

# HIDEAWAY™

## Model HA2400LP Dial Modem

### SELF POWERED

### Dial Modem



- ▲ Powered from RS232 Interface
- ▲ No Batteries, No AC Adapter
- ▲ 2400bps (V.22bis)
- ▲ Fully Hayes™ AT Compatible
- ▲ Auto Fallback, Auto Answer
- ▲ Full & Half Duplex

The HA2400LP is designed for those applications where no external source of power is available. The HideAway derives its power from two isolated sources: Power from the RS232 interface (TXD, RTS & DTR) activates the HideAway's RS232 drivers, the AT Command set controller and the optical relay that picks up the telephone line; Power from the telephone line then activates the data pump and ancillary telephone line components.

HideAway is uniquely designed to adapt to a wide range of applications in the commercial and industrial environments. Current users include manufacturers of equipment which require remote diagnostics and maintenance. They include utility and telephone companies, test and diagnostic equipment and PBX manufacturers, who require remote access to their equipment for maintenance and data acquisition.

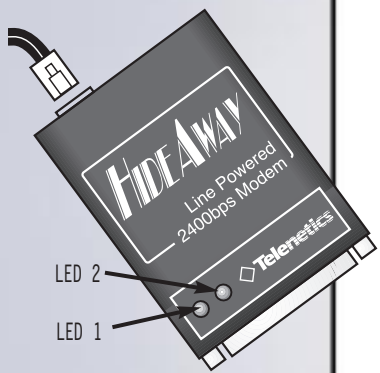
HideAway is also used by companies providing special services and equipment such as energy management and security services. HideAway could be installed in an energy management unit, enabling it to report energy consumption of a remote site to a host. Since the HideAway is a full duplex two way modem, it may receive or initiate a call.

Despite its miniature size of 2.2" x 3" x .83" and its weight of less than 2.3 ounces, HideAway is as powerful as larger desktop modems. Neither the size, nor the low current requirements, affects the superb performance of this unique device. HideAway is fully Hayes™ compatible. It complies with CCITT standards V.22bis and V.22 as well as Bell 103 and Bell 212A protocols. HideAway is a smart, rate adaptable modem that adjusts itself to the data rate of the corresponding modem.

### Technical Specifications

<b>Data Rates:</b>	2400/1200/300/75 bps Asynchronous	<b>Dropout Level:</b>	-48 dBm
<b>Compatibility:</b>	Bell 103/212 - CCITT V.22, V.22bis	<b>Non-Volatile Memory:</b>	Two stored user profiles Four stored phone numbers
<b>Modulation:</b>	QAM in 2400 bps * DPSK in 1200 bps * FSK in 0-300 bps	<b>Power:</b>	Line powered; No battery or AC adapter required
<b>Operation:</b>	Full or half-duplex	<b>Size:</b>	2.2"W x 3"D x .83"H
<b>Command Set:</b>	Hayes™ AT Command Set; 40 character buffer	<b>Weight:</b>	2.3 ounces (67 grams)
<b>Transmit Level:</b>	-12 dBm	<b>Environment:</b>	Operating Temperature: 0 to 40° C
<b>Receive Sensitivity:</b>	-43 dBm	<b>Humidity:</b>	0 to 95% Non Condensing

## Installation, Operation and LED Indicators



LED 1	LED 2
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1. Connect the DB25 connector to the RS232 interface on your data terminal equipment (eg: computer, RTU, Energy Management Device, PBX, etc.)

If the RS232 port is enabled, LED2 will be blinking.



2. Connect the RJ11 jack to a dial up telephone line.
3. Type AT <CR> from within your communications software (ProComm, Windows Terminal, etc.). The modem should send back "OK."
4. Using the HA2400LP to send a call...

Dial out to another modem by entering the command ATDT <phone number><CR>, where <phone number> is the telephone number you want to call.

LED2 will turn OFF and LED1 will start BLINKING while the call is initiated;

**Initiate Call**



LED2 will remain OFF and LED1 will turn OFF during handshake;

**Handshake**



LED1 will LIGHT CONTINUOUSLY and LED2 will remain OFF when connection is made.

**Connected**



5. Using the HA2400LP to receive calls...

To automatically receive calls from another modem, type ATSO=1 <CR>.

This command tells the modem to answer the phone line on the first ring.

To manually answer an incoming modem call, type ATA <CR> after the message.

"RING" is displayed on the screen.

When the modem receives a ring, LED2 will LIGHT continuously for a few seconds, then turn off. LED1 will remain off;

**Initiate Call**



LED1 and LED2 will remain off during handshake;

**Handshake**



LED1 will light continuously and LED2 will remain off when connection is made.

**Connected**



### IMPORTANT NOTES...

- To manually hang up your modem, type +++ and when the modem responds "OK," enter the command ATH <CR>.
- The HA2400LP is not set up for Auto Answer. User must use the AT command ATSO=<number> to set up the answer sequence. Eg: ATSO=1 means answer after the first ring. ATSO=1&W will save the configuration in the modem's non-volatile memory.
- The HA2400LP is a self powered device and configurations are stored in non-volatile memory. Any command configuration not ending in "&W" will be lost if the comm port is turned off. To set the modem to factory default use the AT command AT&F&W.