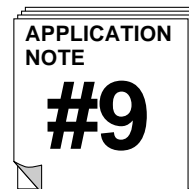


LUTRON®

For Your Information ...



Modem Installation for HomeWorks®

Overview

Lutron has tested and approved the use of an external modem with the HomeWorks system. With a modem, you can communicate directly to the job site from your office as well as change client programming over a common phone line.

The Lutron approved modem is the US Robotics Sportster 33,600 Fax Modem Model No. 839 (external). Initially, you need two modems, one for the job site and the other for your office. For each additional job, you will only need a modem for each job site. This modem can be purchased from the manufacturer at the following address:

US Robotics
8100 North McCormick Blvd.
Skokie, IL 60076-2999
Phone: (800) DIAL USR (342-5877) Fax: (847) 676-7320

Modem Setup

Note: Repeat steps 1 through 5 for each modem.

1. Set the dip switches on the back of the modem as follows:

1	DOWN	Data Terminal Ready Override
2	UP	Verbal Result Codes
3	DOWN	Display Result Codes
4	UP	Echo Offline Commands (Computer modem)
	DOWN	No Echo Offline Commands (Panel modem)
5	UP	Auto Answer On First Ring
6	DOWN	Carrier Detect Override
7	DOWN	Load Factory Defaults
8	DOWN	Smart Mode
2. Using a standard serial cable, connect one end of the cable to the modem's DB25 Female connector. Connect the other end of the cable to the COM port on your computer.
Note: Check the COM port for the proper connection. Typically, the connection is either a DB9 Male or a DB25 Male.
3. Apply power to both modem and computer.
Note: Modems come supplied with a power supply. **This power supply must be plugged into a 120 VAC power source!**
4. Open your HomeWorks Windows Programming Utility (HW-WPU) and the .MDB file that contains the information for your installation. From the tool bar select "COMMUNICATIONS". On the pull down menu go to "SETUP" and select the COM port that the modem is connected to. Click [OK]. Re-select "COMMUNICATIONS" and choose the "TERMINAL" option.
5. In the "RS-232 Command String to Send" type **AT** and press «ENTER». The display should indicate "OK" (you are now successfully communicating to the modem). Next type **AT&F0** for factory reset. Type **ATI4** and the display should appear as follows.

Need additional assistance? Call the Lutron Technical Assistance Hotline 1-800-523-9466
Please provide exact model number when calling.

33.6F SPORSTER FAX MODEM

—————> AT14

AT14

USRobotics Sportster 33600 Fax Settings...

B0 E1 F1 M1 Q0 V1 X4 Y0

BAUD=9600 PARITY=N WORDLEN=8

DIAL=TONE ON HOOK

&A1 &B0 &C0 &D0 &G0 &H0 &I0 &K1 &M4 &N0

&P0 &R1 &S0 &T5 &U0 &Y1

S00=001 S01=000 S02=043 S03=013 S04=010 S05=008 S06=002

S07=060 S08=002 S09=006 S10=014 S11=070 S12=050 S13=000

S15=000 S16=000 S18=000 S19=000 S21=010 S22=017 S23=019

S25=005 S27=000 S28=008 S29=020 S30=000 S31=128 S32=002

S33=000 S34=000 S35=000 S36=014 S38=000 S39=000 S41=000

S42=000

6. Set the Internal parameters with the following strings. (To set parameters, type **AT** plus the new command string. For example, if the string is set to **A1** and you want **A0** type **AT&A0** and press «ENTER».) To set the parameters in memory use the command string **AT&W0&W1**.

If the factory defaults are set differently than listed above then the following must be set.

Controls Data Terminal Ready (DTR) Operations - **AT&D0** (DTR override)

Displays/suppresses result codes - **ATQ0** (Display result codes)

Set Auto Answer - **ATS0=1** (set auto answer to first ring)

Set Display verbal/numeric result codes - **ATV1** (Verbal codes)

Set local echo - **ATE1** Computer Modem (Modem displays keyboard commands)

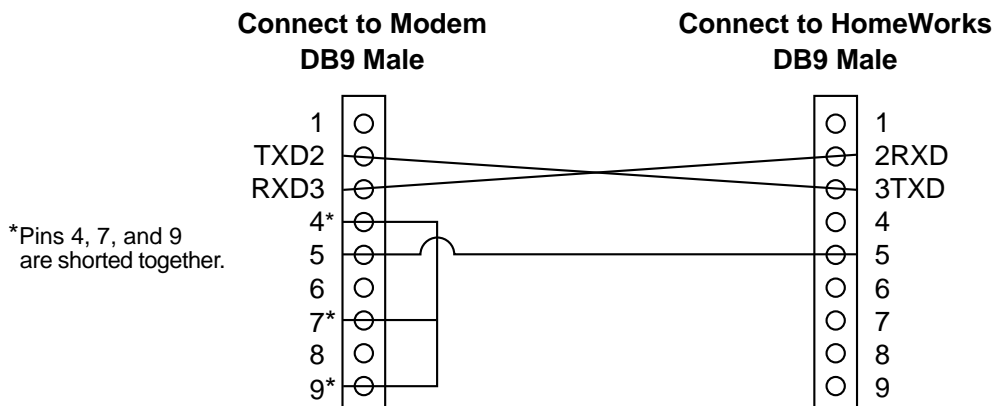
ATE0 Panel Modem (Modem does not displays keyboard commands)

