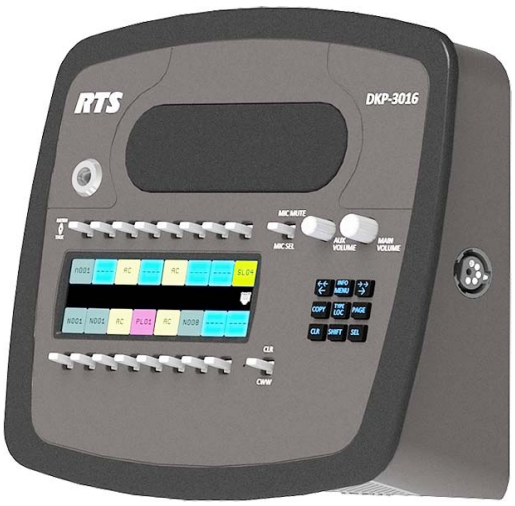
Innovating the Future of Global Communications

DKP-3016 Keypanel Technical Manual

up to and including version 1.2.6

DKP-3016



DKP-3016W

PROPRIETARY NOTICE

COPYRIGHT NOTICE

WARRANTY AND SERVICE INFORMATION

For warranty and service information, refer to the appropriate web site below:

RTS Intercoms ..... www.rtsintercoms.com/warranty
RTS Digital
RTSTW
AudioCom
RadioCom
Intercom Headsets

CUSTOMER SUPPORT

Technical questions should be directed to:

Customer Service Department
Bosch Security Systems, LLC
www.telex.com

DISCLAIMER

The manufacturer of the equipment described herein makes no expressed or implied warranty with respect to anything contained in this manual and shall not be held liable for any implied warranties of fitness for a particular application or for any indirect, special, or consequential damages. The information contained herein is subject to change without prior notice and shall not be construed as an expressed or implied commitment on the part of the manufacturer.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
THE LIGHTNING FLASH AND ARROWHEAD WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF "DANGEROUS VOLTAGE" INSIDE THE PRODUCT.	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	THE EXCLAMATION POINT WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF IMPORTANT INSTRUCTIONS ACCOMPANYING THE PRODUCT.
SEE MARKING ON BOTTOM/BACK OF PRODUCT.		

WARNING: APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

WARNING: THE MAIN POWER PLUG MUST REMAIN READILY OPERABLE.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, GROUNDING OF THE CENTER PIN OF THIS PLUG MUST BE MAINTAINED.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPRATUS TO RAIN OR MOISTURE.

WARNING: TO PREVENT INJURY, THIS APPARATUS MUST BE SECURELY ATTACHED TO THE FLOOR/WALL/RACK IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.

	This product is AC only.
CE	

WARNING: THIS IS A CLASS A PRODUCT. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE, IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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CHAPTER 1

Introduction

The DKP-3016 delivers superior high-quality digital audio using OMNEO technology from Bosch with Dante audio over IP via copper. It delivers audio free of noise, delay, and other artifacts present in legacy technology.

The DKP-3016 utilizes the latest generation of wide angle TFT displays, providing superior clarity, resolution, and longer display life, and delivering high-quality readability under a variety of lighting conditions.

Features

- Superior digital, high-quality audio over IP (Internet Protocol) included through OMNEO technology, the branded IP-based solution from Bosch.
- Advanced signal processing, delivering an audio experience, free of noise, echo, delay, and other artifacts present in legacy technology.
- Backward compatible with legacy technologies, such as analog audio in USOC and 568-B formats.
- New wide angle, high-definition display.
- Enhanced keypanel menus optimized for ease of use.

Specifications

LCD Display:

Active Area ..... 120.10mm (wide) x 35.86 mm (high)

Dot Resolution ..... 576 x 172 pixels

Color Resolution ..... 16-bit (64K) RGB color

View Angle ..... 80 degrees (typical; all directions)

Power Supply:

Type: ..... Internal

AC Input: 100–240VAC 50/60Hz

Inputs:

Matrix

Type ..... Balanced

Typical Input Level ..... +8 dBu

Typical Input Impedance ..... 20 kΩ

Maximum Input Level ..... +20 dBu

Supported Bandwidth ..... 100 Hz to 20 kHz

Front Panel Mic

Type ..... Electret

Typical Input Level ..... -42 dBu

Typical Input Impedance ..... 1 kΩ

Maximum Input Level ..... -25 dBu

Left and Right Headset Mic - Electret

Typical Input Level ..... -42 dBu

Typical Input Impedance ..... 1 kΩ

Maximum Input Level ..... -25 dBu

Left and Right Headset Mic - Dynamic

Typical Input Level ..... -50 dBu

Typical Input Impedance ..... 600 Ω

Maximum Input Level ..... -25 dBu

Outputs:

Matrix

Type ..... Balanced

Typical Output Level ..... +8 dBu

THD+N% ..... <0.20%

Typical Output Impedance ..... 600 Ω

Maximum Output Level ..... +20 dBu

Frequency Response ..... 100 Hz to 20 kHz

Headset - Left, Right

Maximum
Output Power ..... 125 mW for 32 Ω load

Earphone Impedance ..... 16 Ω and above

THD+N% ..... <0.20%

Frequency Response ..... 20 Hz to 20 kHz

Digital:

OMNEO Channels

Typical OMNEO Latency ..... 1 ms

Frequency Response ..... 20 Hz to 20 kHz

Compression	Bit Rate	Coding Delay	Playout Delay	Bandwidth	Sample Rate
G.711	64 kbps	125 µs	20-60 ms	160-224 kbps	8 k
G.729AB	8 kbps	10 µs	20-120 ms	32-112 kbps	8 k
G.722	64 kbps	4 µs	20-60 ms	160-224 kbps	16 k
*Data rate depends on codec selection.					

NOTE: The Playout Delay and Bandwidth depend on the configured amount of audio per packet.

Environmental:

Dimensions

DKP-3016/3016W

3.60 in. H x 10.63 in. W x 9.35 in. D
(91.5 mm H x 270.1 mm W x 237.6 mm D)

Weight

DKP-3016/3016W ..... 3.59 lb. (1.63 kg)

Temperature

Operating ..... 0° C to 50° C (32° F to 131° F)

Storage ..... -20° C to 70° C (-4° F to 158° F)

Power Consumption:

DKP-3016/3016W

Nominal ..... 13 Watts

Maximum ..... 17 Watts

Maximum Volt Amp ..... 42 VA

Certification:

- CE Compliant
- UL Certified
- PSE Compliant

DKP-3016 Block Diagram

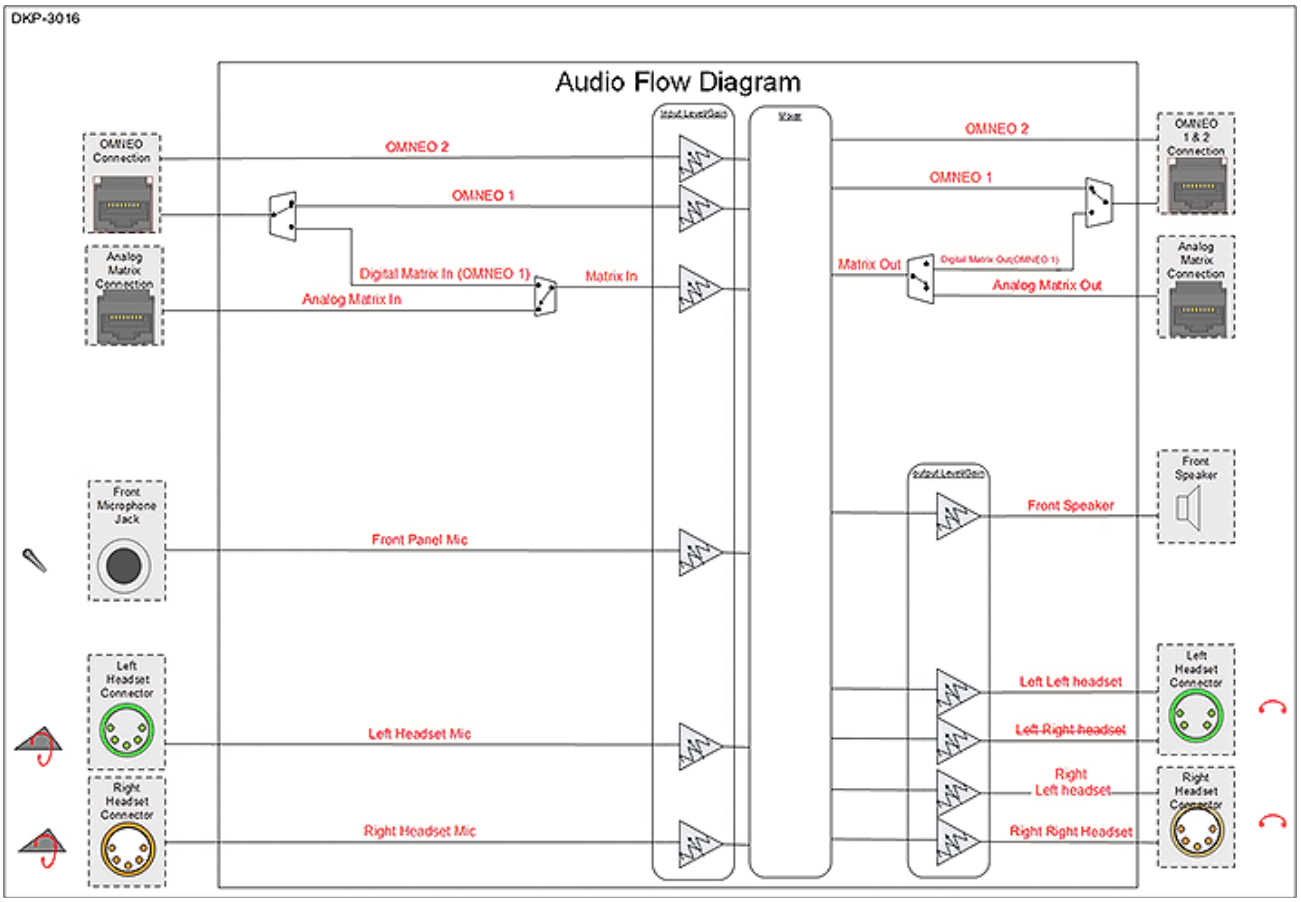


FIGURE 1. DKP-3016 Audio Flow Block Diagram

Reference View – DKP-3016

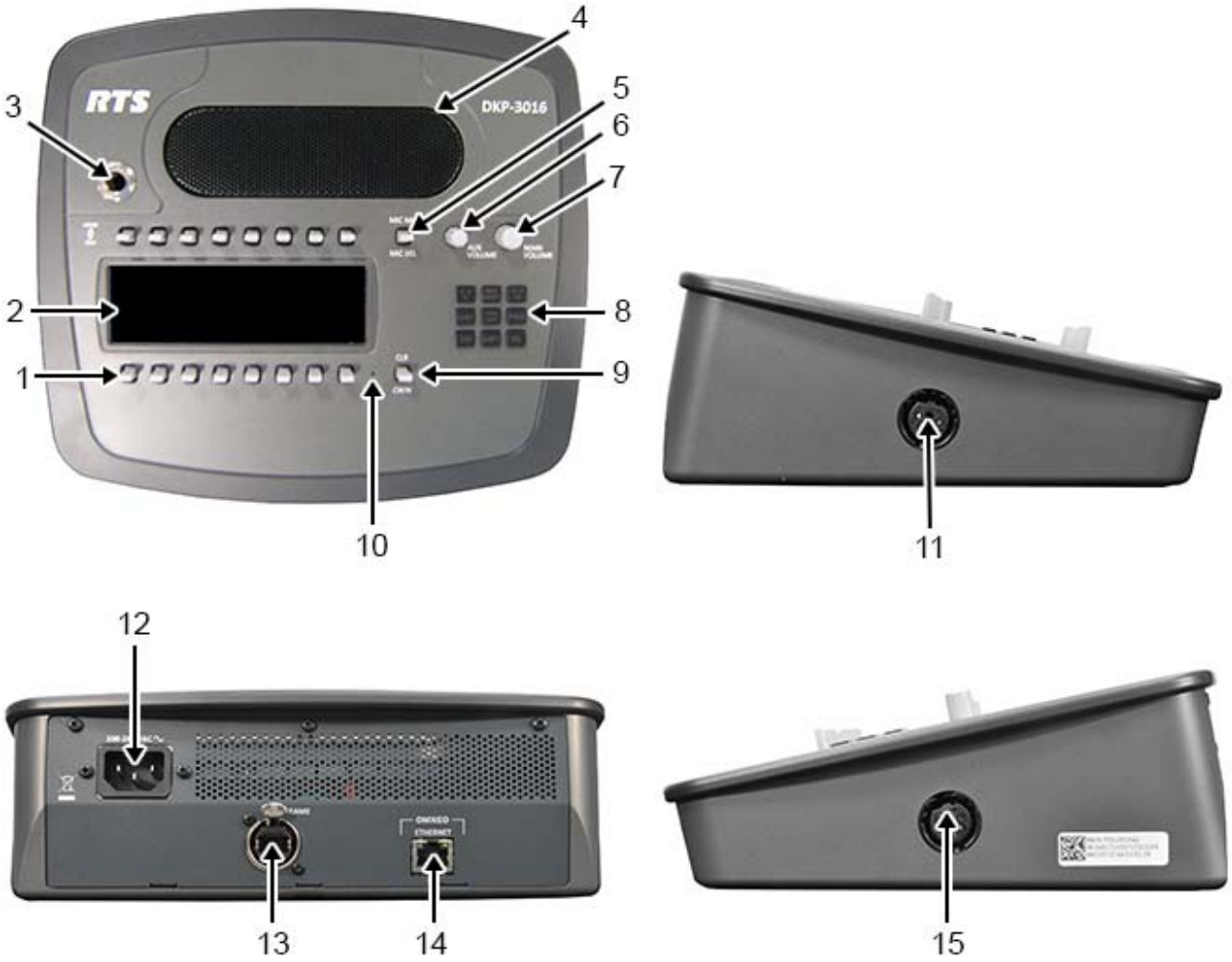


FIGURE 2. DKP-3016 Reference View

1. Talk/Listen Lever Keys
2. LCD Display
3. Microphone Connector
4. Front Speaker
5. MIC MUTE/MIC SEL Lever Key
6. AUX VOLUME shaft encoder
7. MAIN VOLUME shaft encoder
8. Keypad
9. CLR/CWW Lever Key
10. User Reset Hole
11. 4-pin Headset Connector
12. AC Power
13. FRAME Connector
14. OMNEO ETHERNET Connector
15. 5-pin Headset Connector

Connector Pinouts

Right Headset: J5 (Wallmount version – J15)	
Pin	**Assignment**
1	RIGHT_HS_MIC_IN -
2	RIGHT_HS_MIC_IN +
3	RIGHT_HS_COMMON
4	RIGHT_HS_L_OUT
5	RIGHT_HS_R_OUT

Left Headset: J15 (Wallmount version – J5)	
Pin	**Assignment**
1	LEFT_HS_MIC_IN -
2	LEFT_HS_MIC_IN +
3	LEFT_HS_COMMON
4	LEFT_HS_L_OUT

Matrix Connector: J8[a]		
Pin	**RJ-45**	**RJ-12**
1	RS485 +	
2	RS485 -	RS485 -
3	FROM MATRIX +	FROM MATRIX +
4	TO MATRIX +	TO MATRIX +
5	TO MATRIX -	TO MATRIX -
6	FROM MATRIX -	FROM MATRIX -
7	RS485 +	RS485 +
8	RS485-	

a. Supports 568B and USOC wiring

ETHERNET: J11	
Pin	**Assignment**
1	Data 1 +
2	Data 1 -
3	Data 2 +
4	Data 3 +
5	Data 3 -
6	Data 2-
7	Data 4+
8	Data 4-

Front Panel Mic	
Pin	**Assignment**
Tip	PANEL_MIC_IN +
Ring	PANEL_MIC_IN -
Sleeve	CGND

CHAPTER 2

Installation

Requirements

The following keypanel firmware versions are needed for the specified DKP-3016 model:

AZedit ..... *V5.2.2 or later*

IPedit ..... *V3.2.3 or later*

MCII-e ..... *V3.4.0 or later*

AIO-16 ..... *V1.7.0 or later*

FWUT ..... *V4.20.3586 or later*

DNS-SD ..... *V4.20.3586 or later*

OMI ..... *V6.1.8 or later*

DKP-3016 Installation

IMPORTANT: For DKP-3016 wall mounting instructions, see “Wall Mounting Option” on page 151.

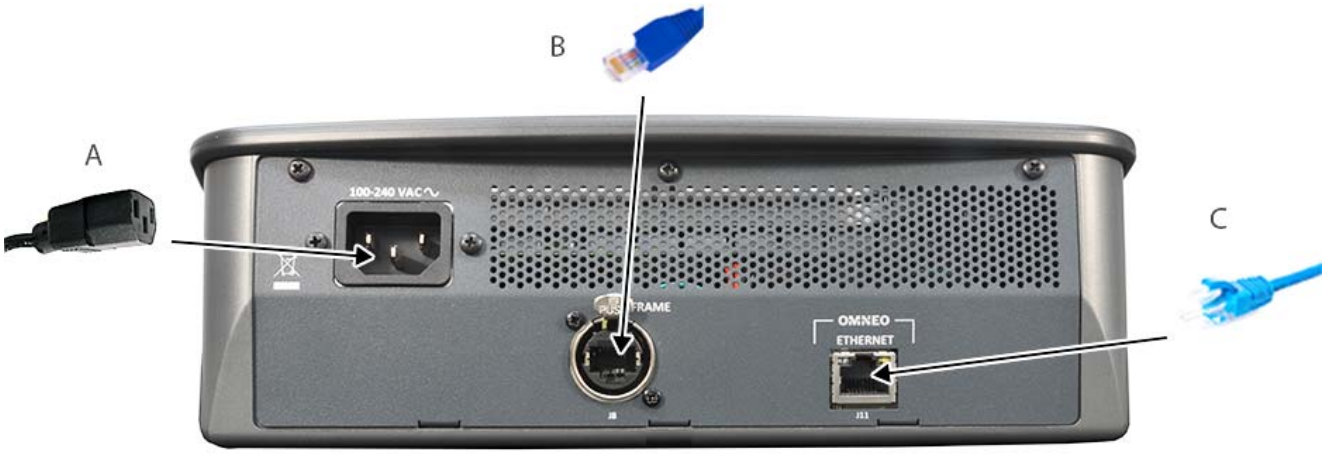


FIGURE 3. DKP-3016 Installation

To **install the DKP-3016**, do the following:

1. On the rear panel of the DKP-3016, plug the **AC power cord (A)** into the power connector on the back panel of the unit.
2. Connect an **RJ-12** or **RJ-45 (USOC or 568B) cable (B)** with RTS cabling to the J8 FRAME connector.
   OR
   Connect a **CAT-5e cable (C)** to the J11 ETHERNET connector.

NOTE: The KP-Series panels can have both AIO and Ethernet connected simultaneously, and the user can switch between connections using the menus.

3. Once the unit is cabled, plug the **AC power cord** into the wall outlet or a power strip.

Configuring the Keypanel Connection

You can configure the OMI using AZedit and IPedit; however, only IPedit can be used to configure the keypanel.

Configure the OMI using AZedit

To **connect the OMI to the DKP-3016 using AZedit**, do the following:

1. From the Status menu in AZedit, select **I/O Cards**.
   The I/O Card Status window appears showing a list of installed cards.
2. Right-click the **OMI card** you want to connect to the keypanel.
   A pop-up menu appears.
3. From the pop-up menu, select **OMNEO Configuration**.
   The OMNEO Configuration window appears.
4. From the OMNEO card drop down menu, select the **slot number** where the OMI card is located in the frame.
   The Device Name field auto-populates with the name of the device.
5. From the Local Channel drop down menu, select the **channel** you want to use to communicate to your keypanel across the network.

   NOTE: Channels not already configured to connect to another device appear with an asterisk (*) next to them.
6. In the Partner Device Name field, enter the **name of keypanel** you want to use to communicate with. Or, select the **Browse icon** to select from a list of devices.
7. From the Partner Device Type drop down menu, select the **type of device** to which the OMI card is connecting.
8. From the Partner Channel drop down menu, select **channel 1** on the device to which the OMI communicates.
9. Once you are completely finished, click **Apply**.
   Apply sends the changes to the cards in the intercom, or Click Cancel to discard all the changes made.

Add the OMI to the Device Catalog in IPedit

To **add the keypanel to IPedit**, do the following:

1. Open **IPedit**.
2. From the Device menu, select **Add**.
   The Add Devices Window appears, open to the Search tab.
3. Select the **OMI card**.
   The Add button becomes active.
4. Click the **Add button**.
   The OMI card appears in the device catalog in the left panel.
5. Click the **Done button**.
   The Add Devices window closes.

Add the DKP-3016 to the Device Catalog in IPedit

To **add the keypanel to IPedit**, do the following:

1. Open **IPedit**.
2. From the Device menu, select **Add**.
   The Add Devices Window appears, open to the Search tab.
3. Select the **keypanel**.
   The Add button becomes active.
4. Click the **Add button**.
   The keypanel appears in the device catalog in the left panel.
5. Click the **Done button**.
   The Add Devices window closes.

Configure the OMI using IPedit

To **configure the OMI using IPedit**, do the following:

Using the Device Configuration and Status Pane

1. In the Device Name field, enter a **device name** familiar to you, if desired.
   Initially OMI cards are given a default name.

IMPORTANT: If you change the device name, this causes the device to reboot. It is not necessary to change the device name. However, if you do change the name, it is best to do this early in the setup so you do not have to revisit other devices that connect to this device and update them later.

2. In the Description field, enter a **description for the OMI card**, if desired.

Using the Channel Configuration and Status Section:

3. In the Channel Description field, enter a **channel description**, if applicable.
4. From the Destination Type drop down menu, select **OKP**.
5. In the Destination Device Name field, enter the **name of the device** to which the channel will connect.
   OR
   a. Click the **...** button.
      The Discovered Devices Window appears.
   b. Expand the **tree** to view the available devices.
   c. From the expanded tree, select the **device** to which you want to connect.
   d. Click **OK**.
6. From the Destination Channel drop down menu, select the **channel** to which the OMI will connect.
7. Send the **changes** to the OMI.

Configure the DKP-3016 using IPedit

To **configure the keypanel using IPedit**, do the following:

Using the Device Configuration and Status Pane

1. In the Device Name field, enter a **device name** familiar to you, if desired.
   Initially, keypanels are given a default name.

IMPORTANT: If you change the device name, this causes the device to reboot. It is not necessary to change the device name. However, if you do change the name, it is best to do this early in the setup so you do not have to revisit other devices that connect to this device and update them later.

2. In the Description field, enter a **description for the keypanel**, if desired.

Using the Channel Configuration and Status Section:

3. In the Channel Description field, enter a **channel description**, if applicable.
4. From the Destination Type drop down menu, select **OMI**.
5. In the Destination Device Name field, enter the **name of the device** to which the channel will connect.
   OR
   a. Click the**...** button.
      The Discovered Devices Window appears.
   b. Expand the **tree** to view the available devices.
   c. From the expanded tree, select the **device** to which you want to connect this keypanel.
   d. Click **OK**.
6. From the Destination Channel drop down menu, select the **channel** to which this keypanel will connect.
7. Send the **changes** to the keypanel.

Connecting the DKP-3016 through the OMNEO Offers Menu

IMPORTANT: If you used IPedit to set up the keypanel connection, this step not needed, because you have already done this in the software.
If you used AZedit to set up the keypanel connection, the keypanel needs to be set up to talk with the OMI card in the frame. To do this, a connection needs to be established using the OMNEO Offers menu on the keypanel. For more information, see “Menu System, OMNEO Offers” on page 113.

To **configure a connection offer**, do the following:

1. Starting at the OMNEO Offers | Keypanel menu, select **OKP**.
2. Press the **SEL button**.
   A list of available OMNEO offers appears.
3. Using the AUX VOLUME shaft encoder, select the **OMNEO offer** you want to use.
   An arrow appears next to the device.
4. Press the **CLR button** to exit menu mode.

Power Up

At power-up, if the keypanel is connected to the matrix, the alphanumeric display shows dashes in the light blue color key - - - -. After several seconds, the intercom key assignments are shown with the appropriate color keys and alphas.

NOTE: If the keypanel cannot establish communications with the intercom system, all keys continue to show asterisks (****) and the *Disconnected from Matrix* icon DISCONNECTED FROM MATRIX appears in the panel display. If the keypanel is configured for OMNEO, this icon also displays the OMNEO device name. Check the keypanel to matrix cable connection if this occurs. If the keypanel loses communications with the intercom, the panel display shows the Disconnected from Matrix icon and displays the **** after approximately 30 seconds.

Address Setting

General Information

In ADAM intercoms using AIO-8 cards or AIO-16 cards with SCSI breakouts, and in ADAM-CS and Zeus/Zeus II intercoms, the intercom ports share data connections in groups of eight (8). Each keypanel is uniquely identified on the data port by its address. The method of determining the proper address varies for each intercom system. Use the method for your intercom system, as described on the following pages.

TABLE 1. DKP-3016 Addressing

Manually Addressed	Automatically Addressed
You must manually address[a] the keypanel when using the following: • AIO-8 on ADAM • AIO-16 SCSI on ADAM • ADAM CS • Zeus I • Zeus II	The keypanel address is automatically detected when using the following: • AIO-16 MDR on ADAM and ADAM-M • Cronus • Zeus III and Zeus III LE/LE+ • RVON Products - RVON-8, RVON-2, RVON-C, and RVON-16 • OMNEO devices **NOTE:** Keypanels using RVON-I/O may need to be individually addressed. See the RVON-I/O user manual for further instruction.

a. To manually address the DKP-3016, see “Service Menu, Set Address” on page 128.

To see specific addressing information for:

- ADAM with AIO-8 cards, see the ADAM technical manual (P/N F01U216986).
- ADAM CS, see the ADAM CS technical manual (P/N 93307517000).
- ADAM and ADAM-M with AIO-16 cards, see the AIO-16 user manual (P/N F01U193267).
- Cronus, see Cronus user manual (P/N F01U118890).
- Zeus III, see the Zeus III user manual (P/N F01U193289).
- Zeus III LE/LE+, see the Zeus III LE/LE+ user manual (P/N F01U193290).

NOTE: If you are connecting to an ADAM or ADAM-M frame with AIO-16 cards using MDR connectors or a Cronus frame, you do not need to set the address. If the AIO-16 is using SCSI breakouts, you must set the address.

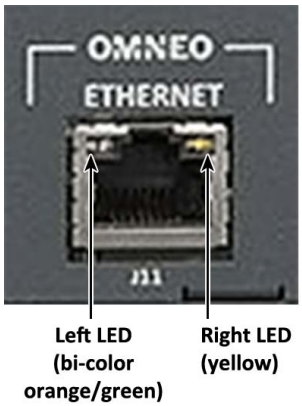
Connections

Frame Connector

Use the Frame connector to connect to an intercom port of the intercom system. For the frame connector location, see Figure 2 on page 12. The intercom port you connect to should agree with the address you set previously.

Ethernet Connector

Use the Ethernet connector to connect the keypanel to a network system. Each RJ-45 Ethernet connector has two LEDs:



Right LED. The left LED is yellow and indicates a network link is established. It flashes on/off whenever there is network activity.

Left LED. The right LED is bi-color (orange and green) and indicates the speed of the connection by the color that is displayed.

- A green LED indicates the port is operating at 1000Mbps (1 Gbps).
- An orange LED indicates the port is operating at 100Mbps.
- No LED color indicates the port is operating at 10Mbps. This is not suitable for OMNEO networking.

Panel Microphone Connector

A panel microphone may be connected to the front of the unit. The connector accepts MCP5, MCP6, or MCP90 series panel microphones. Insert the microphone and rotate the entire microphone body clockwise several turns to lock it in place.

CHAPTER 3

Basic Operation

Intercom Keys and Displays

Color Display Descriptions for Intercom Keys

The DKP-3016 display uses key colors to distinguish the type of key assignment programmed on each key. Use Table 2 to help you determine the available key assignment colors.

You can customize these colors to your preference by using the “Keypanel Color Window” on page 47.

TABLE 2. Default Key Colors

Default Color		Description
	Bright Green	Listen Indicator, Local Matrix
	Brown	IFB Special List
	Teal	Point-to-Point
	Dark Yellow	ISO
	Light Blue	Unassigned, Test Mode (with Talk and Listen Indicators)
	Pale Yellow	Special Functions
	Magenta	Relay
	Pink	Party Line
	Red	Remote Matrix
	Salmon	IFB, Talk Indicator
	Pale Green	Special List
	Periwinkle	UPL Resource

Display Icons

Display Icons are used to indicate the accessories and features enabled, disabled, active, and inactive. Use Table 3 for a complete description of each icon seen on the DKP-3016.

TABLE 3. Display Icon Descriptions

Icon	Icon Name	Description
	Matrix Connected	The keypanel is connected to the Matrix. This icon briefly displays at connection.
	Disconnected From Matrix	There is no connection between the Matrix and the keypanel. This icon is displayed as long as there is no Matrix data connection. **NOTE:** When the keypanel is disconnected, it displays its Device Name (for OMNEO) or IP Address (for RVON) device connections.
	Firmware Download	Firmware is being downloaded to the keypanel. A progress bar at the bottom displays: chunk progress overall progress chunk/overall progress **NOTE:** For more information, see “Download Firmware to the DKP-3016 From AZedit” on page 63.
	Left Headphones	The left headphones are enabled. This indicates the left headset microphone is not enabled.
	Left Headset	The left headset is enabled. To enable the headset, see “Audio Options Menu, Headset Speaker” on page 92.
	Left Headset Mic Muted	The left headset mic is muted.
	Microphone	The microphone is enabled.
	Microphone Mute	The microphone is muted. To mute the microphone, see “Audio Options Menu, Mic Mute” on page 96. To mute the headset mic, see “Audio Options Menu, Headset Mic” on page 91
	Speaker	The speaker is enabled. To enable the speaker, see “Audio Options Menu, Speaker” on page 98.
	Speaker Mute	The speaker is muted.
	Right Headphones	The right headphones are enabled. This indicates the right headset microphone is not enabled.
	Right Headset	The right headset is enabled. To enable the headset, see “Audio Options Menu, Headset Speaker” on page 92.
	Right Headset Mic Muted	The right headset mic is muted.
	Both Headphones	Both right and left headphones are enabled. This indicates both the right and left headset mics are disabled.
	Both Headsets	Both right and left headsets are active.

TABLE 3. Display Icon Descriptions

Icon	Icon Name	Description
	Both Headsets Muted	Both right and left headset mics are muted.
	Snoop Tally Active	Snoop Tally is Active on the keypanel. You must have the Hot Mic enabled to use snoop tallies. To enable snoop tallies, see “Service Menu, Snoop Tally” on page 128.
	Hot Mic	The hot mic is active. To activate Hot Mic, see “Audio Options Menu, Matrix Out” on page 94.
	Tone 1kHz Enabled	Tone 1kHz is enabled on the keypanel. To enable tone 1kHz, see “Audio Options Menu, Tone Gen” on page 98.
	Tone 500Hz Enabled	Tone 500Hz is enabled on the keypanel. To enable tone 500Hz, see “Audio Options Menu, Tone Gen” on page 98.
	Main Volume Bar	The main volume bar is used to control the volume for the keypanel inputs and outputs, including all speaker and headset outputs, and matrix inputs.
	Key Volume Bar	The key volume bar is used to control the listen gain on a per key level. The listen gain range is +6dB to -80db, or Mute. **NOTE:** Listen must be assigned on the key assignment for this function to operate.
	OMNEO Enabled	The OMNEO matrix interface is enabled on the panel. For more information on OMNEO Offers, see “Menu System, OMNEO Offers” on page 113.
	AIO Enabled	The AIO matrix interface is enabled on the panel. For more information on AIO connection configuration, see “Menu System, OMNEO Offers” on page 113.
	RVON Enabled	The RVON matrix interface is enabled on the panel. For more information on RVON Offers, see “Menu System, RVON Offers (Only available when an RVON-IO is detected)” on page 114.
	Matrix Input Mute	The Matrix Input volume is muted. When the Matrix Input volume is adjusted down to Mute, the panel displays this flashing icon as a warning that there is no audio from the Matrix.

Keypad Reference View

There are two tiers available on the DKP 3016's keypad: Primary Mode and SHIFT Mode.

Primary Mode

Primary Mode is used for the most common keypanel functions, such as CLR, SEL, COPY, PAGE, LEFT/RIGHT and accessing the Main menu. There are no special keypad sequences to use these functions.

Shift Mode

SHIFT Mode contains secondary functions used to access more functionality. The SHIFT mode functions are located above the primary keypad key. The shift functions available; *INFO*, *PAGE LEFT/PAGE RIGHT, SHIFT COPY, SHIFT PAGE, and TYPE*.

IMPORTANT: When **SHIFT + <keypad key>** appears in this manual, the user is instructed to press the SHIFT key followed by the next keypad key. The SHIFT key and the keypad key should not be pressed simultaneously.
If the user is instructed to press two keys simultaneously, this manual uses the phrase press and hold.

NOTE: By default, the keypad backlight changes to *white* when the keypad is in SHIFT mode. For more information, see "Service Menu, Keypad" on page 119.

To **access Shift Mode**, do the following:

1. On the keypad, press the **SHIFT button**.
2. On the keypad, press the **key whose SHIFT function** you want to access.

NOTE: Once you enter SHIFT mode, you can exit the mode by pressing the SHIFT key again, without pressing any other keys.

FIGURE 4. DKP-3016 Keypad

TABLE 4.

