INSTALLATION INSTRUCTIONS

MicroComm DXI

PTA-620 VoIP Paging/Talkback Amplifier

1 Intent & Scope

This document describes the installation procedure for the PTA-620 VoIP Paging/Talkback Amplifier.

2 Description

The PTA-620 is a half-duplex Voice over Internet Protocol (VoIP) device that provides paging support (with talkback) and an Audio Level Alarm (ALA) feature for DXL intercom systems. The talkback feature allows a two-way conversation to be carried out over the loudspeakers, and the ALA feature provides continuous monitoring of the ambient room noise with alarm reporting (when abnormal sound levels are detected).

All models include line level input, line level output, two status inputs (for signaling call requests or alarm conditions) and a DPDT relay for controlling external paging amplifiers or providing a direction control signal for an external system.

Three versions of the PTA are available:

PTA-620-31 Provides 1 watt of power at 25 Vrms

PTA-620-35 Provides 5 watt of power at 25 Vrms

PTA-620-85 Provides 5 watt of power into an 8-ohm speaker

3 Mounting the PTA-620

A PTA-620 is designed to be mounted on a back board or on a standard top hat style DIN rail. The PTA-620-31 enclosure is slightly smaller the PTA-620-35 and PTA-620-85 enclosures.

3.1 PTA-620-31

The PTA-620-31 can be wall mounted with two #6 screws or on a standard DIN rail using two DIN rail clips (A Wago 209-188 Mounting Foot (Harding HDW0193) for mounting on standard DIN rails). The following diagram of the unit shows the location of the mounting holes.

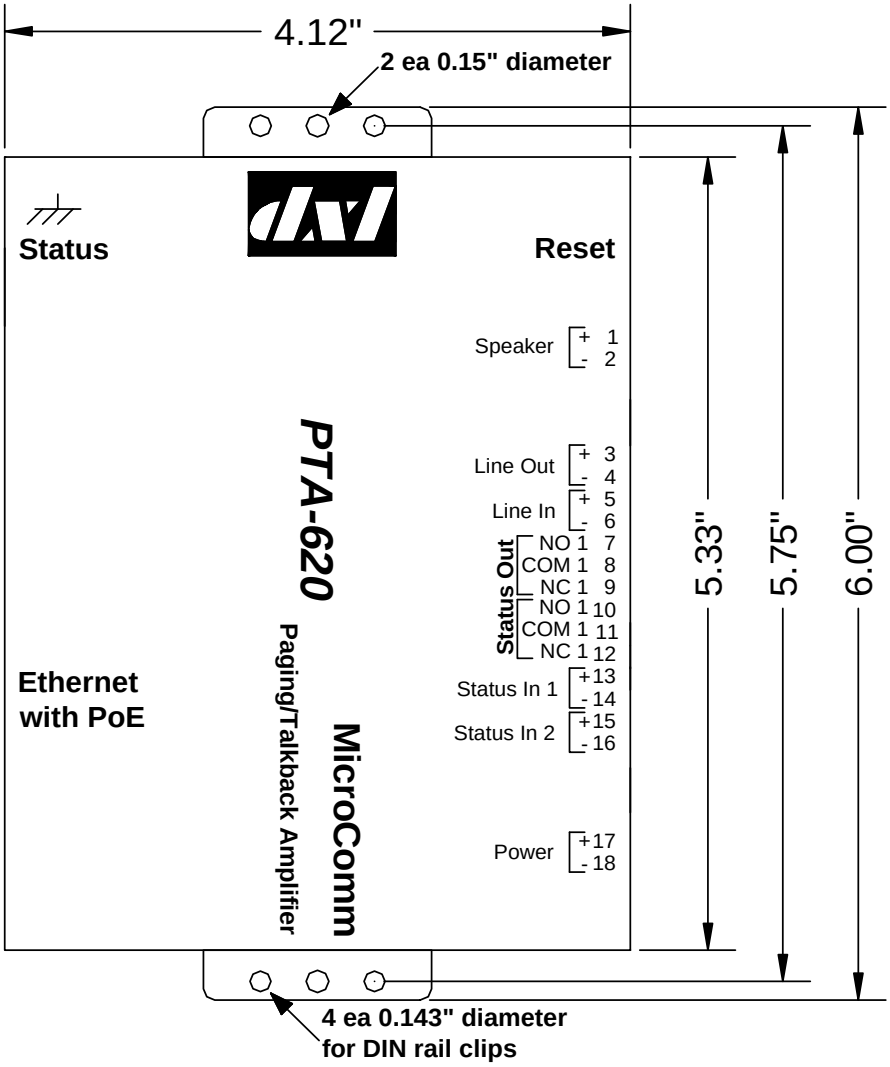


Figure 1 Mounting hole positions for the PTA-620-31

3.2 PTA-620-35 and PTA620-85

The PTA-620-35 and PTA-620-85 are packaged in the same size enclosure. The units can be wall mounted with two #6 screws or on a standard DIN rail using two DIN rail clips (A Wago 209-188 Mounting Foot (Harding HDW0193) for mounting on standard DIN rails). The following diagram shows the location of the mounting holes for these two units

