

# QX3440-QMAGA

## QMAGA INTERFACE CARD FOR QX3440

### Features

- 4 telephone connections for Magneto
- Supports MRD (manual ring down)
- Supports Magneto to FXS speak PLAR function
- Supports dual type L1/L2 and L1/GND magneto phone or MRD
- Per port software programmable for ringing and ring detection on L1/L2 or L1/GND
- 16 Vrms minimum detectable ring
- Intended for use with  $\pm 48$ ,  $\pm 125$ Vdc or 100-240Vac powered main units.



For QX3440-A/C



For QX3440-E

### Description

The four channel magneto (QMAGA) plug-in card is designed for mini slot on QX3440 series. This module allows communications between magneto telephones. With the card set in PLAR mode, communications can take place between a magneto telephone and a regular telephone. All signaling is carried transparently by the digitizing process.

### Ordering Information

To specify options, choose from list below:

**Note 1:** All unit are RoHS compliant.

**Note 2:** Before purchasing, please check the QX3440 main brochure to see if the following models are supported by the controller to use with.

Model	Description	Notes
QX3440-QMAGA	Quad channel magneto plug-in card	For QX3440-A/C Not applicable to $\pm 24$ Vdc powered main units.
QX34DD-QMAGA	Quad channel magneto plug-in card	For QX3440-E Not applicable to $\pm 24$ Vdc powered main units.

## QMAGA Interface Card for QX3440 Product Specification

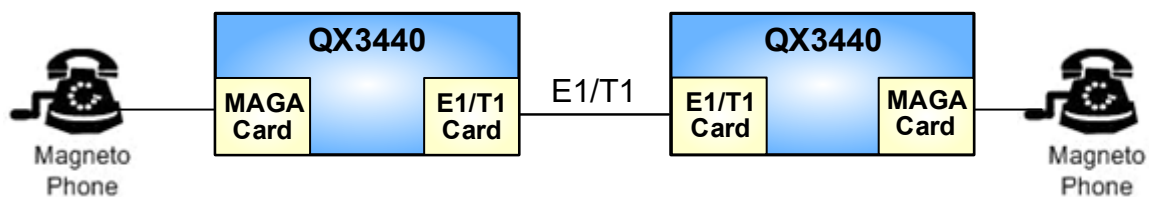
### Magneto (old crank-handle hot-line telephones), MRD (Manual Ring Down) Voice Card

Connector	RJ11 x 4
Alarm Conditioning	CGA busy after 2.5 seconds of LOS, LOF
Encoding	A-law or $\mu$ -law, user selectable per card configurable
Impedance	Balanced 600 or 900 ohms (for magneto telephone impedance )
Longitudinal Conversion Loss	> 46dB
Gain Adjustment	-16 to +7 dB / 0.1dB step transmit gain (D-A) -16 to +13 dB/0.1dB step receive gain (A-D)
Signal/ Distortion	> 25dB with 1004 Hz, 0dBm input
Frequency Response	- 0.25 to -1 dB from 300 to 3400 Hz, coincide with ITU-T G.712
Idle Channel Noise	Max. -65 dBm0p

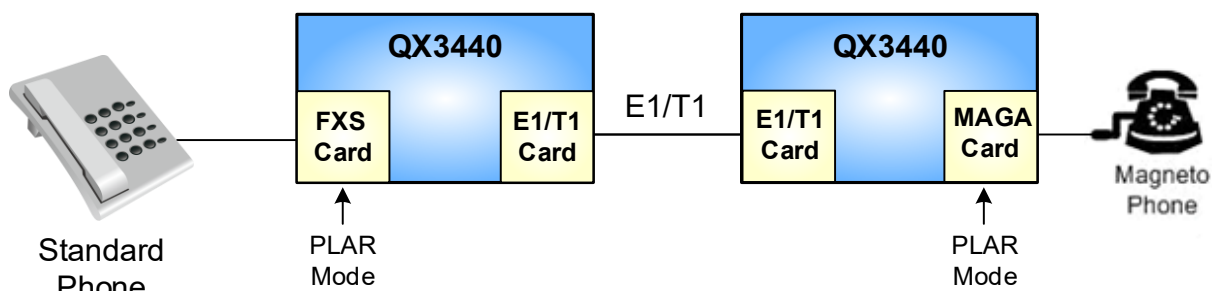
### Signaling

Minimum Detectable Ringing Voltage	16 Vrms
Crank Detectable Across	L1 & L2 Mode (Tip and Ring), L1 & GND Mode(Tip and GND) per port software programmable
Crank Detected time	Valid crank: more than 250 ms  Invalid crank: less than 160 ms
Ringing Generation	Voltage: 76 Vrms (sine wave) Frequency: 25Hz
Ring duration	Software configurable options: 1. PLAR OFF (Continuous Mode) Ring duration depends on cranking time  2. PLAR OFF (One-time) Mode Crank the phone for one time, and the ring duration of the far-end phone could be 0.7, 1.0, 1.5 or 2.0 sec  3. PLAR ON When FXS pone off-hooked, the ring duration of the far-end magneto phone could be 0.7, 1.0, 1.5 or 2.0 sec
Ringing Send Across Signaling	L1 & L2 Mode (Tip and Ring), L1 & GND Mode(Tip and GND) Turn Magneto Phone crank (Ringing across Tip and Ring or Tip and Ground)
Signaling Bit A,B,C,D	Programmable
<ul style="list-style-type: none"> <li>• Signaling is carried transparently by the digitizing process.</li> <li>• Use Magneto card default setting for communications between magneto telephones</li> <li>• Use Magneto card PLAR mode setting for communications between a magneto telephone and a regular telephone</li> </ul>	

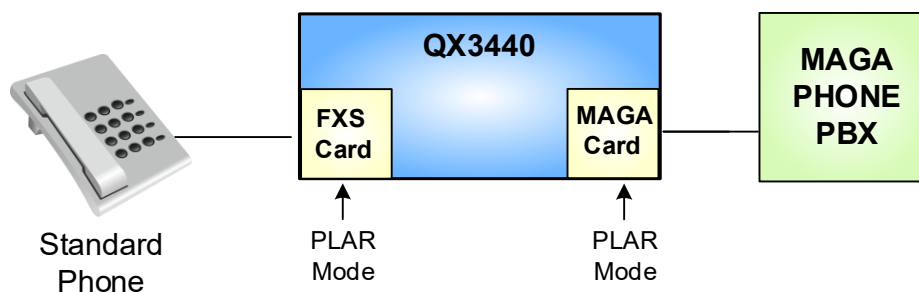
## Application Illustrations



**Standard Magneto Phone to Magneto Phone**



**Telephone to Hand-Cranked Magneto Phone (PLAR ON)**



**As Telephone Converter**