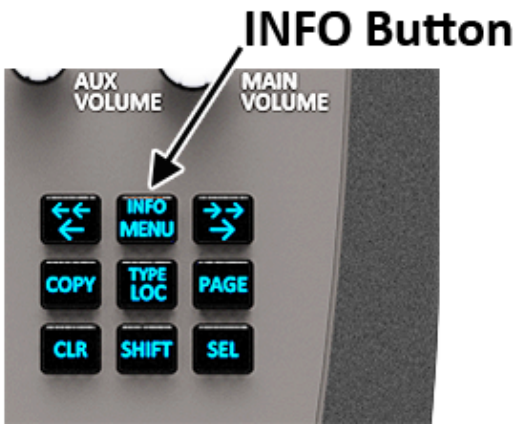
Keypad Button	Shift Function	Description
LOC	TYPE	The LOC/TYPE button displays the list of available intercoms (LOCations) available to scroll from. Select an intercom name to access the scroll lists for that intercom. The TYPE button displays the keypanel assignment types available for scrolling.
←	←←	The ←/←← button moves you backwards through the menu options or available key assignments one at a time or by the page.

TABLE 4.

Keypad Button	Shift Function	Description
MENU	INFO	The MENU/INFO button is used to access the top level menu structure or access a secondary menu of commonly used features (see, "INFO button" on page 28). The MENU button is used to access the top-level menu structure. > Press the **Menu button** once. *The top-level menu appears in the panel display.* **NOTE:** If the keypad backlight is set to On Keypress (Service | Keypad | Backlight | Activation), you must press the Menu button twice to access the top-level menu. Using the ← and → buttons you can scroll through the list of options available. When a selection is highlighted, Press the SEL button to navigate down one level in the menu structure. To **access the INFO menu**, do the following 1. Press the **SHIFT button**. 2. Press the **MENU/INFO button**. *The INFO menu appears in the panel display.* For more details about the INFO button, see "INFO button" on page 28.
→	→→	The →/→→ button moves you forward through the menu options or available key assignments one at a time or by the page.
COPY	ADVANCED COPY	The COPY button is used to copy an incoming call key assignment from the CWW to a specific keypanel key. For example, if caller THEATER calls the keypanel, and there is no keypanel key assigned, THEATER appears in the CWW window in the keypanel display. If the keypanel operator wants to assign the caller (THEATER) a key, use the COPY key on the keypad, and then tap the keypanel key where THEATER is to be assigned. You can also copy from key to key by pressing the COPY+SEL or SHIFT+COPY buttons, and then tapping the source key and target key.
PAGE	ADVANCED PAGE	The PAGE button is used to access a different setup page. You can configure up to 15 pages in the intercom system. The default number of pages is *four*. To configure the number of pages available use the Intercom Configuration window, on the Options Page in AZedit. To **enter the graphical page change mode**, do the following: > Press the **PAGE**+ **SEL buttons**.
CLR		The CLR button also functions as a back button or a full menu exit. The CLR button is also used to hide the CWW window. To **go back a level in the menu**, do the following: > Press and release the **CLR button**. To **clear a menu**, do the following: > Press and hold the **CLR button** for half a second. To **clear the CWW**, do the following: > Press the **CWW key up** to pop entries out of it.
SHIFT		The SHIFT button accesses the secondary keypad actions such as INFO, TYPE, etc.
SEL		The SEL button is used to select options highlighted in the menu structure.

INFO button

The **INFO** button is used to access commonly used features and configuration options for the keypanels. These include the following:



Feature	Description
Panel ID	Displays the port number and alpha of the keypanel.
Level 2	Displays the Talk Level 2 key assignments on the keypanel.
Listen	Displays the listen key assignments on the keypanel.
Callers	Displays a list of current callers to the keypanel.
Assign Types	Displays the assignment types of all the configured keypanel keys.
Matrices	Displays the Matrix for each key assignment.
Tone	Opens the Tone Generator menu. For more information, see “Audio Options Menu, Tone Gen” on page 98.
Setup Pages	Displays the setup pages assigned to each row of keys. You cannot change setup pages from this menu.
Reset Vols	Opens the Key Volumes Reset menu. For more information, see “Audio Options Menu, Key Volumes” on page 94.
Hidden Asgns	Displays key assignments assigned to virtual keys (ie, assignments not currently visible).
MAC Address	Displays the MAC Address of the keypanel.
Test Panel	Enables the Test Panel feature. For more information, see “Service Menu, Test Panel” on page 128.
Version	Displays the firmware version of the DKP-3016. For more information, see “Display Menu, Version” on page 102.

To **access the Info Menu**, do the following:

1. On the keypad, press the **SHIFT button**.
2. On the keypad, press the **INFO MENU button**.
   The INFO menu appears in the panel display.

   NOTE: To exit the INFO menu mode, press the **CLR** button.

Breadcrumb Menu Navigation

Breadcrumb Navigation is a graphical aid to help users know where they are in the menu structure. The breadcrumb menu visually lays out a path of options selected up to the current menu position. It appears as a horizontal line above the menu options (shown in Figure 5).

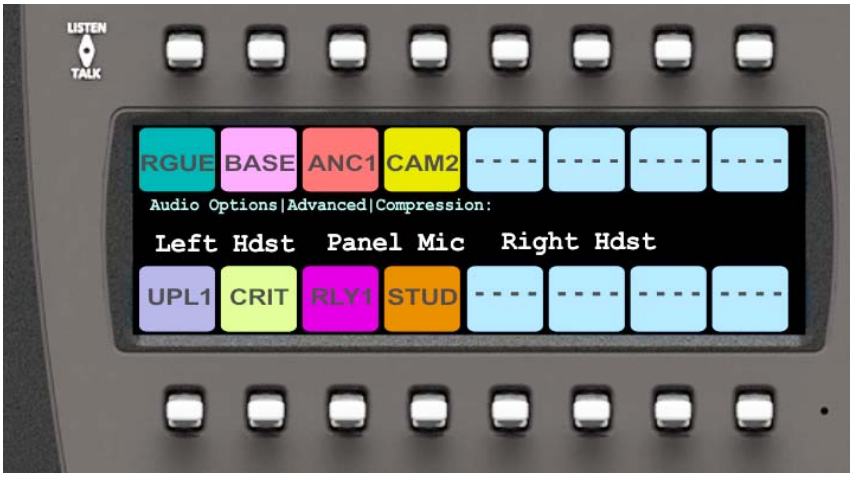


FIGURE 5. Breadcrumb Navigation

Menu Navigation and shaft encoders

While the keypanel is in menu mode, the **AUX VOLUME** shaft encoder is used to move the selection left and right. Or, in the case of a single menu item with up and down control, the shaft encoder is rotated to scroll through the available selections. This is particularly convenient when setting the display brightness or audio gain. Also, pressing the Aux Volume shaft encoder while in menu mode is the equivalent to SEL key operation. Conversely, pressing the **MAIN VOLUME** shaft encoder in menu mode is the equivalent to the CLR key operation.

FIGURE 6. DKP-3016 shaft encoders

Other navigation options:

- Press and hold the AUX VOLUME shaft encoder to exit the menu.
- Double-tap the AUX VOLUME shaft encoder to go backwards in the menu.

CLR Button

The **CLR** button is used either as the BACK function while in MENU mode or to exit MENU mode completely.

To **go back one menu level**, do the following:

> Press the **CLR button once**.

To **exit the menu**, do the following:

> Press and hold the **CLR button for half a second**
> OR
> Press the **CWW key up**.

Basic Intercom Key Operation

IMPORTANT: The DKP-3016 series keypanel does not have side to side movement on the lever keys. You are only able to press up or down. Left and right motions are not available.

To **talk on the DKP-3016**, do the following:

> Press **down** on the keypanel key you want to use.

To **listen on the DKP-3016**, do the following:

> Press **up** on the keypanel key you want to use.

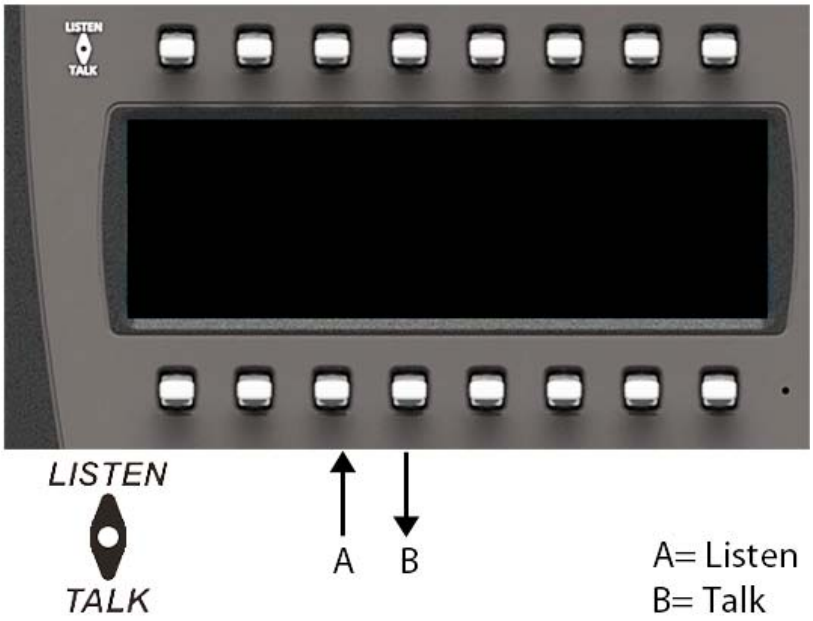


FIGURE 7. Key Function Position Explanation

Talk/Listen Indicator

The **Talk/Listen Indicator**, shown in Figure 8, displays a visual indicator when the talk and/or listen key is active. The talk and listen states of each key are represented by an LED-like horizontal bar at the bottom (talk) and top (listen) of each key.

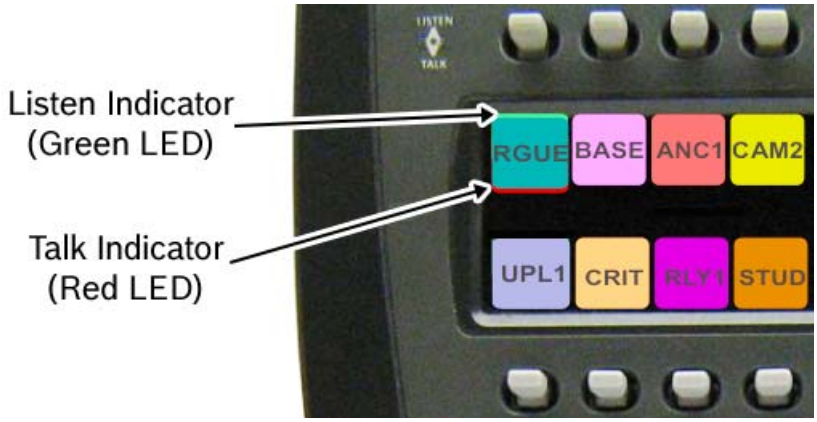


FIGURE 8. Talk/Listen Indicators

By default, the listen indicator is *green* and the talk indicator is *red*. You can change the colors of the indicator by using the Key Color Window in AZedit. For more information, see “Keypanel Color Window” on page 47.

Crosspoint Gain Adjustment

Crosspoint Gain Adjustment gives you the ability to adjust an individual crosspoint gain associated with different assignments. For example, you can decrease the gain (audio strength) of key assignment assigned to a person with a strong (loud) voice.

To **adjust the crosspoint gain**, do the following:

1. Lift and hold the **listen key** for which you want to adjust the crosspoint gain.
2. Turn the **AUX VOLUME shaft encoder to the right** to increase the gain.
   OR
   Turn the **AUX VOLUME shaft encoder to the left** to decrease the gain.
   The gain level bar is shown on the key.

Keypanel Volume Adjustments

By default, the **MAIN VOLUME** shaft encoder adjusts the Output Volume for the speaker or headset, whichever is currently active.

IMPORTANT: If you adjust the Speaker Output volume down to Mute, then the panel displays a flashing Spkr Mute icon as a warning there is no audio to the speaker.

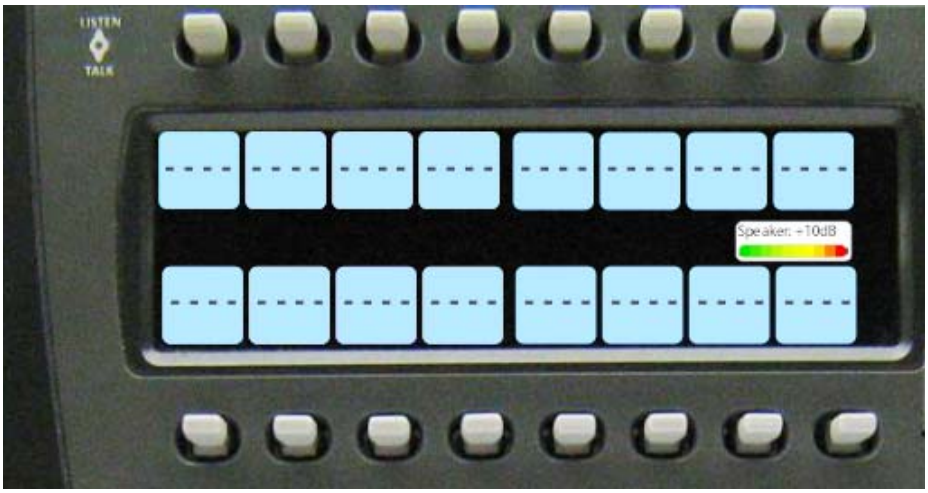
If you adjust the Headset Output volume down to Mute, then the panel displays a flashing Hdst Mute icon as a warning there is no audio to either the right or left or both headsets.

Output volume ranges from *+10dB to -48dB* and *Mute*.

To **adjust output volume level**, do the following:

> Turn the **MAIN VOLUME shaft encoder** to the right to increase the volume for the selected output.
> OR
> Turn the **MAIN VOLUME shaft encoder** to the left to decrease the volume for the selected output.

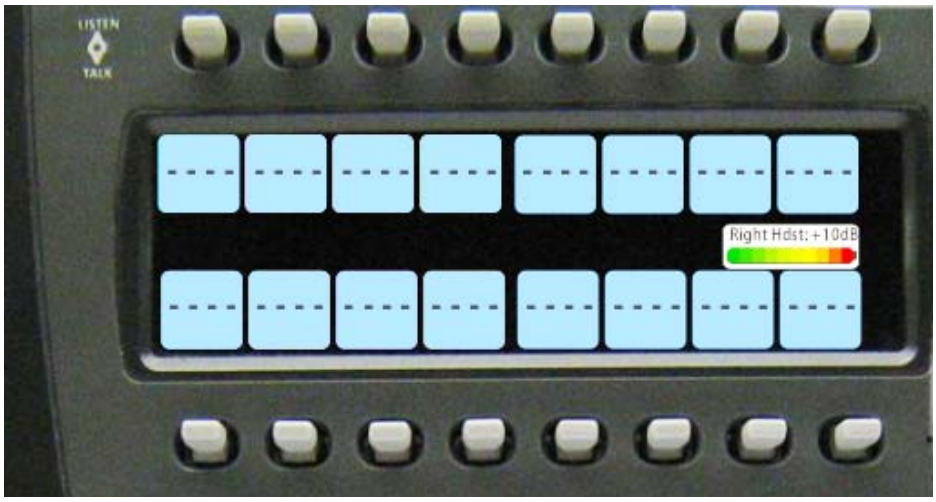
NOTE: When the MAIN VOLUME shaft encoder is turned, the volume level bar appears in the panel display.



NOTE: You can save the volume adjustments to be power-up defaults using “Menu System, Save Config” on page 114.

To **select a different output volume control**, do the following:

> Press the **MAIN VOLUME shaft encoder** once.
The main volume focus switches to the next available output, displayed above the volume level bar.



Aux Volume Adjustments

The **AUX VOLUME** shaft encoder adjusts the Matrix Input and OMNEO input volumes.

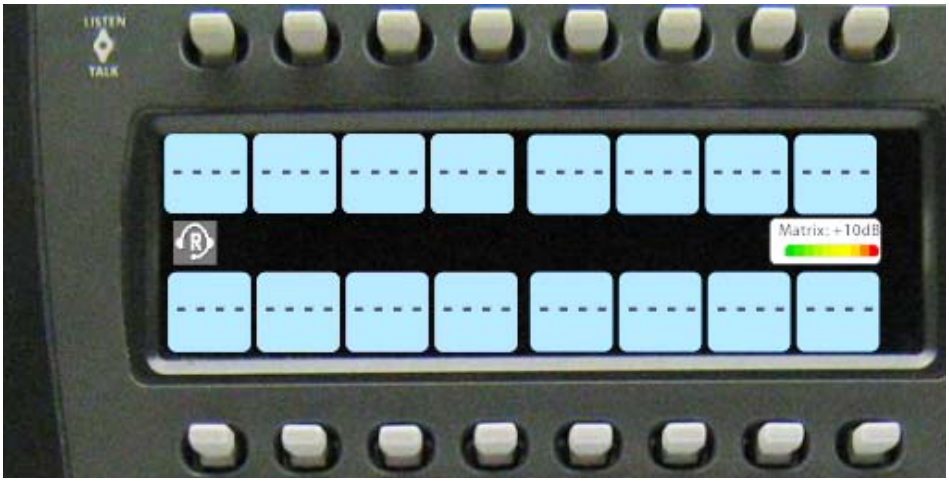
IMPORTANT: If you adjust the Matrix Input volume down to Mute, then the panel displays a flashing Mtx Mute icon as a warning there is no audio from the Matrix.

Input volume ranges from *+10dB to -48dB* and *Mute*.

To **adjust input volume level**, do the following:

> Turn the **AUX VOLUME shaft encoder** to the right to increase the volume for the selected input.
OR
Turn the **AUX VOLUME shaft encoder** to the left to decrease the volume for the selected input.

NOTE: When the AUX VOLUME shaft encoder is turned, the volume level bar appears in the panel display.



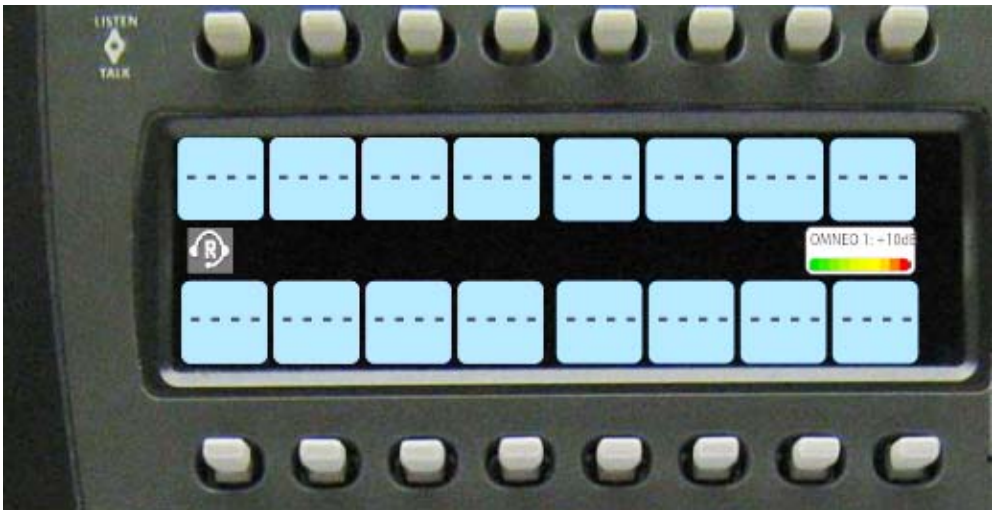
NOTE:

- You can save the volume adjustments to be power-up defaults using “Menu System, Save Config” on page 114.
- The inputs appear in the Aux Volume menu if they are enabled and mixed to an output.

IMPORTANT: When OMNEO is present and the keypanel is configured with an AIO connection to the Matrix, OMNEO 1 can be used as an AUX input. To adjust OMNEO 1 volume, the OMNEO 1 input must be mixed to an output (any output).

To **change the focus of the volume control**, do the following:

> Press the **AUX VOLUME shaft encoder** once.
The aux volume focus switches to the next available input.



Priority Call Volume Control

Priority Call Volume Control is used to mark a keypanel as a priority caller. When a priority caller talks to another keypanel, a minimum crosspoint volume (configurable in AZedit) is enforced for the duration of the call to ensure the caller is heard, even if the target panel has set the listen volume to a lower volume.

In addition, a minimum volume of -6dB on the speaker and headset of the target panel is also enforced when receiving a call from a priority caller (also ensuring the caller is heard, even when the target panel's headset and speaker volume is turned down. Once the call is completed, the previous speaker, headset, and crosspoint volumes are restored when the priority caller stops calling.

When a panel is the target of a priority call, the speaker, headset, and volume display are shown with an orange background indicating a priority call is in progress.

NOTE: The volumes are never lowered by the priority call, but are raised to the minimum values for the duration of the call if they had lower values to begin with.

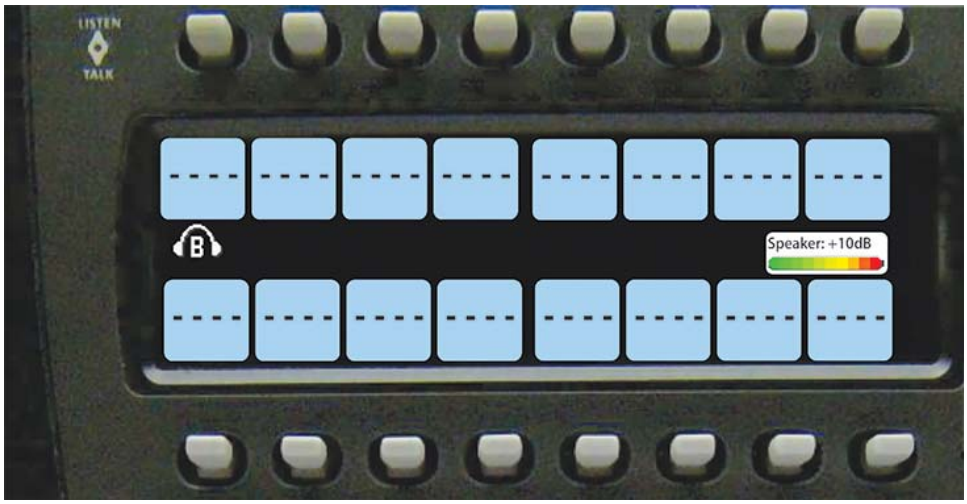


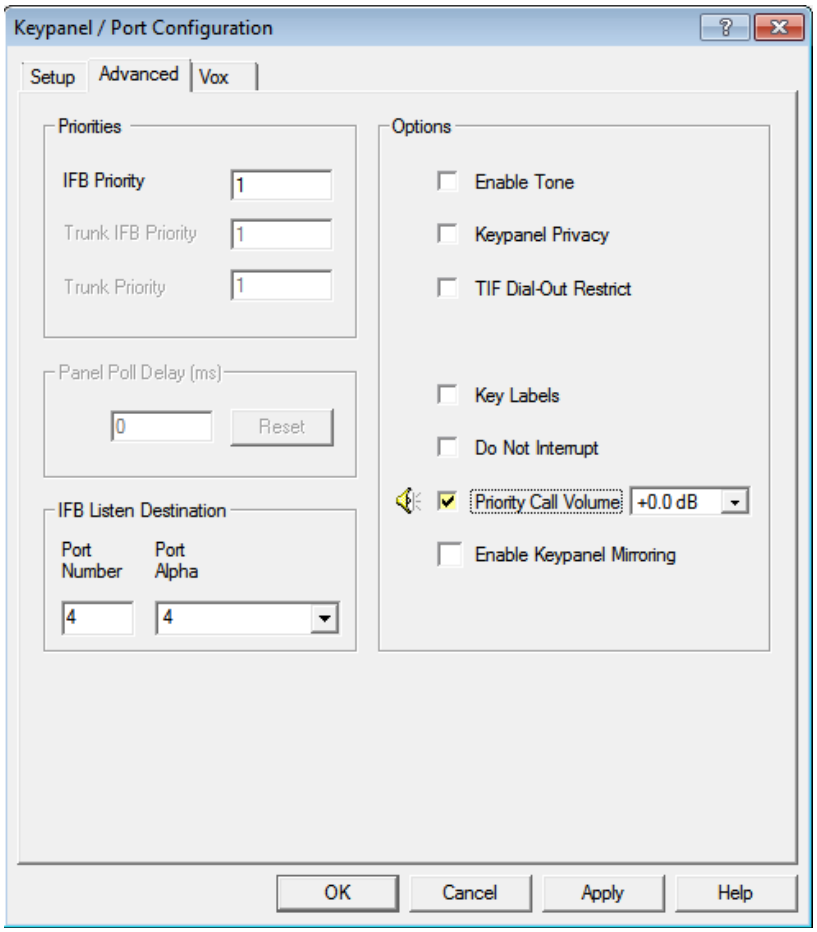
FIGURE 9. Incoming Priority Call Volume Control Keypanel

Available crosspoint values range from: *+6dB to -80dB and Mute.*

By default, the priority call volume is set to *+0.0dB*.

To **configure priority call volume control**, do the following:

1. On the Keypanels/Ports screen in AZedit, select the **port** you want to set with priority call volume control.
2. Click the **Edit button**.
   The Keypanel/Port Configuration screen appears.



3. Click the **Advanced tab**.
   The Advanced Page appears.
4. Select the **Priority Call Volume check box**.
5. From the Priority Call Volume drop down box, select the **crosspoint volume level** for the priority caller.
6. Click the **Apply button**.
7. Send the **change to the Intercom**.

Operation of Intercom Keys with Auto Functions

NOTE: Assignment of keys with auto functions is described in the programming section that follows.

Operation of keys with auto functions, is as follows:

Talk+auto follow	Talk and listen can be activated separately. The listen assignment listens to whatever is assigned to the talk key.
Talk+auto listen	Both talk and listen activate when talk is activated.
Talk+auto mute	Listen turns off when talk is activated.
Talk+auto reciprocal	Listen is always on and talk may be turned on or off.
Talk+auto table	If an IFB talk key has an auto table listen assignment, talk and listen is independently activated. The listen key listens to whatever is defined as the IFB Listen Source for the IFB assigned to the talk key.
All Call	Activating this key activates all keys to the left of it, up to, but not including another all call key.
Talk+DIM	If a point-to-point key has the DIM function as a level 2 talk assignment, activating the key causes the crosspoint levels to diminish for any other intercom ports currently listening to the same destination and are in the same DIM tables.

Operation of Intercom Keys with Options

Group Option Keys

Activating the master key in a key group activates all keys in the group according to each key's individual key assignment. Activating a slave key does not affect any other keys in the group. For more information, see "Key Options Menu, Key Groups" on page 110.

Solo Key

Activating a key with the solo option causes all other keys to turn off until the solo key is turned off. For more information, see "Key Options Menu, Solo" on page 112.

Exclusive Key

Activating a key with the exclusive option causes all other Exclusive keys to turn off when activated. Unlike the solo option, when exclusive is activated, the keys turn off and stay off. For more information, see "Key Options Menu, Exclusive" on page 109.

Lock Key

A key with the lock option on it is locked in the on or off position and cannot be changed until the lock is removed. For more information, see "Key Options Menu, Lock (Button Lock)" on page 111.

Chime Key

When a chime is configured on a key and a call is received, the chime is activated. You can configure length and type of chime for the key, as well. For more information, see "Key Options Menu, Chime" on page 108.

Clear Keys

Clearing keys is used to remove any key options assigned to a specific key. For more information, see "Key Options Menu, Clear" on page 109.

Latching Keys

Latching keys on a keypanel gives the user hands-free operation where keys stay active after quickly tapping the key. For more information, see "Key Options Menu, Latching" on page 111.

Operation of Intercom Talk Keys with the Speaker DIM Setting

Activating any talk key causes the speaker or headphone volume at the keypanel to diminish by the amount specified in the DIM menu item on the Service menu. For more information, see "Audio Options Menu, Dim" on page 90.

NOTE: Do not confuse this with the Talk+DIM auto function previously described. Talk+DIM affects the speaker or headphones on other keypanels when a particular talk key is activated on the keypanel. Speaker DIM affects the speaker or headphone level on the keypanel when any talk key on the keypanel is activated.

Operation of Intercom Keys assigned to TIF Ports

If a keypanel key is assigned to talk to an intercom port designated as a TIF port in AZedit, placing the key in the talk position activates the DKP-3016/3016W dialing menu. For more information, see “Telephone Interface (TIF) Operation” on page 131.

To **designate an intercom port as a TIF port**, do the following:

1. In AZedit, select the **port** you want to designate as a TIF port on the Keypanel/Port window.
2. Click the **Edit button**.
3. On the Advanced tab, select the **Port is TIF check box**.
4. Send the **change** to the intercom system.

User Quick Select Scrolling

User Quick Select Scrolling is a fast and easy way to call or assign a point-to-point key on the DKP-3016/3016W.

To **use the User Quick Select Scroll feature to call a user**, do the following:

1. Press the **left and right arrow buttons** to scroll through the list of point-to-point connections available.
   The selected port is highlighted in white.

NOTE:

- You can also use the left and right arrow buttons to page scroll through the list of ports available. Page scroll is useful when you have a large intercom system and you want to find a port quickly.
- You can also use the AUX VOLUME shaft encoder to quickly scroll through the list once you are in the scroll list menu.

To **page scroll**, do the following:

1. Press the **SHIFT button** before pressing the **left or right arrow buttons**.
   OR
   Press the **SHIFT button** and then press and hold the **arrow button** to repeat scrolling a page at a time.
   When the key is released, the keypanel exits SHIFT mode.
2. When the port is selected, press down on the **CWW key** to talk to the selected port.

Call Waiting Operation

Occasionally, a keypanel may call and there is not a key assigned to talk back to the caller. In this case, the caller’s name appears in the **CWW** (Call Waiting Window).

NOTE: The DKP-3016 supports a graphical call waiting window. For more information, see “Graphical Call Waiting Window Operation” on page 41.

To **answer a CWW call**, do the following:

> Press down and hold the **CWW key** to talk back.

To **clear a name from the CWW window**, do the following:

> When the CWW window is populated, tap up on the **CWW key**.

NOTE: If a second call is received in the CWW while a caller name is already displayed, the Call Waiting Window flashes.

To **answer a second call**, do the following:

> Tap the **CWW key** up to clear the first name, and then hold the **CWW key** down to talk to the second caller.

NOTE: By default, only the names of callers who are not currently assigned to intercom keys appear in the call waiting window. Alternately, you can force all caller names to display in the call waiting window. This is controlled by DIP Switch 2 on the ADAM Master Controller card or the *Always stack callers in the call waiting window* option found in AZedit (*Options* | *Intercom Configuration* | *Options*). Setting this option in AZedit overrides the DIP Switch 2 setting on the Master Controller.

Graphical Call Waiting Window

Traditionally, incoming calls have been displayed on key 16 on the keypanel, flashing to indicate an incoming call. The DKP-3016 Series keypanel can keep a history of the last nine callers and display them in a scrollable, graphical window above keys 15 and 16. The CWW displays three calls at a time (only two in Unicode alpha mode) with a scroll arrow appearing if there are more than three calls in the list.

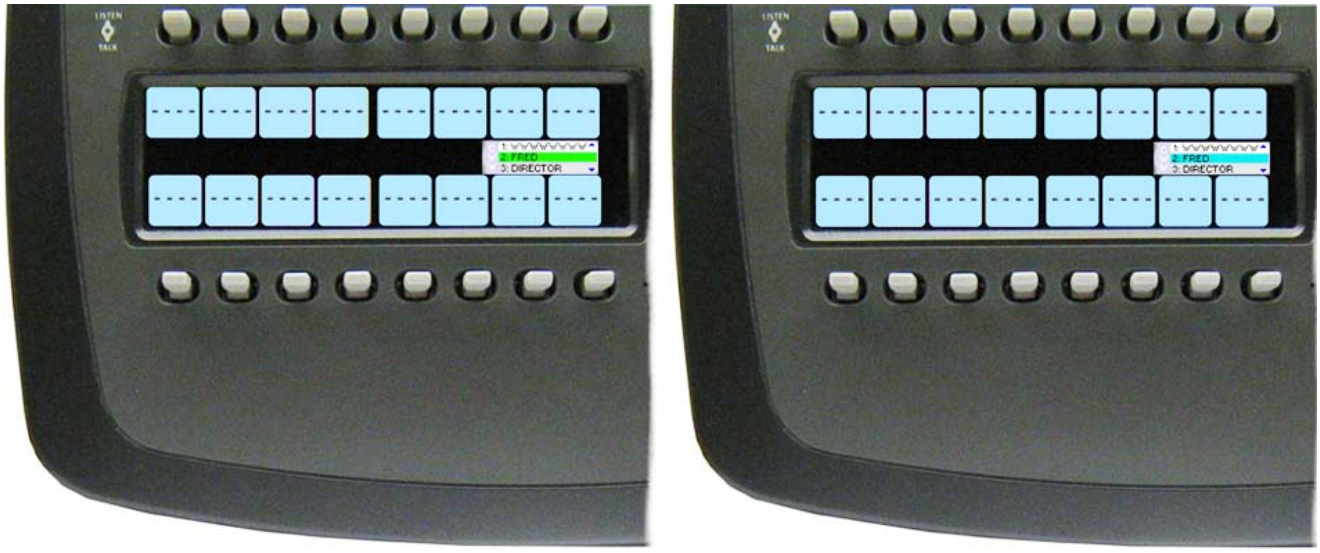


FIGURE 10. Graphical Call Waiting Window

TABLE 5. Graphical CWW Call Description

Item	Description
New Call	White background
Selected Call / Not Talking	Cyan background
Selected Call / Talking	Green background
Old Call	Gray background

Graphical Call Waiting Window Operation

Use Table 5 on page 41 and Figure 10 on page 41 to understand the different states of the CWW.

Display or Hide the CWW

To **display the CWW**, do the following:

> On the DKP-3016 panel, lift up on the **CWW key**.
The graphical CWW appears.

To **hide the CWW**, do the following:

> Press the **CLR button**.
The CWW closes.

NOTE: If the CWW list is visible and not empty, it remains visible until hidden. If the CWW list is visible, but empty, it auto-hides after a five second timeout.