Set Controls Carrier Detect (CD) signal - **AT&CO** (CD override)

7. Repeat steps 1 through 6 to program the second modem.
8. Plug the modem that is connected to your computer to an outside phone line.

Connecting the Modem to the HomeWorks System

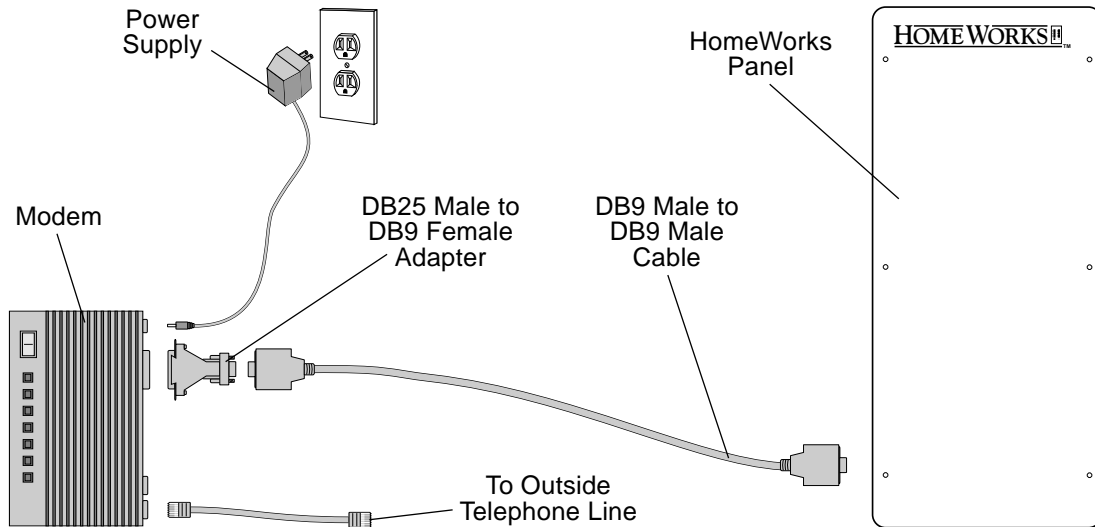
1. To connect the modem to the HomeWorks Panel a special cable must be used. (This cable can be special ordered from Black Box Corporation at (412) 746-5500 or fax (800) 321-0746. Request model #CBCC33634). The internal connections for this cable are shown below.



Need additional assistance? Call the Lutron Technical Assistance Hotline 1-800-523-9466

Please provide exact model number when calling.

2. Use a DB25 Male to DB9 Female adapter to connect the special cable to the modem. After connections are made (see figure below), apply power to the modem. **A 120 VAC power supply is required!**



3. Plug the modem into an outside phone line.

Using the Modems With HomeWorks Programming Utility

From the HomeWorks Programming Utility select “Communications” from the toolbar and choose the “Terminal” option. Once the “Terminal” dialog box is opened, type and send **AT** to confirm modem connection. To call from one modem to another, type the command **ATDT**, the phone number, and [ENTER]. You hear the modem dial tone followed by touch tones and ringing. When the connection is made a the feedback string “connect 9600” will display on the screen. Verify communications by sending a question mark ?. If the response from the HomeWorks Panel is an exclamation point !, the modem communication link is confirmed. You are now able to communicate directly to the HomeWorks system from your computer.

NOTE: This modem connection has no capabilities for security and will answer the phone line on the first ring. Lutron recommends that the modem is only powered on when communication to the HomeWorks Panel is needed and powered off when not in use.

Worldwide Technical and Sales Assistance

If you need assistance call the toll-free ***Lutron Technical Assistance Hotline***. Please provide exact model number when calling.
(800) 523-9466 (U.S.A., Canada, and the Caribbean)
Other countries call (610) 282-3800

Our address on the Web is www.lutron.com

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299 U.S.A.
Phone: (610) 282-3800
Fax: (610) 282-3090

Lutron and HomeWorks are registered trademarks of Lutron Electronics Co., Inc.
© 1998 Lutron Electronics, Co., Inc.

**Need additional assistance? Call the Lutron Technical Assistance Hotline 1-800-523-9466
Please provide exact model number when calling.**

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299 U.S.A.
Made and printed in the U.S.A. 3/98 P/N 360-712 Rev. C