Can I use EEE switches (Energy Efficient Ethernet or 'Green Ethernet') in my Dante network?

Short answer: no.

EEE (Energy Efficient Ethernet) is a technology that reduces switch power consumption during periods of low network traffic. It is also sometimes known as Green Ethernet andIEEE802.3az.

Although power management should be negotiated automatically in switches that support EEE, it is a relatively new technology, and some switches do not perform the negotiation properly. This may cause EEE to be enabled in Dante networks when it is not appropriate, resulting in poor synchronization performance and occasional dropouts.

Therefore we strongly recommend that:

1. If you use managed switches, ensure that they allow EEE to be disabled. Make sure that EEE is disabled on all ports used for real-time Dante traffic.

2. If you use unmanaged switches, do not use Ethernet switches that support the EEE function, because you cannot disable EEE operation in these switches.

Guidelines for selecting switches are found on the Audinate website at <u>https://www.audinate.com/resources/networks-switches</u>.

Examples of unmanaged switches that have Energy Efficient Ethernet (and which cannot be used with Dante) include those listed below:

- Rosewill RC-415 10/100/1000Mbps 5-Port Gigabit Green Ethernet
- TRENDnet
 - TRENDnet TEG-S81g Unmanaged 10/100/1000Mbps 8-Port Gigabit GREENnet Switch
 - TRENDnet TEG-S82g Unmanaged 10/100/1000Mbps 8-Port Gigabit GREENnet Switch
 - TRENDnet TEG-S16DG Unmanaged 10/100/1000Mbps 16-Port Gigabit GREENnet Switch
 - TRENDnet TEG-S16G Unmanaged 10/100/1000Mbps 16-Port Gigabit GREENnet Switch
 - TRENDnet TPE-TG80G Unmanaged 10/100/1000Mbps 8-Port Gigabit GREENnet PoE+ Switch
- ASUS GX-D1051 V3 Unmanaged 10/100/1000Mbps 5-Port Gigabit Desktop Switch with Green Network
- ASUS GX Series GX-D1241 V3 Unmanaged 10/100/1000Mbps 24-Port Gigabit Switch with Loop Detection Function
- D-Link DGS-105 Unmanaged 10/100/1000Mbps 5-Port Gigabit Switch
- D-Link DGS-1016A 16-Port Unmanaged Gigabit Switch
- D-Link DGS-1024A Unmanaged 10/100/1000Mbps 24-Port Unmanaged Gigabit Switch
- EDIMAX GS-1016 Unmanaged 10/100/1000Mbps 16-Port Gigabit Rackmount Switch
- EDIMAX GS-1026 10/100/1000Mbps 24 x Gigabit Ports w/ 2 SFP Slots Rackmount Switch

- ZyXEL GS105B 5-Port Gigabit Ethernet Switch with Metal Housing & Green Energy Saving Technology
- LINKSYS
 - LINKSYS LGS116 Unmanaged 10/100/1000Mbps 16-Port Gigabit Switch
 - LINKSYS LGS108P Unmanaged 10/100/1000Mbps 8-Port Gigabit PoE Switch
 - LINKSYS LGS124 Unmanaged 10/100/1000Mbps 24-Port Gigabit Switch
 - LINKSYS LGS116P Unmanaged 10/100/1000Mbps 16-Port Gigabit PoE Switch
 - LINKSYS LGS124P Unmanaged 10/100/1000Mbps 24-Port Gigabit PoE Switch
- SMC
 - SMCGS501 5-Port 10/100/1000Mbps(RJ-45)IEEE 802.3az Energy-Efficient Ethernet Su ...
 - SMCGS801 8-Port 10/100/1000Mbps (RJ-45)IEEE 802.3az Energy-Efficient Ethernet S ...
 - SMCGS502 5-Port 10/100/1000 Mbps (RJ-45)IEEE 802.3az Energy-Efficient Ethernet ...
 - SMCGS802 8-Port 10/100/1000Mbps(RJ-45)IEEE 802.3az Energy-Efficient Ethernet S ...
 - SMCGS803 EZ Switch TM 10/100/1000 Mbps 8-Port Gigabit Ethernet Switch Loopback D ...
 - SMCGS805 (Project Only) MSO Solution IEEE 802.3az Energy-Efficient Ethernet Support Su ...
 - SMCGS1601 16-Port 10/100/1000 Mbps Unmanaged Switch IEEE 802.3az Energy-Efficie ...
 - SMCGS2401 24-Port 10/100/1000 Mbps Unmanaged Switch Green EthernetSupport IEEE ...
 - SMCGS801P EZ Switch[™] 10/100/1000 8-Port Gigabit Ethernet PoE Switch PoE Features I ...
 - SMCGS1601P 16-Port 10/100/1000 Mbps Unmanaged PoE Switch PoE FeaturesIEEE 802.3a ...
- HP 1410 Switch Series
 - 1410-8G Switch (J9559A)
 - 1410-16G Switch (J9560A)
 - 1410-24G-R Switch (JG708A)
 - 1410-24G Switch (J9561A)
 - 1410-8 Switch (J9661A)
 - 1410-16 Switch (J9662A)
 - 1410-24 Switch (J9663A)
 - o 1410-24-R Switch (JD986B)
 - 1410-24-2G Switch (J9664A)
- Cisco SG100 Small Business Switch Series

- SG100D-05 5 Port Gigabit Desktop Switch
- SG100D-08 8 Port Gigabit Desktop Switch
- SG100D-08P 8 Port PoE Gigabit Desktop Switch
- SG100-16 16 Port Gigabit Switch
- SG100-24 24 Port Gigabit Switch with 2 Combo Mini-GBIC Ports
- SG102-24 Compact 24 Port Gigabit Switch with 2 Combo Mini-GBIC Ports
- ZyXEL GS1100 Series 8/16/24-port GbE Unmanaged Switch
 - GS1100-8HP 8-port GbE Unmanaged PoE Switch
 - GS1100-16 16-port GbE Unmanaged Switch
 - GS1100-24 24-port GbE Unmanaged Switch
 - GS1100-24E 24-port GbE Unmanaged Switch

List updated May 1, 2014

This is not an exhaustive list, but rather a list of some switches that fall under the category of Energy Efficient Ethernet unmanaged switches. It is the responsibility of the user to verify switch compatibility.