

# Magneto Interface Card for Loop-AM3440

#### **Features**

- 12 telephone connections for Magneto
- Connector: Twelve RJ11 or one Telco 64
- 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
- A, B, C, D signaling bits per-port configurable
- 16 Vrms minimum detectable ring
- Intended for use with 110-220 Vac (SAB) or ±48 Vdc powered main units





## **Description**

The twelve-channel magneto (12MAGA) plug-in card is designed for the single slot on Loop-AM3440 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 the list below.

**Note 1:** RoHS compliant units are identified by the letter **G** appearing at the end of the ordering code. **Note 2:** Before purchasing, please check the AM3440 main brochure to see if the following models are supported by the controller to use with.

Model	Description	Notes	
Loop-AM3440-12MAGA- <b>typ-G</b>	12-channel Magneto plug-in module with ring across L1&GND and L1&L2. Software programmable. Used with 12 RJ11 connectors or 1 Telco 64 connector.	Please use with 100-240Vac or ±48Vdc powered main units.	
		For <b>typ</b> option, please refer to the table below for detail information	
Accessories			
User's Manual			
Loop-AM3440-12MAGA-UM	User's Manual (paper copy).  Note: A CD version of the manual is already included as standard package.		
Cable Management Bar		· <u> </u>	
Loop-ACC-CM-12RJ11- G	Cable Management Bar H192 x W7 x D12 mm	For AM3440 12 Magneto plug-in card only. Shipped with 3 screws.	



#### ■ Where **typ** is used to select the connector type:

typ=	Description	Note
RJ	12 x RJ11	
TELCO	1 x Telco 64	

## **Magneto Interface Card Product Specifications**

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

Connector Twelve RJ11 x one Telco64
Power 110-220 Vac or ±48 Vdc

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

-21 to +7 dB / 0.1dB step transmit gain (D-A)

-21 to +13 dB/0.1dB step receive gain (A-D)

16 Vrms

Signal/ Distortion > 25dB with 1004 Hz, 0dBm input

Frequency Response ± 0.5 dB from 300 to 3400 Hz, coincide with ITU-T G.712

Idle Channel Noise Max. -65 dBm0p

Signaling

Minimum Detectable Ringing Voltage

Crank Detectable Across L1 & L2 Mode (Tip and Ring), L1 & GND Mode(Tip and GND) per port

software programmable

Crank Detected time Valid carnk: more than 250 ms

Invalid crank: less than 160 ms Voltage: 76 Vrms (sine wave)

Ringing Generation Voltage: 76 Vrms (sine w

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 phone 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)

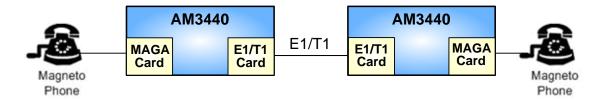
Signaling Bit A,B,C,D

Per-port configurable

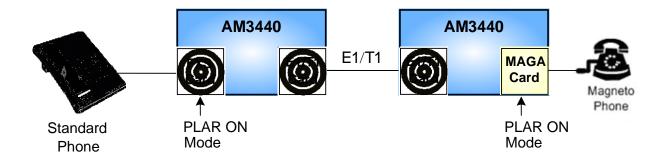
- Signaling is carried transparently by the digitizing process.
- Use Magneto card default setting for communications between magneto telephones
- Use Magneto card PLAR mode setting for communications between a magneto telephone and a regular telephone



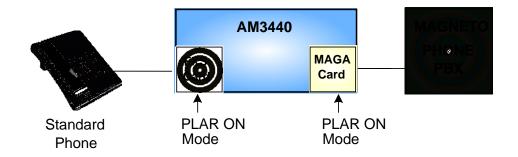
# **Application Illustrations**



### **Standard Magneto Phone to Magneto Phone**



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



**As Telephone Converter (PLAR ON)** 



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