

FOREIGN EXCHANGE OFFICE INTERFACE

FXO-4871

At the Central Office/PABX end, FXO-4871 allows the connection of an analog two wire ring in/loop out powered telephone line. The line interface incorporates a 2 to 4 wire hybrid that separates the transmit and receive audio, and has other basic features of ringing voltage detect and line seize.

The interface detects when the line is ringing and issues a pulsed PTT command (open collector to ground) to the Tx section of the full duplex radio link. This interface also seizes the line when carrier operated squelch (COS) is detected from the Rx section of the full duplex radio link. When the remote telephone is lifted off hook, this interface detects COS and seizes (loops) the line, causing any ring to cease and the continuous assertion of PTT allowing a full duplex conversation to occur.

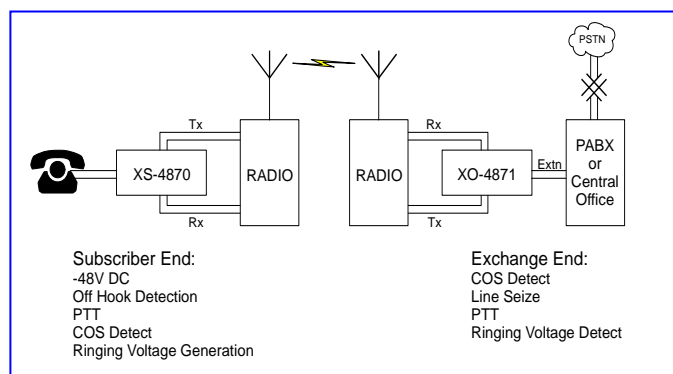
All Central Office service tones such as dial, ring-back, and busy are in-band and therefore heard at the remote end.

Specifications

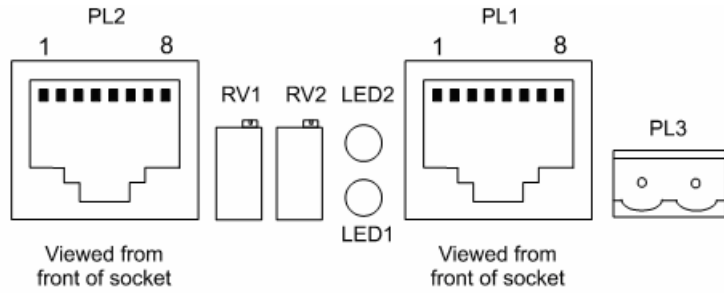
Power Requirement:	13.8Vdc nom. (12 – 48 Vdc)
Connectors:	BL-2 (power) RJ45 (radio) RJ12 (Central Office/PABX extension)
Length of cable:	30m max.
Hook flash:	100ms
Audio levels:	350mV RMS (adjustable gain in radio module pre-amp)
Tx Output Level:	1 Volt p-p approx.
Tx Output Impedance:	600 Ohm nom.
Rx Input Level:	1 Volt p-p approx.
Rx Input Impedance:	15k Ohm nom.
COS Detect:	Open collector command from Radio Rx unmute circuit (to be switched to ground during busy/Rx carrier/un-mute)
PTT:	Open collector switched to ground
Return loss:	> 6dB
Mounting:	Four holes for stand-offs
PCB size:	85mm x 227mm in area

Functions

- COS detect
- Line seize
- PTT (Open collector to ground),
pulsed with detected ringing voltage,
continuous with COS detect
- Ring Voltage detect



Connector Pin-outs



DESCRIPTION	FXO-4871/PC-4873
CONNECTOR PL2	LINE
1	NC
2	NC
3	NC
4	La
5	Lb
6	NC
7	NC
8	NC
RV1 LEVEL	LINE TO RADIO
RV2 LEVEL	RADIO TO LINE
LED1 RED	POWER
LED2 GREEN	LOOP LINE
CONNECTOR PL1	RADIO
1	NC
2	AUDIO TO RADIO
3	AUDIO FROM RADIO
4	ANALOG GROUND
5	PTT OUTPUT (OPEN COLLECTOR) SWITCHES TO GND WHEN LINE LOOPED OR RINGING
6	COS INPUT TO BE SWITCHED TO GND TO LOOP LINE
7	SIG GND (GND)
8	NC
CONNECTOR PL3	POWER
1&2	12-48V DC POLARITY INSENSITIVE



design2000
Est. 1968 www.design2000.com.au