

VoIP Encoder/ Decoder

MN-FVPN

Overview

EDWARDS Voice over Internet Protocol (VoIP) encoder/decoder units allow for the use of Transmission Control Protocol/Internet Protocol (TCP/IP) to transmit supervised digital audio for mass notification applications.

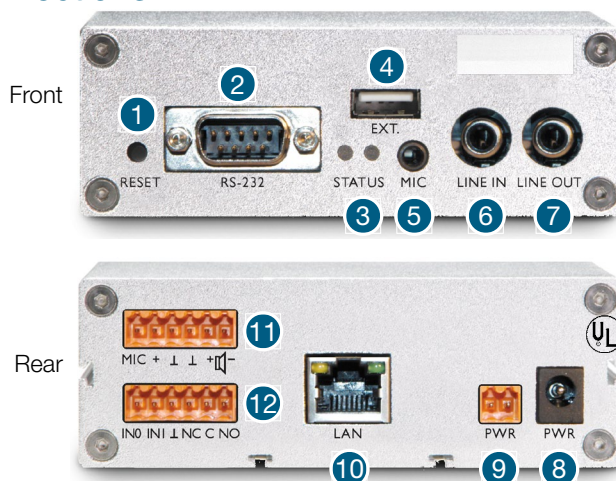
While in encoder mode, the MN-FVPN takes audio signals from the Central Control Station (CCS) and transmit it over an Ethernet path. While in decoder mode, the MN-FVPN takes the digital audio signal from the Ethernet pathway and provides the connectivity to the local 3-ASU/4, 3-ASU/FT or local audio system.

The EDWARDS VoIP system can operate in a one-to-one (one encoder to one decoder) or one-to-many (one encoder to multiple decoders) modes of operation, while providing end-to-end supervision of the entire audio path, and delivering highly intelligible audio signals. The MN-FVPN mounts in an EST3 enclosure on an MN-BRKT1F, in a 3-CAB or 3-RCC enclosure, or on a MN-BRKT3F in an APS(6)(10)A power supply.

Standard Features

- Rugged aluminum construction
- Powered by 24 Vdc from the control panel
- Easy to configure
- Easy to wire, comes with polymer bracket and standard cables

Connections



1. Reset button.
2. RS-232 connection
3. Status LEDs
4. USB interface (not used)
5. Microphone input (not used)
6. Line input
7. Line output
8. Power
9. Power(not used)
10. LAN connection (RJ-45, 10/100 Half/Full duplex)
11. Microphone/Speaker (not used)
12. Unsupervised input zones and Form C relay

Application

EDWARDS VoIP encoder/decoders are part of the EST3 mass notification solution set, which is flexible and scalable enough to suit new installations and retrofits alike. Voice-over-Internet offers the universality of a standard protocol that simplifies setup and configuration and, because VoIP is a digital protocol, there is no loss of signal quality over long distances.

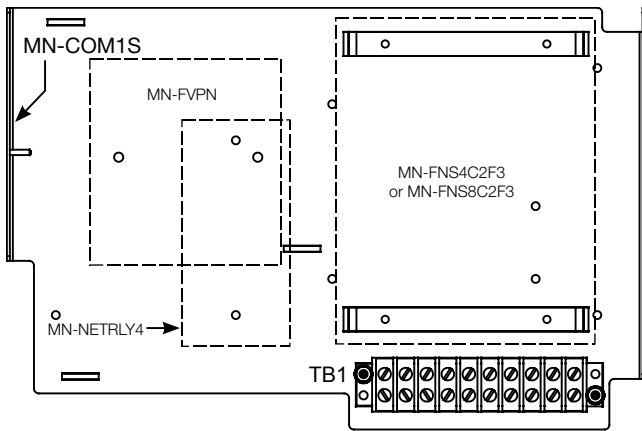
As part of the EST3 Emergency Communications platform, MN-

FVPN units can be configured to operate with a stand-alone EST3 network or with multiple EST3 networks that are controlled by the powerful, but intuitive-to-operate FireWorks Graphical Control Workstation. Pre-recorded and/or live voice messages can easily be routed where desired. FireWorks can function as the event management system that brings ECS/MNS, Fire Alarm, Security, CCTV and other functions together into a single event-driven interface. All signals are presented in a consistent, concise and informative manner.

