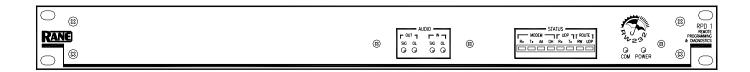


#### REMOTE PROGRAMMING & DIAGNOSTICS



## **General Description**

Through the use of a modem and telephone lines, the RPD 1 allows remote control, programming, and diagnostics of remote sites using RaneWare RW 232 products. These include the RPE 228d Programmable Equalizer, the RPM 26v Programmable Multifunction Processor, and the Engineered Conferencing Systems line of products.

Used in conjunction with a standard, *off the shelf* modem (not included), the RPD 1 is easily upgradable as improved technology becomes available. The Rane RPD 1 provides standard RS-232 connection for remote system diagnostics, and communication with the room controller from a remote location.

Any modem may be used with the RPD 1. There are two types of data connections: RW 232 and User Data serial connections (both utilize the RS-232 standard). Placing and answering telephone calls over the modem is performed using a PC or laptop computer connected to the local RPD 1's RW 232 Control Input Port. Remote diagnostics and programming is enabled by connecting the remote RPD 1's User Data (RS-232) port to the Program Port of the control system.

A password protected 'firewall' is provided within the RPD 1. The password adds security to incoming calls

containing data, by not allowing any data to be sent to the User Data or RW 232 Control Ports until the password is entered. Re-routing data to a remote location from the RW 232 Control Output Port instead of the User Data Port allows control of RW 232 devices from a remote site.

A modem cable is included for modem connection. RS-232 connects the RPD 1 to any control system.

**RaneWare**® is software that runs the RPD 1 under Microsoft Windows95(SE)/98®, allowing real time control. The software's graphical interface features control of all parameters and extensive on-line help. RaneWare is downloadable from Rane's web site, <a href="http://www.rane.com">http://www.rane.com</a>.

The following is recommended as a minimum system:

- 80386SX with 80387 coprocessor, 33 MHz
- Unused serial port
- 4M RAM
- Windows 3.1, 95(SE) or 98
- · Color monitor

Powered from UL listed, CE approved remote power supplies, the RPD 1 is exempt from safety agency requirements, and may be used in any installation mandating agency compliance.

#### **Features**

- Password protected data access from remote sites
- Standard RS-232 user data connection up to 19.2 kbs for remote system diagnostics
- Separate RW 232 connection for RaneWare system diagnostics & control
- Custom cables provided for connection between RPD 1 and modem
- UL/CSA/CE and 100/120/230 VAC Remote Power Supplies



### REMOTE PROGRAMMING & DIAGNOSTICS



# **Features and Specifications**

Parameter	Specification	Limit	Units	Conditions/Comments
Frequency Response	120 to 3.5k		Hz	
Input Impedance	10k		ohms	Active Balanced
Audio Output Type	Active Balanced			Euroblock Connectors
Impedance	100		ohms	
THD	0.1	max	%	
Signal-To-Noise	60	min	dB	@ 0 dBu ref, 160-4800 Hz BW
CMRR	20	min	dB	@ 1 kHz
Data Control Connection	RW 232			DB-9 Male
Modem Connection	RS-232			DB-25 Female
Max User Data Rate	19.2		kbs	
Protocol: RW 232 Port	8 bit, Even Parity			RS-232
User Data & Modem Ports	8 bit, No Parity			RS-232
Unit: Agency Listing				
120 VAC Model	Class 2 Equipment			National Electrical Code
	UL			Exempt Class 2 equipment
	CSA			Exempt Class 2 equipment
	FCC part 15J			Certified Class B Device
230 VAC Model	VDE, SELV			Safety Extra Low Voltage
	CE-EMC			EMC Directive 89/336/EEC
	CE-Safety Exempt			Article 1 of LV Directive 73/23/EEC
Power Supply: Agency Listing				
120 VAC Model	UL			File no. E88261
	CSA			File no. LR58948
230 VAC Model	CE-EMC			EMC Directive 89/336/EEC
	CE-Safety			LV Directive 73/23/EEC
100 VAC Model	Built to JIS			Japan only
Power Supply: Requirement	18 VAC w/ center tap	10%	Vrms	
Maximum Current	650		mA	RMS Current From Remote Supply
Unit: Construction	All Steel			
Size	1.75" H x 19" W x 8.5" D (1U)			(4.4 cm x 48.3 cm x 21.6 cm)
Weight	6 lb (w/o power supply)			(2.7 kg)
Shipping: Size	4.5" x 20.3" x 13.75"			(11.5 cm x 52 cm x 35 cm)
Weight	11 lb			(5.0 kg)
Note: 0 dBu=0.775 Vrms				

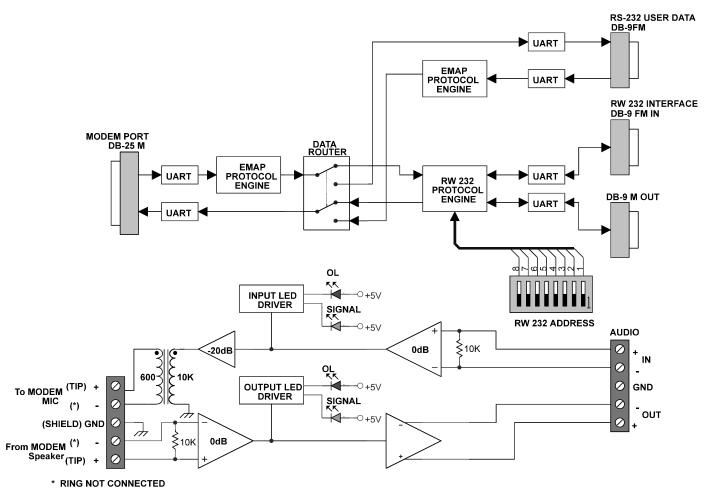
# **RPD 1 Modem Compatibility**

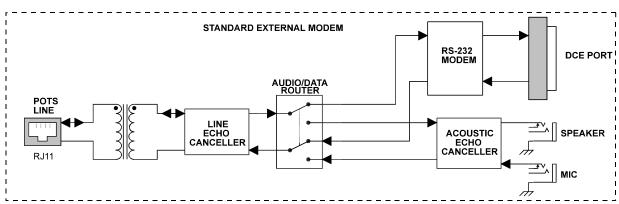
#### The modem to be used with the RPD 1 must meet these criteria:

- 1. 28.8 kbps minimum speed (for data), 23.3 kbps (for voice only).
- 2. External
- 3. Hayes compatible



# **Block Diagram**

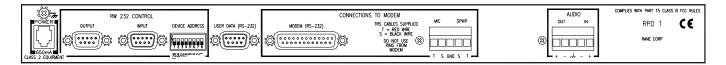




#### REMOTE PROGRAMMING & DIAGNOSTICS



#### **Rear Panel**



## RaneWare RPD 1 Screens



