

Extending a Pro64 Network Without Mute

Aviom's Pro64® network provides true plug-and-play setup and reconfiguration without manual programming. Pro64 systems can be expanded at any time, and devices can be connected in any combination of serial and parallel wiring topologies, without restricting signal flow. In order to achieve this flexibility and produce a seamless network stream where all channels are available throughout the network in real time, regardless of physical layout, the network must briefly mute when a new device is added to a functioning system. However, new Pro64 firmware now allows devices to be added to a functioning system without any interruption of audio.

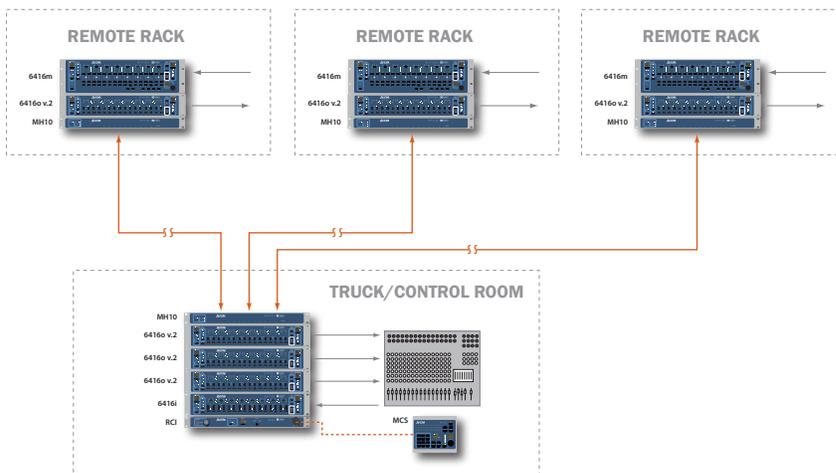
PLUG-AND-PLAY CONNECTIVITY

In systems with firmware version 4.19 or earlier, the Pro64 network will briefly mute each time a new device is added to a functioning system. This mute period allows the new device to be identified by the network's Control Master and integrated into the network audio and data stream. The duration of the mute depends on the existing configuration and the changes being made but will typically be several hundred milliseconds per device added.

MUTE-FREE EXPANSION

Version 4.35 firmware introduces some protection against this mute for systems that cannot tolerate the risk of even a brief mute when a device is added to the network, while still preserving the simplicity and flexibility of plug-and-play connectivity.

The MH10 and MH10f Merger Hubs now allow new devices to enter the network without interrupting audio and data flow, if those new devices are connected directly to open ports on the Merger Hub. By managing the flow of the audio and data stream, along with communications to the Control Master, the MH10 and MH10f will maintain a seamless flow of audio and data while also allowing new devices to enter the network, eliminating the brief mute previously associated with hot-plugging a new device into an existing network.



By placing an MH10 Merger Hub in each rack and connecting to the main rack via the MH10s, and utilizing parallel connections within each rack, racks can be connected and disconnected without interrupting audio flow.

For optimized protection against mutes from physical network changes, Aviom recommends systems be wired with MH10 or MH10f Merger Hubs in each rack and devices within racks connected directly to the Merger Hub ports.

Note that any physical reconfigurations that affect clock mastership for the network will require a network-wide mute as the clocking architecture is changed.



The 10-port MH10 Merger Hub can be used to provide mute-free network expansion ports, without any limitation on the direction of audio signals or availability of network resources. The MH10f offers similar functionality, but replaces two of the RJ45 network ports with SFP slots for single- or multi-mode fiber optic transceivers.