SUPRAMODEM 2400zi INSTALLATION AND SOFTWARE INSTRUCTIONS

Congratulations on purchasing a SupraModem 2400zi™. The SupraModem 2400zi is designed to make maximum use of the awesome capabilities of your Amiga 2000™. You can install as many as five SupraModem 2400zi's and use them simultaneously because of the Amiga's multitasking capability. You could be involved in a discussion on CompuServe™ with one SupraModem while down-loading a large program from a BBS with another—and the BBS could be running on an Amiga with several SupraModem 2400zi's. Your Amiga's serial port remains free when using the SupraModem 2400zi so you can connect additional devices. The SupraModem uses the state-of-the-art Intel 89024 modem chip set incorporating most of the modem on two low-power NMOS chips. This chip set is fully "AT" command compatible and handles virtually all Bell and CCITT protocols so you can talk to modems around the world from 110 to 2400 baud. Two stages of surge suppression are built into the SupraModem 2400zi to drastically reduce the chances of your Amiga being damaged by a lightning strike through the phone line. In short, the SupraModem 2400zi is the kind of exquisitely engineered product that you expect from Supra Corporation.

This manual covers installation of the SupraModem 2400zi and use of the utility software specific to this modem. The *SupraModem 2400 Operator's Manual* provides additional information on using your SupraModem 2400. If after reading the two manuals you have any questions, please call us at (503) 967-9081 between 9 a.m. and 4 p.m. PST. Thank you for buying a Supra product and enjoy!

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Installing the Modem

Before installing your SupraModem 2400zi, read the first three pages of Chapter 1 and the first page of Chapter 2 in the *SupraModem 2400 Operator's Manual.* Then install your modem as explained in this section.

Your SupraModem 2400zi fits in half of an Amiga expansion slot. This feature lets you put both the modem and a PC-style half card in one of the bridge slots and is useful if you have a fully loaded machine.

We have provided two types of mounting brackets for the external phone jacks. The standard bracket is attached to the phone jacks when shipped and is the best one for most people. This bracket fits in any of the seven openings in the Amiga case back that are located behind your Amiga and PC XT expansion slots. The second bracket fits in the Amiga case back in one of the two openings closest to the disk drive and lets your modem connect to the telephone line even if other cards are using all seven of the other openings.

Follow the steps below to install your SupraModem 2400zi:

1. Turn off your computer and unplug all of its cables.

2. Open the computer's case by using a Phillips screwdriver to remove the five screws that hold the Amiga's top on. There are two screws on each side and one on the back located at top dead center. Remove the Amiga's top and set it aside, out of your way.

3. Decide which of the five Amiga expansion slots you wish to put the modem in. If you plan to add a hard disk to your system, consider not using the slot that is closest to the floppy disk drive; that slot is often used to hold a hard disk interface or hard card. Refer to the illustrations on page 5 for placement examples.

4. Hold the modem over the Amiga expansion slot with the modem's phone jack toward the back and top of the computer and the modem's gold edge connector pointed down. Slide the modem down through the guide at the front of the computer, place the modem into the expansion slot, and push down so it fits snugly.

5. Decide which opening you wish to mount the phone jack assembly in. You probably want to use the opening directly behind the modem. If you decide to use one of the openings closest to the disk drive, you will need to change the bracket on the phone jack assembly. Do this by removing the two small Phillips screws, swapping brackets, and replacing the screws.

6. Remove the screw or screws that hold the desired opening's metal cover in place.

7. Mount the phone jack assembly in the opening using the screw or screws you removed in step 6.

8. Plug one end of the short phone cord into the telephone jack on the inside of the phone jack assembly. The other end of the short phone cord plugs into the jack on the top of the modem card.

9. Replace the top of the Amiga.

10. Plug one end of the long telephone cable into one of the modem's telephone jacks on the back of the Amiga, and plug the other end into a wall telephone jack.

11. (Optional.) If you want to connect a telephone to the same telephone line, plug the telephone's cable into the remaining modem telephone jack. Note that the telephone cannot be used while the modem is being used.

12. Reconnect the cables you disconnected in step 1. The modem will turn on automatically when you turn on your computer.

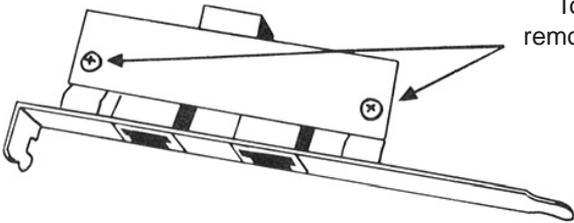13. Install the modem software as described in the next section.