Incoming Calls

When a call is received at the DKP-3016 panel, the graphical CWW list appears on the keypanel display. Unlike the keypanel tally indicators in previous keypanel versions:

- the graphical CWW list appears on the keypanel display.
- the graphical CWW and the call flashes (tallies), rather than the CWW button.

Up to nine calls can be stored in the CWW history scroll list. The most recent call is inserted at the top of the graphical CWW list (position 1) with a white background (See Figure 10 on page 41). Other items in the CWW list are shifted down, as necessary. The ninth call in the list is dropped when a new call is received.

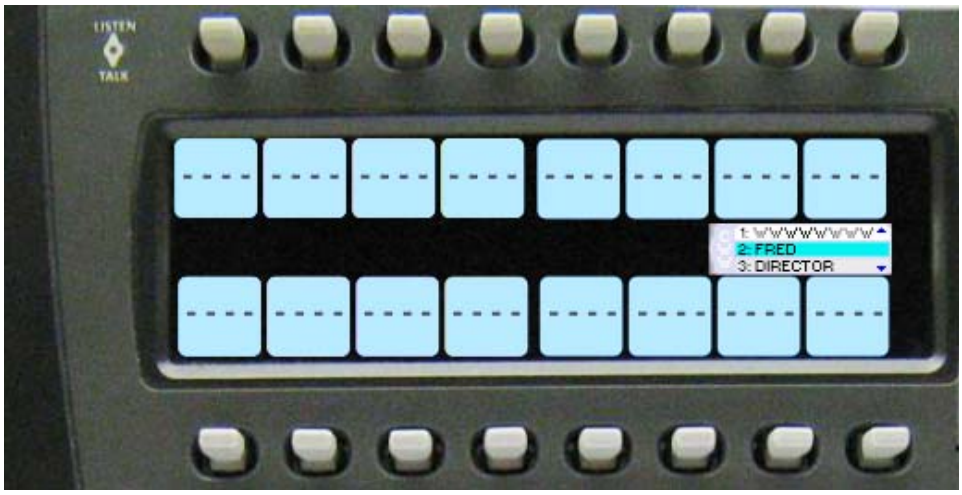


FIGURE 11. Graphical Call Waiting Window Highlighted Call

NOTE: A highlighted item in the graphical CWW cannot be shifted off the CWW list.

For more information on the CWW mode options, see “Service Menu, CWW” on page 116.

To **scroll the CWW list**, do the following:

> When the CWW list is visible, use the arrow buttons to scroll through the list.
The highlight moves through the scroll list.

To **answer a call on the graphical CWW**, do the following:

1. Scroll the **CWW** to highlight the call you want to answer.
   The highlighted call is shown with a cyan background.
2. Press down and hold the **CWW key** to talk to the caller.
   The highlight in the CWW list turns green and moves to the top of the list when talking with the caller.
3. Release the **CWW key** to stop talking.
   The call is ended. The background of the caller in the CWW list turns a light gray (if not highlighted).

Clearing the CWW List

To **clear the CWW list**, do the following:

1. If the CWW is not visible, press the **CWW key** to make it visible and the call selected.
2. Use the **left and right arrows** to select the call to remove.
   The highlighted call is shown with a cyan background.
3. Press the **CWW key up**, to clear the selected entry.
4. Repeat **steps 2 & 3**, as necessary.

Mic Select

The mic (input) or speaker/headset (output) can be configured as Always On or Enabled, or Disabled.

For more information, see:

- “Audio Options Menu, Headset Speaker” on page 92.
- “Audio Options Menu, Panel Mic” on page 97.
- “Audio Options Menu, Headset Mic” on page 91.

TABLE 6. Source Configuration Matrix and Display icons

	ALWAYS ON/ENABLED	SWITCHED	DISABLED	ICON DISPLAYED
Panel Mic				
	X	X		
			X	No icons display on the keypanel.
Headset Mic				
	Left and Right			
	Right	Left		 OR 
	Left	Right		 OR 
	Left		Right	
	Right		Left	
			Left and Right	No icons display on the keypanel.
Speaker				
	X	X		
			X	No icons display on the keypanel.
Headset				
	Left and Right			

TABLE 6. Source Configuration Matrix and Display icons

	ALWAYS ON/ENABLED	SWITCHED	DISABLED	ICON DISPLAYED
	Right	Left		 OR 
	Left	Right		 OR 
	Left		Right	
	Right		Left	
			Left and Right	No icons display on the keypanel.

Setup Pages

Setup Pages are used to provide access to more key assignments than a panel has keys, enabling the user to quickly switch one set of assignments for another.

You can have *up to 15 Setup Pages per keypanel port*. By default, four Pages are configured.

NOTE: To change the number of Pages available for ports, in AZedit go to Options | Intercom Configuration | Options tab in AZedit. Change the Setup pages per port field to the number of pages needed. This causes the intercom to resize (first birthday), meaning the intercom configurations are erased.

To **open Setup Pages,** do the following:

> On the keypanel keypad, press the **PAGE key**.
> OR
> On the keypanel keypad, press the **SHIFT + PAGE keys**.
> *The graphical page mode appears in the keypanel display screen. The page tab displays turquoise.*

IMPORTANT: To add key assignments to the setup pages, see “Menu System, Key Assign Menu” on page 103.

To **toggle between the Setup pages**, do the following:

1. Use the **left and right arrow keys to change the page**.
   When changing the page, the Page tab appears yellow, until selected.
2. Press the **SEL key** to select the page.
   The Page tab returns to the turquoise color. After two seconds with no SEL button selection, the page is automatically selected.

Menu Passwords

As with other keypanels, the DKP-3016 allows you to lock the entire menu structure or only the service menu. This is implemented through AZedit (System | Miscellaneous | Keypanel Menu Password). For more information, see the AZedit user manual (p/n F01U239453).

NOTE: Only numerical passwords are allowed.

To **enter a menu password at the password prompt**, do the following:

1. Press the **MENU button**.
   Password: appears in the keypanel display screen.
2. Using the AUX VOLUME shaft encoder, scroll to select the **correct number for the active password digit**.
3. Press the **AUX VOLUME** shaft encoder.
   The next password digit becomes active.
   OR
   When the password is completely entered correctly, the menu appears.

NOTE:

- Use the CLR button, double-click the AUX VOLUME shaft encoder, or single-click the MAIN VOLUME shaft encoder to erase the last digit.
- If there are no digits, the CLR button or double-clicking either the AUX VOLUME shaft encoder or MAIN VOLUME shaft encoder exits the menu.

Keypanel Color Window

The **Keypanel Color** window (System | Miscellaneous | Keypanel Colors), shown in Figure 12, is used to change the text and background colors assigned to function types, key assignments, and talk/listen indications. You can modify local intercom key assignments and function type colors, as well as remote intercom function type colors, giving you the flexibility to distinguish different systems through the use of color patterns.

The Keypanel Color window is only available when the following requirements are met:

- running AZedit version 3.7.0 or later.
- running MCII-e version 2.1.0 or later.

NOTE: Key colors are associated with assignments and assignment types, not the physical keys they are assigned to.

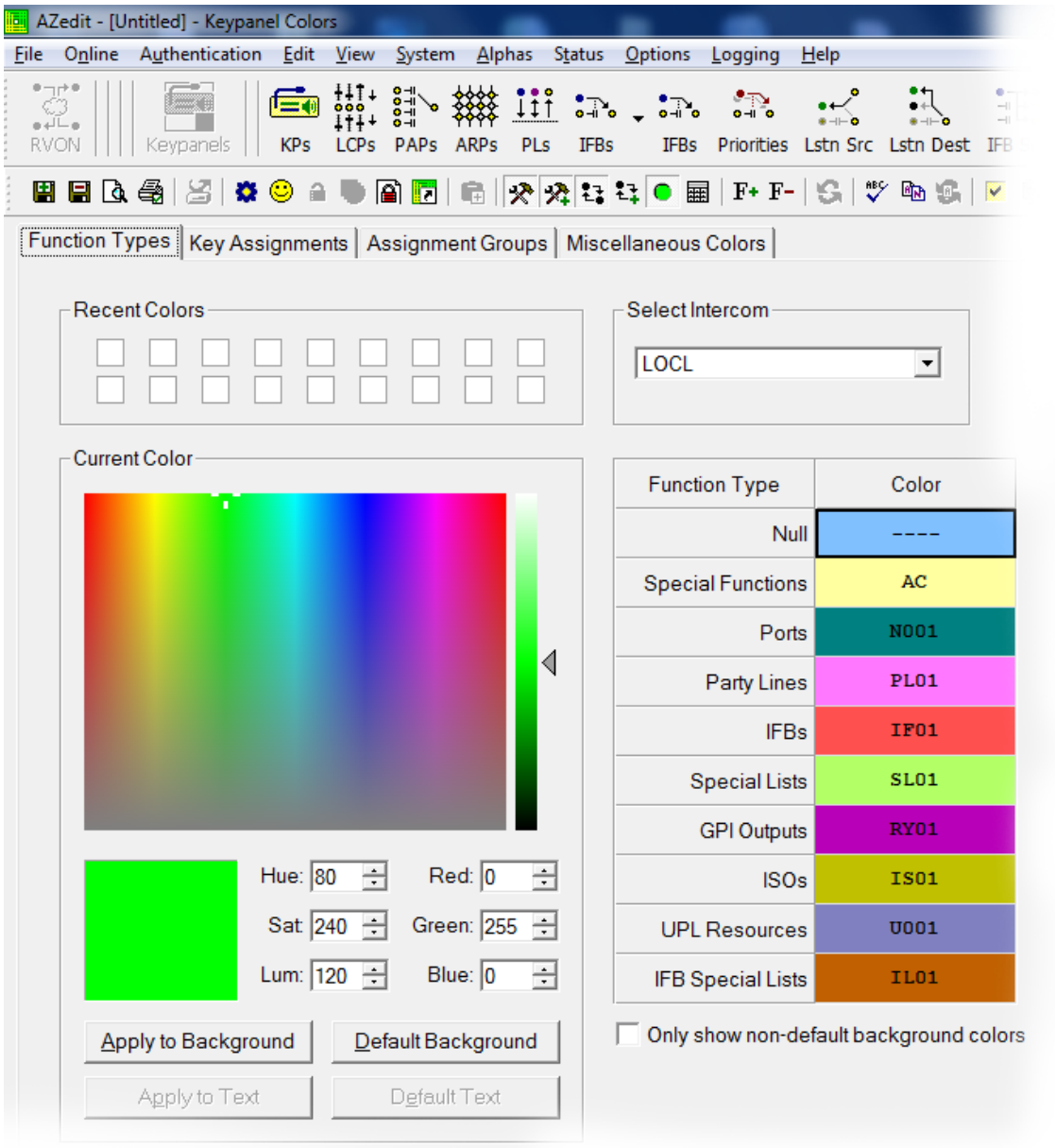


FIGURE 12. Keypanel Colors Window

Function Types Page

The **Function Types** page, shown in Figure 12, is used to change the default colors assigned to the various keypanel function types.

Select Intercom Drop Down Menu

The **Select Intercom** drop down menu is used to select the intercom system (*local* or *remote*) in which you want to change the color of the key function types.

Recent Colors Group Box

The **Recent Colors** group box displays the 18 most recently used colors.

Current Color Group Box

The **Current Color** group box displays the currently selected color (current color cell), whether from the color palette or recent colors. Also, using the Hue, Sat, Lum, Red, Green, and/or Blue spin boxes, you can adjust the selected color to create a unique color for the function type.

NOTE: You can drag and drop colors from the color picker or recent color check boxes, and drop it on the background or text area of one of the cells in the Color Grid (Figure 13 on page 49). You can also select a color in the Color Grid and drop and drag it to the Current Color Cell field. By holding down the Ctrl key on the keyboard, you can select multiple cells in the Color Grid, thus allowing you to apply color to multiple key assignments.

Apply To Background Button

The **Apply to Background** button is used to apply the color selection to the background.

Default Background Button

The **Default Background** button is used to reset the background color to the default color.

Apply To Text Button

The **Apply to Text** button is used to apply the color selection to the text of the type of assignment.

Default Text Button

The **Default Text** button is used to reset the text color to the default color of the type of assignment.

Color Grid

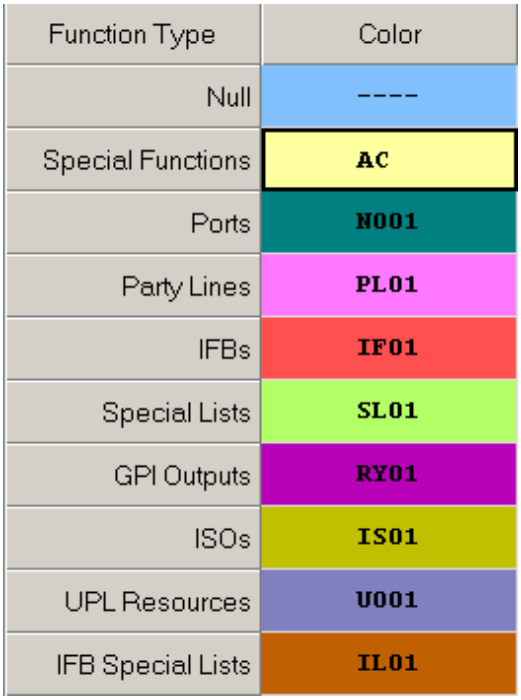


FIGURE 13. Color Grid

Function Type Column

The **Function Type** column displays the different function types you can make key color changes for.

Available selections are: *Null*, *Special Functions*, *Ports*, *Party Lines*, *IFBs*, *Special Lists*, *GPI Outputs*, *ISOs*, *UPL Resources*, and *IFB Special Lists*.

Color Column

The **Color** column displays the current text and background colors assigned to the function type.

NOTE: You must select the current color box next to the function type you want to change the color for. When selected, a thick black line appears around the box.

Only Show Non-Default Background Colors Check Box

The **Only Show Non-Default Background Colors** check box, if selected, shows colors only for function types set to a color other than their default color.

Key Assignment Page

The **Key Assignment** page, shown in Figure 14, is used to change the colors assigned to the various assignment types. This means you can assign different colors to the individual function type resources. For example, you can change the display color for the party line assignment number 003.

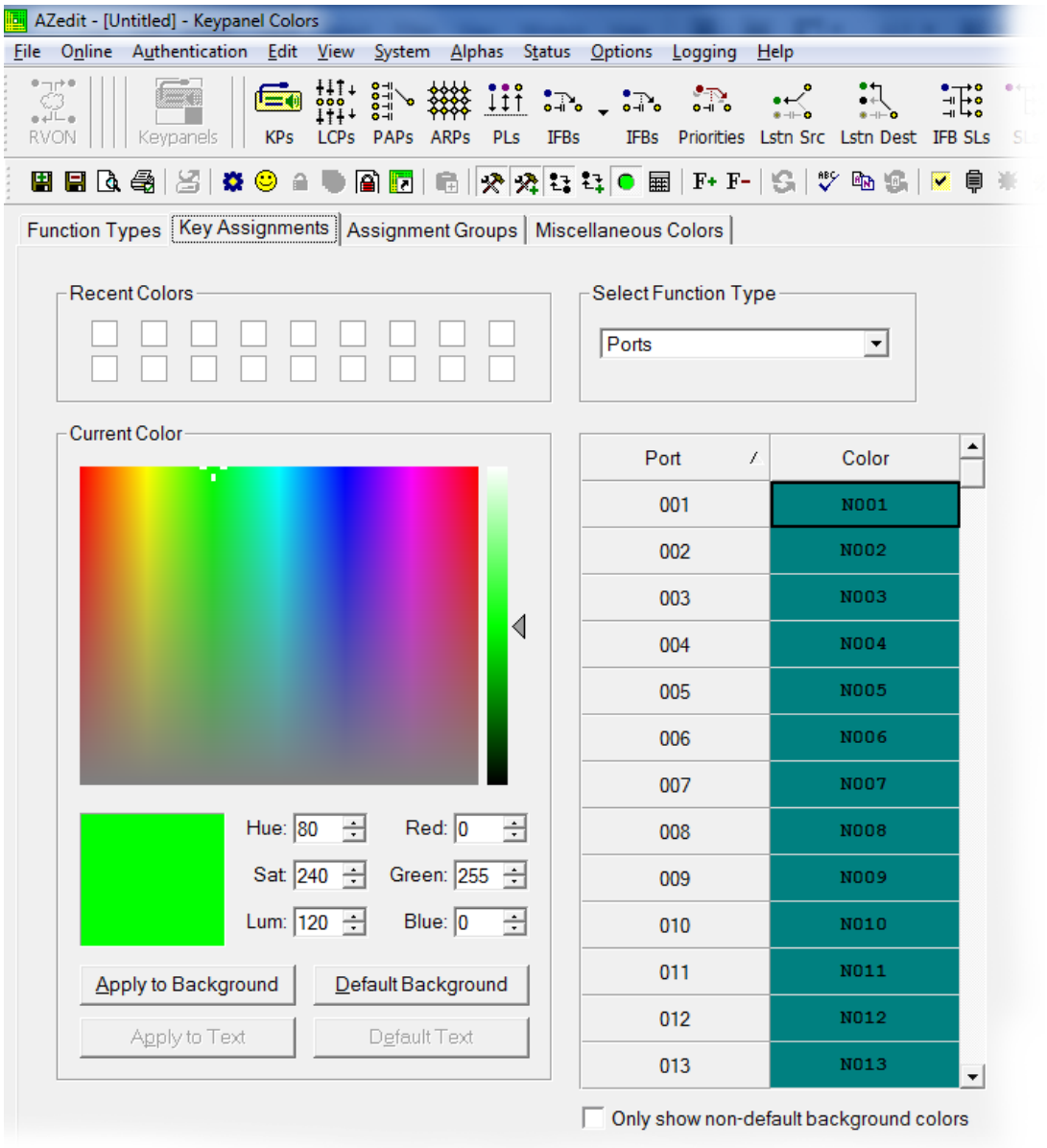


FIGURE 14. Key Assignments Page

Select Function Type Drop Down Menu

The **Select Function Type** drop down menu is used to select the function type you want to display the function number resources for.

Available selections for this field are: *Ports, Party Lines, IFBs, Special Lists, GPI Outputs, ISOs, UPL Resources,* and *IFB Special Lists.*

Function Number Column

The **Function Number** column displays the function numbers (resources available) for which you can modify the color of the assigned key.

NOTE: Key colors are associated with assignment types, not the individual keys themselves. Therefore, changing a key's assignment type may change its color.

Color Column

The **Color** column displays the current color assigned to the function number.

NOTE: You must select the current color box next to the function number for which you want to change the color. When selected, a thick black line appears around the box indicating it is selected.

Assignment Groups Page

The **Assignment Groups** page, shown in Figure 15, is used to change colors of the members of the different assignment groups.

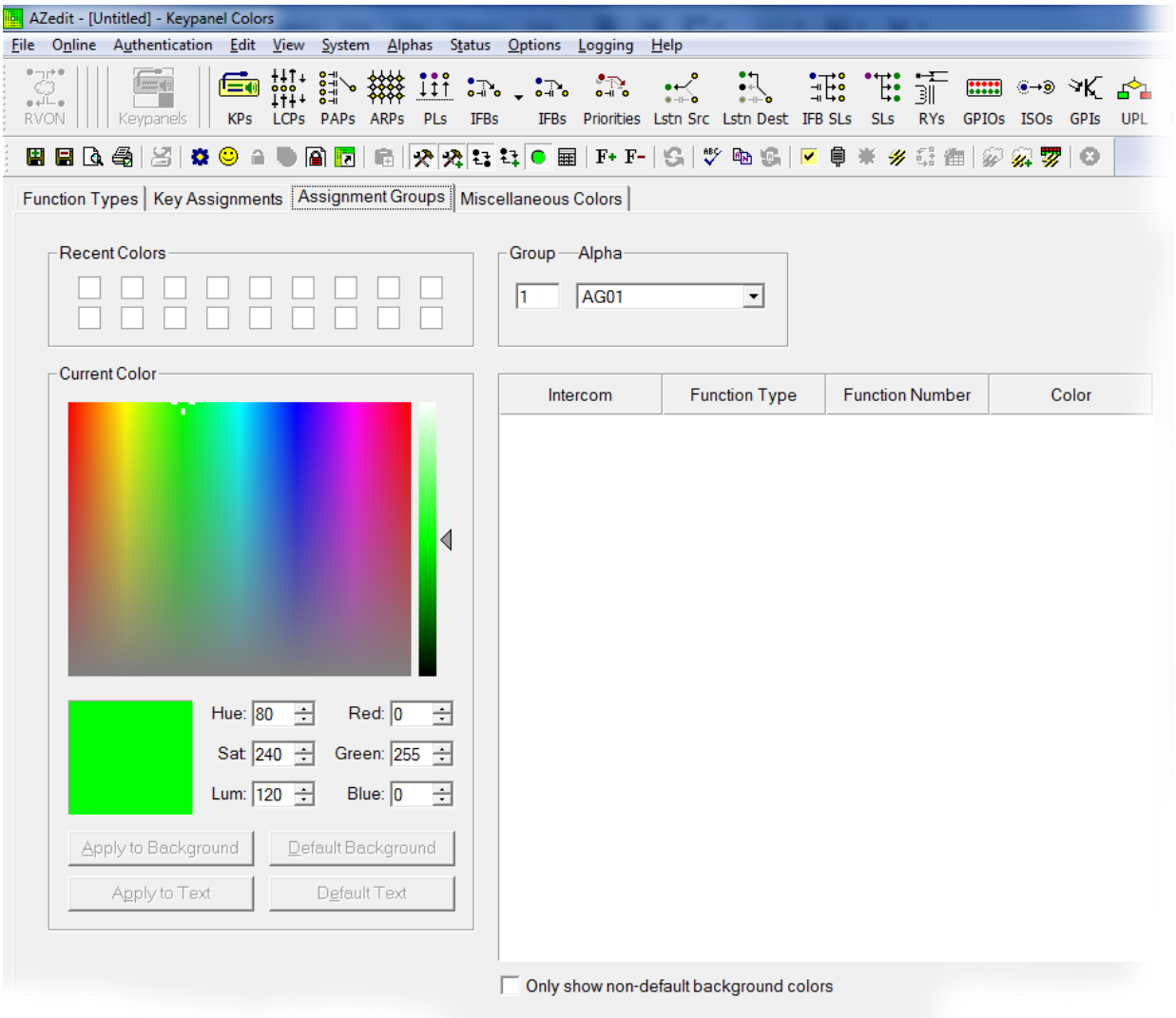


FIGURE 15. Assignments Groups Page

Select Assignment Group Drop Down Menu

The **Select Assignment Group** drop down menu is used to select the assignment group for whose members you want to modify the key color.

Intercom Column

The **Intercom** column displays the name of the intercom where the group resides.

Function Type Column

The **Function Type** column displays the type function assigned to the group.

Function Number Column

The **Function Number** column displays the number of the assignment group you select from the Assignment Group drop down menu. For more information, see “Select Assignment Group Drop Down Menu” on page 51.

Color Column

The **Color** column is used to select the assignment group member whose color you want to modify.

To **select the color column**, do the following:

> Click the **color box** next to the assignment group member.
A thick, black outline appears around the selected color box.

Miscellaneous Colors Page

The **Miscellaneous Colors** page, shown in Figure 16, is used to change the colors of the talk and listen indicators seen on the DKP-3016 series keypanel when talk and/or listen is activated.

For more information on Talk and Listen indicators, “Talk/Listen Indicator” on page 31.

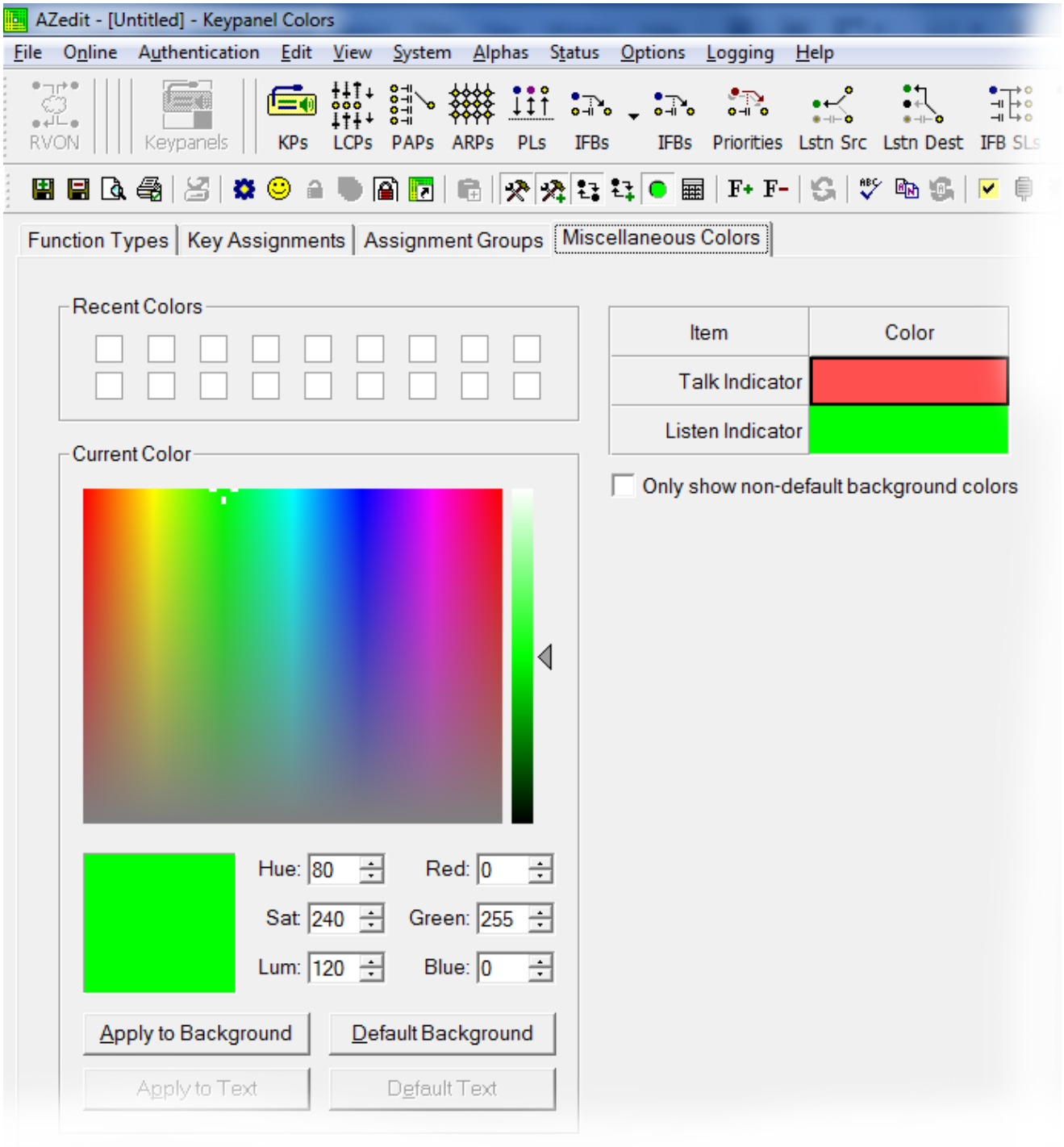


FIGURE 16. Miscellaneous Colors Page

Enhanced Tallies

Enhanced Tallies allow you to configure, using AZedit, how tallies look on the keypanel. You are able to change how incoming calls, PLs, IFBs, etc look on the keypanel. By default, an incoming call tally is indicated by a flashing alpha. With enhanced tallies, you can configure the text and background colors used to display the key in both flashing and normal states for the duration of the tally. You can also configure a chime to be played when an incoming call is received, as well as an icon to appear announcing the call. For more information, see Table 9, "Tally Icon Descriptions," on page 61.

Requirements

AZedit version 5.0.0 or later

MCII-e version 3.2.0 or later

To **open the Enhanced Tallies window**, do the following:

1. Open **AZedit**.
2. From the menu bar, select **System | Miscellaneous | Enhanced Tallies**.
   The Enhanced Tallies window appears.

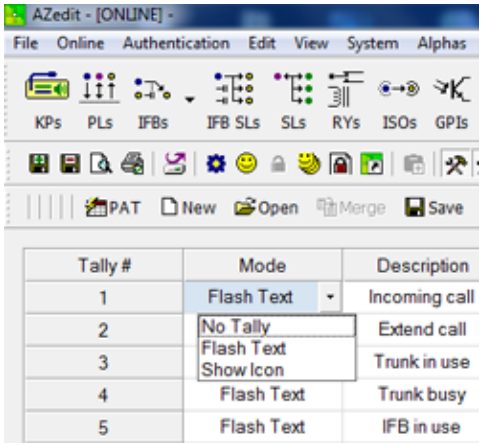


TABLE 7. Enhanced Tallies Window

Tally # Column

The **Tally #** column displays the tally number. This number is associated with the tally description and is used in selecting tallies to generate via UPL statements. AZedit supports 20 different tallies, however, the first 10 are predefined.

TABLE 8. Predefined Tallies

Tally #	Description
1	Incoming Call
2	Extend Call
3	Trunk in Use
4	Trunk Busy
5	IFB in Use
6	IFB Busy
7	PL in Use
8	General In Use
9	TIF Off-Hook
10	TIF Ringing

Mode Column

The **Mode** column is used to select the type of tally to use.

There are three options available:

No Tally

Flash Text Flashes text for a user-determined (duration column) amount of time.

Show Icon Shows an icon for a user determined (duration column) amount of time. For more information, see Table 9, “Tally Icon Descriptions,” on page 61.

Description Column

The **Description** column is used to enter a description of the tally you create.

IMPORTANT: It is recommended you do not change the pre-defined tallies descriptions. Changing the description does not change pre-defined purpose of the tally. For example, if you change the description for IFB Busy to Trunk Busy, it still activates when an IFB is busy and may be confusing to users.

To **change the Description column**, do the following:

1. In the Description column, double-click the desired **tally description**.
   The selected Description cell becomes active.
2. In the Description cell, enter the new **tally description**.
3. Click **Activate**.

Duration Column

The **Duration** column is used to select the duration of the tally’s activation.

Available options for this field are: *Indefinite* and *one second through five minutes.*

To **set the tally duration**, do the following:

1. In the Duration column, select the **duration of the tally** you want to change.
   A drop down menu appears.
2. From the drop down menu, select the **desired duration**.

Characteristics Column

The **Characteristics** column is used to configure the characteristics or behavior of the visual tally. The option selected in the Mode column determines what is seen in this column. From the Characteristics column, you can access a configuration window for either Text or Icon selections. If No Tally is selected in the Mode column, the Characteristics column is blank.

To **open the Text configuration window**, do the following:

1. In the Characteristics column, click on the **cell with the word Text**.
   The cell animates the tally as defined (for example, flashing text with color or animating icons) and an ellipsis button appears in the cell.
2. Click the **Ellipsis button**.
   The Flash Text Characteristics window appears. For more information, see "Flash Text Characteristics Window" on page 58.

To **open the Icon configuration window**, do the following:

1. In the Characteristics column, click on the **cell with word Icon**.
   An ellipsis button appears in the cell next to the word Icon.
2. Click the **Ellipsis button**.
   The Show Icon Characteristics window appears. For more information, see "Show Icon Characteristics Window" on page 60.

Chime # Column

The **Chime #** column is used to select the type of chime to play when a tally is activated.

Available options for this field are: *System Chime #1, System Chime #2, System Chime #3, System Chime #4, User Chime #1, User Chime #2, User Chime #3, and User Chime #4.*

To **set the chime**, do the following:

1. In the Chime # column, select the desired **chime cell**.
   A drop down menu appears.
2. From the drop down menu, select the desired **chime**.

Duration Column

The **Duration** column is used to select the length of time for the chime to last.

Available options for this field are: *One-shot* and *one second through five minutes.*

To **set the duration of the chime**, do the following:

1. In the Duration column, select the **duration of the desired tally**.
   A drop down menu appears.
2. From the drop down menu, select the **desired duration**.

Legacy Action Column

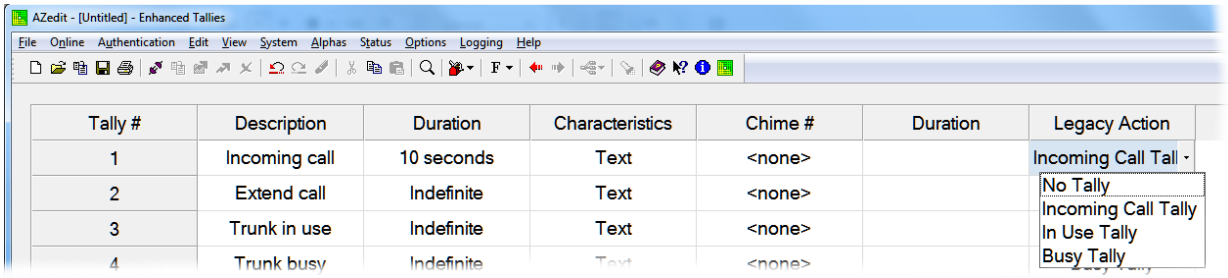
The **Legacy Action** column is used to select how the tally description is implemented on keypanels that do not support Enhanced Tallies.

Available options are:

No Tally
Incoming Call Tally
In-Use Tally
Busy Tally
Extend Call Tally

To s**elect a legacy action**, do the following:

1. Click in the **Legacy Action column cell** desired.
   A drop down arrow appears.
2. From the Legacy Action drop down menu, select desired **action**.



Flash Text Characteristics Window

The **Flash Text Characteristics** window is used to configure the way a text tally behaves for the selected tally.