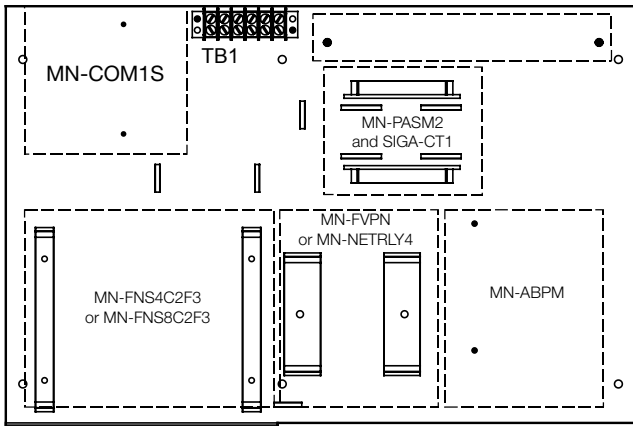
Mounting

The MN-COM1S mounts on an MN-BRKT1F or an MN-BRKT3F bracket. These install inside the EST3 control panel or Auxiliary Power Supply for a neat and self-contained mass notification solution.

MN-BRKT3F

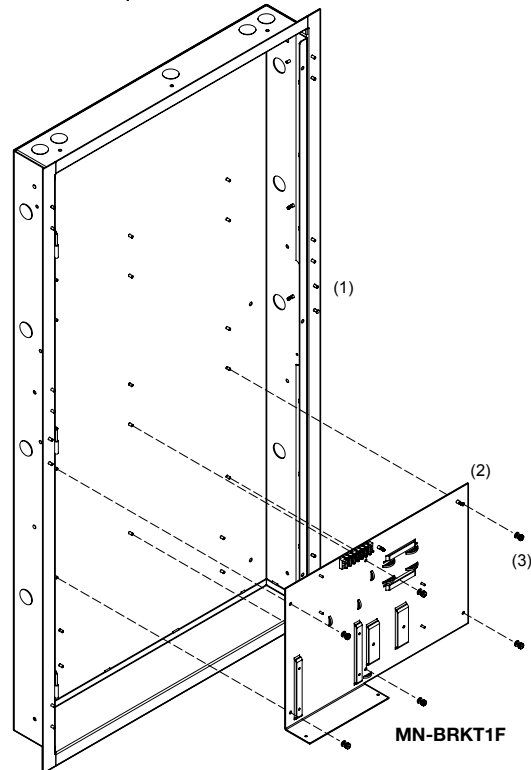
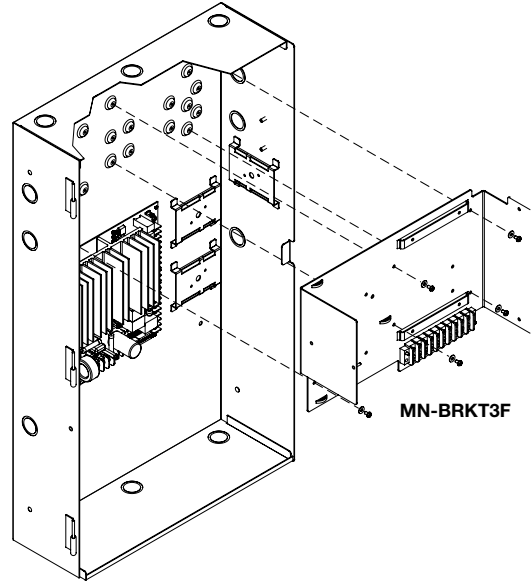


