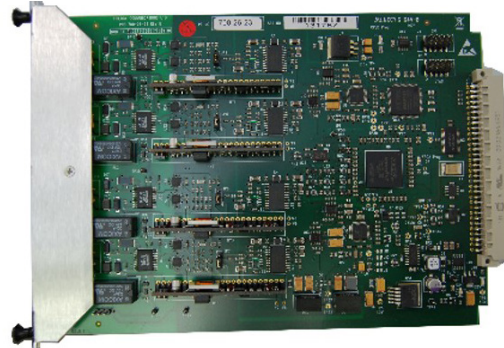


Key Features

- Provides a standard interface for 4 PSTN lines or other 3rd-party telephony devices
- Allows outside callers to access a Gemini intercom system and reach individual subscribers or conferences automatically or via an operator
- Enables internal users to make and receive outside phone calls from anywhere on the system
- Auto-answer: Incoming call is greeted with a dial tone and caller uses a predefined DTMF dial plan to contact a specific user or conference
- Manual-answer: Incoming call is automatically routed to pre-defined Hardware or software intercom panels for manual call handling
- Line Access from Intercom Panels: A key on a operator panel is used to access a line and dial a call
- Line Access from Other Gemini users with DTMF Capability: Devices dial a series of digits to access a line and dial a call



The Telephone Expansion Board (FXO) is one of the option cards available for the Gemini™ Intercom system.

Description

The FXO board provides a standard interface to four third-party telephony systems like PSTN lines, PBXs, mobile telephone interfaces and other telephony devices. Outside callers can dial into Gemini and contact individual users or conferences automatically or manually through an operator. This option also allows Gemini users to make outside calls from anywhere on the system using any device with DTMF dialing capability.

Technical Specifications

Line Interference

Number of channels: 4 per card, Max of 4 option cards per Gemini unit

DSP channel usage: 4 DSP IP channels per card

Signalling: Loop start or ground

DTMF: DTMF detection for DDOI routing

Bypass phone operation: Phone is switched out of circuit whenever FXO channel is in use

Line Impedance: CTR21, 600R, 900R or Japan – software selectable

Return loss: >18dB 300-400Hz

Protection: FCC pt 68 type B longitudinal surge, 1500V; FCC pt 68 type B metallic surge, 800V

Ring equivalency number: REN <0.2

Longitudinal balance: >60dB (200-1000Hz); 40dB (1000-4000Hz)

Common mode rejection ratio (CMRR): On hook >70dB 50-500Hz Vcm=60Vrms
Off hook >40dB 50-500Hz Vcm=60Vrms

Common mode overload level (CMOL): On hook >300Vrms 50-60Hz
Off hook >250Vrms 50-60Hz

Max trip/ring voltage: 300V (Correct operation not implied) Recommended max 120V

Max loop current: 90mA

Ringing voltage – detect: Typically 22V, min 26V, 17-68Hz

Ringing voltage – no detect: Typically 14V, max 18V, 1768Hz

THD: <1% at 0dBm, 1kHz

Crosstalk: <-85dB (inter-channel and inter-card)

Insertion Loss: 0dB

Nominal line TX level: -9dBm ± 1dB

Input level adjustment: Via software -9dB to +12dB in steps of 1.5dB

Output level adjustment: Via software -34.5dB to +12dB in steps of 1.5dB. Mute option

Freq response: 300Hz – 3200Hz ± 2dB ref to 1kHz (8kHz sampling)

Connectors

Line: RJ11 2 pin modular jack socket

Bypass Phone: 1 per channel (4)

Phone connector pinout: Pin 3 – tip (B), Pin 4 – ring (A), other pins - unused

Ringing

Ring Cadence: US Ringtone

Echo Suppression

General: DSP Based adaptive filter providing acoustic & network suppression

Tail length (acoustic): 63.5ms

ERLE: 30dB typical

Environmental

Operating temperature range:

32° to 122°F (0 to 50°C)

Storage temperature range:

-4° to 140°F (-20° to 60°C)

Operating humidity:

20 to 90% at 104°F/40°C non-condensing

Order Codes

700-26-23: Telephone Expansion Board (FXO)

**All Trilogy panels support DTMF dialing*