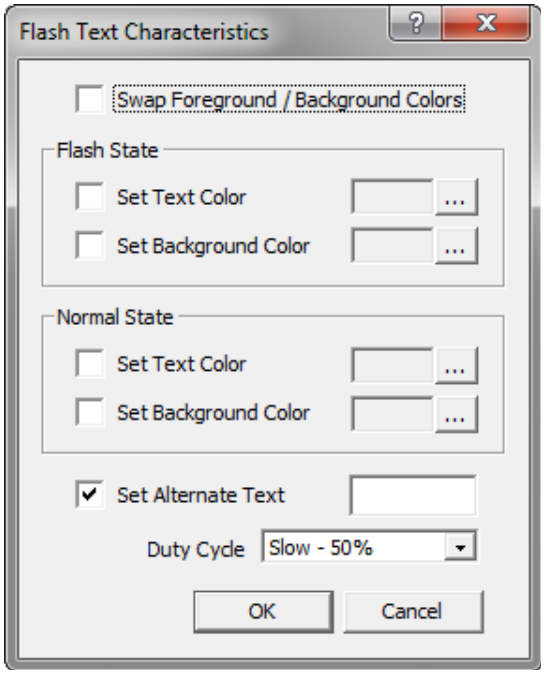


FIGURE 17. Flash Text Characteristics Window

Swap Foreground / Background Colors Check Box

The **Swap Foreground / Background Colors** check box indicates the foreground color swaps with the background color creating a blinking effect on the keypanel display.

Flash State Group Box

The **Flash State** group box is used to assign text and background colors used when a tally state is flashing.

Set Text Color Check Box

The **Set Text Color** check box activates the Selected Color cell and Browse button. This means you can modify the color of the text displayed.

Selected Color Cell and Ellipsis Button

The **Selected Color** cell displays the currently selected color of the text.

The **Ellipsis** button opens the Select Color window where you can assign a different color to the text.

Set Background Color Check Box

The **Set Background Color** check box activates the Selected Color cell and Browse button. This means you can modify the color of the background displayed.

Selected Color Cell and Ellipsis Button

The **Selected Color** cell displays the currently selected color of the background.

The **Ellipsis** button opens the Select Color window where you can assign a different color to the background.

Normal State Group Box

The **Normal State** group box is used when the tally is active and is not in the flash state. If there is no tally active, then the colors are whatever is defined for the assignment in the intercom.

Set Text Color Check Box

The **Set Text Color** check box activates the Selected Color cell and Browse button. This means you can modify the color of the Text displayed.

Selected Color Cell and Ellipsis Button

The **Selected Color** cell displays the currently selected color of the text.

The **Ellipsis** button opens the Select Color window where you can assign a different color to the text.

Set Background Color Check Box

The **Set Background Color** check box activates the Selected Color cell and Browse button. This means you can modify the color of the Background displayed.

Selected Color Cell and Ellipsis Button

The **Selected Color** cell displays the currently selected color of the background.

The **Ellipsis** button opens the Select Color window where you can assign a different color to the background.

Set Alternate Text Check Box and Entry Field

The **Set Alternate Text** check box and entry field is used to enter alternate text or characters that appears intermittently with the existing tally text.

This field can contain up to four characters.

Duty Cycle Drop Down Menu

The **Duty Cycle** drop down menu is used to select the rate the tally flashes alternate with normal text mode. The flash period is one second.

Available options for this menu are:

On Solid	There is no flash
Slow 25%	The flash appears for 25% of the flash period (1/4 of a second), while the normal mode appears for 75% of the flash period (3/4 of a second)
Slow 50%	The flash and the normal mode appear for 50% of the flash period (1/2 second each)
Fast 50%	The flash and the normal appear for 50% of the flash period in alternating pattern (1/4 second flash, 1/4 second normal mode, 1/4 second flash, and 1/4 second normal mode)
Slow 75%	The flash appears for 75% (3/4 of a second), while the existing text appears for 25% (1/4 of a second) of the flash period

OK Button

The **OK** button is used to accept/apply the changes and close the window.

Cancel Button

The **Cancel** button is used to reject the changes and close the window.

Show Icon Characteristics Window

The **Show Icon Characteristics** window is used to configure which icon to display during a tally event and the rate at which it flashes during the event.

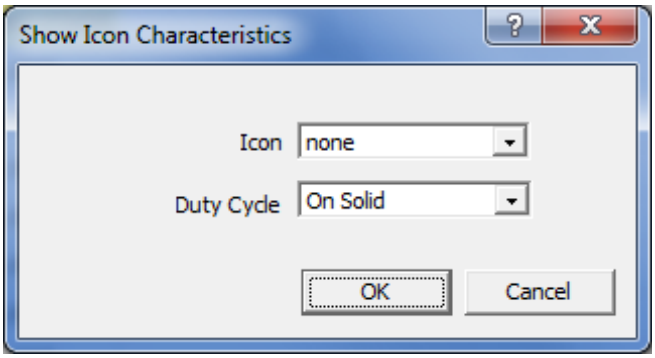


FIGURE 18. Show Icon Characteristic Window

Icon Drop Down Menu

The **Icon** drop down menu is used to select the icon you desire. See “Tally Icon Descriptions” on page 61.

Duty Cycle Drop Down Menu

The **Duty Cycle** drop down menu is used to select the rate the icon flashes. The flash period is 1 second.

Available options for this menu are:

On Solid	There is no flash
Slow 25%	The icon appears for 25% of the slow flash period
Slow 50%	The icon appears for 50% of the slow flash period
Fast 50%	The icon appears for 50% of the fast flash period in alternating 25% segments
Slow 75%	The icon appears for 75% of the fast flash period
Animate	4-frame animation, each frame displays for 25% of the flash period.

OK Button

The **OK** button is used to accept/apply the changes and close the window.

Cancel Button

The **Cancel** button is used to reject the changes and close the window.

Enhanced Tally Icons

Enhanced Tally Icons, shown in Table 9, are used to visually alert keypanel users of different events occurring on the keypanel and in the Matrix system. The keypanel ships with these icons built-in by default.

NOTE: These icons are the default icons included with the keypanel. These icons can be used for any purpose. Not all the icons are used as defaults.The descriptions in Table 9 are just suggested uses.

TABLE 9. Tally Icon Descriptions

Icon	Icon Name	Description
	Target	Incoming Call (animation supported) – A call is coming into the keypanel and the animation toggles the target every half second. Extended Call (animation not supported)– The extended call tally is generated when the key is on for a predetermined amount of time. In English intercoms, five seconds pass before the tally begins, while in Japanese intercoms, two seconds must pass
	Red Star	Trunk In-Use (animation not supported) Trunk Busy (animation supported) – The trunk is busy. The animation toggles the star on/off every quarter of a second.
	Black Star	IFB/ISO In Use (animation not supported) IFB/ISO Busy (animated) - The IFB/ISO is busy. The animation rotates the star.
	Orange Wave	PL In-Use (animation not supported)
	Gray Gear	General In-Use (animation not supported) - Used in Japanese intercoms. This tally is used to show when other keypanels are doing an action on the keypanel. In a Japanese intercom, if your panel is in-use (i.e., you turn on a talk key to anybody), and I have your assignment on my keypanel, the assignment on my keypanel displays the General In-Use tally, even though we are not talking to each other.
	Red Phone	TIF Ringing (animation supported) - The handset vibrates in the animation.
	Yellow Phone	TIF Offhook (animation supported) - The TIF key is active. The animation flashes the icon on and off every half second.
	Exclamation	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Heart	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Question	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Flag	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Person	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Link	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Car	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Lightening Bolt	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	House	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.

TABLE 9. Tally Icon Descriptions

Icon	Icon Name	Description
	Handset	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Lock	Available for UPL Tally (animation not supported)
	Speaker	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Play	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Message	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.
	Red Circle	Available for UPL Tally (animation supported) - The animation flashes the icon on and off every half second.

Panel Tally

Panel Tally is used to notify a keypanel user of an event not specifically belonging to a key; for example, a blinking icon appears when a newscast is on air. Panel tallies are controlled through the use of UPL statements. Multiple UPL statements can be configured, but only one icon displays at a time. Lower numbered icons take priority.

Available panel tally icons are:

Suggested Use	
 **Alarm, Appointment, Event**	 **Positive, Notify**
 **Alarm, Chime, Notify**	 **Favorite**
 **Target, Incoming**	 **Information**
 **Appointment, Event**	 **Negative**
 **On-Air, Live**	 **On Air**
 **Error**	 **Warning, Alarm, Alert**
 **Warning**	

CHAPTER 4

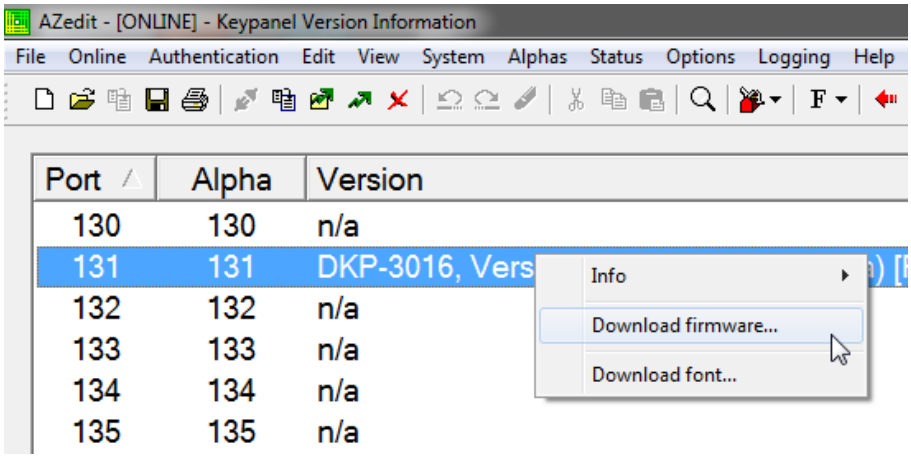
Firmware Download

Download Firmware to the DKP-3016 From AZedit

IMPORTANT: When downloading firmware using AZedit, the file type used is a .mot file.When downloading firmware using the Firmware Upload Tool, the file type is a .capfw file.

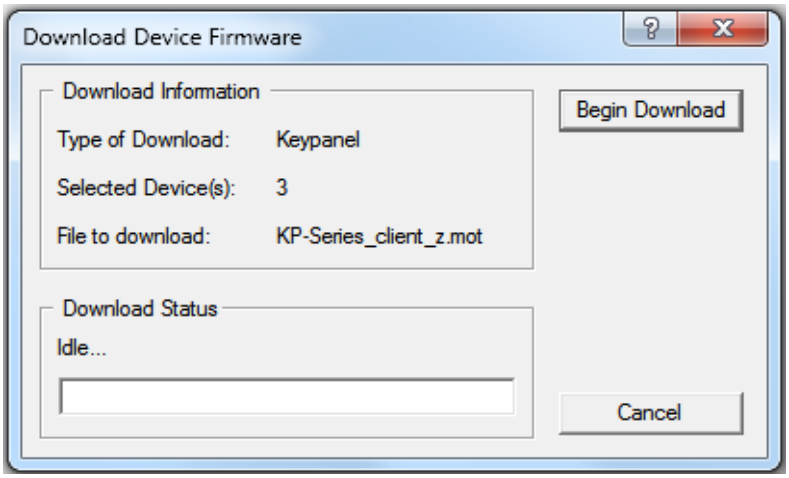
To **download firmware to the keypanel**, do the following:

1. Open **AZedit**.
2. From the Status menu, select **Software Versions** | **Keypanels**.
   The Keypanel Version Information window appears.
3. Find the **port number** where the DKP-3016 is assigned.

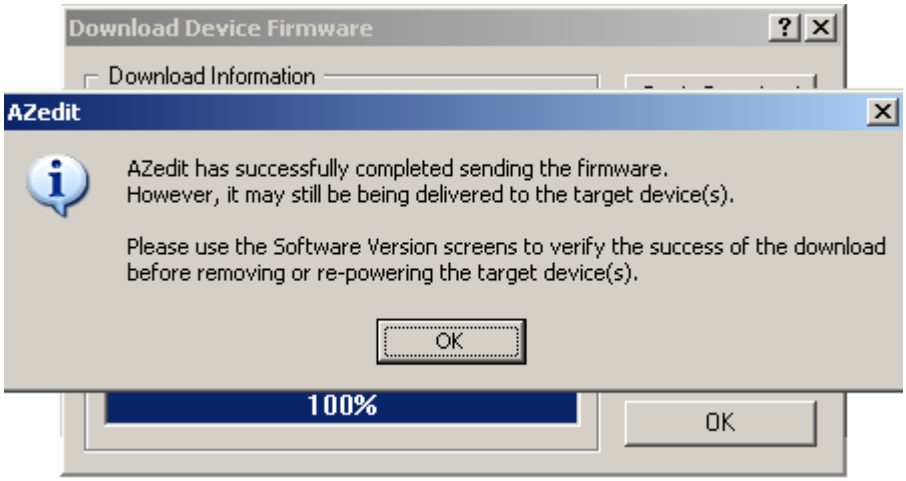


4. Highlight the **Port** (keypanel) to be updated.
   You may select more than one at a time by holding CTRL key down while you select.
5. Right-click the **highlighted selections**.
   A popup menu appears.
6. Select **Download firmware...**.
   The Firmware Download window appears.
7. Using the browse button, browse to the **file to be downloaded**.

8. Click **Open**.
The Download Device Firmware window appears.



9. Click **Begin Download**.
The download begins. A progress bar appears to show the progress of the download.



10. Verify the keypanel displays the **FIRMWARE DOWNLOAD message with a progression bar.**

11. Click **OK**.
The DKP-3016 firmware download finishes.
12. Verify the keypanel displays the **PROCESSING DOWNLOAD message with a progression bar**

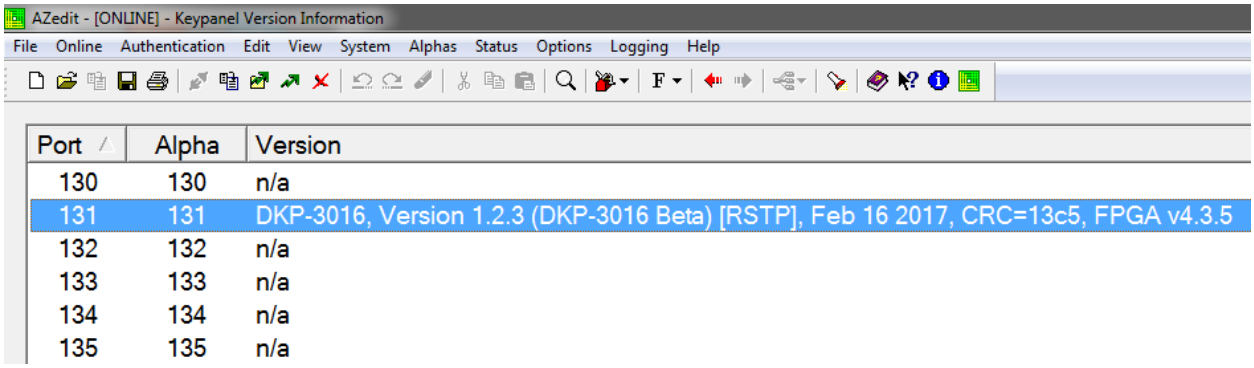
NOTE: Processing Download is only shown if the downloaded firmware image is compressed.

13. Once the keypanel is finished processing the download, the keypanel begins to **reprogram**.
The keypanel flashes a REPROGRAMMING DO NOT POWER OFF message in the display panel.

NOTE:

- This can take up to 2 minutes to complete if connected via OMNEO and up to 15 minutes to complete if connected via AIO. Use the Keypanel Version Information window (Status | Software Versions | Keypanels) to follow the progress of the download. Also, the keypanel displays Firmware Download on the panel display until the download is complete.
- The DKP-3016 resets itself once the firmware download is complete and the flash reprogrammed.
- While the firmware is downloading, chunk progress is displayed by incremental blocks. Also, the keypanel displays an icon warning not to turn off the panel while the flash is being reprogrammed.

14. In the Keypanel Version Information window (Status | Software Versions | Keypanels), verify the **version upgrade**.



Download Firmware to the Keypanel Using the Firmware Upload Tool

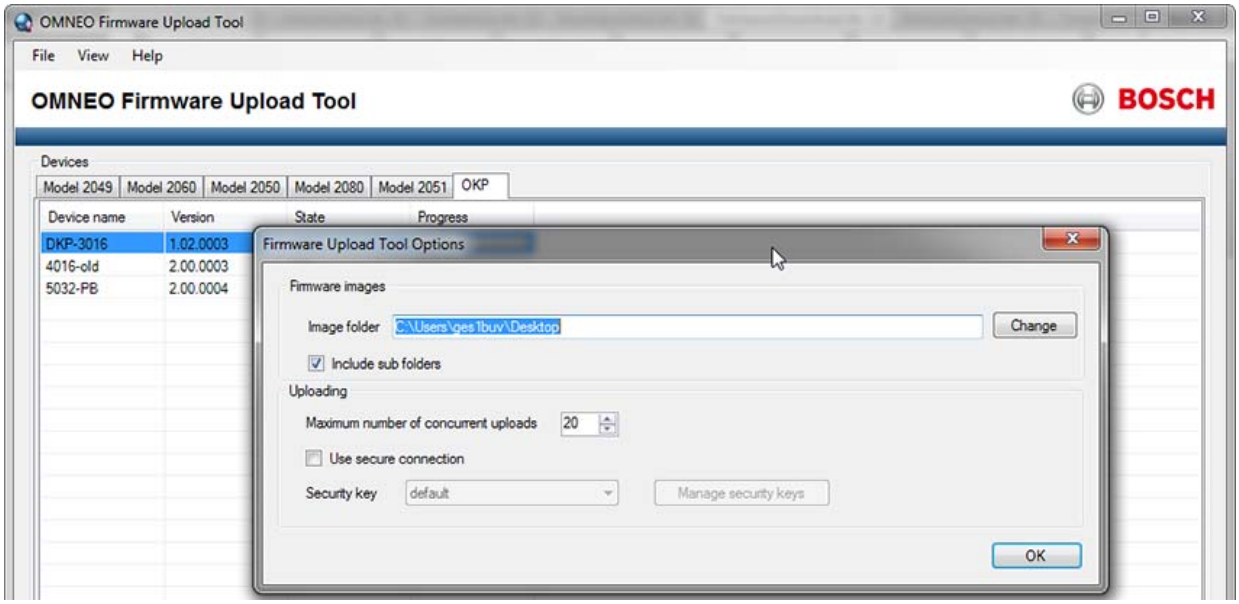
Required Firmware version:

FWUT	*V4.2.0 or later*

IMPORTANT: When downloading firmware using AZedit , the file type used is a .mot file.When downloading firmware using the Firmware Upload Tool, the file type is a .capfw file.

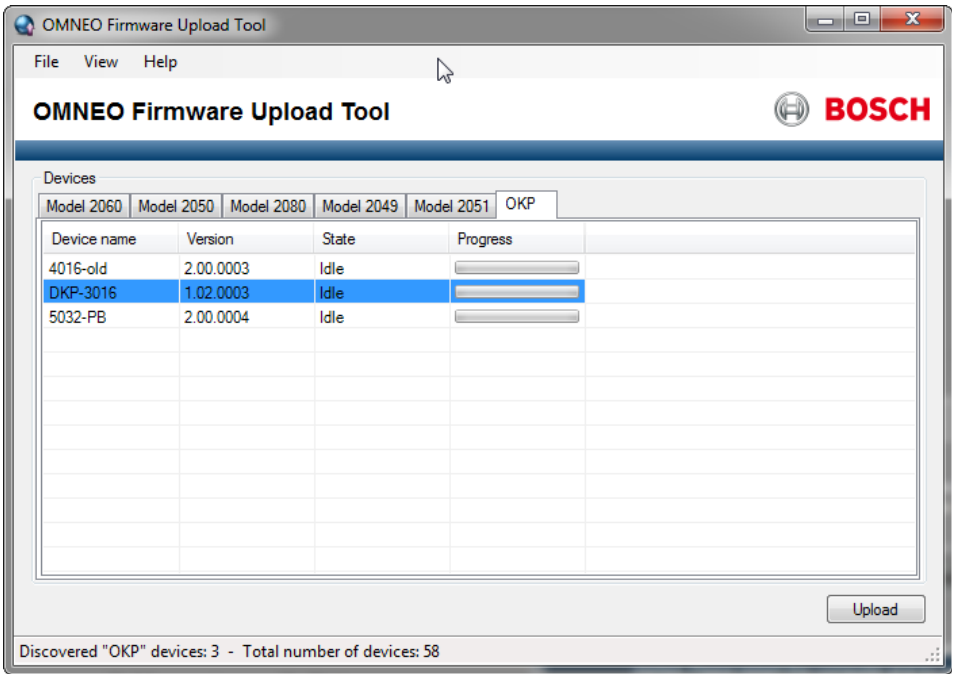
To **download firmware to the keypanel**, do the following:

1. Open the **Firmware Upload Tool**.
2. From the File menu, select **Options**.
   The Firmware Upload Tool Options window appears.

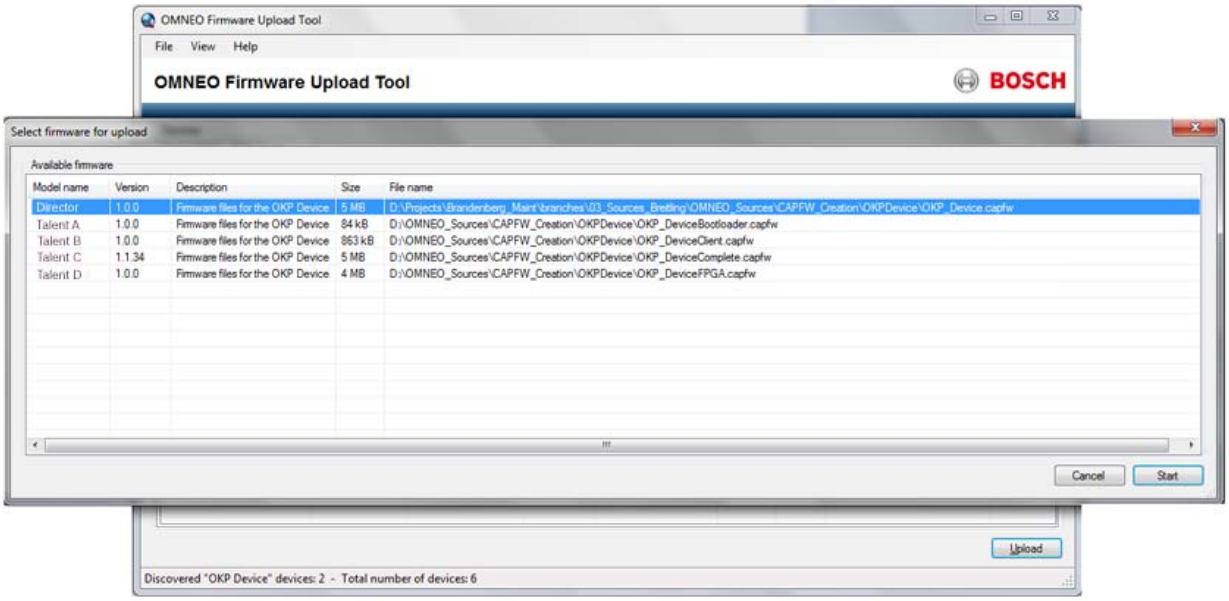


3. Click the **Change button**.
   The folder network window appears.
4. Navigate to the **folder** where the firmware resides.
5. Click **OK**.
6. Click **OK**, again.
   The Firmware Upload Tool Options window closes.

7. From the OKP Device page, select the **device** you want to update.



8. Click the **Upload button**.
The Select Firmware for Upload window appears.
9. From the list of firmware, select the **firmware** you want to download.



10. Click the **Start button**.
11. Once the firmware has been updated, the keypanel **reboots** automatically.

Download Firmware Using the Bootloader

The **Bootloader** is used to upgrade the keypanel firmware if it is corrupt or fails in such a way that makes normal downloading of new firmware impossible.

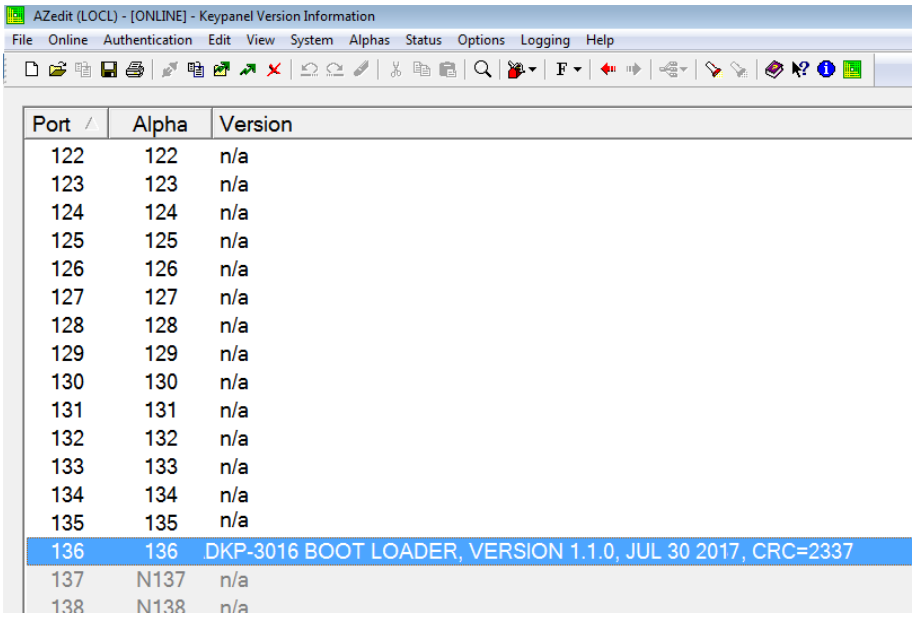
IMPORTANT: If the keypanel firmware is corrupt, the panel may boot automatically into the bootloader. However, if the keypanel firmware appears valid, but fails to run properly, you may need to force the keypanel into the bootloader to load new keypanel firmware.

Run the Bootloader

To **run the bootloader**, do the following:

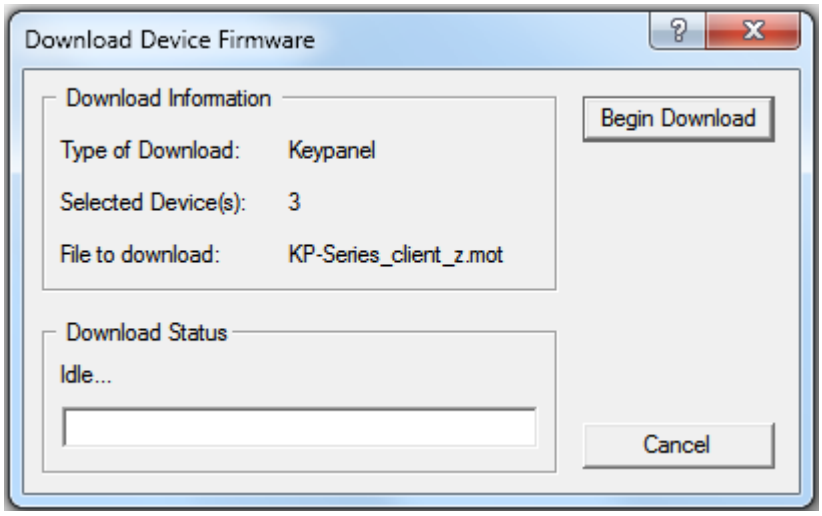
1. Power **off** the keypanel.
2. Verify the **DKP-3016 is powered off**, but still connected to the FRAME.
3. At the same time, press and hold **keypanel key 15 in the listen position (up) and keypanel key 16 in the talk position (down)**, while you connect the **power cord** to the keypanel.
   DKP-3016 - Boot Loader Waiting for download... appears in the panel display.

4. In AZedit, from the Status menu, select **Software Versions**.
   The Software Versions popup menu appears.
5. From the Software Versions popup menu, select **Keypanels**.
   The Keypanel Version Information window appears.



6. From the Keypanel Version Information window, find and select the **DKP-3016**.
7. Right-click on the **DKP-3016**.
   A popup menu appears.
8. From the popup menu, select **Download Firmware...**.
   The Firmware Download navigation window appears.
9. Navigate to and select your **firmware file** (i.e., KP-Series_client_z.mot).

10. Click **Open**.
The Download Device Firmware window appears.



11. Click **Begin Download**.
The Download begins and a popup message appears.
12. Click **OK**.
The DKP-3016 firmware download finishes.

NOTE: This can take up to 15 minutes to complete if connected via AIO. Use the Keypanel Version Information window to follow the progress of the download (the number and percentage of chunks completed). Also, the firmware progression is displayed on the DKP-3016 panel display until the download is complete.

NOTE: Once the Boot Loader is finished downloading, it reprograms the flash and reboots itself.

Display the Bootloader Version from the Keypanel

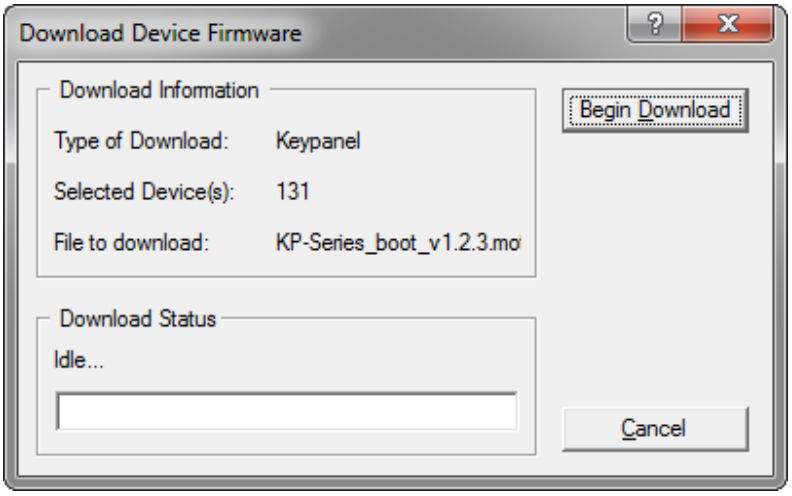
To **display the Bootloader version currently installed in the keypanel**, do the following:

1. While pressing the MAIN VOLUME and AUX VOLUME shaft encoders on the front of the keypanel at the same time, press the **MENU button**.
   The main menu appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Service**.
3. Press the **SEL button**.
   The Service menu options appear in the panel display.
4. Using the AUX VOLUME shaft encoder, select **Boot Code**.
5. Press the **SEL button**.
   Version X.X.X (where X represents the Bootloader version numbers) appears in the panel display.

Download and Upgrade the Bootloader in the DKP-3016

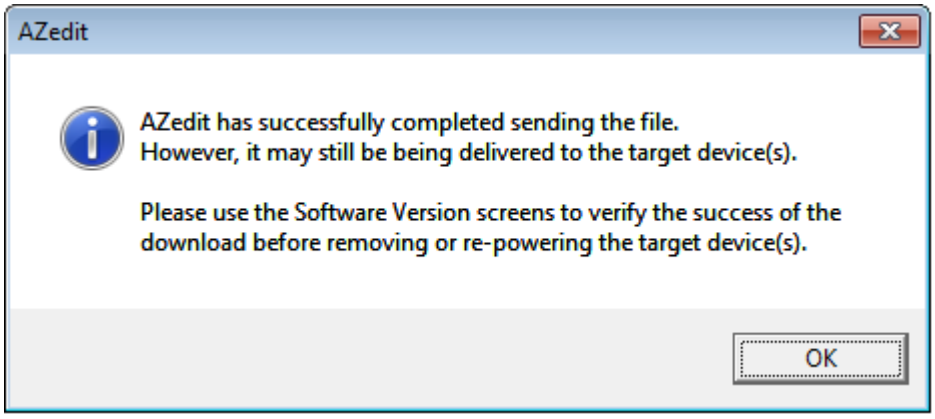
To **download the Bootloader to the keypanel**, do the following:

1. Open **AZedit**.
2. From the Status menu, select **Software Versions | Keypanels.**
   The Keypanel Version Information window appears.
3. Find the **port number** where the DKP-3016 is assigned.
4. Highlight the **Port** (keypanel) to be updated.
   You may select more than one at a time by holding CTRL key down while you select.
5. Right-click the **highlighted selections**.
   A popup menu appears.
6. Select **Download Firmware**.
   The Firmware Download window appears.
7. Using the browse button, navigate to the **Bootloader file** you want to use.
8. Click **Open**.
   The Download Device Firmware window appears.

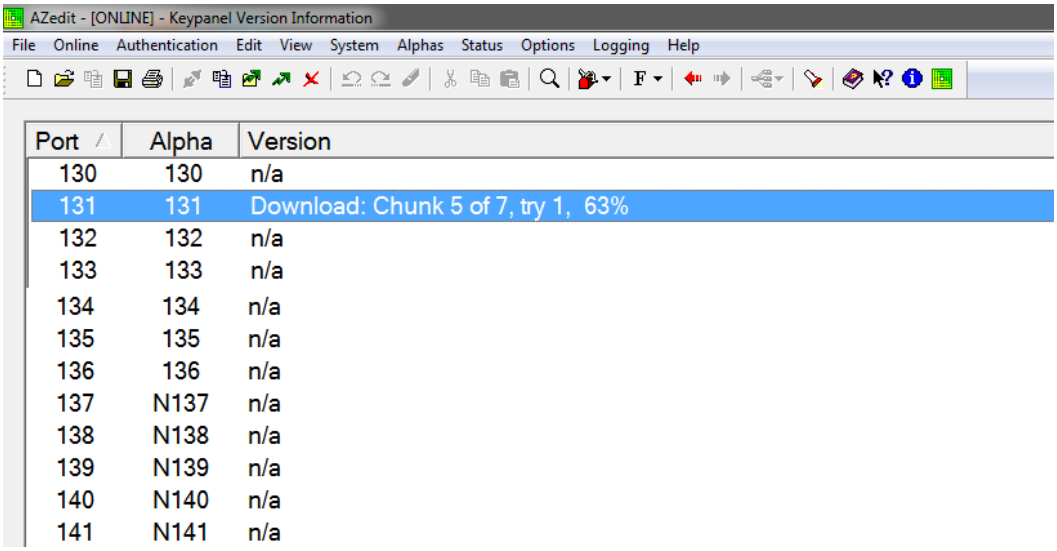


9. Click **Begin Download**.
   The download begins. A progress bar appears to show the progress of the download.

10. Click **OK**.
The DKP-3016 firmware download to the Matrix finishes. The Download Bootloader Firmware To The Keypanel begins.



