



Located in Van Nuys, California since 1979, Louroe Electronics™ is the World Leader in Audio Monitoring Technology. Louroe products are used in over forty countries and are utilized in both the private sector and government applications. Louroe serves the needs of law enforcement, security, health care, entertainment, hospitality and retail industries and many more. At Louroe Electronics we maintain rigorous standards to ensure our products provide reliability, durability and excellent performance for our customers' needs.

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## POE POWER EXTRACTOR

### DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

#### 28 05 07.21 PoE Power Sources for Electronic Safety and Security

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##### Notes to Specifier:

1. Where several alternative parameters or specifications exist, or where, the specifier has the option of inserting text, such choices are presented in **<bold text>**.
2. Explanatory notes and comments are presented in **colored** text.

## POE POWER EXTRACTOR

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Section includes an interface to extract 12 VDC from a (nominal) 48 VDC IEEE 802.3af PoE connection or from a directly connected dedicated 12 VDC power source and to provide an interface for a microphone and/or speaker to separate devices with audio output and/or input capability.
- B. Related Requirements
  - 1. 27 41 23 Audio-Video Accessories
  - 2. 27 51 23 Intercommunications and Program Systems
  - 3. 28 15 23 Intercom Entry Systems
  - 4. 28 47 17 Notification Devices and Methods

#### 1.02 REFERENCES

- A. Abbreviations
  - 1. PD – Powered Device
  - 2. PoE – Power over Ethernet
  - 3. PSE – Power Sourcing Equipment
- B. Reference Standards
  - 1. IEEE 802.3af – Power Over Ethernet

#### 1.03 SUBMITTALS

- A. Informational Submittals
  - 1. Product Data - Manufacturer's printed or electronic data sheets
  - 2. Manufacturer's instructions
- B. Closeout Submittals
  - 1. Warranty documentation
  - 2. Manufacturer's installation, configuration and operation manuals
  - 3. As-built wiring diagrams
  - 4. Recommended spare parts list

#### 1.04 QUALIFICATIONS

- A. Manufacturer shall have a minimum of five years' experience in providing commercial audio systems.
- B. Manufacturer's products shall be manufactured in the United States of America.
- C. Installers shall meet Manufacturer's requirements for equipment installation.

#### 1.05 WARRANTY

- A. Manufacturer shall provide a limited 24 month warranty for the product to be free of defects in material and workmanship.

END OF SECTION

## PART 2 PRODUCTS

### 2.01 EQUIPMENT

- A. Manufacturer: Louroe Electronics  
6955 Valjean Ave.  
Van Nuys, CA 91406  
Phone: (818) 994-6498  
Fax: 818) 994-6458  
Web: www.louroe.com  
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- B. Model: IF-PX
- C. Alternates: None

### 2.02 DESCRIPTION

- A. The PoE Audio Interface/Power Extractor ("PoE extractor") shall be an interface to extract 12 VDC from a (nominal) 48 VDC IEEE 802.3af PoE connection or from a directly connected dedicated 12 VDC power source and to provide an interface for a microphone and/or speaker to separate devices with audio output and/or input capability.

**The IF-PX interfaces with Louroe speakerphones, microphones, and other external devices that require a 12 VDC supply, such as system accessories and non-PoE cameras.**

- B. Network
1. The power extractor shall pass Ethernet signals and PoE, if present, from a RJ-45 input port to a RJ-45 output port without distortion or attenuation.
  2. Use of the power extractor shall not diminish the standard Ethernet distance of 328 feet (100 m) between Power Sourcing Equipment (PSE) and the ultimate Powered Device (PD).
  3. Both PoE Mode A and Mode B shall be supported.
  4. Connectors: RJ-45
  5. Cabling: Cat 5e or better
- C. Power
1. The power extractor shall be capable of deriving 36 – 57 VDC power from PoE on the network input and converting the nominal 48 VDC voltage to a 12 VDC output.
    - a. Available power at output from PoE extraction: 9.6 Watts (800 mA @ 12 VDC)
  2. Alternatively, the power extractor shall be capable of being powered by a separate 12 VDC, 2 A power source.
- D. Audio
1. Microphone: Line Level, balanced or unbalanced
    - a. Cabling:
      - 1) One (1) 2 conductor shielded 22 AWG with 24 AWG drain wire cable to terminal block
      - 2) One (1) 3.5 mm stereo patch cable
  2. Speaker outputs (2): Line level with +15 dB Gain Control
    - a. Cabling:
      - 1) One (1) 2 conductor shielded 22 AWG with 24 AWG drain wire cable to terminal block

- 2) One (1) 3.5 mm stereo patch cable

**When 2 way audio is required, both channels of the stereo patch cable are used for connection to a non-Louroe device; and a 3 conductor shielded 22 AWG with 24 AWG drain wire cable to terminal block are used for connection to Louroe equipment.**

E. Protection

1. Types

- a. Thermal
- b. Overload
- c. Short circuit

2. Action:

System shutdown and reset on fault removal

F. Operating temperature:

-4° F to +113° F (-20° C to +45° C)

G. Enclosure

1. Dimensions (l x w x h)

6" x 3.5" x 2.125"

2. Material:

14 gauge aluminum, black anodized

END OF SECTION

## PART 3 EXECUTION

### 3.01 INSTALLERS

- A. Contractor personnel shall comply with all applicable state and local licensing requirements.

### 3.02 INSTALLATION

- A. Contractor shall follow Manufacturer's written installation instructions in their entirety.

**When the equipment is part of an audio monitoring system, it is recommended that Contractor post notice of audio monitoring on the premises in accordance with Federal and State regulations.**

END OF SECTION