



Applications

- Police, Fire, Ambulance
- Utilities, Taxis, Airlines
- Forestry, Parks and Recreation
- Industries, Municipalities, Construction
- Security and Public Safety

The **MRTI 2000** (Mobile Radio Telephone Interconnect), Model PL1877A, is a highly advanced DSP-based tool to connect radio systems to public or private telephone networks. Used with repeaters or base stations, the unit initiates calls (with properly equipped portables and mobiles) and/or receives landline-initiated calls. The **PL1877A** will allow wireless users to keep in contact with landline phone users.

As the features listed show, the **PL1877A** offers a vast array of standard features that are optional with most other telephone interconnects. Features such as multi-digit and wildcard access, release, triple key access, direct access, number restrictions, timers and autodial, enhanced VOX, and built-in paging mean easy operation, control of landline communications, and user efficiency. The **PL1877A's** programmable features allow it to be used in most user environments and radio systems.

Features

- **Multi-Digit Access & Release**
- **Direct Access**
- **Triple Key Access**
- **Autodial: 25 Numbers**
- **Paging, including Multi-User Paging**
 - 2-Tone
 - DTMF
 - Plectron
 - 1500
 - 2805
 - User-Defined 2-Tone in Multi-Mode
- **Pulse / DTMF Dial**
- **CTCSS Control**
- **Dial-Click Decode**
- **Enhanced VOX**
- **DTMF Regeneration**
- **Last Number Re-dial**
- **Half Duplex Capable**
- **Attendant Control**
- **Landline Enhanced VOX**
- **Autodial**
- **Hookflash**
- **Toll Restrictions**
- **Over-Beep Tone**
- **Automatic Station Identifier**
- **Autolevel**
- **Programmable Radio Interface (Including Detector of Speaker Audio, External Logic, Squelch, or Rx VOX Carrier Detect)**
- **Remote Modem Programmable**
- **PC Programmable (Windows® Format)**
- **Rack Mountable**
- **Modular Phone-Line Connection**

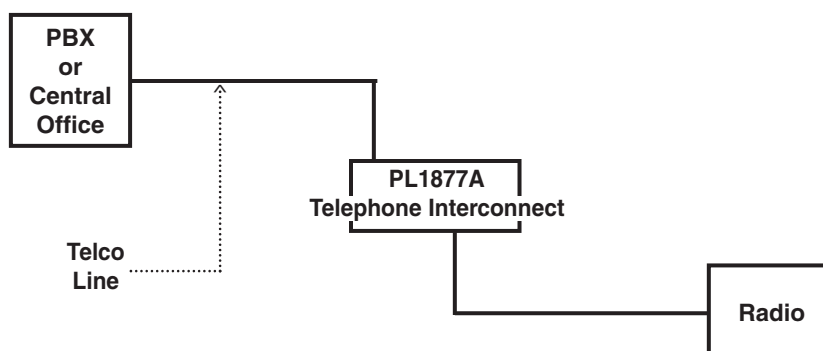
MRTI 2000 Telephone Interconnect

PL1877A

Specifications

Size	.7 W x 8.3 D x 1.5 H inches
Shipping weight	.4 lbs. maximum
Color	Black
Input voltage	+10.5 to 16 VDC, or optional 115 VAC or 220 VAC 50/60Hz
Input current	Less than 750 mA
Temperature	0° to +60° C
Humidity	<95% at relative humidity at +50° C
RFI protection	Built-in
Audio distortion	.1% maximum with reference to a 1,000 Hz tone
Frequency response (Rx to landline)	± 3 dB at 360 - 3,000 Hz
Frequency response (landline to Tx)	± 3 dB at 300 - 3,000 Hz
Hum and noise	-45 dB from 1,000 Hz reference
Output level to radio Tx	.15mV RMS to 0.5 V RMS into 600 Ohms
Output level to phone line	-9 dBm maximum (timed average over 3 seconds)
Input level from phone line	± 5 dBm maximum; Autolevel threshold: -35 dBm, ±3 dB
Phone busy detect threshold	-20 V, ± 2 V
Phone line ring detect	Adjustable from 20 V RMS to 50 V RMS
Ringer equivalence	.00B (AC) / 4.9 (DC)
Approvals	FCC: ADG-USA-27439-MM-E
Landline audio delay	0 to 0.5 seconds adjustable (Enhanced VOX mode)
Logic inputs	Input Impedance 90K ohms (inputs pulled up through 100K ohms to Power input voltage); Maximum low level input @ 5 V; Maximum high level input @ 3.5 V; Maximum high level @ 100 V
VOX key sensitivity	-45 dBm
Circuit loading to Tx audio	Bridging impedance (AC-coupled)
Radio connections	Generic - 12 conductor cable, see Accessories and Options section
Telephone connections	RJ11C/RJ14C

System Diagram



Accessories & Options

XAC4000A	Programming Bundle	XAC0005A	Rack Mount Kit
XAC0009A	Programming Cable	51018-0006	MTR2000 Interface Cable
40419-008	110 VAC Power Supply (Optional – needed if power is not received from connected radio)	M2000-MAX-CBL	MaxTrac/GM300 Interface Cable
40420-001	European Power Adapter	M2000-QUANT-CBL	Quantar/Quantro Interface Cable
40420-002	UK Power Adapter	M2000-DIU-CBL	Astro DIU Interface Cable
		M2000-MSF5000-CBL	MSF5000 Interface Cable
		XTI0001A	2nd Line, Field Install Kit



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Quality Management System Certified by DNV - ISO9001:2008

The policy of GAI-Tronics is one of continuous improvement, therefore the company reserves the right to change specifications without notice