11. Verify the Keypanel Version Information window is displaying the **numbers of chunks (of data) transferred to the keypanel**.



12. Verify the keypanel displays the **BOOTLOADER DOWNLOAD message with a progression bar**.

13. The keypanel begins to **reprogram**.
The keypanel flashes a REPROGRAMMING: DO NOT POWER OFF message in the display panel. This can take several minutes.

14. Once the reprogramming is complete, the keypanel **reboots**.

Display the FPGA Version

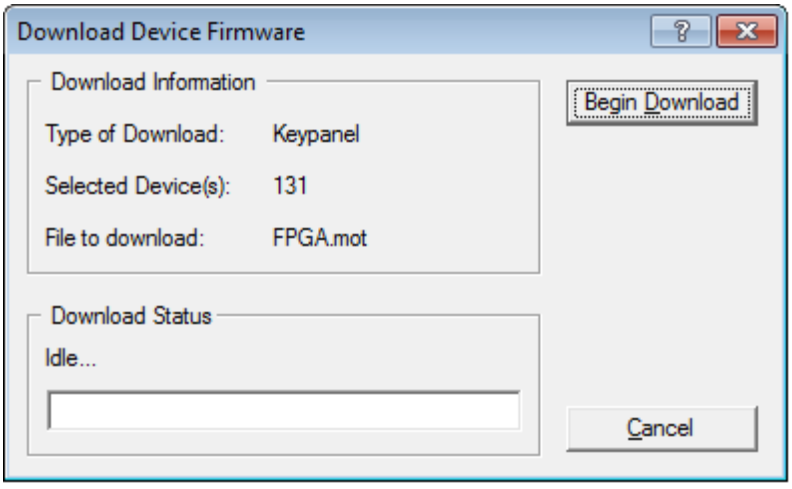
To **display the FPGA version currently installed in the keypanel**, do the following:

1. While pressing the MAIN VOLUME and AUX VOLUME shaft encoders on the front of the keypanel at the same time, press the **MENU button**.
   The main menu appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Service**.
3. Press the **SEL button**.
   The Service menu options appear in the panel display.
4. Using the AUX VOLUME shaft encoder, select **FPGA Version**.
5. Press the **SEL button**.
   Version X.X.X (where X represents the FPGA version numbers) appears in the panel display.

Download and Upgrade the FPGA in the DKP-3016

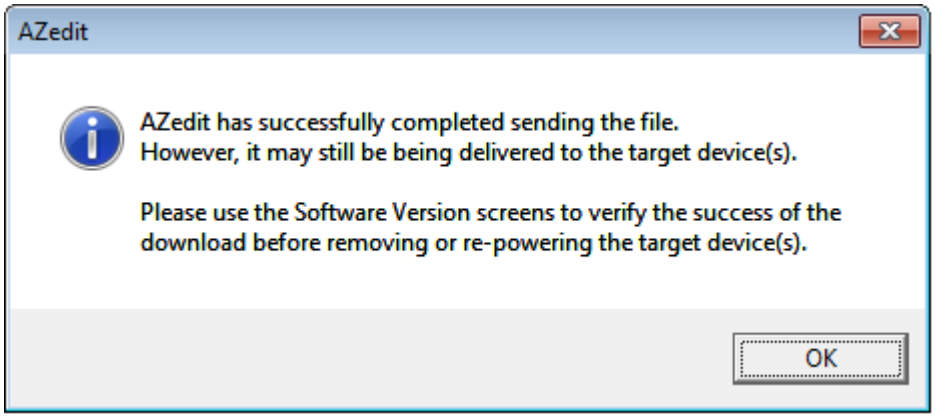
To **download the FPGA to the keypanel**, do the following:

1. Open **AZedit**.
2. From the Status menu, select **Software Versions | Keypanels.**
   The Keypanel Version Information window appears.
3. Find the **port number** where the DKP-3016 is assigned.
4. Highlight the **Port** (keypanel) to be updated.
   You may select more than one at a time by holding CTRL key down while you select.
5. Right-click the **highlighted selections**.
   A popup menu appears.
6. Select **Download firmware**...
   The Firmware Download window appears.
7. Using the browse button, navigate to the **FPGA file** you want to use.
8. Click **Open**.
   The Download Device Firmware window appears.

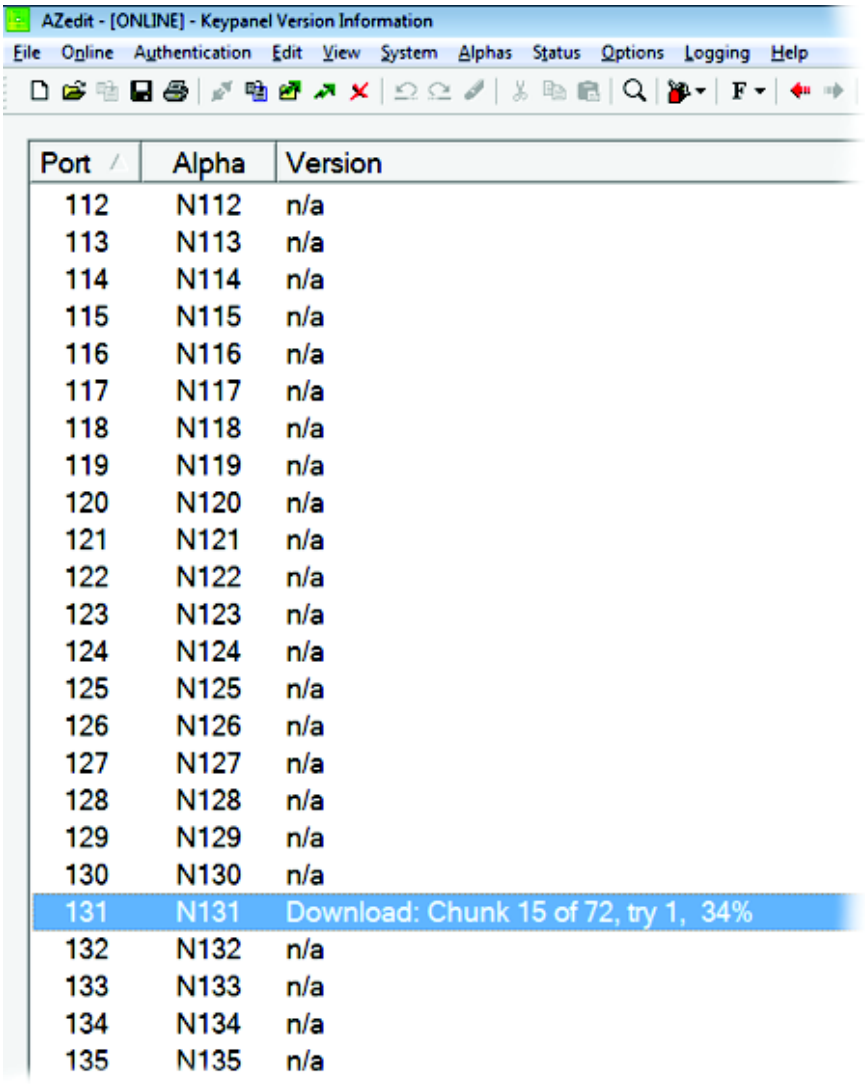


9. Click **Begin Download**.
   The download begins. A progress bar appears to show the progress of the download.

10. Click **OK**.
The DKP-3016 firmware download to the Matrix finishes. The Download FPGA Firmware To The Keypanel begins.

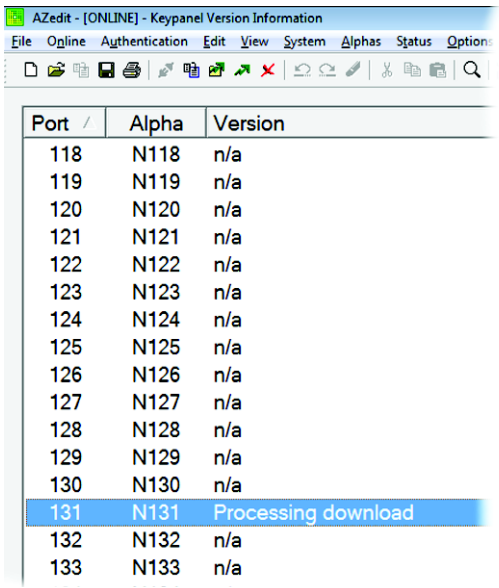


11. Verify the Keypanel Version Information window is displaying the **numbers of chunks (of data) transferred to the keypanel**.



12. Verify the keypanel displays the **FPGA DOWNLOAD message with a progression bar**.
Once the download is complete, the keypanel has to process the downloaded file.

13. Verify the Keypanel Version Information window displays **Processing download** on the keypanel port you chose.



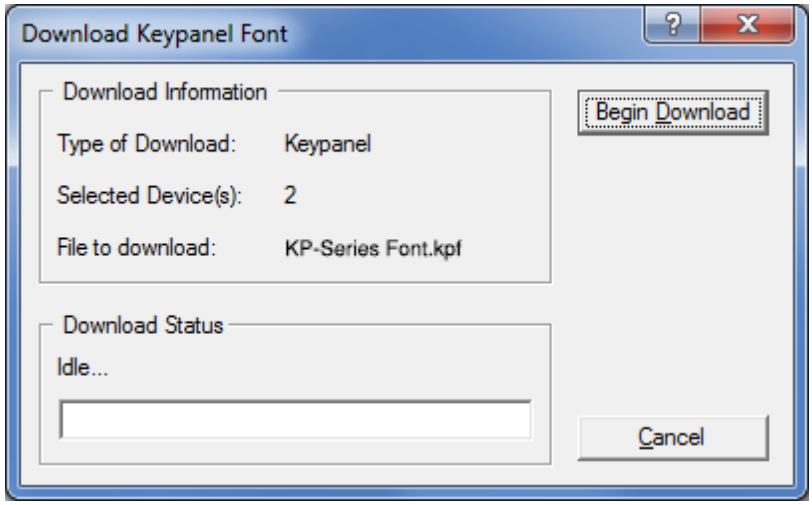
14. Verify the keypanel displays the **PROCESSING DOWNLOAD message with a progression bar**.

15. Once the keypanel is finished processing the download, the keypanel begins to **reprogram**.
The keypanel flashes a REPROGRAMMING: DO NOT POWER OFF message in the display panel. This can take several minutes.

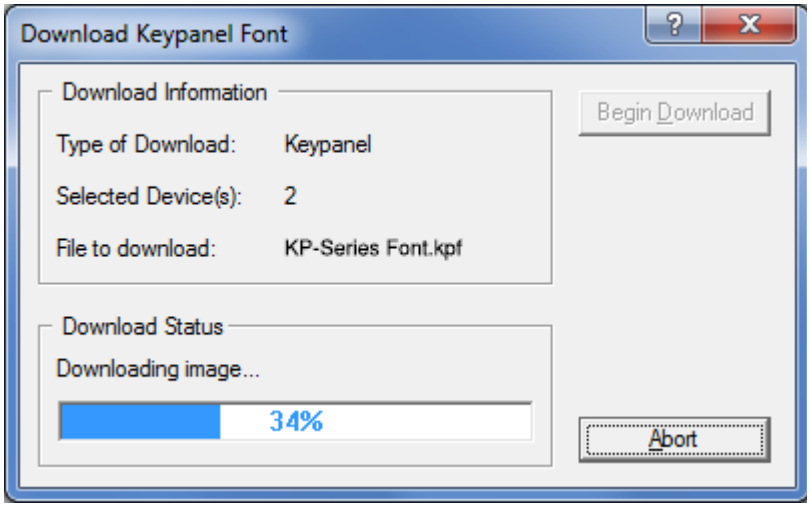
16. Once the reprogramming is complete, the keypanel **reboots**.

Download a Font File

1. Open **AZedit**.
2. From the Status menu, select **Software Versions | Keypanels.**
   The Keypanel Version Information window appears.
3. Find the **port number** where the DKP-3016 is assigned.
4. Highlight the **Port** (keypanel) to be updated.
   You may select more than one at a time by holding CTRL key down while you select.
5. Right-click the **highlighted selections**.
   A popup menu appears.
6. Select **Download font...**.
   The Font Download window appears.
7. Navigate to the **font file (.kpf)** you want to use.
8. Click **Open**.
   The Download Keypanel Font window appears.

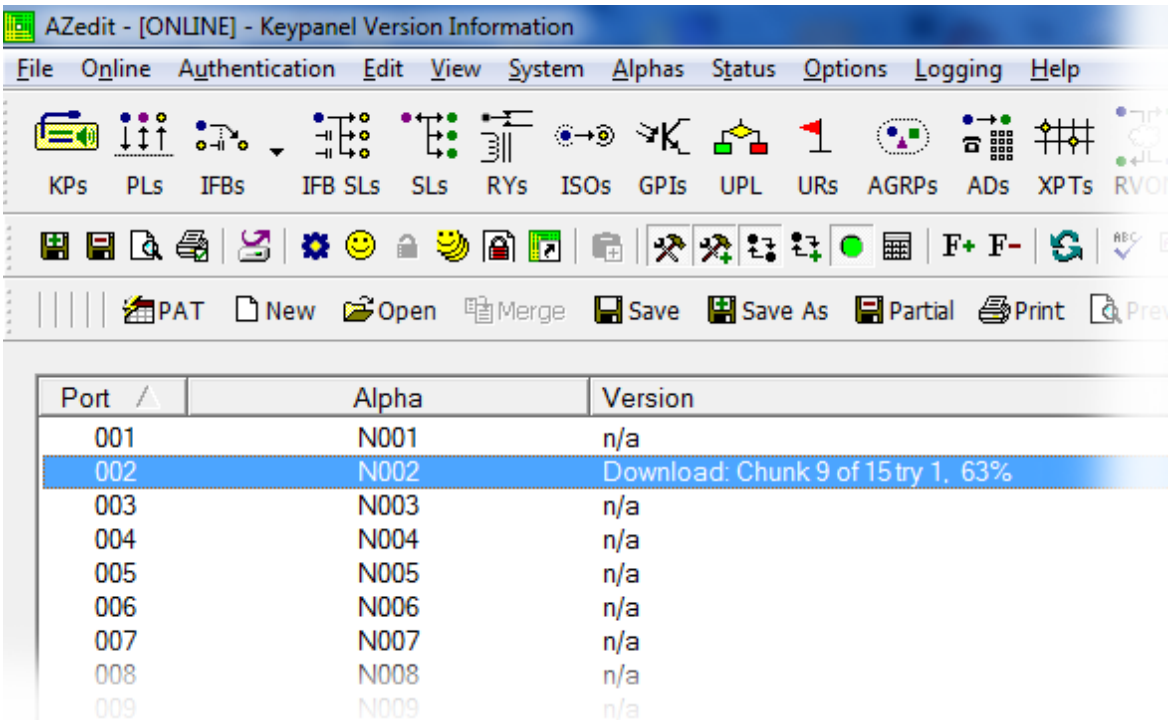


9. Click **Begin Download**.
   The download begins. A progress bar appears to show the progress of the download.



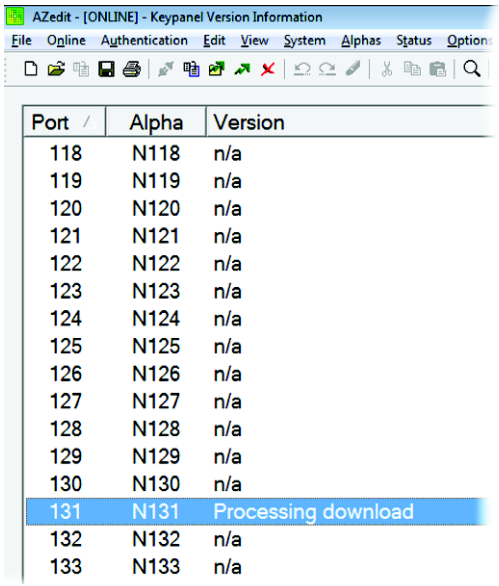
Once the download is complete the Download Keypanel Font window closes.

10. Verify the Keypanel Version Information window is displaying the **numbers of chunks (of data) transferred to the keypanel**.



11. Verify the keypanel displays the **FONT DOWNLOAD message with a progression bar**.
Once the download is complete, the keypanel has to process the downloaded file.

12. Verify the Keypanel Version Information window displays **Processing download** on the keypanel port you chose.



13. Verify the keypanel displays the **PROCESSING DOWNLOAD message with a progression bar**.

14. Once the keypanel is finished processing the download, the keypanel begins to **reprogram**.
The keypanel flashes a REPROGRAMMING: DO NOT POWER OFF message in the display panel. This can take several minutes.

15. Once the reprogramming is complete, the keypanel **reboots**.

CHAPTER 5

DKP-3016 Menu System

NOTE: A menu system quick reference chart is located at “Keypanel Menu Quick Reference” on page 133.

Main Menu Access

IMPORTANT: For more detailed information on Basic Key operation, see “Menu Navigation and shaft encoders” on page 29.

The **Main Menu** is the topmost level of the menu structure.

Available selections for this menu are:

Audio Options
Display
Key Assign
Key Options
OMNEO Offers
RVON Offers
Save Config
Service

To **access the main menu structure**, do the following:

1. On the keypanel keypad, press the **MENU button**.
   The Main menu structure displays across the top of the panel display.
2. Using the arrow buttons on the keypad, navigate through the **menu options**.
3. Press the **SEL button**.
   The submenu for the selection appears.

Menu System, Audio Options

Available options for this menu are:

Advanced
Chime
Dim
Headset Mic
Headset Spkr
Inputs
Key Volumes
Matrix Out
Max Volume
Mic Gain
Mic Mute
Min Volume
Output Lev
Panel Mic
Sidetone
Speaker
Tone Gen

Audio Options Menu, Advanced

- AGC
- Compression
- Filters
- Gating
- Metering
- Mixing
- Mix Mode
- Noise Gate

AGC

The **AGC (**Automatic Gain Control) menu is used to set the speed at which a microphone becomes active and the speed at which a sustainable level is achieved through the use of the Attack menu and the Decay menu. You can set these levels for the panel microphone and the headset microphones used with the keypanel.

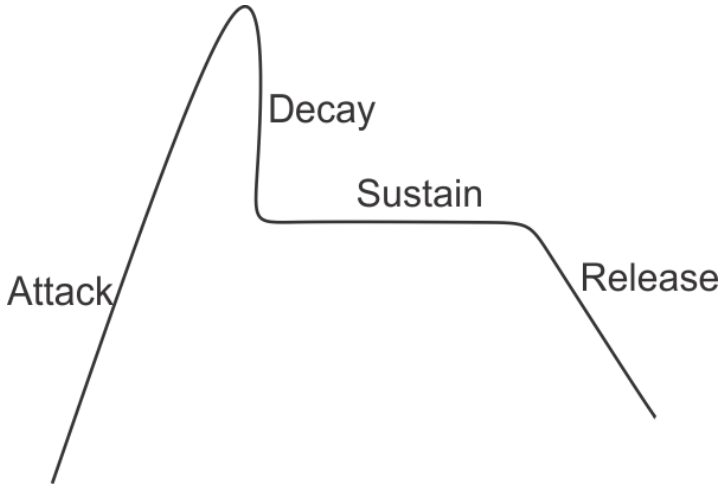


FIGURE 19. Automatic Gain Control Example

Attack

The **Attack** menu item is used to set the speed at which the microphone gets to the activation threshold, the point where the circuit determines if the noise is a voice. The smaller the attack time, the faster the mic turns on.

Available options for this menu are:

0.5ms

1ms (d)

2ms

Decay

The **Decay** menu item is used to set the speed at which the gain transitions to silence during release.

Available options for this menu are:

500ms

750ms (d)

1000ms

To **configure the attack speed for a microphone source**, do the following:

1. Starting at the Audio Options | Advanced | AGC menu, select **Attack**.
2. Press the **SEL button**.
   Left Hdst, Panel Mic, and Right Hdst appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Left Hdst**, **Panel Mic**, or **Right Hdst**.
4. Press the **SEL button**.
   The Fast Attack Speed scroll box appears in the panel display.
5. Using the AUX VOLUME shaft encoder, select the desired **Attack speed**.

To **configure the decay speed for a microphone source**, do the following:

1. Starting at the Audio Options | Advanced | AGC menu, select **Decay**.
2. Press the **SEL button**.
   Left Hdst, Panel Mic, and Right Hdst appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Left Hdst**, **Panel Mic**, or **Right Hdst**.
4. Press the **SEL button**.
   The Decay scroll box appears in the panel display.
5. Using the AUX VOLUME shaft encoder, select the desired **Decay speed**.

Compression

The **Compression** menu item is used change the keypanel audio gain, meaning audio above the threshold is changed according to the compression selected. The compression is used to reduce the output level.

Compression can be applied to the following:

- Headset
- Panel Mic

Available options are:

1:1

2:1

3:1(d)

To **configure compression on a microphone**, do the following:

1. Starting at the Audio Options | Advance menu, select **Compression**.
2. Press the **SEL button**.
   Left Hdst, Panel Mic, and Right Hdst appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the **microphone source**.
4. Press the **SEL button**.
   The Compression Ratio scroll box appears in the panel display.
5. Using the AUX VOLUME shaft encoder, select the desired **compression ratio**.

Filters

Filters allow you to add a bandpass filter, a preset frequency response (equalization) filter or a notch filter to one or more audio sources.

Bandpass

The **Bandpass** menu is used to enable using bandpass filters as well as set a low and high frequency range where frequencies within the two (2) frequency points are passed and anything outside of the range is rejected.

To **configure a bandpass range for Inputs**, do the following:

1. Starting at the Audio Options | Advanced | Filters menu, select **Bandpass**.
2. Press the **SEL button**.
   Inputs and Outputs appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Inputs**.
4. Press the **SEL button**.
   OMNEO 1, and OMNEO 2 appear in the panel display.

   NOTE: OMNEO 1 is only available if it is not the matrix connection.
5. Using the AUX VOLUME shaft encoder, select either **OMNEO 1** or **OMNEO 2**.
6. Press the **SEL button**.
   Frequencies and Mode appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select **Mode**.
   Disabled and Enabled appear in the panel display.
8. Using the AUX VOLUME shaft encoder, select **Enabled**.
9. Press the **SEL button**.
   An arrow appears next to the selected option.
10. Press the **CLR** button.
    Frequencies and Mode appear in the panel display.
11. Using the AUX VOLUME shaft encoder, select **Frequencies**.
12. Press the **SEL button**.
    The Low Freq scroll box and the High Freq scroll box appear in the panel display.
13. Using the AUX VOLUME shaft encoder, select the desired **low frequency**.
14. Using the arrow keys, select the **high frequency scroll box**.
15. Using the AUX VOLUME shaft encoder, select the desired **high frequency**.

To **configure a bandpass range for Outputs**, do the following:

1. Starting at the Audio Options | Advanced | Filters menu, select **Bandpass**.
   Inputs and Outputs appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Output**.
3. Press the **SEL button**.
   Left Hdst, Matrix Out, OMNEO 1, OMNEO 2, and Right Hdst appear in the panel display.

   NOTE: OMNEO 1 is only available if it is not the matrix connection.

4. Using the AUX VOLUME shaft encoder, select the **output** you want to modify.

   If Right Hdst or Left Hdst is chosen:

   a. Press the **SEL button**.
   Both, Left Chan, and Right Chan appear in the panel display.
   b. Using the AUX VOLUME shaft encoder, select either **Both**, **Left Chan**, or **Right Chan**.

5. Press the **SEL button**.
Frequencies and Mode appear in the panel display.
6. Using the AUX VOLUME shaft encoder, select **Mode**.
Disabled and Enabled appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select **Enabled**.
8. Press the **SEL button**.
An arrow appears next to the selected option.
9. Press the **CLR button**.
Frequencies and Mode appear in the panel display.
10. Using the AUX VOLUME shaft encoder, select **Frequencies**.
11. Press the **SEL button**.
The Low Freq scroll box and the High Freq scroll box appear in the panel display.
12. Using the AUX VOLUME shaft encoder, select the desired **low frequency**.
13. Using the arrow keys, select the **high frequency scroll box**.
14. Using the AUX VOLUME shaft encoder, select the desired **high frequency**.

Equalization

Equalization allows the user to select predefined settings that modify the frequency envelope of an audio channel. This is a 5-band equalizer. Each preset provides a different EQ to be applied to the audio.

Available selections for this menu are:

Default	0 dB (15Hz–20kHz)
Hiss Reduction	0 dB (15Hz–2kHz) -6 dB (2kHz–12.6kHz)
Rumble Reduction.	0 dB (50Hz–20kHz)
Noise Reduction	0 dB (50Hz–2kHz) -6 dB (2kHz–8kHz) -80 dB (8kHz–12.6kHz)

To **configure a preset frequency response for an input**, do the following:

1. Starting at the Audio Options | Advanced | Filters menu, select **Equalization**.
Inputs and Outputs appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select either **Input**.
3. Press the **SEL button**.
Left Hdst, Matrix In, Panel Mic, and Right Hdst appear in the panel display.
4. Using the AUX VOLUME shaft encoder, select **Left Hdst**, **Matrix In**, **Panel Mic**, or **Right Hdst**.
5. Press the **SEL button**.
Mode and Presets appear in the panel display.
6. Using the AUX VOLUME shaft encoder, select **Mode**.
Disabled and Enabled appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select **Enabled**.
8. Press the **SEL button**.
An arrow appears next to the selected option.
9. Press the **CLR** button.
Mode and Presets appear in the panel display.
10. Using the AUX VOLUME shaft encoder, select **Presets**.

11. Press the **SEL button**.
Default, Hiss Reduction, Rumble Reduction, and Noise Reduction appear in the panel display.
12. Using the AUX VOLUME shaft encoder, select **Default**, **Hiss Reduction**, **Rumble Reduction**, or **Noise Reduction**.
13. Press the **SEL button**.
An arrow appears next to preset selected.

To **configure a preset frequency response for an output**, do the following:

1. Starting at the Audio Options | Advanced | Filters menu, select **Equalization**.
Inputs and Outputs appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Output**.
3. Press the **SEL** button.
Speaker appears in the panel display.
4. Press the **SEL button**.
Mode and Presets appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Mode**.
Disabled and Enabled appear in the panel display.
6. Using the AUX VOLUME shaft encoder, select **Enabled**.
7. Press the **SEL button**.
An arrow appears next to the selected option.
8. Press the **CLR** button.
Mode and Presets appear in the panel display.
9. Using the AUX VOLUME shaft encoder, select **Presets**.
10. Press the **SEL button**.
Default, Hiss Reduction, Rumble Reduction, and Noise Reduction appear in the panel display.
11. Using the AUX VOLUME shaft encoder, select **Default**, **Hiss Reduction**, **Rumble Reduction**, or **Noise Reduction**.
12. Press the **SEL button**.
An arrow appears next to preset selected.

Notch

The **Notch** menu allows you to add a notch filter to matrix input. This can be useful when the keypanel data port signal is being heard in the audio line due to cable routing problems.

By default, the notch filter is set to *Disabled*.

Available options for this menu are:

Disabled

Narrow	9500hz–9700Hz (200Hz band)
Default	9450hz–9750Hz (300Hz band)
Wide	9400hz–9800Hz (400Hz band)

To **configure the notch filter for the matrix input**, do the following:

1. Starting at the Audio Options | Advanced | Filters menu, select **Notch**.
The Notch Filter scrollbox appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select the desired **Notch Filter**.

Gating

Gating (also called VOX) allows you to minimize or eliminate background noise problems by shutting off an audio source when the audio level drops below a certain threshold.

Gating can be applied to the following:

Left Hdst

Matrix In

OMNEO 1 (only present if connected via the AIO)

OMNEO 2

Panel Mic

Right Hdst

The range for the gating threshold is *-17dB* to *+18dB*, and *Disabled*.
By default, the gating threshold is set to *Disabled*.

NOTE: 0dB threshold is 12dB below nominal. Nominal inputs are as follows:

Headset Mics	*-50dBu*
Matrix In	*8dBu*
Panel Mics	*-42.5dBu*
OMNEO 1-2	*8dBu*

To **configure gating on the keypanel**, do the following:

1. Starting at the Audio Options | Advanced menu, select **Gating**.
2. Press the **SEL button**.
   Left Hdst, Matrix In, OMNEO 1, OMNEO 2, Panel Mic, and Right Hdst appear in the panel display.

   NOTE: OMNEO 1 is only available if it is not the matrix connection.
3. Using the AUX VOLUME shaft encoder, select **Left Hdst**, **Matrix In**, **OMNEO 1**, **OMNEO 2**, **Panel Mic**, or **Right Hdst**.
4. Press the **SEL button**.
   The Threshold scroll menu appears.
5. Using the AUX VOLUME shaft encoder, select the desired **threshold**.
6. Press **CLR** to go to the previous menu item.
   OR
   Press and hold **CLR** to exit the menu structure.

Metering

Metering allows you to monitor an audio source connected to the keypanel. The energy of the incoming audio is split into five bands and displayed on the left side of the keypanel when enabled.

The decibels display range is from 28dB below nominal to 8dB above nominal
The bands are defined as:

Band 1	*100 Hz to 400 Hz*
Band 2	*400 Hz to 800 Hz*
Band 3	*800 Hz to 1.6 kHz*
Band 4	*1.6 kHz to 3.2 kHz*
Band 5	*3.2 kHz to 15 kHz*

NOTE: Only one channel can be metered at a time.

You can enable metering on:

Left Hdst

Matrix In

None (d)

OMNEO 1 (only present if connected via the AIO)

OMNEO 2

Panel Mic

Right Hdst

To **enable metering**, do the following:

1. Starting at the Audio Options | Advanced menu, select **Metering**.
2. Press the **SEL button**.
   Left Hdst, Matrix In, None, OMNEO 1, OMNEO 2, Panel Mic, and Right Hdst appear in the panel display.

   NOTE: OMNEO 1 is only available in AIO mode.
3. Using the AUX VOLUME shaft encoder, select **Left Hdst**, **Matrix In**, **None**, **OMNEO 1**, **OMNEO 2**, **Panel Mic**, or **Right Hdst**.
4. Press the **SEL button**.
   An arrow appears next to the selected option.

Mixing

Mixing allows you to route selected audio signals to the following destinations:

- Left Headset
- OMNEO 1 (only present if connected via the AIO)
- OMNEO 2
- Right Headset
- Speaker
- To Matrix

IMPORTANT: If OMNEO is enabled, OMNEO 1 is not available because it is acting as the To Matrix. On the other hand, if AIO is enabled, OMNEO 1 and OMNEO 2 are both available as auxiliary channels.

By default, the microphone signals are routed to the matrix. The matrix signal is routed to the speaker and to the left and right channels of the headphones. These defaults can be changed via the Audio Options sub-menus for Panel Mic, Speaker, Headset Speaker, Left Headset, and Right Headset.

Available options for this menu are:

Left Hdst

OMNEO 1 (only present if connected via the AIO)

OMNEO 2

Right Hdst

Speaker

To Matrix

TABLE 10. Resources Table

Destination \ Source	Panel Mic	Matrix In	Hdst Mic	OMNEO 1	OMNEO 2
To Matrix	a	X	a	X	X
Left Headset	X	b	X	X	X
Speaker	X	b	X	X	X
Mic OUT	a	X	a	X	X
Right Headset	X	b	X	X	X
OMNEO Ch 1	X	X	X	X	X
OMNEO Ch 2	X	X	X	X	X

a. Mic inputs cannot be mixed to the Matrix using this menu. To mix mic inputs to the matrix output use the Panel Mic and Headset Mic menus

b. The Matrix input cannot be mixed to speaker or headset outputs using the menu. To mix Matrix In to speakers or headset, use the Speaker and Headset Spkr menus.

To **configure mixing**, do the following:

1. Starting at the Audio Options | Advanced menu, select **Mixing**.
2. Press the **SEL button**.
   Left Hdst, OMNEO 1, OMNEO 2, Right Hdst, Speaker, and To Matrix appear in the panel display.

   NOTE: OMNEO 1 is only available in AIO mode.
3. Using the AUX VOLUME shaft encoder, select the **destination** to mix to (or the destination to which the sources are mixed).

   NOTE: If Left Hdst, or Left Hdst is chosen, an additional step of choosing Both, Left Chan, or Right Chan is required.
4. Press the **SEL button**.
   A list of available inputs appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select the **input** to mix to the selected output.
6. Press the **SEL button**.
   An arrow appears next to the selection.

   NOTE: Repeat steps 5 and 6 to select additional inputs to mix to the selected output.

Mix Mode

The **Mix Mode** menu is used to control whether mixes made to the speakers and headsets are muted when they are not active.

Available options for this menu are:

Aux Mixes Switched (d)	Aux inputs mixed to speakers or headsets are only heard when the panel is in the appropriate headset or speaker mode.
Mixes Always Active	Aux inputs mixed to speakers or headset are always heard, regardless of whether the panel is in headset or speaker mode.

To **configure Mix Mode,** do the following:

1. Starting at the Audio Options | Advanced menu, select **Mix Mode**.
2. Press the **SEL button**.
   Aux Mixes Switched and Mixes Always Active appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **mix mode**.
4. Press the **SEL button**.
   An arrow appears next to the selection.

Noise Gate

The **Noise Gate** menu is used to enable or disable the audio level (-72dBu) at which the mic turns on. When noise gate is enabled, the microphone noise gate is set to -72dBu; when the noise gate is disabled, the microphone is always on.

To **enable/disable noise gate**, do the following:

1. Stating at the Audio Options | Advanced menu, select **Noise Gate**.
2. Press the **SEL button**.
   Left Hdst, Panel Mic, and Right Hdst appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the **Left Hdst**, **Panel Mic**, or **Right Hdst**.
4. Press the **SEL button**.
   Disable and Enable appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Disable** or **Enable**.