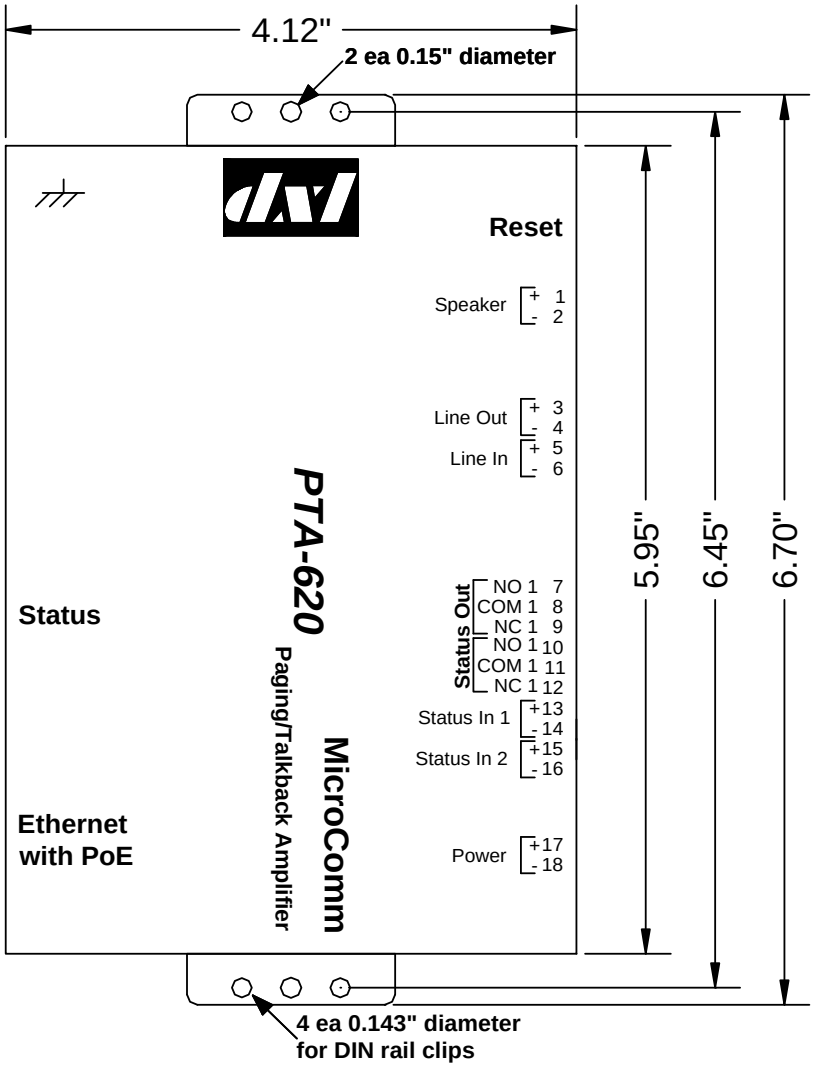
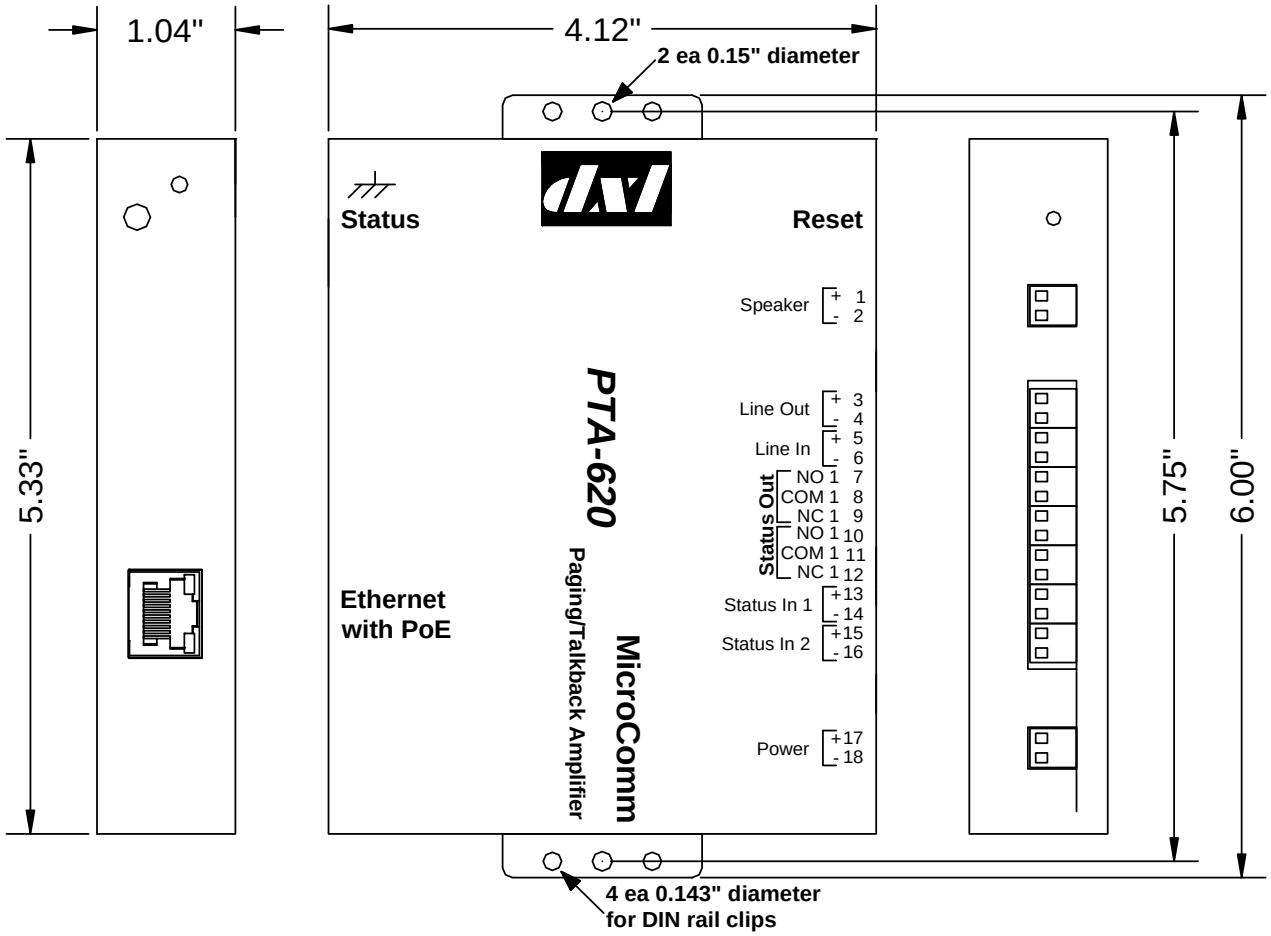


