

# HideAway™

A member of the Hidex Modem Family from  
Industrial Grade Modem

## Model HA2400LP Self-Powered Dial Modem



- Powered from RS-232 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 RS-232 interface (TXD, RTS & DTR) activates the HideAway's RS-232 drivers, the AT Command set controller and the optical relay that picks up the telephone line. Power from the telephone line activates the data pump and ancillary telephone line components.

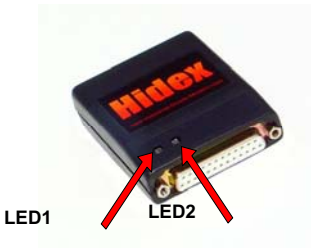
HideAway is uniquely designed to adapt to a wide range of applications in the commercial and industrial environments. Current users include manufacturers of equipment which require remote diagnostics and maintenance. They include utility and telephone companies, test and diagnostic equipment and PBX manufacturers, that 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, affect 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 required No 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>Operating Temperature:</b>	0 to 40° C
<b>Receive Sensitivity:</b>	-43 dBm	<b>Humidity:</b>	0 to 95% Non Condensing



LED1

LED2



## Installation, Operation and LED Indicators

1. Connect the DB-25 connector to the RS-232 interface on your data terminal equipment (e.g.: computer, RTU, Energy Management Device, PBX, etc.)

If the RS-232 port is enabled, LED2 will be blinking.

2. Connect the RJ-11 jack to a dial up telephone line.
3. Type AT <CR> from within your communications software (ProComm, Windows HyperTerminal, etc.). The modem should respond with "OK."
4. Using the HA2400LP to make 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.

### Initiate Call

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

### Handshake

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

### Connected

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

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.

### Initiate Call

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

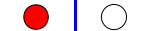
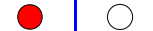
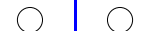
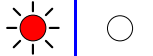
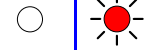
### Handshake

LED1 and LED2 will remain off during handshake;

### Connected

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

LED1    LED2



## IMPORTANT NOTES...

To manually hang up your modem, type +++ and when the modem responds "OK," enter the command ATH <CR>.

As it comes from the factory, the HA2400LP is not set up to Auto Answer. The user must use the AT command ATSO=<number> to set up the answer sequence. E.g.: 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.

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