Audio Options Menu, Chime

The **Chime** menu is used to set the volume for each of the built-in chimes, as well as to enable or disable preview of chimes during chime selection in this menu and others that reference chimes.

Available configurable options for this menu are:

Preview	When enabled, a preview of the chime is played each time a new chime is selected or while the volume is being adjusted, so you can listen to what it sounds like.
Chime	Allows the user to select between 12 system chimes.
Volume	Controls the volume of the chime. This field ranges from *-60dB to 10dB.* The default for this field is *-20dB*.

To **configure Chime Volumes on the keypanel**, do the following:

1. Starting at the Audio Options menu, select **Chime**.
2. Press the **SEL button**.
   The Preview, Chime, and Volume scroll boxes appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Yes** or **No** for Preview.
4. Press the **SEL** button.
   The Chime scroll box is selected.
5. Using the AUX VOLUME shaft encoder, select the **desired chime**.
6. Press the **SEL** button.
   The Volume scroll box is selected.
7. Using the AUX VOLUME shaft encoder, select the desired **volume**.

Audio Options Menu, Dim

To **configure Dim on the keypanel**, do the following:

1. Starting at Audio Options, select **Dim**.
2. Press the **SEL button**.
   Headset and Speaker appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Headset** or **Speaker**.
4. Press the **SEL button**.
   The Dim Amount scroll box appears.
5. Using the AUX VOLUME shaft encoder, select the desired **Dim Amount**.

NOTE: When Headset is selected, an additional choice must be made between **Left** or **Right** before the dim amount can be selected.

Audio Options Menu, Headset Mic

The **Headset Mic** option allows the user to configure where audio is coming from and the type of microphone being used.

By default, if no headset is detected, the headset mic input is muted to avoid allowing noise to get to the system. This feature can be disabled.

Auto-Mute

The **Auto-Mute** option is used to automatically mute the Mic Input when a headset mic is not detected.

Available selections for the Auto-mute menu are:

Disabled

Enabled

Mode

Available selections for the Mode menu are:

Disabled

Enabled

Switched When set to Switched, the state of the Headset Mic is controlled by the Mic Sel key.

Type

Available selections for the Type menu are:

Auto-Detect (d) The keypanel automatically detects the type of microphone connected.

Dynamic

Electret

To **configure the Headset Mic Auto-mute**, do the following:

1. Starting at the Audio Options menu, select **Headset Mic**.
2. Press the **SEL button**.
   Left and Right appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **headset**.
4. Press the **SEL button**.
   Auto-Mute, Mode, and Type appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Auto-Mute**.
6. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select **Disabled** or **Enabled**.
8. Press the **SEL button**.
   An arrow appears next to the selected option.

To **configure the Headset Mic Mode,** do the following:

1. Starting at the Audio Options menu, select **Headset Mic**.
2. Press the **SEL button**.
   Left and Right appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **headset**.
4. Press the **SEL button**.
   Auto-Mute, Mode, and Type appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Mode**.
6. Press the **SEL button**.
   Disabled, Enabled, and Switched appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select **Disabled**, **Enabled**, or **Switched**.
8. Press the **SEL button**.
   An arrow appears next to the selected option.

To **configure the Headset Mic Type**, do the following:

1. Starting at the Audio Options menu, select **Headset Mic**.
2. Press the **SEL button**.
   Left and Right appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **headset**.
4. Press the **SEL button**.
   Auto-Mute, Mode and Type appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Type**.
6. Press the **SEL button**.
   Auto-Detect, Dynamic, and Electret appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select **Auto-Detect**, **Dynamic**, or **Electret**.
8. Press the **SEL button**.
   An arrow appears next to the selected option.

Audio Options Menu, Headset Speaker

The **Headset Spkr** menu option is used to control the headset detection functions: auto-transfer, which is used to detect if a headset is present, and mode, which determines when and where audio is heard.

Auto-Transfer

Available selections for the Auto-transfer menu are:

Disabled

Enabled — When enabled, the keypanel automatically enters or leaves headset mode when a headset is plugged in or removed.

To **configure the Headset Spkr Auto-Transfer function**, do the following:

1. Starting at the Audio Options menu, select **Headset Spkr**.
2. Press the **SEL button**.
   Left, Right, and Volume Control appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **headset (Right or Left)**.
4. Press the **SEL button**.
   Auto-Transfer and Mode appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Auto-Transfer**.
   Disabled and Enabled appear in the panel display.
6. Using the AUX VOLUME shaft encoder, select **Disabled** or **Enabled**.
7. Press the **SEL button**.
   An arrow appears next to the selected option.

Mode

Available selections for the Mode menu are:

Always On (d)

Disabled

Switched When set to Switched, the state of the Headset is controlled by the Mic Sel key.

To **configure the Headset Spkr Mode**, do the following:

1. Starting at the Audio Options menu, select **Headset Spkr**.
2. Press the **SEL button**.
   Left, Right, and Volume Control appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **headset (Right or Left)**.
4. Press the **SEL button**.
   Auto-Transfer and Mode appear in the panel display.
1. Using the AUX VOLUME shaft encoder, select **Mode**.
2. Press the **SEL button**.
   Both, Left Chan, and Right Chan appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **option**.
4. Press the **SEL button**.
   Always On, Disabled, and Switched appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select the **mode**.
6. Press the **SEL button**.
   An arrow appears next to the selected option.

Volume Control

Available selections for the Volume Control menu are:

Ganged

Individual (d)

To **configure the Headset Spkr Volume Control**, do the following:

1. Starting at the Audio Options menu, select **Headset Spkr**.
2. Press the **SEL button**.
   Left, Right, and Volume Control appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Volume Control**.
4. Press the **SEL button**.
   Ganged and Individual appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select the desired **volume control option**.
6. Press the **SEL button**.
   An arrow appears next to the selected option.

Audio Options Menu, Inputs

The **Inputs** menu is used to enable or disable volume control for audio inputs through the front panel shaft encoder. By default, all inputs are enabled. This means the inputs are visible as inputs in the Mixing menu and (if mixed somewhere) can be selected for volume control.

If disabled, the inputs are not visible in the mixing menu and cannot be selected for volume control.

NOTE: Disabling an input does not undo any of the mixes you had previously established in the Mixing menu; however, it hides access to volume control of this input. This is useful if you want to set the matrix input volume, and then want to disable the volume control so users cannot adjust the Matrix volume.

To **enable or disable an input**, do the following:

1. Starting at the Audio Options | Inputs menu, select **Matrix In**, **OMNEO1** or **OMNEO2**.

   NOTE: OMNEO 1 is only available in AIO mode.

2. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Enabled** to enable the selected Input.
   OR
   Using the AUX VOLUME shaft encoder, select **Disabled** to disable the selected Input

Audio Options Menu, Key Volumes

The **Key Volumes** menu is used to enable or disable the adjusting of crosspoint listen gains. If key volumes are enabled, the user can adjust the list gains for Matrix crosspoints from the keypanels. Alternatively, you can reset key gains back to their default settings.

Available options for this menu are: *Adjust, Minimum,* and *Reset*.

NOTE: Key Volumes are either enabled for the entire keypanel or disabled for the entire keypanel. This setting cannot be set on a per key basis.

To **enable key volumes**, do the following:

1. Starting at the Audio Options | Key Volumes menu, select **Adjust**.
2. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Enabled**.
4. Press the **SEL button**.
   Key volume adjustments are allowed by users.

Minimum

The **Minimum** menu item is used to allow an administrator to set a minimum crosspoint volume for individual keys. This prevents users from lowering the crosspoint volume to an inaudible or muted level.

Available options for the minimum volume levels are: *-80dB to +6dB*, and *Mute*.

To **set the minimum volume on every key**, do the following:

1. Starting at the Audio Options | Key Volumes menu, select **Minimum**.
2. Press the **SEL button**.
   Adjust Minimum Key Volumes appears in the panel display and the individual keys become active to change the minimum volume.
3. Using the lever associated with the keypanel key, press and hold **the lever key up**.
   A green indicator is displayed at the top of the selected key.
4. Turn the **AUX VOLUME shaft encoder to the left or right** to decrease or increase the volume.

To **reset all key gains to their default value**, do the following:

1. Starting at the Audio Options | Key Volumes menu, select **Reset**.
2. Press the **SEL button**.
   Cancel and Do Reset appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Do Reset**.
4. Press the **SEL button**.
   Volumes reset appears in the panel display.

Audio Options Menu, Matrix Out

Matrix Out allows the user to select between Normal or Hot Mic. In Normal setting, audio from the selected active mic (based on the mic select feature, see “Audio Options Menu, Panel Mic” on page 97) goes out to the Matrix when any talk key is active. In the Hot Mic setting, audio from the mic goes out to the Matrix without regard to the talk key state.

By default, Matrix Out is set to *Normal* operation.

To **configure Matrix Out**, do the following:

1. Starting at the Audio Options | Matrix Out menu, select **Hot Mic** or **Normal**.
2. Press the **SEL button**.
   An arrow appears next to the selected option.

   NOTE: When Hot Mic is enabled, the Hot Mic icon appears in the panel display.

Audio Options Menu, Max Volume

The **Max Volume** menu is used to set the maximum level, in dB, of the volume the user can configure for a headset or a speaker. This feature prevents incoming audio from being too loud.

The range for this field is *-48dB* to *10dB*, and *Mute*.
The default setting is *10dB*.

To **set the maximum volume for headsets or speakers**, do the following:

1. Starting at the Audio Options | Max Volume menu, select **Headset** or **Speaker**.
2. Press the **SEL button**.
   The Max Volume: scroll box appears in the panel display.
3. Using the AUX VOLUME shaft encoder, scroll to the desired **maximum volume**.

Audio Options Menu, Mic Gain

Mic Gain allows the user to adjust the mic gain level. For more information, see “Keypanel Volume Adjustments” on page 32, “Keypanel Volume Adjustments” on page 32, and “Aux Volume Adjustments” on page 34.

The range for this field is *-20dB* to *10dB*.
By default, this field is set to *0dB*.

To **set the Mic Gain level**, do the following:

1. Starting at the Audio Options | Mic Gain menu, select **Left Hdst, Panel Mic, or Right Hdst**.
2. Press the **SEL button**.
   The Mic Gain scroll box appears in the panel display.
3. Using the AUX VOLUME shaft encoder, scroll to the desired **mic gain level**.

Audio Options Menu, Mic Mute

The **Mic Mute** menu is used to configure the actions of the Mic Mute key.

Available options are:

Disabled – By disabling the mic mute key, users are not able to mute the microphone from the front panel.

Momentary – The mic is muted for only as long as the mic mute key is held on.

Toggle – The mic mute key is enabled. In this mode, pressing the mic mute key toggles the mic mute state on and off.

By default, the Mic Mute menu is set to *toggle*.

To **configure Mic Mute**, do the following:

1. Starting at the Audio Options menu, select **Mic Mute**.
2. Press the **SEL button**.
   Disable, Momentary and Toggle appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Disabled**, **Momentary**, or **Toggle**.
4. Press the **SEL button**.
   An arrow appears next to the selected option.

Audio Options Menu, Min Volume

The **Min Volume** menu item is used to set the minimum volume level, in dB, for different inputs and outputs on the keypanel. This is the minimum volume level available when using the Main Volume and Aux Volume control knob, located on the front of the keypanel.

Available sources are: *Headset*, *Speaker*, *Matrix In*, *OMNEO 1*, and *OMNEO 2*.

NOTE: OMNEO 1 is only available in AIO mode.

The range for this field is *-48dB* to *10dB*, and *Mute*.
By default, this field is set to *Mute*.

To **set the min volume**, do the following,

1. Starting at the Audio Options | Min Volume menu, select the desired **source**.
2. Press the **SEL button**.
   The Min Volume: scroll box appears in the panel display.
3. Using the AUX VOLUME shaft encoder, scroll to the desired **minimum volume**.

Audio Options Menu, Output Level

The **Output Level** menu is used to adjust the nominal audio output level to the matrix.

The range for this field is *0dB* to *8dB*.
By default, the output level is set to *8dB*.

To **set the output level**, do the following,

1. Starting at the Audio Options menu, select **Output Lev**.
   The Output Level: scroll box appears in the panel display.
2. Using the AUX VOLUME shaft encoder, scroll to the desired **output level**.

Audio Options Menu, Panel Mic

The **Panel Mic** menu option is used to configure how the panel mic operates.

Available options for this field are:

Disabled

Enabled

Switched When set to Switched, the state of the Panel Mic is controlled by the Mic Sel key.

By default Panel Mic is configured to *switched*.

To **configure the panel mic**, do the following:

1. Starting at the Audio Options, select Panel Mic.
2. Press the **SEL button**.
   Disabled, Enabled, and Switched appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **mode**.
4. Press the **SEL button**.
   An arrow appears next to the selected option.

Audio Options Menu, Sidetone

The **Sidetone** menu is used to configure the level, in dB, at which the user hears their own voice. Most people prefer some amount of sidetone to overcome the muffled sensation when talking, especially when wearing a dual-sided headset. You can also configure the mode sidetone operates.

The range for this field is *-65dB* to *0dB*.
By default, the sidetone level is set at *-20dB*.

The available options for the sidetone mode are:

Always On

Disabled

Switched (d) When set to Switched, the user's voice is heard only when a talk key is activated.

To **set the sidetone level**, do the following:

1. Starting at the Audio Options | Sidetone menu, select **Level**.
2. Press the **SEL button**.
   The Sidetone Level scroll menu appears in the panel display. By default, sidetone is set to -20dB.
3. Using the AUX VOLUME shaft encoder, adjust the **sidetone level**.

To **set the sidetone mode**, do the following:

1. Starting at the Audio Options | Sidetone menu, select **Mode**.
2. Press the **SEL button**.
   Always On, Disabled, and Switched appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **mode** to operate sidetone.
4. Press the **SEL button**.

Audio Options Menu, Speaker

The **Speaker** menu option is used to configure how the speaker operates.

Available selections are:

Always On

Disabled

Switched When set to Switched, the state of the speaker is controlled by the Mic Sel key.

To **configure the speaker**, do the following:

1. Starting at the Audio Options menu, select **Speaker**.
2. Press the **SEL button**.
   Always On, Disabled and Switched appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **option**.
4. Press the **SEL button**.
   An arrow appears next to the selected option.

Audio Options Menu, Tone Gen

Tone Gen (tone generation) allows the user to turn the tone generator on or off. The tone generator is used to check the audio path from the keypanel to the matrix.

Available selections for this menu are:

500Hz Tone (d)

1kHz Tone

To **enable/disable the tone generator**, do the following:

> Starting at the Audio Options | Tone Gen menu, select **Tone Off** to disable the tone generator.
  OR
  Using the AUX VOLUME shaft encoder, select **Tone On** to enable the tone generator.
  An arrow appears next to the selected option.

To **set the frequency level for the tone**, do the following:

1. Starting at the Audio Options | Tone Gen menu, select **Frequency**.
2. Press the **SEL button**.
   1kHz Tone and 500Hz Tone appears in the panel display.
3. Using the AUX VOLUME shaft encoder, select **1kHz Tone** or **500Hz Tone**.
   An arrow appears next to the selected option. If tone is enabled, an icon indicating 500Hz or 1kHz displays once the menu is exited.

Menu System, Display

Use this menu to display information about the keypanel configuration.

The information available for display is as follows:

Assign Type
Chans On
Chime
Exclusive
Key Groups
Key List
Level 2 (Key Assignments)
Listen (Assignments)
MAC Address
Matrix
Panel ID
Solo Key
(Keypanel Firmware) Version

Display Menu, Assign Type

Assign Type displays the talk level 1 assignment types for all keys.

To **display the types of key assignments assigned to the DKP-3016**, do the following:

1. On the keypanel, press **MENU**.
   The Information menu appears.
2. Using the AUX VOLUME shaft encoder, select **Display**.
3. Press the **SEL button**.
   The Display submenu appears.
4. Using the AUX VOLUME shaft encoder, select **Assign Type**.
5. Press the **SEL button**.
   The assignment types appear on the appropriate key displays.

Display Menu, Chans On

Chans On displays a scroll list of all intercom ports with crosspoints currently closed to this keypanel. Chans On is typically used to locate an open mic or other open audio source that needs to be shut off. The most likely cause is a talk key that has been left on at some keypanel. In this case, use the arrow buttons to quickly page-scroll through the list of names. Press the call waiting window key to ask the person at the other end of the connection to turn off the talk key.

To **display the Chans On information**, do the following:

1. Starting at the Display menu, select **Chans On**.
2. Press the **SEL button**.
   The Chans On display appears showing the active channels.
   OR
   If there are currently no active channels, No callers. appears in the panel display.

Display Menu, Chime

Chime displays all keys with the chime option enabled on them in red. For more information, see “Key Options Menu, Chime” on page 108.

To **display keys with Chime enabled**, do the following:

1. Starting at the Display menu, select **Chime**.
2. Press the **SEL button**.
   The Chime display appears showing chime enabled keys in red.

Display Menu, Exclusive

Exclusive displays all keys with the exclusive key assignment. For more information, see “Key Options Menu, Exclusive” on page 109.

To **display the Exclusive Keys information**, do the following:

1. Starting at the Display menu, select **Exclusive**.
2. Press the **SEL button**.
   The Exclusive display appears showing exclusive keys in red.

   NOTE: You can assign more than one Exclusive key. Only one key marked as an Exclusive key can be turned on at any time. Pressing an Exclusive key turns off any other Exclusive key already active.

Display Menu, Key Groups

Key Groups displays a scroll list of groups available on the keypanel.

To **display the different groups available**, do the following:

1. Starting at the Display menu, select **Key Groups**.
2. Press the **SEL button**.
   Group 1, Group 2, Group 3, and Group 4 appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the **Group** you want to display.
4. Press the **SEL button**.
   The Master key appears in red, while the slave keys appear in green.

Display Menu, Key List

Key List displays and allows users to see all the other assignments on other keypanel pages not currently showing in the keypanel display.

To **display the Key List information**, do the following:

1. Starting at the Display menu, select **Key List**.
2. Press the **SEL button**.
   The Key List displays all the assignments not currently displayed on the keypanel.
   OR
   No assignments. appears in the panel display.

Display Menu, Level 2

Level 2 displays the talk level 2 assignments for any key that has them assigned. Talk level 2 assignments are used to call two users at one time, activated when the Level 1 assignment is used.

To **display the Level 2 Talk information**, do the following:

1. Starting at the Display menu, select **Level 2**.
2. Press the **SEL button**.
   The Level 2 display appears showing the level 2 talk assignments.

Display Menu, Listen

Listen displays the listen assignments for all keys, if applicable.

To **display the Listen information**, do the following:

1. Starting at the Display menu, select **Listen**.
2. Press the **SEL button**.
   The Listen display appears showing the listen assignments for all keys (if assigned).

Display Menu, MAC Address

MAC Address displays the MAC Address of the keypanel.

To **display the MAC Address**, do the following:

1. Starting at the Display menu, select **MAC Address**.
2. Press the **SEL button**.
   The MAC Address display appears showing the MAC Address of the keypanel.

Display Menu, Matrix

Matrix displays the intercom system name for all talk level 1 key assignments. The local intercom is represented by a green key, while a remote intercom is represented by a red key. If a key assignment is not present on a key, an unassigned key displays.

In non-trunked intercom systems, the intercom system name is always LOCL (local). In trunked systems, intercom system names are created in TrunkEdit (*Intercoms* | *Names*).

To **display the matrix intercom system name**, do the following:

1. Starting at the Display menu, select **Matrix**.
2. Press the **SEL button**.
   The Matrix display appears showing the matrix intercom system.

Display Menu, Panel ID

Panel ID displays the port number to which the keypanel is connected.

NOTE: When the keypanel is not scroll enabled, the Panel ID displays only the port number in the panel display. When the keypanel is scroll enabled, the port number and port alpha are displayed.

To **display the panel ID**, do the following:

1. Starting at the Display menu, select **Panel ID**.
2. Press the **SEL button**.
   The Panel ID display appears showing the port number and alpha (if applicable) for the keypanel.

Display Menu, Solo

Solo displays the key with the solo assignment. For more information, see “Key Options Menu, Latching” on page 111.

To **display the Solo Key information**, do the following:

1. Starting at the Display menu, select **Solo**.
2. Press the **SEL button**.
   The Solo display appears showing solo keys in red.

   NOTE: You may only assign one solo key at a time.

Display Menu, Version

Version displays the firmware version currently running on the keypanel.

NOTE: For firmware upgrades, contact customer service. The keypanel firmware can be upgraded through AZedit.

To **display the firmware version currently loaded on the keypanel**, do the following:

1. Starting at the Display menu, select **Version**.
2. Press the **SEL button**.
   The Version display appears showing firmware version for the keypanel.

Menu System, Key Assign Menu

The **Key Assign** menu is used to assign intercom key assignments and auto functions to keypanel keys.

Available options for this menu are:

Matrix (only in trunked systems)
Pt-to-Pt
Party Line
IFB
Special List
Sys Relay
Camera ISO
UPL Resource
IFB Spcl List
Auto Funcs

To **access the key assign menu options**, do the following:

1. Starting at the Key Assign menu, select the **key assignment type** to assign.
2. Press the **SEL button**.
   A scroll list of available assignments appears.

Key Assign Menu, Matrix (Trunked System Only)

Matrix only appears for trunked intercom systems. You must select a remote intercom matrix before assigning intercom keys to destinations in that matrix. You do not need to select matrix to assign keys to destinations in your own matrix. Also, you do not need to select matrix when assigning an auto function key to a matrix.

To **assign a remote assignment to the DKP-3016**, do the following:

1. Starting at the KeyAssign | Matrix menu, select a **remote intercom**.
2. Press the **SEL button**.
   A scroll list of available assignments appears.
3. Using the AUX VOLUME shaft encoder, select the **assignment** to assign to the keypanel key.
4. Press the **SEL button**.
   A list of auto-functions appear.
5. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the assignment, if applicable.
6. Press the **SEL button**.
   Tap Key appears in the panel display.
7. Press down on the desired **keypanel key position** for the assignment to appear.
   The alpha name appears on the key.

Key Assign Menu, Pt-to-Pt

Pt-to-Pt assigns a key that talks or listens to another intercom port.

NOTE: Some Pt-to-Pt destinations may be non-keypanel devices that cannot activate talk and listen paths. Therefore, if you want full communication, you may need to assign both talk and listen on the key. For more information, see “Key Assign Menu, Auto Func” on page 107.

To **assign Pt-to-Pt to the keypanel key**, do the following:

1. Starting at the Key Assign | Pt-to-Pt menu, select the **port** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto-functions appear.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the Pt-to-Pt assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the **keypanel key position** where you want the Pt-to-Pt assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, Party Line

Party Line assigns a key that talks and/or listens to a party line. Party Lines are defined in AZedit.

NOTE: Party Line members are usually non-keypanel devices that cannot activate talk and listen paths. Therefore, if you want full communication, you need to assign both talk and listen on the key. If all communications are normally 2-way, you may wish to assign the key as Talk+Auto Listen.

To **assign a Party Line to the keypanel key**, do the following:

1. Starting at the KeyAssign | Party Line menu, select the **party line** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto-functions appear.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the Party Line assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the **keypanel key position** where you want the Party Line assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, IFB

IFB assigns the IFB assignment type to a key. By default, all IFBs are restricted. You must select the appropriate scroll enable check box in AZedit, to see IFBs.

To **assign an IFB to the keypanel key**, do the following:

1. Starting at the KeyAssign | IFB menu, select the **IFB assignment** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto-functions appear.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the IFB assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the desired **keypanel key position** for the IFB assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, Special List

Special List assigns a key that talks and/or listens to a special list. The key is not available until members have been assigned to the special list in AZedit.

NOTE: Special List members can be non-keypanel devices that cannot activate talk and listen paths. Therefore, if you want full communication with all members of the special list, you may need to assign both talk and listen on the key.

To **assign a Special List to the keypanel key**, do the following:

1. Starting at the KeyAssign | Special List menu, select the **Special List** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto functions appear.
3. Using the AUX VOLUME shaft encoder, select the **auto-function** to assign to the Special List assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the desired **keypanel key position** for the Special List assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, Sys Relay

Sys Relay refers to any of several types of control devices that can exist in the intercom system, including:

- The 8 GPI outputs from an ADAM Frame (J11 on the XCP-ADAM-MC Breakout Panel).
- The 8 GPI outputs from an ADAM CS Frame (J903 on the ADAM CS back panel).
- The relay outputs of an FR9528 Relay Frame (RELAY OUTPUTS connector on the FR9528 back panel).
- The 16 GPI outputs of a UIO-256 or GPIO-16 Frame (J5 on the UIO-256/GPIO-16 back panel).

To **assign a Relay to the keypanel key**, do the following:

1. Starting at the KeyAssign | Sys Relay menu, select the **relay** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto-functions appear.

   NOTE: You will not hear anything if you listen to a Relay, but you can activate the relay with either a talk or listen key.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the relay assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the desired **keypanel key position** for the Relay assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, Camera ISO

Camera ISO assigns an **ISO** (isolate) assignment type to the key. By default, all ISOs are restricted. You must select the appropriate scroll enable check box in AZedit, to see ISOs.

To **assign a Camera ISO to the keypanel key**, do the following:

1. Starting at the KeyAssign | Camera ISO menu, select the **ISO** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto-functions appear.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the Camera ISO assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the **keypanel key position** where you want the Camera ISO assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, UPL Resources

UPL Resources assigns a key the UPL resource assignment type to the key. By default, all UPL resources are restricted. You must select the appropriate scroll enable check box in AZedit, to see UPLs.

To **assign a UPL to the keypanel key**, do the following:

1. Starting at the KeyAssign | UPL menu, select the **UPL** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto functions appear.

   NOTE: You will not hear anything if you listen to a UPL Resource, but you can activate the UPL with either a talk or listen key.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the UPL assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the **keypanel key position** where you want the UPL assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, IFB Spcl List

IFB Spcl List (IFB Special List) is similar to a special list, except the members of these special lists are IFB assignments. IFB SLs are useful when a producer of a news program needs to talk to all the talent at the same time (most talent assignments are IFB assignments).

To **assign an IFSL to the keypanel key**, do the following:

1. Starting at the KeyAssign | IFB Spcl List menu, select the **IFSL** to assign to the keypanel key.
2. Press the **SEL button**.
   A list of auto functions appear.
3. Using the AUX VOLUME shaft encoder, select the **auto function** to assign to the IFSL assignment, if applicable.
4. Press the **SEL button**.
   Tap Key appears in the panel display.
5. Press down on the desired **keypanel key position** for the IFSL assignment to appear.
   The key color changes and the alpha appears on the key.

Key Assign Menu, Auto Func

Auto Func assigns an auto function to the key.

Available options for this menu are:

All Call	Talk level 1 only.	Turns all Talk keys on to the left of the AC key, up to the next AC key or the end of the row.
Auto Follow	Listen keys only.	Listens to what is assigned on the Talk key.
Auto Listen	Listen keys only.	When Talk is pressed, Listen turns on.
Auto Mute	Listen keys only.	If Listen is active and Talk is pressed, Listen turns off.
Auto Recip	Listen keys only.	Listen is always on.
Auto Table	Listen keys only.	Acts as an Auto Follow for all key assignments except IFB keys that have a Listen Source defined. In this case, Auto Table listens to the IFB Listen Source.
DIM	Dim Table function, for talk level 2 on point-to-point keys only.	

To **assign an Auto Function**, do the following:

1. Starting at the KeyAssign | Auto Funcs menu, select the desired **auto function** to assign to the keypanel key.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Press the desired **keypanel key** to assign the auto function.

Menu System, Key Options Menu

The **Key Options Menu** is used to configure many of the keypanel operation options, such as auto dial functions, chime keys and duration, exclusive keys, key group assignments, solo key configuration, latching options, button lock, and tally operation.

Available options for this menu are:

Chime
Clear
Exclusive
Icons
Key Groups
Latching
Lock
Solo
Tallies
Turn Off

Key Options Menu, Chime

Chime indicates a chime tone sounds for incoming call announcements (on specified keys). You can configure the chime tone to activate for a specified amount of time after a call is received.

The range for this field is one *second to five minutes, and one-shot.*

NOTE: Keys that have the currently selected Chime and Duration are shown with a red talk bar. Keys with a different chime or duration are shown with a green talk bar. Keys with no chime do not show a talk bar.

To **add a chime tone to keypanel keys**, do the following:

1. Starting at the Key Options, select **Chime**.
2. Press the **SEL button**.
   A Chime scroll box and a Duration scroll box appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **system chime** (for example, System #1, System #2, System #3, and System #4).
4. Using the arrow keys, select the **Duration scroll box**.
5. Using the AUX VOLUME shaft encoder, select the **duration of the chime**.
6. Tap down on each **keypanel key** to which you want to add a Chime.
   Selected keys display a red talk bar and bell icon.

NOTE: Assigning <none> clears the chime from the key. When you change chime types, if Preview is enabled, you hear the chime play. Also, if you lift the listen key for any key showing it has a chime assigned, you hear the chime associated with that key.

Key Options Menu, Clear

The **Clear** menu option is used to clear any key options or clear UPG key programming that have been assigned to a specific key.

To **clear a key's key options**, do the following:

1. Starting at the Key Options menu, select **Clear**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Tap the desired **key** from which to clear the key options.
   The key options are removed from the keypanel key.
4. Press the **CLR button** to exit the menu structure.

To **clear UPG key programming**, do the following:

1. Starting at the Key Options menu, select **Clear**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Press the desired **UPG key** from which to clear the UPG programming.
   The key options are removed from the keypanel key.
4. Press the **CLR button** to exit the menu structure.

Key Options Menu, Exclusive

Exclusive allows the user to set up keys that cause any other exclusive keys to turn off when activated. Unlike the solo option, when the exclusive option is deactivated, the other exclusive key turns off and does not turn back on. You can assign multiple exclusive keys.

To **create an exclusive key assignment**, do the following:

1. Starting at the Key Options menu, select **Exclusive**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Tap **down** on any keypanel key you want to assign the exclusive key option.
   Selected keys display a red talk bar and a minus icon.

To **remove an exclusive key assignment**, do the following:

1. Starting at the Key Options menu, select **Exclusive**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Tap down on each **red keypanel key** from which to remove the exclusive key option.
   The selected keys return to the unassigned state (red talk bar and minus icon disappear).

Key Options Menu, Icons

The **Icons** menu option is used to enable icon overlays for various key states. There are seven key states that can be indicated using an icon.

By default, icons are enabled, which means they are displayed.

The icons available are:

	Gold Star	Key is Solo Key
	Black Phone	Key has TIF Assignment
	Globe	Key has Remote/Trunk assignment
	Bell	Key has Chime
	Plus	Key is Group Master
	Minus	Key is Exclusive

To **enable/disable icon overlays**, do the following:

1. Starting at the Key Options menu, select **Icons**.
2. Press the **SEL button**.
   An Icon scroll box and a Display scroll box appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **key state** from the Icon scroll box.
4. Using the arrow keys, select **Display**.
5. Using the AUX VOLUME shaft encoder, select **Enable** to display the icon.
   OR
   Using the AUX VOLUME shaft encoder, select **Disable** to hide the icon.
6. Repeat **steps 3 through 5** as necessary.

Key Options Menu, Key Groups

Key Groups is used to create a key group. A key group allows the user to activate a group of keys by activating one key (the master key). When the master key is activated, all keys in the group become active.

You can create *up to four key groups*.

To **create a key group**, do the following:

1. Starting at the Key Options | Key Groups menu, select the desired **Group** (1–4) to create.
2. Press the **SEL button**.
   Tap Master Key appears in the panel display.
3. Tap down on the desired **keypanel key** to act as the master key.
   OR
   Press **SEL** to skip creating a Master key
   The selected key displays a red talk bar and Tap Slave Key(s) appears in the panel display.

   NOTE: A group without a master key cannot be activated by a key press, but may still be activated by a GPI Input.
4. Tap down on the **keypanel keys** you want to be activated when the master key is selected.
   The selected keys display a green talk bar.

To **delete a key group**, do the following:

1. Starting at the Key Options | Key Groups menu, select the desired **Group** (1-4) to delete.
2. Press the **SEL button**.
   Tap the Master Key appears in the panel display.

3. Press the **SEL** key.
   The selected key loses its red talk bar and Tap Slave Key(s) appears in the panel display.
4. Tap down on the desired **green keypanel keys** to remove from the group.
   The selected keys lose their green talk or listen bar.

Key Options Menu, Latching

Latching is used to enable or disable the keypanel key to stay on when pressed. When Latching is enabled, the talk function stays on after the talk key is pressed briefly. Otherwise, the talk function only works when the button is pressed. You configure globally across all keys, or on a per key basis.

NOTE: A key only latches if it is pressed and released within 0.5 seconds. Otherwise, the key always turns off when released.

By default, latching is *enabled*.

To **set latching on a keypanel key**, do the following:

1. Starting at the Key Options menu, select **Latching**.
2. Press the **SEL button**.
   Global and Per Key appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select either **Global** or **Per Key**.

   NOTE: When Per Key is selected, you need to tap each key to change the latch enable state.
4. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Enabled** or **Disabled**.
   An arrow appears next to the selected option.

Key Options Menu, Lock (Button Lock)

Lock is used to lock keypanel keys in the on or off position. Each key may be independently locked on or off.

To **lock a button on**, do the following:

1. Starting at the Key Options menu, select **Lock**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Tap a **key** once to lock it on.
   A green talk bar appears. This indicates the key is locked on.
   OR
   Tap the **key again** to lock it off.
   A red talk bar appears indicating the key is locked off, meaning the user cannot turn the key on or off.
   OR
   Tap the **key again** to release the lock.

Key Options Menu, Solo

Solo allows the user to set up a key that causes all other keys to turn off when activated. However, when the solo key is released, the keys that were turned off by the solo key turn back on.

You can assign only one solo key.