MN-BRKT1F



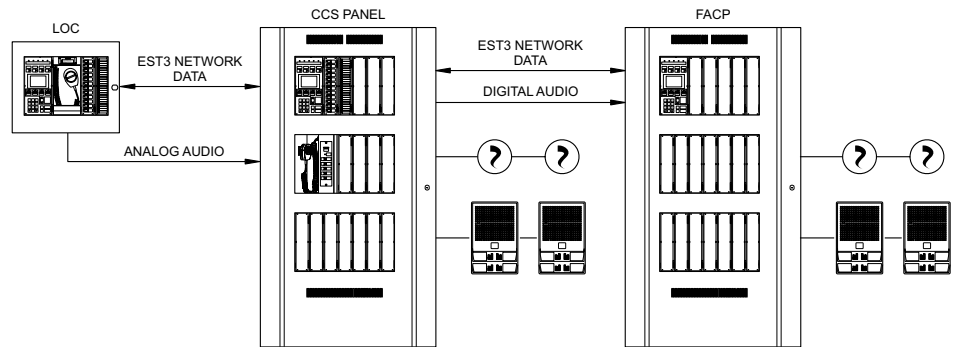
Component Layout

Compatible Control Panel

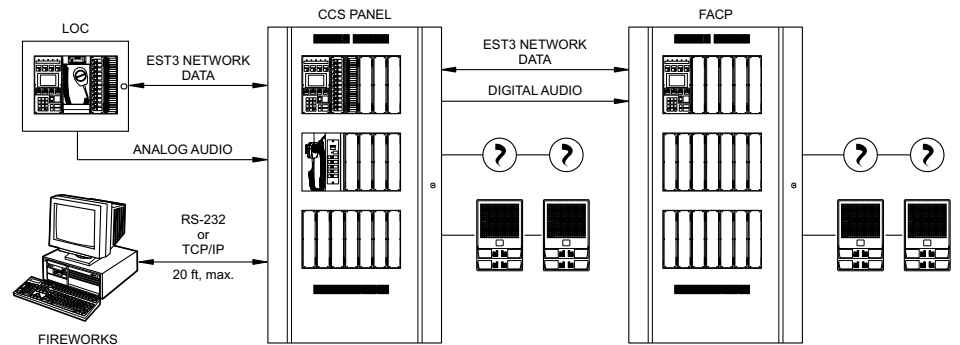


Typical Wiring

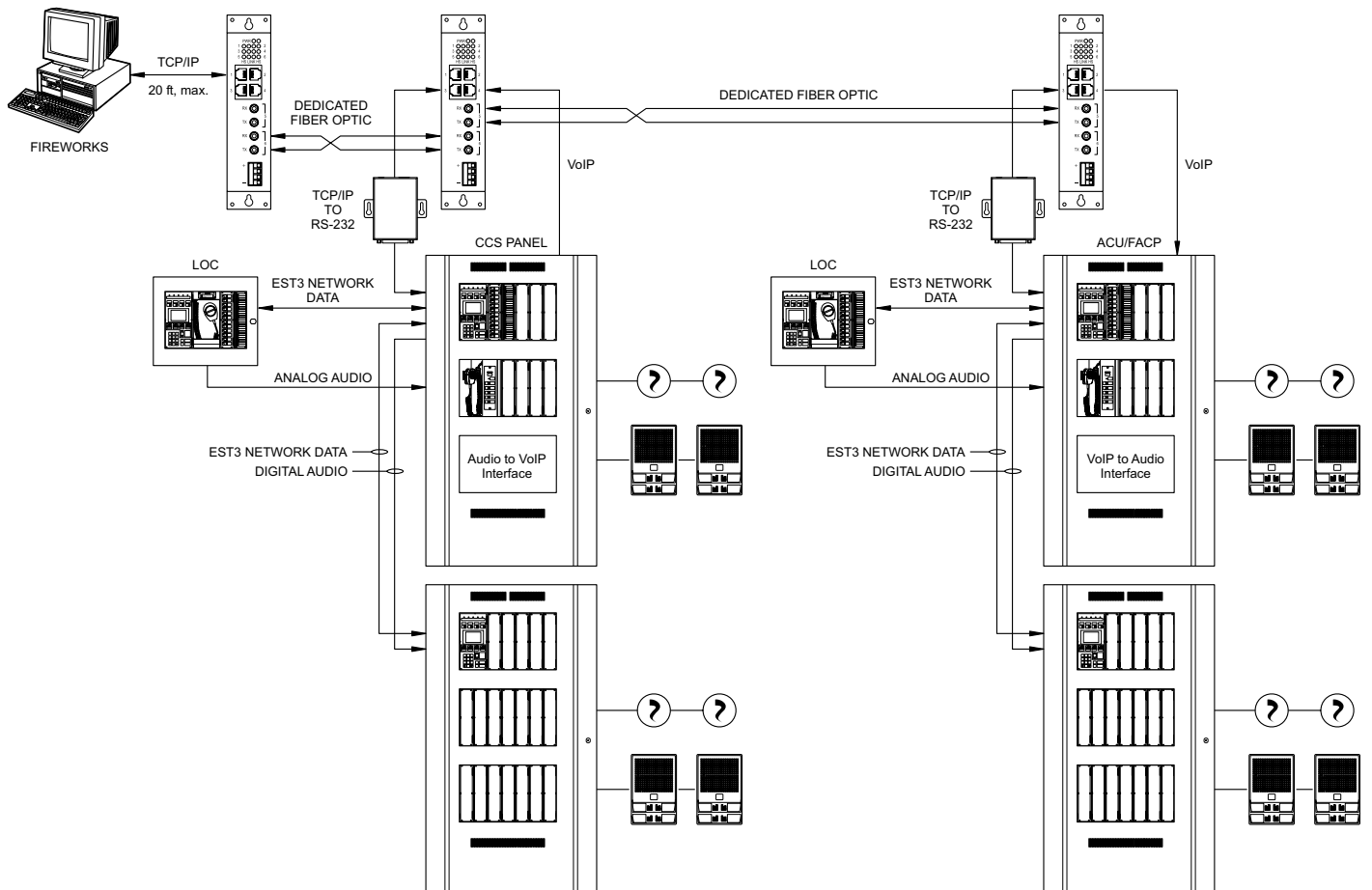
Single EST3 Network without FireWorks



Single EST3 Network with FireWorks



Multiple EST3 Network with FireWorks



Specifications

Voltage	18 to 28 VDC
Current	89 mA
Dimensions (W x H x D)	5.0" x 4.25" x 1.375" (127 mm x 38 mm x 35 mm)
Housing	Aluminum

Audio interface

In	1 VRMS from MN-ABPM
Out	100 mVRMS to 3-ASU/4 or 3-ASU/FT Terminals 13 & 14

Network Interface

Connector	RJ-45
Cable type	CAT6 or CAT6a
Other	10/100 Mbps, TCP/IP, auto negotiating

Operating environment

Temperature	32 to 120°F (0 to 49°C)
Humidity	0 to 93% RH, noncondensing at 90°F (32°C)

Ordering Information

MN-FVPN	MN-FVPN VoIP Encoder/Decoder, comes with MN-FVPB1 polymer bracket, MN-AUDCBL1 audio interface cable, and MN-PWRCBL1 power cable.
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Related Equipment

MN-BRKT1F	VoIP interface mounting bracket for EST3 enclosures
MN-BRKT3F	VoIP interface mounting bracket for APS-(6)(10)A power supplies
MN-COM1S	Ethernet Device Server Network Interface – 10/100BASE-T
MN-PASM2	Pre-amp Supervision Module. One MN-PASM2 & one SIGA-(M)RM1 required per MN-FVPN used in decoder mode.
SIGA -RM1/MRM1	Riser Supervision Module
MN-FNS4C2F3	Four Fast Ethernet (RJ45), 2 GB SFP, Layer 3 Lite. 24 VDC
MN-FNS8C2F3	Eight Fast Ethernet (RJ45), 2 GB Combo SFP/RJ45, Layer 3 Lite. 24 VDC
MN-FNS8C18F2	Rack-mount, 8 Fast Ethernet (RJ45), 16 FE SFP, 2 GB Combo SFP/RJ45, Layer 2. Requires power supply modules.
MN-ABPM	Audio Bridge
MN-FVPNTS6	Six-position terminal strip
MN-TK10	10-position terminal strip kit