Figure 2 Mounting hole positions for the PTA-620-35 and PTA-620-85

4 Field Connection

The following diagram shows the location of the terminal blocks on a PTA-620-31. (The PTA-620-35 and PTA-620-85 have the same terminal blocks with the same labels).



PTA-620-31

Figure 3 Terminal Block Locations for External Field Connections

4.1 Network Connections

The Ethernet connection is made via an 8-pin RJ-45 connector. Although the PSE (Power Source Equipment) must use the pin pairs assigned to an endspan or midspan (not both) the PD (Powered Device) accepts power from either the endspan or midspan device. The Ethernet RJ-45 includes both the network and power connections.

RJ-45 Pin	Function
1	Tx+
2	Tx-
3	Rx+
4	48Vdc (SRC)
5	48Vdc (SRC)
6	Rx-
7	48Vdc (RETURN)
8	48Vdc (RETURN)

Table 1 RJ-45 Ethernet & PoE

4.2 Other Connections

4.2.1 Line Input/Output

Two adjacent 1x2 terminal blocks provide connections for a line output and line input audio signals

TB-04	Function
1	Line Out +
2	Line Out -
3	Line In +
4	Line In – (Gnd)

Table 2 Line Level Input/Output

4.2.2 Auxiliary Power

If power to the unit is not available via a PoE connection an external power supply can be used to provide power to the unit through a 1x2 terminal block. The PTA requires a supply voltage of 20 Vdc – 36 Vdc, 0.6 Amps.

TB-02	Function
17	Input +
18	Input – (Gnd)

Table 3 Auxiliary Power

4.2.3 Speaker

External loudspeakers can be connected to the PTA-620 via a 1x2 terminal block labeled Speaker

4.2.4 Status Output

A DPDT relay is used to provide a status output signal.

TB-06	Function
7	NO
8	COM1
9	NC
10	NO
11	COM2
12	NC

Table 4 Status Relay Contacts

4.2.5 Status Inputs

Two unsupervised switch inputs can be provide via two 1x2 terminal blocks.

TB-04	Function
13	Switch Input #1
14	Gnd
15	Switch Input #2
16	Gnd)

Table 5 Status Input

4.2.6 Earth Ground

A hole is available for the purpose of earth grounding the enclosure using a #6 self-tapping screw to attach a ground wire.

5 Reset Pin

A depressed reset pin is available, when pressed returns the operation of the unit to the factory set operating conditions.