To **create a solo key**, do the following:

1. Starting at the Key Options menu, select **Solo**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Tap down on the **keypanel key** you want to configure as solo.
   The selected key displays a red talk bar and a star icon.

To **remove a solo key**, do the following:

1. Starting at the Key Options menu, select **Solo**.
2. Press the **SEL button**.
   Tap Key appears in the panel display.
3. Tap down on the **red solo keypanel key** from which to remove the solo assignment.
   The key returns to its normal state (red talk bar and star icon disappear).

Key Options Menu, Tallies

Tallies are used to indicate incoming calls with blinking alpha assignments. You can configure tally time as 5, 10, or 15 seconds or set it as indefinite.

If indefinite is selected, when a caller presses and releases the talk key, a tally with a minimum duration appears. If the call is answered before the minimum duration is met, the tally is cancelled. However, if indefinite is selected and a caller presses and holds (or latches) the talk key, the tally continues until the caller releases the key. This means the tally continues through the call if the caller does not release the key.

NOTE: When DKP-3016 keypanels are connected to legacy intercoms (for example, intercoms that do not support Enhanced Tallies, the available options for this menu are not relevant).

When DKP-3016 keypanels are connected to intercoms that support Enhanced Tallies, the Enhanced Tallies view allows you to globally configure how the tally behaves (the options in the Tally menu in the keypanel are relevant). For more information, see “Enhanced Tallies” on page 54.

By default, tallies are set to *15 seconds*.

To **set the tally time on an incoming call**, do the following:

1. Starting at the Key Options | Tallies menu, select **Min Duration**.
2. Press the **SEL button**.
   A Min Duration scroll box appears in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **duration**.

To **set the tally time to indefinite on an incoming call**, do the following:

1. Starting at the Key Options | Tallies menu, select **Indefinite**.
2. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Disable** or **Enable**.
   An arrow appears next to the selected option.

Key Options Menu, Turn Off

The **Turn Off** menu item allows the user to quickly turn off all keys, all talk keys, or all listen keys.

To **turn off keys on the keypanel using the menu**, do the following:

1. Starting at the Key Options | Turn Off menu, select **All Keys**, **Talk Keys**, or **Listen Keys**.
2. Press the **SEL button**.
   Turn Keys Off? appears in the keypanel panel display.
3. Press the **SEL button**.
   Keys Turned Off appears in the keypanel panel display.

Menu System, OMNEO Offers

The **OMNEO Offers** menu item is used to configure the keypanel to communicate with the matrix via an OMNEO or AIO connection. From this menu, you can also configure the OMNEO channels to be used for AUX Inputs.

OMNEO Matrix Connection Configuration

To **configure an available OMNEO device connection port**, do the following:

1. Starting at the OMNEO Offers | Keypanel menu, select **OKP** (Omneo Keypanel).
2. Press the **SEL button**.
   A list of available OMNEO offers appears.
3. Using the AUX VOLUME shaft encoder, select the **OMNEO offer** to use.
   An arrow appears next to the device.

OMNEO Aux Port Configuration

To **configure the OMNEO channels as Aux Inputs**, do the following:

1. Starting at the OMNEO Offers | Keypanel menu, select **Aux Input**.
2. Press the **SEL button**.
   OMNEO 1 and OMNEO 2 appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **OMNEO 1** or **OMNEO 2**.
4. Press the **SEL button**.
   A list of available OMNEO offers appears in the panel display.
5. Using the AUX VOLUME shaft encoder, select the **OMNEO offer** to configure as an Aux Input.
6. Press the **SEL button**.
   The OMNEO Aux Input is configured.

Menu System, RVON Offers (Only available when an RVON-IO is detected)

The **RVON Offers** menu item is used to configure the matrix connection when an RVON-I/O is attached to the AIO port on the back of the keypanel.

RVON-IO Matrix Connection

RVON-I/O	RVON-16, RVON-8, RVON-C, and RVON-I/O (in local mode). Use the Frame connection on the back panel of the keypanel.

NOTE: For more information about RVON-I/O configuration, see the RVON-I/O user manual (F.01U.193.280).

To **configure the Matrix connection port**, do the following:

1. Starting at the RVON Offers | Keypanel menu, select the **Matrix connection type** to use.

   NOTE: If an RVON-I/O is connected to the keypanel, RVON-I/O replaces the AIO menu option.

2. Using the AUX VOLUME shaft encoder, select the **port** to use.
   An arrow appears next to the port.

Menu System, Save Config

The **Save Config** menu option is used to save custom settings made in the Audio Options, Key Options or Service menus. Once you have made modifications via these menus, run Save Cfg to store the custom settings in non-volatile memory. This ensures your custom settings are saved when the keypanel is powered down. You can run Reset Config (see “Service Menu, Reset Cfg” on page 126), to erase all custom settings.

To **save the configuration**, do the following:

1. On the keypad, press **MENU**.
   The main menu appears.
2. Using the AUX VOLUME shaft encoder, select **Save Config**.
3. Press the **SEL button**.
   Configuration saved appears in the panel display.

Menu System, Service

The information available for key assign is as follows:

Alphas
CWW
Display
Intercom Mode
Key View
Keypad
LCD Backlight
OMNEO Setup
Page Change
Reset Cfg
RVON Setup
Scrn Saver
Set Address
Snoop Tally
Test Panel

Service Menu, Alphas

The **Alphas** menu is used to select the alpha size (length) and type to be displayed for key assignments.

NOTE: When a Reset Cfg is performed, the Alpha Size and Poll ID are not reset.

Available options are:

4 Chars
6 Chars
8 Chars
8 Chars (Unicode)

IMPORTANT: Keypanels on the same AIO-8, or on the same group of eight on an AIO-16, Zeus I/II (but not III), or ADAM CS must have the same alpha size selected. But each group of eight can support a different alpha size.

To **set the alpha size**, do the following:

1. Starting at the Service | Alphas menu, select **4 Chars**, **6 Chars**, **8 Char**, or **8 Chars (Unicode)**.
2. Press the **SEL button**.
   Cancel and Save and Restart appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Save and Restart**.
4. Press the **SEL button**.
   The keypanel restarts itself with the new alpha size.

Service Menu, CWW

The **CWW** menu is used to configure the **CWW** (Call Waiting Window). There are two configuration options; how many calls can be shown in the CWW and what happens to the highlight when a new call comes in to the keypanel.

Number of Entries

The **Number of Entries** menu is used to define how many calls can be shown in the CWW. The maximum number of entries is 9, while the minimum is 3 (2 in Unicode).

To **select the number of entries allowed for the CWW**, do the following:

1. Starting at the Service menu, select **CWW**.
2. Press the **SEL button**.
   Number of Entries and On New Caller appears in the panel display.
3. Using the arrow buttons, select **Number of Entries**.
4. Press the **SEL button**.
   The Number of CWW Entries scroll list appears.
5. Using the arrow buttons, select between **3 and 9 entries**.

On New Caller

The **On New Caller** menu is used to configure what action occurs in the CWW when a new call enters the queue.

The options available for this menu are:

Select New Call	When a new call enters the CWW queue, it goes to the top of the list and is then selected. The highlight moves to this item.
Don't Select (default)	When a new call enters the CWW queue, it goes to the top of the queue, but the highlighted item does not change.
Select If Idle	When a new call comes into the CWW queue, it goes to the top of the queue list and the highlight is moved to it only if the user has not interacted with the CWW in the last 5 seconds. Or if the CWW window was not visible.

To **configure the action to take when a new call comes into the keypanel**, do the following:

1. Starting at the Service menu, select **CWW**.
2. Press the **SEL button**.
   Number of Entries and On New Caller appears in the panel display.
3. Using the arrow buttons, select **On New Caller**.
4. Press the **SEL button**.
   Select New Call, Select If Idle, and Don't Select appear in the panel display.
5. Using the arrow buttons, select **Select New Call**, **Select If Idle** or **Don't Select**.

Service Menu, Display

The **Display** menu is used to enable the menu context, show speaker volume and to switch the display to emulate a KP-32 keypanel.

Show Volume

The **Show Volume** menu is used to enable always-on display of the volume bar for Headset, Matrix, or Speaker, depending on what is selected from the encoder knobs.

KP32 Emulation

The **KP32 Emulation** menu is used to switch the display alphas and background to emulate the KP32 with the black background and green lettering.

IMPORTANT: Only the key and key assignment display change; the menu structure and other display elements do not revert to the KP32 display.

To **activate KP32 Emulation**, do the following:

1. Starting at the Service | Display menu, select **KP32 Emulation**.
2. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Enabled**.
4. Press the **SEL button**.
   The display panel changes to the KP32 Emulation mode and exits menu mode.

Service Menu, Intercom Mode

The **Intercom Mode** menu is used to set the keypanel to display alphas in the correct font/language and modify the behavior of some functions to match the intercom firmware type.

Available options are *Alternate* and *Standard*.

NOTE: Standard mode is the default and should be used in most cases. Alternate mode is primarily used for intercoms running Japanese firmware.

To **select the intercom mode**, do the following:

1. Starting at the Service | Intercom Mode menu, select **Alternate** or **Standard**.
   An arrow appears next to selected option.
2. Press the **SEL button**.
   The selections Cancel and Save and Restart appear.
3. Using the AUX VOLUME shaft encoder, select **Cancel** to cancel out of the action.
   OR
   Using the AUX VOLUME shaft encoder, select **Save and Restart** to save the changes.
4. Press the **SEL button**.

Service Menu, Key View

The **Key View** menu is used to configure the keypanel keys to show key crosspoint gains, show listen assignments, or show the matrix for each key assignment.

NOTE: Show Lstn and Show Mtx are mutually exclusive options. Only one of these options may be enabled at a time.

Available options for this menu are:

Show Gain	The crosspoint gain bar graph for each key is shown below the talk assignment.
Show Lstn	The listen assignment for each key is shown above the talk assignment.
Show Mtx	The matrix name for each key assignment is shown above the talk assignment.

IMPORTANT: When the keypanel is configured for 8 Char or 8 Char (Unicode), none of these options are available.

To **configure the Key View**, do the following:

1. Starting at the Service menu, select **Key View**.
2. Press the **SEL button**.
   Show Gain, Show Lstn, and Show Mtx appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Show Gain** to show gain on the key display.
   OR
   Using the AUX VOLUME shaft encoder, select **Show Lstn** to show listen assignments on the key display.
   OR
   Using the AUX VOLUME shaft encoder, select **Show Mtx** to show the matrix assignments on the key display.
4. Press the **SEL button**.
   Disabled and Enabled, and Enabled (Suppress Auto) or Enabled (Suppress Local) appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select the desired **key view option**.

   NOTE: Enabled (Suppress Auto) is visible only when Show Lstn is selected. Selecting Enabled (Suppress Auto) causes only non-auto listen assignments to be displayed.
   Enabled (Suppress Local) is visible only when Show Mtx is selected. Selecting Enabled (Suppress Local) causes only non-local matrix assignments to be displayed.
6. Press the **SEL button**.
   An arrow appears next the selected option.

Service Menu, Keypad

The **Keypad** menu is used to configure the look and behavior of the keypad.

Backlight

The **Backlight** menu is used to select the color and brightness of the keypad backlight LEDs at various usage states and to configure the keypad mode.

Setup

The **Setup** menu allows you to configure the color and brightness of the keypad backlight LEDs various actions are performed on the keypanel.

Brightness ranges from *0%* to *100%*.
By default, brightness is set to *30% for the Inactive state; and 100% for the Active and Shift states.*

Available options for this menu are:

Inactive	Set the color and brightness of the keypad backlight LEDs when the keypad is in the inactive state.
Active	Set the color and brightness of the keypad backlight LEDs when the keypad is in the active state.
Shift State	Set the color and brightness of the keypad backlight LEDs when the keypad is in the SHIFT state. For more information, see “INFO button” on page 28.

Activation

The **Activation** menu is used to configure how and when the keypad backlights. When Activate is selected, the backlight activates when the user presses any keypad key on the keypanel. Within the Activate menu, you can select whether the first key is processed or swallowed.

Available selections for this field are:

On Keypress (swallowed)	The first keypress made when the keypanel is Inactive activates the keypad and the backlight turns on. The actual key function is not processed.
On Keypress (processed)	The first keypress made when the keypad is Inactive is processed and the backlight turns on.
Always	The keypad backlight is always on. Additionally, the first keypress is always processed.
Never	The keypad backlight is always off, but the first keypress is still always processed.

NOTE: When the keypanel menu is not active, the backlight stays lit for five seconds of inactivity before returning to the inactive state. However, when the keypanel menu is active, the backlight stays lit for one minute before exiting the menu system and returning to the inactive state.

To **configure the Keypad Setup option**, do the following:

1. Starting at the Service | Keypad menu, select **Backlight**.
2. Press the **SEL button**.
   Activation and Setup appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Setup**.
4. Press the **SEL button**.
   Inactive, Active, and Shift State appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Inactive**, **Active**, or **Shift State**.
6. Press the **SEL button**.
   The Brightness scroll box and the Color scroll box appear in the panel display.
7. Using the AUX VOLUME shaft encoder, select the desired **brightness**.
8. Press the **SEL button**.
9. Using the arrow keys, select the **color scroll box**.
10. Using the AUX VOLUME shaft encoder, select the desired **color**.
11. Press the **SEL button**.

To **set the keypad Activation option**, do the following:

1. Starting at the Service | Keypad menu, select **Backlight**.
2. Press the **SEL button**.
   Activation and Setup appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Activation**.
4. Press the **SEL button**.
   The Activate: scroll box appears in the panel display.
5. Using the AUX VOLUME shaft encoder, select **On Keypress (swallowed)**.
   OR
   Using the AUX VOLUME shaft encoder, select **On Keypress (processed)**.
   OR
   Using the AUX VOLUME shaft encoder, select **Always**.
   OR
   Using the AUX VOLUME shaft encoder, select **Never**.

SEL Key

The **SEL Key** menu allows the user to choose what function the SEL key performs when not in menu mode. This menu allows you to set up the SEL key functionality.

Available selections for this field are:

Auto (d)	The key function is automatically selected based on whether you are in Standard or Alternate intercom mode. In Standard mode, the SEL key is assigned Assignment Group functionality, while in Alternate mode, the SEL key is assigned Quick Assign functionality.
Assign Groups	The key function is given Assignment Groups. This displays the scroll lists of a collection of user-selectable key assignments. When you select a group, a scroll list of the members of the group appear, which then can be called or programmed onto a key. For more information see, “Assignment Groups Page” on page 51.
Quick Assign	The key function is given Quick Assign. When you configure the SEL key with Quick Assign, you are actually selecting your most used key type, for example, P-P with AL. When the SEL key is pressed with a quick assign configured to it, a menu appears with Assign or Clear. The user can then quickly configure a key with a pre-configured assignment by selecting Assign, or clear the key assignment by selecting Clear.

Service Menu, LCD Backlight

The **LCD Backlight** menu option allows you to set the brightness of the panel display of the keypanel.

The range for this field is *35–100%*.
The default is *65%*.

To **configure the LCD backlight**, do the following:

1. Starting at the Service menu, select **LCD Backlight**.
2. Press the **SEL button**.
   The Brightness: scroll box appears in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **brightness**.

Service Menu, OMNEO Setup

The **OMNEO Setup** menu option is used to configure the OMNEO device name, enable DHCP, address the OMNEO device for the keypanel, and set up the static IP configuration, if DHCP is disabled.

IMPORTANT: If you change the device name of the keypanel, you must change how other devices are configured, so they can continue to make connection offers to this keypanel.

IMPORTANT: After making any change to the OMNEO Setup, the keypanel resets to activate the changes. The reset occurs five seconds after exiting the menu system.

To **enable DHCP from the keypanel**, do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.

   NOTE: OKP refers to the OMNEO keypanel using the OMNEO connection; however, if an OEI-2 is also attached to the AIO port, you see both OKP and OEI-2 options for selection.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **DHCP**.
4. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Enabled**.
6. Press the **SEL button**.

To **configure the OKP device name**, do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Device Name**.
   The name of the OKP card appears in the panel display with the first character of its name blinking.
4. Using the AUX VOLUME shaft encoder, select a **new character at the current position**.
5. Using the MAIN VOLUME shaft encoder, move to the **next or previous character position**.
6. Press **SHIFT** to insert a character at the current position.

7. Press the **SEL button**.
   OR
   Press the **AUX VOLUME** shaft encoder to move to the next character.

   NOTE: Press the MAIN VOLUME shaft encoder to cancel editing. A confirmation is required.
8. Repeat **steps 4** and **7** until you have modified the device name.
9. Move to the end of the name and press the **SEL button** (or the AUX VOLUME shaft encoder) to save changes.
   The message Save Name? appears on the panel display.
10. Press the **SEL button**.

To **configure the OKP IP Address**, do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **DHCP**.
4. Press the **SEL button**.
   Disabled and Enabled appear in the panel display.
5. Verify **DHCP is disabled**.

   NOTE: When making changes to the OKP IP parameters, DHCP must be disabled before changing the Domain Name or IP Address. If DHCP is enabled, you can still view the IP Parameters, but you cannot make changes to them.
6. Press **CLR**.
7. Using the AUX VOLUME shaft encoder, select **IP Parameters**.
8. Press the **SEL button**.
   IP Address, Netmask, Gateway, DNS Server, and Domain appear in the panel display.
9. Press the **SEL button**.
   The IP Address appears with the first octet blinking in the panel display.
10. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the IP Address.
11. Press the **SEL button**.
    The focus shifts to the second octet.
12. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the IP Address.

    NOTE:

    - Pressing the SEL key or a single-tap to the AUX VOLUME shaft encoder moves the focus to the next octet, unless already on the last octet, in which case it saves the current IP Address.
    - Pressing the CLR key, double-tapping the AUX VOLUME shaft encoder, or single-tapping the MAIN shaft encoder moves the focus to the previous octet, unless already on the first octet, in which case it cancels editing of the IP Address.
13. Press the **SEL button**.
    The focus shifts to the third octet.
14. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the IP Address.
15. Press the **SEL button**.
    The focus shifts to the last octet.
16. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the IP Address.
17. Press the **SEL button**.
    The IP Parameters menu options appear in the panel display.

To **configure the Netmask Address**, do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **IP Parameters**.
4. Press the **SEL button**.
   IP Address, Netmask, Gateway, DNS Server, and Domain appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Netmask**.
6. Press the **SEL button**.
   The Netmask Address appears with the first octet blinking in the panel display.
7. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the Netmask Address.
8. Press the **SEL button**.
   The focus shifts to the second octet.
9. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the Netmask Address.
10. Press the **SEL button**.
    The focus shifts to the third octet.
11. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the Netmask Address.
12. Press the **SEL button**.
    The focus shifts to the last octet.
13. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the Netmask Address.
14. Press the **SEL button**.
    The IP Parameters menu options appear in the panel display.

To **configure the Gateway Address**, do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **IP Parameters**.
4. Press the **SEL button**.
   IP Address, Netmask, Gateway, DNS Server, and Domain appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Gateway**.
6. Press the **SEL button**.
   The Gateway Address appears with the first octet blinking in the panel display.
7. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the Gateway Address.
8. Press the **SEL button**.
   The focus shifts to the second octet.
9. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the Gateway Address.
10. Press the **SEL button**.
    The focus shifts to the third octet.
11. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the Gateway Address.
12. Press the **SEL button**.
    The focus shifts to the last octet.
13. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the Gateway Address.
14. Press the **SEL button**.
    The IP Parameters menu options appear in the panel display.

To **configure DNS Server,** do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **IP Parameters**.
4. Press the **SEL button**.
   IP Address, Netmask, Gateway, DNS Server, and Domain appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **DNS Server**.
6. Press the **SEL button**.
   The DNS Server Address appears with the first octet blinking in the panel display.
7. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the DNS Address.
8. Press the **SEL button**.
   The focus shifts to the second octet.
9. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the DNS Address.
10. Press the **SEL button**.
    The focus shifts to the third octet.
11. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the DNS Address.
12. Press the **SEL button**.
    The focus shifts to the last octet.
13. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the DNS Address.
14. Press the **SEL button**.
    The IP Parameters menu options appear in the panel display.

To **configure the Domain name**, do the following:

1. Starting at the Service | OMNEO Setup menu, select **OKP**.
2. Press the **SEL button**.
   Device Name, DHCP, and IP Parameters appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **IP Parameters**.
4. Press the **SEL button**.
   IP Address, Netmask, Gateway, DNS Server, and Domain appear in the panel display.
5. Using the AUX VOLUME shaft encoder, select **Domain**.
6. Press the **SEL button**.
   The domain name appears with the first character blinking in the panel display.
7. Using the AUX VOLUME shaft encoder, select a **new character at the current position**.
8. Press the **SEL button**.
   The focus shifts to the next character position.

   NOTE:

   - You can also use the **arrow keys** to navigate right or left in character position.
   - Press **CLR** to delete the current character.
   - Press **SHIFT** to insert a character at the current position.
   - Press the **MAIN shaft encoder** to cancel editing. A confirmation is required.
9. Repeat **steps 3** to **6** until the domain is named.
10. Once finished, press the **SEL button**.
    Save Name? appears in the panel display.
11. Press the **SEL button**.
    The IP Parameters menu options appear in the panel display.

Service Menu, Page Change

The **Page Change** menu is used to select whether you are allowed to change setup pages while talk keys are active. By default, in Standard Intercom Mode, page changes are allowed when talk keys are active. However, the default in Alternate Intercom Mode does not allow page changes to occur when talk keys are active.

Available options:

Auto	The default is followed depending on the Intercom Mode: Standard or Alternate.
Always Allow	Page changes are allowed while Talk Keys are active.
No Talk Keys	Page changes are not allowed while Talk Keys are active. A red bar appears above/below the keys signifying page changes are not allowed. If the talk key is turned off, the red bar turns blue and page changes can be done.

To **configure page change operation**, do the following:

1. Starting at the Service | Page Change menu, select **Page Change**.
2. Press the **SEL button**.
   Auto, Always Allow, and No Talk Keys appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **page change option**.
4. Press the **SEL button**.
   An arrow appears next to the selected option.

Service Menu, RVON Setup

The **RVON Setup** menu is used to configure the RVON-I/O IP Address, Netmask Address, and Gateway Address for the DKP-3016.

To **configure the IP Address for the RVON-IO**, do the following:

1. Starting at the Service | RVON Setup menu, select **RVON-IO**.
2. Press **SEL**.
   IP Address, Netmask, and Gateway appear in the display window.
3. Using the arrow keys, select **IP Address**.
4. Press **SEL**.
   The IP Address appears with the first octet blinking in the display window.
5. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the IP Address.
6. Press **SEL**.
   The focus shifts to the second octet.
7. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the IP Address.
8. Press **SEL**.
   The focus shifts to the third octet.
9. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the IP Address.
10. Press **SEL**.
    The focus shifts to the last octet.
11. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the IP Address.
12. Press **SEL**.
    The RVON Setup menu options appear in the display window.

To **configure the Netmask Address**, do the following:

1. Using the arrow keys, select **Netmask**.
2. Press **SEL**.
   The Netmask Address appears with the first octet blinking in the display window.
3. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the Netmask Address.
4. Press **SEL**.
   The focus shifts to the second octet.
5. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the Netmask Address.
6. Press **SEL**.
   The focus shifts to the third octet.
7. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the Netmask Address.
8. Press **SEL**.
   The focus shifts to the last octet.
9. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the Netmask Address.
10. Press **SEL**.
    The RVON Setup menu options appear in the display window.

To **configure the Gateway Address**, do the following:

1. Using the arrow keys, select **Gateway**.
2. Press **SEL**.
   The Gateway Address appears with the first octet blinking in the display window.
3. Using the AUX VOLUME shaft encoder, enter the **first octet number** in the Gateway Address.
4. Press **SEL**.
   The focus shifts to the second octet.
5. Using the AUX VOLUME shaft encoder, enter the **second octet number** in the Gateway Address.
6. Press **SEL**.
   The focus shifts to the third octet.
7. Using the AUX VOLUME shaft encoder, enter the **third octet number** in the Gateway Address.
8. Press **SEL**.
   The focus shifts to the last octet.
9. Using the AUX VOLUME shaft encoder, enter the **last octet number** in the Gateway Address.
10. Press **SEL**.
    The RVON Setup menu options appear in the display window.
11. Press **CLR** to exit menu mode.

Service Menu, Reset Cfg

Reset Cfg restores almost all custom settings to the default values and erases all stored autodial numbers. Reset Cfg does not change the selected alpha size, intercom mode, poll ID, or headset transfer state.

To **reset the keypanel configuration**, do the following:

1. Starting at the Service menu, select **Reset Cfg**.
   Cancel and Do Reset appear in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Do Reset**.
3. Press the **SEL button**.
   Configuration reset appears in the panel display.

Service Menu, Scrn Saver

Scrn Saver allows the user to configure the way the screen saver feature operates.

Available selections for this menu are:

Activate	Allows the user to activate the screen saver immediately (used to test current display settings).
Delay	Allows the user to set the delay for Display Dim (for example, when the display will dim) and to set the delay for Activation (for example, when the screen saver becomes active). Both features can be set from 30 minutes, up to 12 hours, or disabled.
Display Dim	Allows the user to set the brightness of the panel display from 0-100%. This setting is a percentage of the current LCD brightness. For example, if you configured your backlight for 60%, then in this menu, 100% is equal to 60% and 0% is equal to 35%.
Mode	Can be set to Bitmap, Display Off (sleep mode), or Text.

The default setting for this option is:

Delay	*One hour for both display dim and screen-saver activation*
Display Dim	*25%*
Mode	*Text*

NOTE: Activating any lever key, button, shaft encoder, or incoming call deactivates the screen-saver.

To **manually activate the screen saver**, do the following:

1. Starting at the Service | Scrn Saver menu, select **Activate**.
2. Press the **SEL button**.
   The screen saver is activated on the keypanel panel display.

To **set the delay option for the keypanel screen saver**, do the following:

1. Starting at the Service | Scrn Saver menu, select **Delay**.
2. Press the **SEL button**.
   Display Dim and Activation appear in panel display.
3. Using the AUX VOLUME shaft encoder, select **Display Dim**.
4. Press the **SEL button**.
   The Delay Time: scroll box appears in the panel display.
5. Using the AUX VOLUME shaft encoder, select the **amount of time** you want to expire before the display dims.
6. Press **CLR**.
   Display Dim and Activation appear in panel display.
7. Using the AUX VOLUME shaft encoder, select **Activation**.
8. Press the **SEL button**.
   The Delay Time: scroll box appears in the panel display.
9. Using the AUX VOLUME shaft encoder, select the **amount of time** you want to expire before the screen saver becomes active.

To **set the brightness of the display**, do the following:

1. Starting at the Service | Scrn Saver menu, select **Display Dim**.
2. Press the **SEL button**.
   The Brightness scroll box appears in the panel display.
3. Using the AUX VOLUME shaft encoder, scroll to the desired **display brightness**.

To **set the screen saver mode (type)**, do the following:

1. Starting at the Service | Scrn Saver menu, select **Mode**.
2. Press the **SEL button**.
   Bitmap, Display Off and Text appear in the panel display.

3. Using the AUX VOLUME shaft encoder, select **Bitmap** to have a bitmap image display when the screen saver activates.
   OR
   Using the AUX VOLUME shaft encoder, select **Display Off** to put the display into sleep mode when the screen saver activates.
   OR
   Using the AUX VOLUME shaft encoder, select **Text** to have a text message display when the screen saver activates.
4. Press the **SEL button**.
   If Bitmap or Text is selected, the options Bounce or Scroll appear.
5. Using the AUX VOLUME shaft encoder, select **Bounce** to have the bitmap or text bounce across the display.
   OR
   Using the AUX VOLUME shaft encoder, select **Scroll** to have the bitmap or text scroll across the display.

Service Menu, Set Address

Set Address is used to indicate the poll ID of the keypanel. See “DKP-3016 Addressing” on page 20 to determine if you need to set the keypanel address. The poll ID is the number (or address) at which an AIO card or intercom attempts to communicate with the keypanel. The Poll ID number is directly related to the connection port on the breakout panel.

Available options for the Poll ID are *1–8*.

To **set the address**, do the following:

1. Starting at the Service | Set Address menu, select the **poll ID** for the keypanel.
2. Press the **SEL button**.
   Cancel or Save and Restart appear in the panel display.
3. Using the AUX VOLUME shaft encoder, scroll to **Save and Restart**.
4. Press the **SEL button**.
   Restarting.... appears. The keypanel resets. Once the restart is complete, the Poll ID is enabled.

Service Menu, Snoop Tally

Snoop Tally, when enabled, indicates to keypanel users somebody is listening to them. For example, snoop tallies are displayed on keypanel 1, if there is another keypanel (2) which is listening to keypanel 1 via a point-to-point or a special list, but is not talking to keypanel 1. Snoop tallies are suppressed if keypanel 1 has any talk keys turned on, or if the hot mic is not enabled.

From this menu, you can set the type of chime indication you want and the duration of the tally.

Available Tally durations available are: *One-shot* and *1 second* to *5 minutes*.

NOTE: Hot Mic must be activated on the keypanel for snoop tally to work. For more information, see “Audio Options Menu, Matrix Out” on page 94.

By default, snoop tally is *disabled* (no chime).

To **enable snoop tallies on the keypanel**, do the following:

1. Starting at the Service menu, select **Snoop Tally**.
2. Press the **SEL button**.
   The Chime scroll box and the Duration scroll appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select the desired **type of chime**.
4. Press the **SEL button**.
5. Using the arrow keys, select **Duration**.
6. Press the **SEL button**.
7. Using the AUX VOLUME encoder knob, select the **duration** of the tally.

Service Menu, Test Panel

Test Panel allows the user to check the operation of all keys and displays on the keypanel.

TABLE 11. Test Panel Key Descriptions

Display	*Action*
	All alpha numeric displays show a % symbol when in Test Panel mode.
	Press down on any key.
	Press up on any key.
<MENU>	Single tap the Aux Volume encoder knob
<-MENU>	Rotate the Aux Volume encoder knob counterclockwise.
<+MENU>	Rotate the Aux Volume encoder knob clockwise.
<MENU-DBL>	Double tap the Aux Volume encoder knob
<MENU- HELD>	Press and Hold the Aux Volume encoder knob
<MAIN>	Single tap the Aux Volume encoder knob
<-MAIN>	Rotate the Main Volume encoder knob counterclockwise.
<+MAIN>	Rotate the Main Volume encoder knob clockwise.
<MAIN-DBL>	Double tap the Main Volume encoder knob
<MAIN- HELD>	Press and Hold the Main Volume encoder knob
<MUTE>	Press up on the MIC MUTE/MIC SEL. key.
<MIC>	Press down on the MIC MUTE/MIC SEL. key.
<CLR>	Press up on the CLR/CWW key.
<CWW>	Press down on the CLR/CWW key.

To **enable the test panel**, do the following:

1. On the keypanel, press **MENU**.
   The Information menu appears in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Service**.
3. Press the **SEL button**.
   The Service submenu appears in the panel display.
4. Using the AUX VOLUME shaft encoder, select **Test Panel**.
5. Press the **SEL button**.
   The Test Panel display appears.
6. Using Table 11 on page 129, test the **keypanel keys**.

   NOTE: To exit test panel mode, press the **CLR button**.

CHAPTER 6

Telephone Interface (TIF) Operation

IMPORTANT: Telephone operation requires an optional **TIF** (Telephone Interface). You must assign an intercom key to talk/listen to the TIF. It is recommended to configure a talk + auto follow assignment. See the TIF User Manual (PN F01U193285) for specific TIF configuration options.

Receiving A Phone Call

When there is an incoming telephone call, the TIF alpha begins to tally.

To **receive a phone call**, do the following:

> Press the **key** to answer the call.

NOTE: TIF assignments tally when the phone is ringing. By default, the assignments also tally while the phone is off-hook. This operation can be disabled by selecting the *Don't generate tallies for off-hook TIF assignments* check box in AZedit (Options | Intercom Configuration | Options page) or by editing the Enhanced Tally definitions for the TIF Off-hook and TIF ringing tally types.

Hanging Up

Keypanel Hang Up

To **hang up the telephone**, do the following:

1. On the keypanel, press the **TIF key** down to turn it on.
   Icom ADial, Hang Up, and Redial appear in the panel display.
2. Using the AUX VOLUME shaft encoder, select **Hang Up**.
3. Press the **SEL button**.
   The call is disconnected.

To **redial a phone number**, do the following:

1. On the keypanel, press the **TIF listen key** on.
2. On the keypanel, press the **TIF talk key** on.
   Icom ADial, Hang Up, and Redial appear in the panel display.
3. Using the AUX VOLUME shaft encoder, select **Redial**.
4. Press the **SEL button**.
   The last dialed number is connected. The TIF key alpha flashes and Hang Up appears in the panel display.
5. Press the **SEL button** to disconnect the call.
   The call is ended.

