

The 10-port MH10 Merger Hub supports bidirectional parallel network connections in Pro64™ audio networks. Similar to a familiar Ethernet switch, but with features and performance designed specifically for networking and distributing audio, the MH10 offers unprecedented flexibility and simplicity in system design. All ten A-Net® ports feature heavy-duty locking Neutrik® EtherCon® connectors.

In Pro64 systems running in Auto Mode, the MH10 merges the inputs from all ten ports, ensuring that all 64 channels in the network are distributed back out all ten ports, regardless of the physical location of those inputs. Channels can be physically located off any combination of the ten ports, even if they go through multiple MH10s.

In a Manual Mode system, the MH10 provides three preset configurations, allowing users to optimize the way each hub point merges and distributes audio channels. Each configuration preserves complete bidirectionality of the system, even as inputs are separated physically off various legs of a hub. The MH10 also provides the protection of a back-up cable for main runs, as in a digital snake.

The MH10 Merger Hub will also merge Aviom's Virtual Data Cable™ data, allowing Pro64 devices to send and share control data effortlessly over long cable distances (up to 400'/120m between devices).

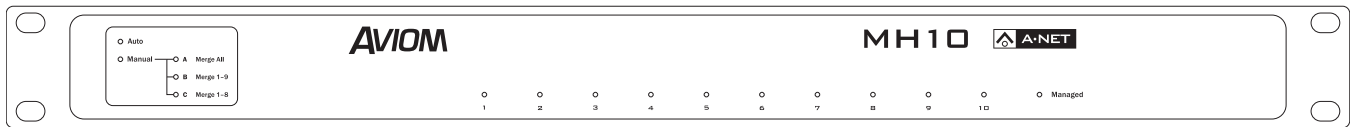
Multiple MH10 Merger Hubs can be included in a single system without loss of performance.

PRODUCT HIGHLIGHTS

- Merge and distribute up to 10 Pro64 A-Net streams
- 10 bidirectional Pro64 A-Net ports with EtherCon RJ45 connectors
- Multiple configurations for routing audio data
- Use any number of MH10 Merger Hubs in a network
- Create back-up cable paths
- Add digital splits anywhere in a network

TECHNICAL SPECIFICATIONS

LED indicators	A-Net Active, x10	
A-Net	10 EtherCon RJ45 connectors, rear panel	
A-Net Cable Length	400 feet (120 meters) between devices	
Power Supply	100–240VAC	50–60Hz, 24W
	Internal switching type; IEC connector	
Dimensions	1U; 19" w x 8" d x 1.75" h (482.6 x 203 x 44 mm)	
Weight	8 pounds (3.63 kilos)	
<i>All Aviom products are designed and manufactured in the U.S.A.</i>		

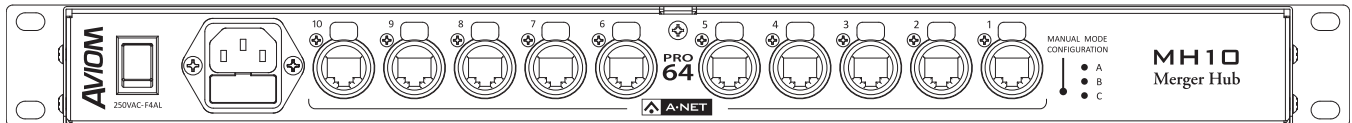


▲ FRONT PANEL FEATURES

- Auto/Manual Mode indicator LEDs
- A-Net Active Indicator LEDs per port (10)

▼ REAR PANEL FEATURES

- A-Net Ports 1-10
- Manual Mode configuration switch with LEDs

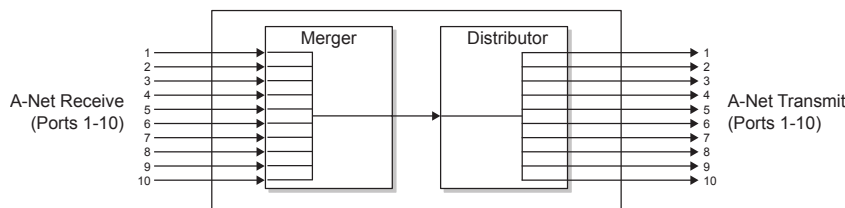


MH10 AUDIO SIGNAL FLOW DIAGRAMS

The MH10 provides three preset configurations for routing the audio content of the A-Net streams received at its 10 ports.

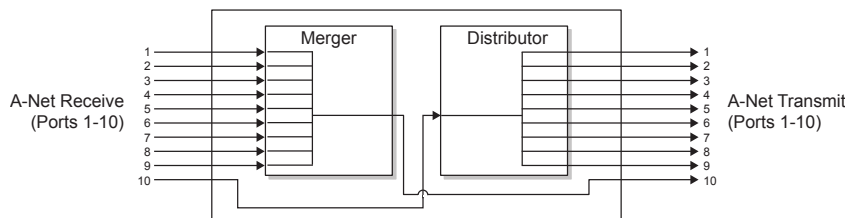
AUTO MODE

MANUAL MODE CONFIGURATION A (Merge All)



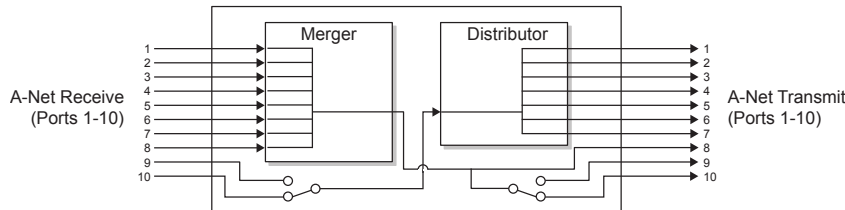
In **Auto Mode**, channels from all 10 streams are merged into a single stream, which is then distributed through the transmitted streams at all 10 ports. **Manual Mode Configuration A (Merge All)** functions similarly.

MANUAL MODE CONFIGURATION B (Merge 1-9)



In **Manual Mode Configuration B (Merge 1-9)**, audio from the streams received at ports 1-9 is merged into a single stream, which is transmitted out port 10. The stream received at port 10 is distributed out ports 1-9.

MANUAL MODE CONFIGURATION C (Merge 1-8)



In **Manual Mode Configuration C (Merge 1-8)**, ports 9 and 10 serve as a redundant pair, with one port available as a backup. Audio from the streams received at ports 1-8 is merged into a single stream, which is transmitted out port 8, as well as port 9 or 10. Audio received at ports 9 and 10 is distributed out ports 1-7.

ARCHITECTURAL SPECIFICATION

The Aviom MH10 Merger Hub shall employ the Aviom A-Net® audio transmission protocol to provide ten ports capable of A-Net data distribution to/from devices connected in a Pro64™ A-Net network. It shall digitally transmit full-bandwidth, high-quality audio by employing the Aviom A-Net audio transmission protocol.

The front panel shall provide ten LED indicators for the A-Net data ports, a Managed Mode LED, and A-Net network mode LEDs.

The unit shall be powered by an internal universal power supply (110 to 240VAC) with an AC power receptacle with fuse, and be supplied with a detachable AC cable. It shall be UL and CE listed. The unit shall have EtherCon® RJ45 connectors for the A-Net digital network connections.

Its dimensions shall be 19 inches wide, 8 inches deep, and 1U (1.75") high. Its net weight shall be 5 pounds, and its front panel shall be finished in blue. The unit shall be Aviom Incorporated model MH10.