CHAPTER 7

Keypanel Menu Quick Reference

Audio Options

- Advanced
  - AGC
    - Attack
      - Left Hdst / Panel Mic / Right Hdst
        - Fast Attack Speed
          - 0.5ms
          - 1ms (default)
          - 2ms
    - Decay
      - Left Hdst / Panel Mic / Right Hdst
        - Decay
          - 500ms (default)
          - 750ms
          - 1000ms
  - Compression
    - Left Hdst / Panel Mic / Right Hdst
      - Compression Ratio:
        - 1:1
        - 2:1
        - 3:1(default)
  - Filters
    - Bandpass
      - Inputs
        - OMNEO 1 - Only when DKP-3016 has an AIO connection.
        - OMNEO 2
          - Frequencies
            - Low Freq
              - 0 Hz (default)
              - 15.6Hz
              - 31.5Hz
              - 50Hz
            - High Freq
              - 22kHz (default)
              - 16kHz
              - 8KHz
              - 4KHz
          - Mode
            - Disabled (default)
            - Enabled
      - Outputs
        - Left Hdst
          - Both
          - Left Chan
          - Right Chan

- Frequencies
  - Low Freq
    - 0 Hz (default)
    - 15.6Hz
    - 31.5Hz
    - 50Hz
  - High Freq
    - 22kHz (default)
    - 16kHz
    - 8KHz
    - 4KHz
- Mode
  - Disabled (default)
  - Enabled

Matrix Out
OMNEO 1 - Only when DKP-3016 has an AIO connection.
OMNEO 2

- Frequencies
  - Low Freq
    - 0 Hz (default)
    - 15.6Hz
    - 31.5Hz
    - 50Hz
  - High Freq
    - 22kHz (default)
    - 16kHz
    - 8KHz
    - 4KHz
- Mode
  - Disabled (default)
  - Enabled

Right Hdst
- Both
- Left Chan
- Right Chan

- Frequencies
  - Low Freq
    - 0 Hz (default)
    - 15.6Hz
    - 31.5Hz
    - 50Hz
  - High Freq
    - 22kHz (default)
    - 16kHz
    - 8KHz
    - 4KHz
- Mode
  - Disabled (default)
  - Enabled

Equalization

Inputs

Left Hdst
Matrix In
Panel Mic
Right Hdst

- Modes
  - Disabled (default)
  - Enabled
- Presets
  - Default (default)
  - Hiss Reduction
  - Rumble Reduction
  - Noise Reduction

Outputs

		Speaker	Modes	Disabled (default) Enabled
			Presets	Default (default) Hiss Reduction Rumble Reduction Noise Reduction
	Notch			
		Notch Filter		
			Disabled (default) Narrow Default Wide	
Gating				
	Left Hdst Matrix In OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2 Panel Mic Right Hdst			
		Threshold		
			Disabled (default) Narrow Default Wide	
Metering				
	Left Hdst Matrix In None (default) OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2 Panel Mic Right Hdst			
Mixing				
	Left Hdst	Both Left Chan Right Chan	Left Hdst OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2 Panel Mic Right Hdst	
	OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2 Speaker	Left Hdst Matrix In OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2 Panel Mic Right Hdst		
	Right Hdst	Both Left Chan Right Chan	Left Hdst OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2 Panel Mic Right Hdst	
	To Matrix	Matrix In OMNEO 1 - Only when DKP-3016 has an AIO connection. OMNEO 2		
Mix Mode				
	Aux Mixes Switched (default)			
	Mixes Always Active			
Noise Gate				

	Left Hdst Panel Mic Right Hdst	Disabled (default) Enabled	
Chime			
Preview			
	Yes (default) No		
Chime			
	System #1-12		
Volume			
	-20dB (default) -60dB – 10dB		
Dim			
Headset			
	Left Right		
		Dim Amount:	0dB (default) -32dB – 0dB
Speaker			
		Dim Amount:	-8dB (default) -48dB – 0dB Mute
Headset Mic			
Left Right			
	Auto-Mute	Disabled Enabled (default)	
	Mode	Disabled Enabled Switched (default)	
	Type	Auto-Detect (default) Dynamic Electret	
Headset Spkr			
Left Right			
	Auto-Transfer	Disabled Enabled (default)	
	Mode	Both, Left Chan Right Chan	Always On (default) Disabled Switched
Volume Control			
	Ganged Individual (default)		
Inputs			
Matrix In			
	Disabled Enabled (default)		
OMNEO 1 - Only when DKP-3016 has an AIO connection.			
	Disabled Enabled (default)		
OMNEO 2			
	Disabled Enabled (default)		

- Key Volumes
  - Adjust
    - Disabled
    - Enabled (default)
  - Minimum
    - Adjust Minimum Key Volumes
  - Reset
    - Cancel
    - Do Reset
      - Volumes Reset
- Matrix Out
  - Hot Mic
  - Normal (default)
- Max Volume
  - Headset
    - Left
    - Right
      - Max Volume: -48dB – 10dB (default), Mute
  - Speaker
    - Max Volume: -48dB – 10dB (default), Mute
- Mic Gain
  - Left Hdst
  - Panel Mic
  - Right Hdst
    - Mic Gain:
    - 0dB (default)
    - -20dB – 10dB
- Mic Mute
  - Disabled
  - Momentary
  - Toggle (default)
- Min Volume
  - Headset
    - Left
    - Right
      - Min Volume: Mute (default), -48dB – 10dB
  - Speaker
  - Matrix In
  - OMNEO 1 - Only when DKP-3016 has an AIO connection.
  - OMNEO 2
    - Min Volume:
    - Mute (default)
    - -48dB – 10dB
- Output Level
  - Output Level: 8dB (default) – 0dB
- Panel Mic
  - Disabled
  - Enabled
  - Switched (default)
- Sidetone

Level	
	Sidetone Level: -20dB (default), -65dB to 0dB
Mode	
	Always On Disabled Switched (default)
Speaker	
	Always On Disabled Switched (default)
Tone Gen	
Frequency	1KHz Tone 500Hz Tone (default)
Tone Off (default)	
Tone On	

Display Menu

Assign Type	
	Shows key's assignment types
Chans On	
	Shows scroll list of current callers
Chime	
	Shows keys with Chime assigned
Exclusive	
	Shows which keys are Exclusive keys
Key Groups	
	Group 1 - shows which key is Master, and which keys are Group Slaves Group 2 - shows which key is Master, and which keys are Group Slaves Group 3 - shows which key is Master, and which keys are Group Slaves Group 4 - shows which key is Master, and which keys are Group Slaves
Key List	
	Shows scroll list of hidden key assignments assigned to virtual keys
Level 2	
	Level 2 Assignments - Shows the talk level 2 assignment for each key assignment
Listen	
	Listen Assignments - Shows the listen assignment for each key assignment
MAC Address	
	MAC Address - Shows the MAC Address for this keypanel
Matrix	
	Key Assignment Matrices - Shows the matrix for each key assignment
Panel ID	
	<Panel ID> - Shows the port number and alpha for this keypanel
Solo Key	
	Solo Key - Shows which key is the solo key
Version	
	Version X.X.X - Shows the keypanel firmware version

Key Assign Menu

<table>
<tr><td>Matrix (only displays if there are remote matrices. Selecting Matrix displays a list of remote intercoms.)</td><td rowspan="9"><Ports/Assignments></td><td rowspan="9">Listen
Talk Lvl1
Talk Lvl2
Talk+AF
Talk+AL
Talk+AM
Talk+AR
Talk+AT</td><td rowspan="9">Tap Key</td></tr>
<tr><td>Pt-to-Pt</td></tr>
<tr><td>Party Line</td></tr>
<tr><td>IFB</td></tr>
<tr><td>Special List</td></tr>
<tr><td>Sys Relay</td></tr>
<tr><td>Camera ISO</td></tr>
<tr><td>UPL Resource</td></tr>
<tr><td>IFB Spcl List</td></tr>
<tr><td>Auto Funcs</td><td>All Call
Auto Follow
Auto Listen
Auto Mute
Auto Recip
Auto Table
DIM</td><td colspan="2">Tap Key</td></tr>
</table>

Key Options Menu

- Chime
  - Chime
    - <none>
    - System #1
    - System #2
    - System #3
    - System #4
    - System #5
    - System #6
    - System #7
    - System #8
    - System #9
    - System #10
    - System #11
    - System #12
  - Duration
    - One-shot (default)
    - 1 second
    - 2 seconds
    - 3 seconds
    - 4 seconds
    - 5 seconds
    - 10 seconds
    - 15 seconds
    - 20 seconds
    - 30 seconds
    - 60 seconds
    - 90 seconds
    - 2 minutes
    - 3 minutes
    - 4 minutes
    - 5 minutes
- Clear
  - Tap Key
- Exclusive
  - Tap Key
- Icons
  - Icon
    - Key has TIF Asgn
    - Key is Solo Key
    - Key is Exclusive Key
    - Key is Group Master
    - Key has Chime
    - Key has Trunk Asgn
  - Display
    - Disabled
    - Enabled (default)
- Key Groups
  - Group 1 / Group 2 / Group 3 / Group 4
    - Tap Master Key
      - Tap Slave Key
- Latching
  - Global
    - Disabled
    - Enabled (default)

- Per Key
  - Tap Key
- Lock
  - Tap Key
- Solo
  - Tap Key
- Tallies
  - Indefinite
    - Disabled (default)
    - Enabled
  - Min Duration
    - Min Duration:
      - 5 seconds
      - 10 seconds
      - 15 seconds (default)
- Turn Off
  - All Keys
    - Turn Keys Off?
      - Keys Turned Off
  - Talk Keys
    - Turn Keys Off?
      - Keys Turned Off
  - Listen Keys
    - Turn Keys Off?
      - Keys Turned Off

OMNEO Offers Menu

- Keypanel
  - OKP
    - <Port #> - Shows currently selected connection offer, alternative offers, or <none>
  - AIO - If an RVON-IO or an OEI-2 is connected, it shows that device instead
    - Disabled
    - Enabled (default)
- Aux Input
  - OMNEO 1 - Only when DKP-3016 has an AIO connection.
    - <Port #> - shows currently selected connection offer, or <none>
  - OMNEO 2
    - <Port #> - shows currently selected connection offer, or <none>

RVON Offers Menu

- RVON-IO
  - <Port #> - Shows currently selected connection offer, alternative offers, or <none>

Save Config Menu

- Configuration Saved

Service Menu

- Alphas
  - 4 Chars (default)
  - 6 Chars
  - 8 Chars
  - 8 Chars (Unicode)
- CWW
  - Number of Entries
    - Number of CWW Entries
      - 9 (default)
      - 3-9
  - On New Caller
    - Select New Call
    - Select If Idle
    - Don’t Select (default)
- Display
  - Menu Context
    - Disabled
    - Enabled (default)
  - Show Volume
    - Disabled (default)
    - Enabled
  - KP32 Emulation
    - Disabled (default)
    - Enabled
- Intercom Mode
  - Alternate
  - Standard (default)
- Key View
  - Show Gain
    - Disabled (default)
    - Enabled
  - Show Lstn
    - Disabled (default)
    - Enabled
    - Enabled (Suppress Auto)
  - Show Mtx
    - Disabled (default)
    - Enabled
    - Enabled (Suppress Local)
- Keypad
  - Backlight
    - Activation
      - Activate
        - On Keypress (swallowed) (default)
        - On Keypress (processed)
        - Always
        - Never
    - Setup
      - Inactive
        - Brightness: ##% (default is 30%)
        - Color:
          - Blue (default)
          - White
      - Active
        - Brightness: ##% (default is 100%)

- Color:
  - Blue (default)
  - White
- Shift State
  - Brightness: ##% (default is 100%)
  - Color:
    - Blue
    - White (default)
- SEL Key
  - Auto (default)
  - Assign Groups
  - Quick Assign

LCD Backlight

- Brightness:
  65% (default)
  35% – 100%

OMNEO Setup

- OKP
  OEI-2 (if attached)
  - Device Name
    - <displays device name and allows editing>
  - DHCP
    - Disabled (default)
      Enabled
  - IP Parameters
    - IP Address <displays IP Address and allows editing>
      Netmask <displays Netmask and allows editing>
      Gateway <displays Gateway and allows editing>
      DNS Server 1 <displays DNS Server and allows editing>
      Domain <displays Domain Name and allows editing>

Page Change

- Auto (default)
  Always Allow
  No Talk Keys

Reset Cfg

- Cancel
  Do Reset
  - Configuration Reset

RVON Setup

- RVON-IO
  - IP Address
    - IP Address <displays IP Address and allows editing>
  - Netmask
    - Netmask <displays Netmask and allows editing>
  - Gateway
    - Gateway <displays Gateway and allows editing>

Scrn Saver

- Activate
  - Displays current screen saver. Press CLR to return to menu.
- Delay
  - Display Dim
    - Delay Time: 1 hour (default) (30 min, 1 – 12 hours, and Disabled)
  - Activation
    - Delay Time: 1 hour (default) (30 min, 1 – 12 hours, and Disabled)
- Display Dim
  - Brightness: 25% (default) (0% – 100%)

- Mode
  - Bitmap
    - Bounce
    - Scroll (default)
  - Display Off
  - Text (default)
    - Bounce
    - Scroll (default)
- Set Address
  - Poll ID <1–8>
    - Cancel
    - Save and Restart
- Snoop Tally
  - Chime:
    - none (default), System #1, System #2, System #3, System #4
  - Duration:
    - One-shot (default) (1 sec, 2 sec, 3 sec, 4 sec, 5 sec, 10 sec, 15 sec, 20 sec, 30 sec, 60 sec, 90 sec, 2 min, 3 min, 4 min, 5 min)
- Test Panel

APPENDIX A

Unicode Support

AZedit and Unicode Support

Minimum firmware revision requirements for Unicode support are:

- MCII-e v2.4.0 or later
- AIO-8 v10.5.0 or later
- AIO-16 v1.3.0 or later
- Cronus v1.8.0 or later
- Zeus III v1.3.0
- KP 32 CLD v1.3.0 or later
- KP 12 CLD v1.1.0
- RP-1000 v2.0.0
- KP12/4U v1A.0.26 (Cyrillic character set only)
- KP-4016/5032 v1.0.2
- DKP-3016 v1.2.6

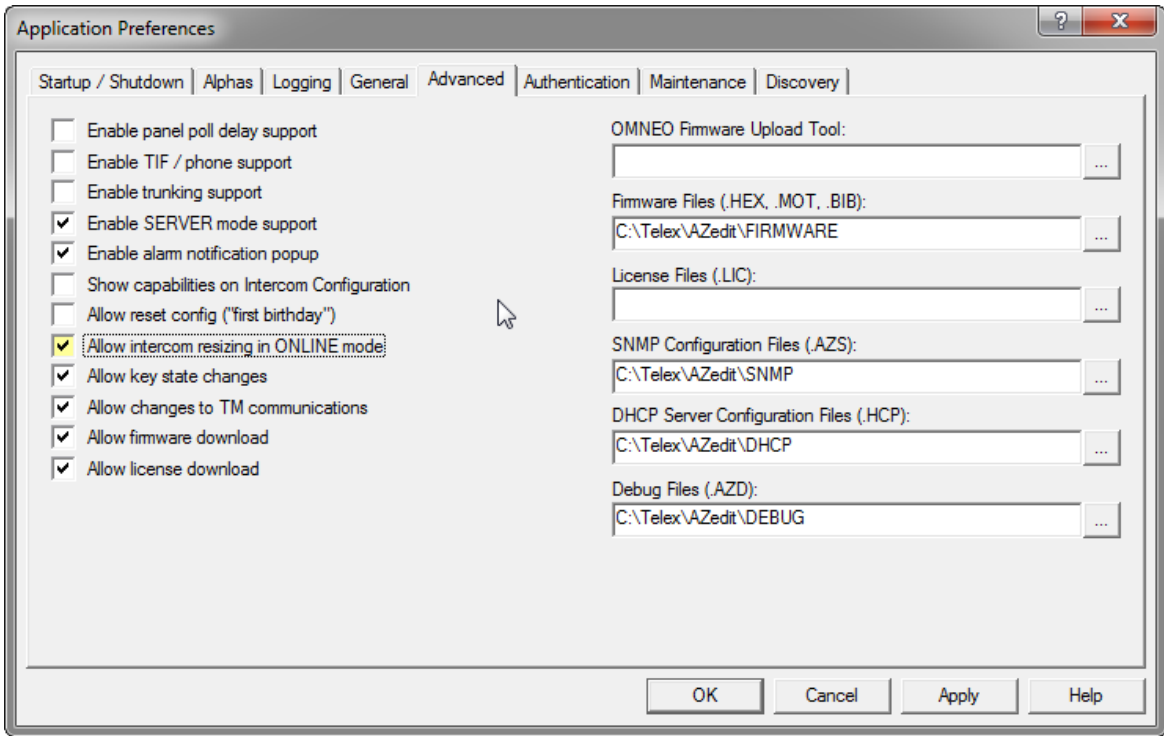
To **configure the keypanel for Unicode operation**, do the following:

IMPORTANT: Before going further, save the setup file. This is needed to restore system configuration after enabling Unicode operation.

1. On the keypanel, select **Service | Alphas | 8 Chars (Unicode) | Save and Restart**.

   NOTE: If using the keypanel with Japanese firmware, you must also configure the correct Intercom Mode. See “Service Menu, Intercom Mode” on page 117.

2. From the Options menu in AZedit, select **Preferences**.
   The Application Preferences window appears.
3. Select the **Advanced** tab.
   The Advanced page appears.
4. Select the **Allow intercom resizing in ONLINE mode** check box.

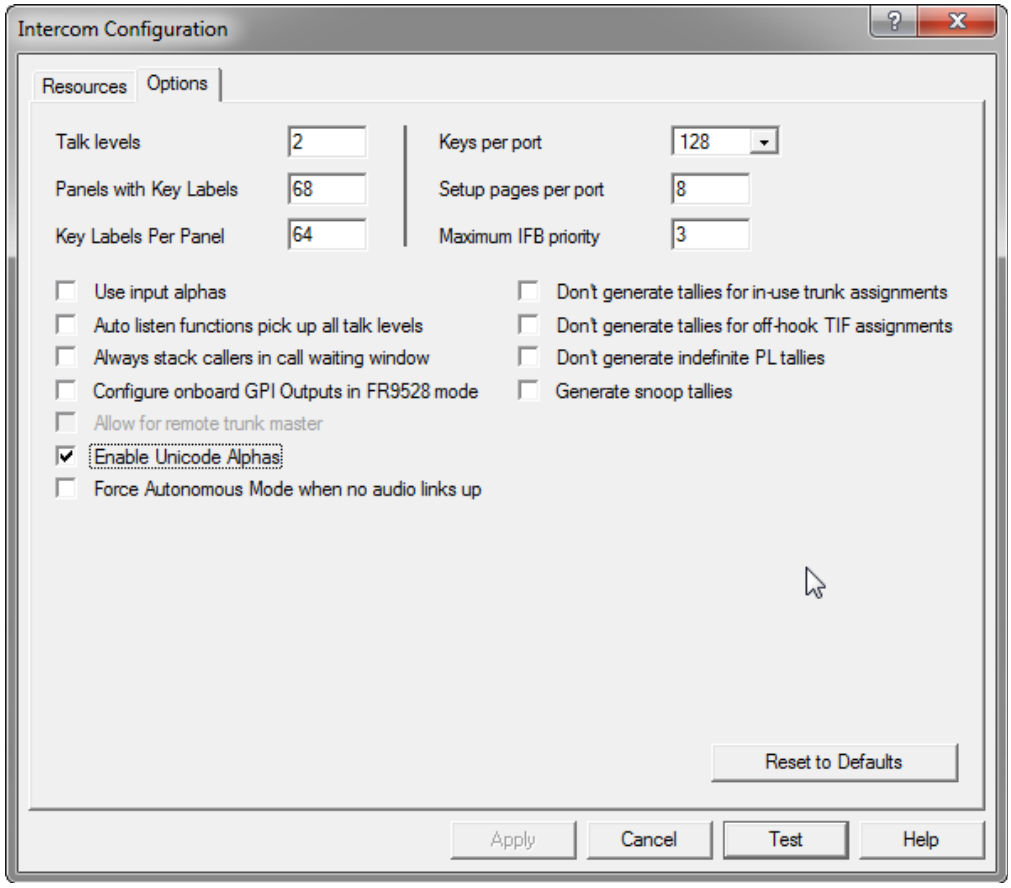


5. Click **Apply**.
6. Click **OK**.
   The Application Preferences window closes.

IMPORTANT: **You are about to erase the entire intercom setup! Be sure to save your file.**

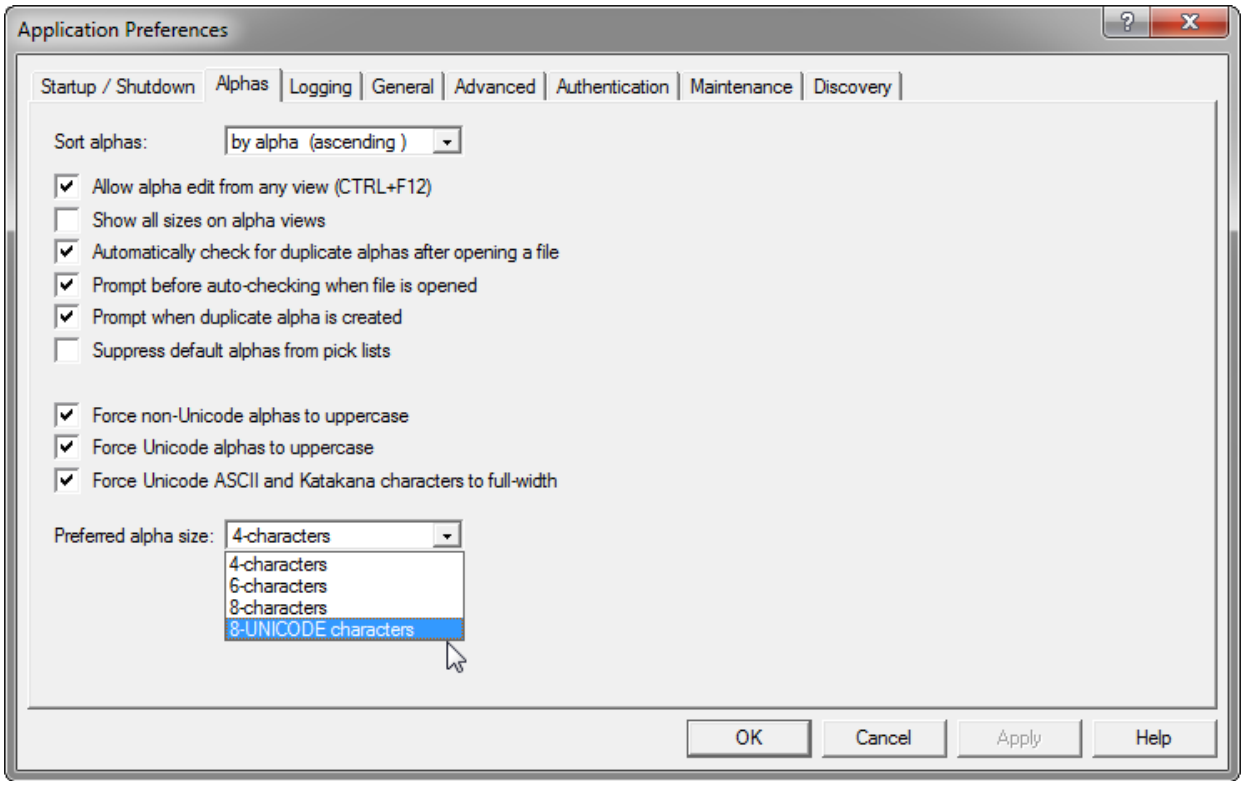
7. From the Options menu, select **Intercom Configuration**.
   The Intercom Configuration window appears.
8. Click the **Options** tab.
   The Options page appears.

9. Select the **Enable Unicode Alphas** check box.



10. Click **Apply**.
The Intercom Configuration window closes.
11. From the Options menu, select **Preferences**.
The Application Preferences window appears.
12. Click the **Alphas** tab.
The Alphas window appears.

13. From the Preferred alpha size drop down menu, select **8-UNICODE characters**.



14. Click **Apply**.
15. Click **OK**.
    The Application Preference window closes.

To **restore the system configuration**, do the following:

1. From the Online menu, select **Send File**.
2. Navigate to the **system configuration file (.adm)** you want to restore.
3. Click **OK**.

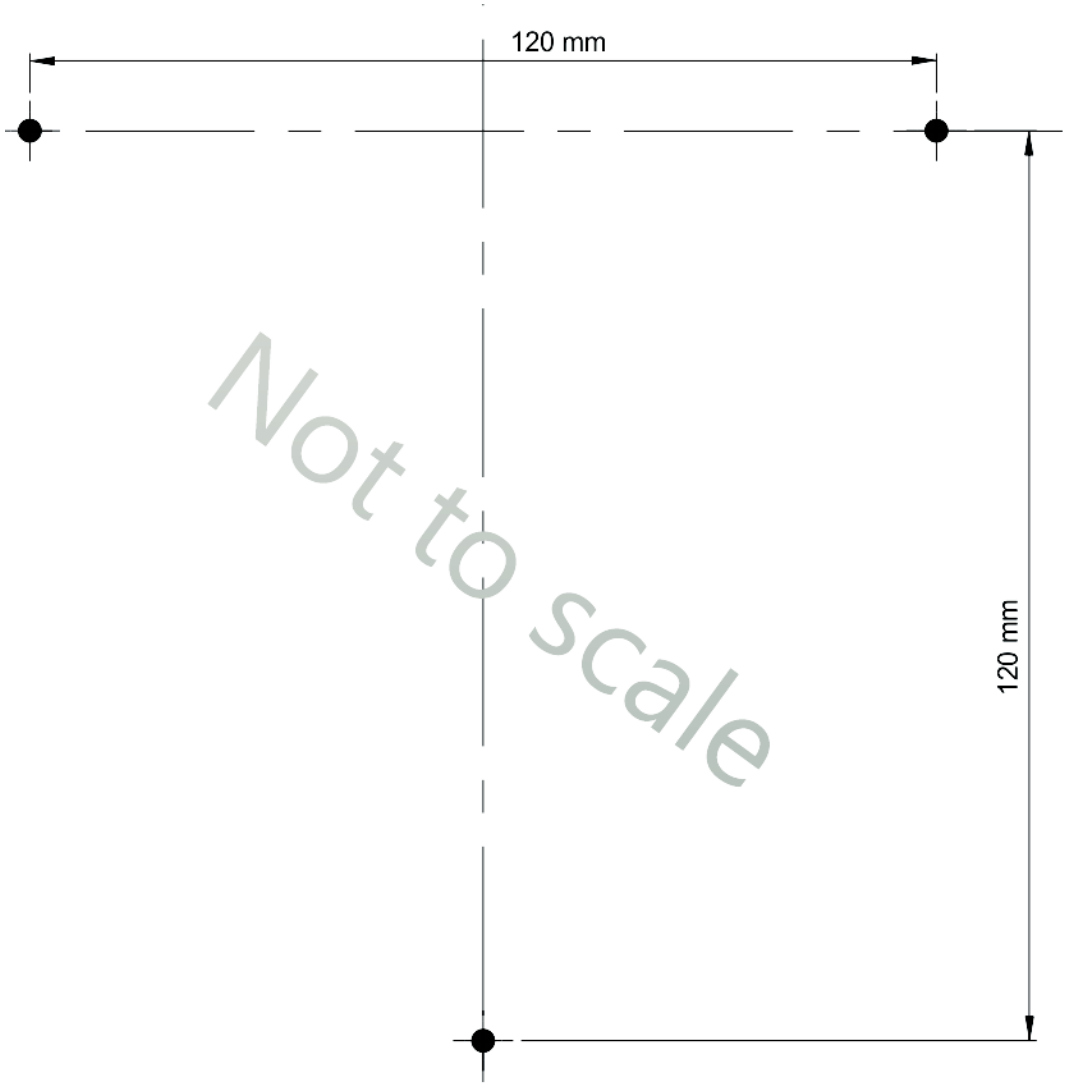
APPENDIX B

Wall Mounting Option

Wall Mount Instructions

To **wall mount the DKP-3016W**, do the following:

1. Using the screw-hole diagram as a reference, mark the **three hole locations** on the wall.

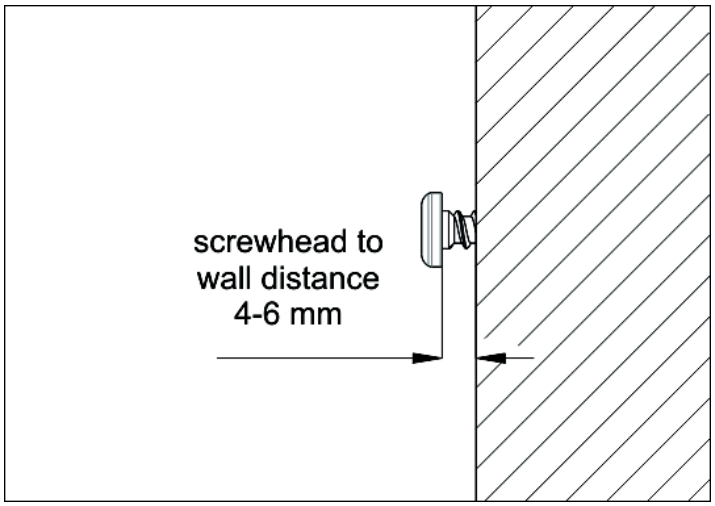


NOTE:

- It may be necessary to predrill the holes or use screw anchors, depending on the type of material the wall is constructed.
- The DKP-3016W is supplied with three wood screws. If you need to use different screws due to different wall material, be sure to adhere to the following guidelines:
  - Screw diameter: M5
  - Head diameter: no more than 10mm across
  - Head height: no more than 3.5mm tall

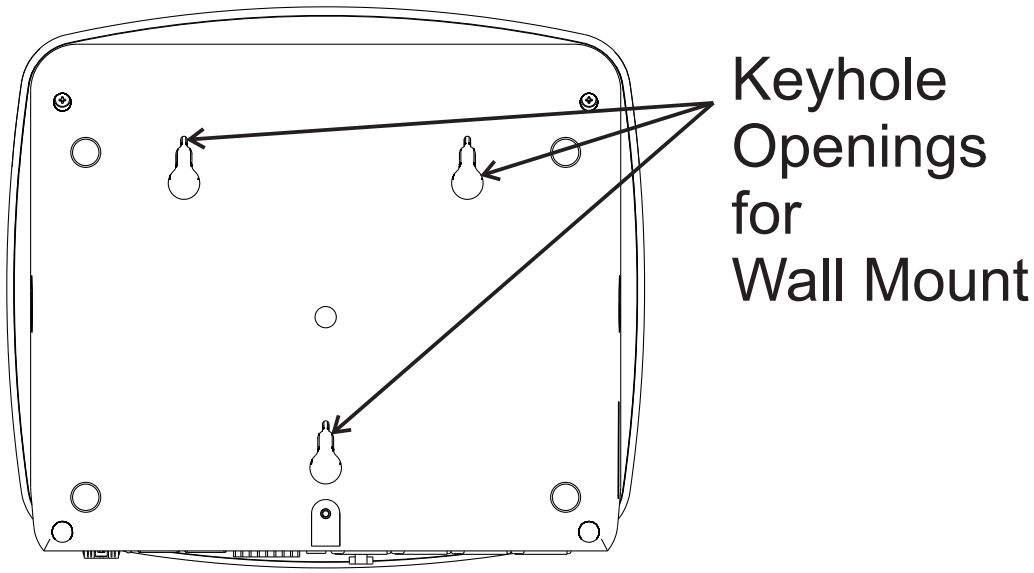
2. Using a screw driver, drive the **screws** into the predefined holes.

IMPORTANT: It is necessary for all screws to protrude from the wall at approximately the same height. The height should be 4-6mm from the underside of the screw head to the wall.



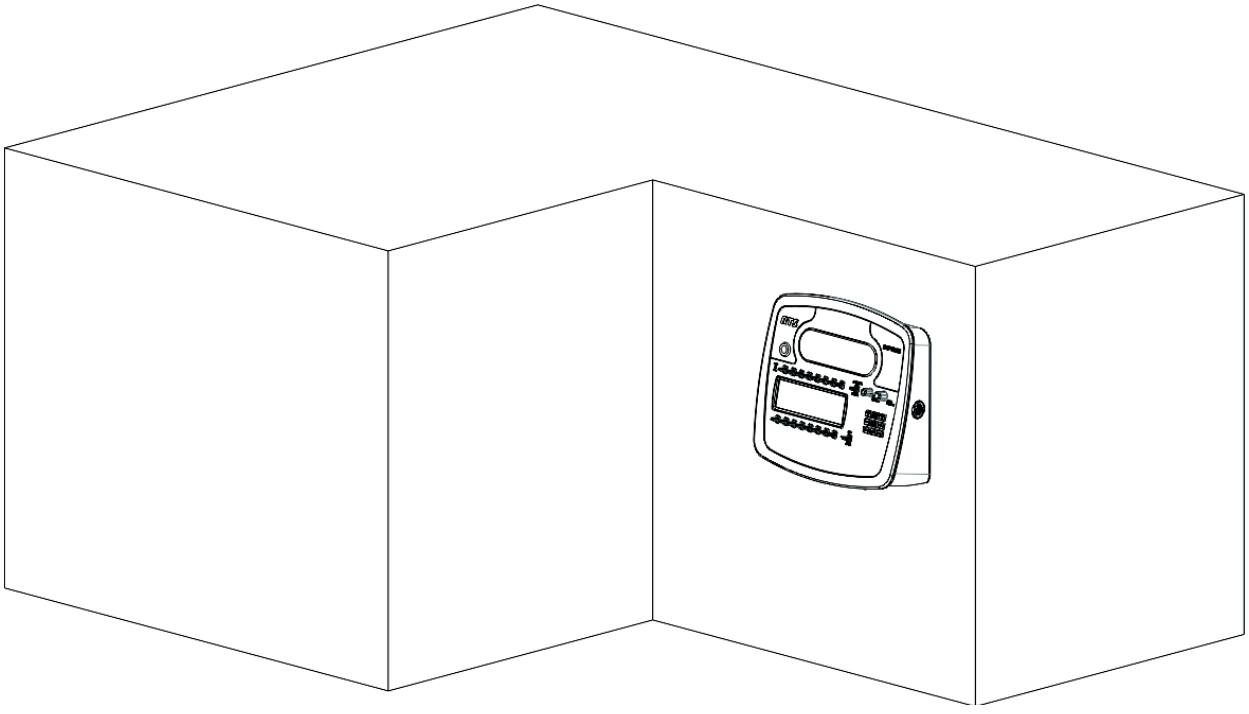
– If the screw is inserted too far, the unit cannot latch in place.
– If the screw is not inserted far enough, the unit is not locked in place properly and can potentially fall off the wall.

3. Align the **bottom of the unit** over the screws, allowing the screw heads to slide into the largest part of the key hole opening.



IMPORTANT: Make sure all the screws are secure in the keyholes on the bottom of the unit.

4. Gently slide the **unit downward**, ensuring it locks into place.



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