Typical Installation
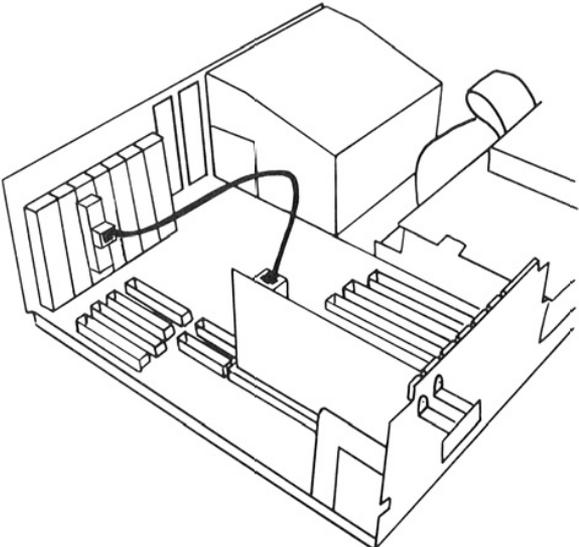
Optional Installation
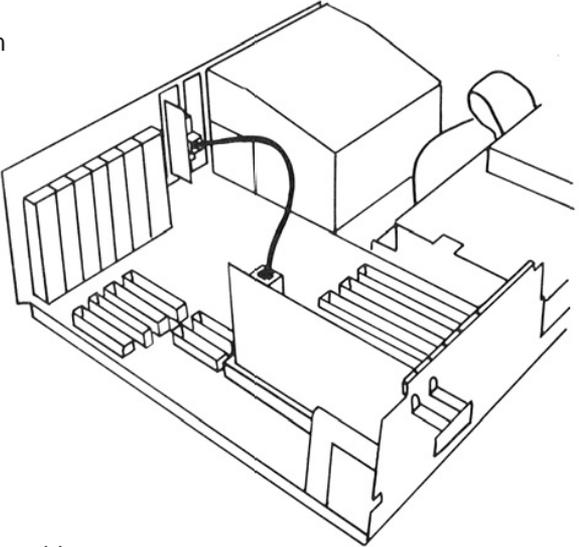
Telephone Jack Assembly

To switch brackets,
remove these screws.

Installing the Modem Software

To install software for one SupraModem 2400zi, first install the SupraModem 2400zi device driver. To do this from the **Workbench**, double click on the **InstallDriver** program icon from the **Supra-Modem 2400zi Software** disk. This will install the driver to your *current* **DEVS:** directory. You may wish to install the driver to additional diskettes. Your **DEVS:** directory should not be reassigned to a **RAM:** or **RAD:** disk when you run **InstallDriver**.

Next, if your telecommunications program does not let you select which device it works with, use **ModemModify** to modify a *back-up copy* of the program. Most telecom programs written before 1989 need to be modified. To modify a telecom program, *single* click on the **ModemModify** icon, and simultaneously hold down the **Shift** key and *double* click on the telecom program's icon.

ModemModify is necessary because of the following. All hardware devices connected to an Amiga 2000 must have a device driver. The device driver for the first SupraModem 2400zi in an Amiga 2000 is called **modem0.device**. Many telecom programs can only access a modem through **serial.device** (the Amiga serial port's device driver), so Supra provides the **ModemModify** utility so telecom programs can be modified to access the SupraModem 2400zi driver.

With the device driver installed and your telecom program modi-fied, you can run the telecom program and enjoy the modem.

The following table lists some of the more popular Amiga 2000 telecommunications programs and their compatibility status at the time as of March 1989.

Program	Publisher	Status
A-Talk™	Oxxi	Works as is
Access!™	shareware	Works after **ModemModify**
Baud Bandit™	Progressive Per.	Works as is
Dr. Term™	Progressive Per.	Works after **ModemModify**
Diga™	Aegis	Works after **ModemModify**
Handshake™	shareware	Does not work!
SuperBase Pro™	Precision	Works after **ModemModify**
VT-100™	shareware	Works after **ModemModify**

Using Multiple SupraModem 2400zi's

You can put as many as five SupraModem 2400zi's in a single Amiga 2000. To do this, first install the modems by following the instructions given for one SupraModem 2400zi, and then install software for the modems as described in the following paragraphs.

Choosing Telecom Programs & Installing Device Drivers

First, decide what telecom software you wish to use with your modems. Ideally, each program will let you select which device name and unit number it uses. In this case you only need to install the **modem0.device** driver, which supports five modems, units 0-4.

A device driver can support multiple devices by using auxiliary unit numbers. A solitary internal modem is always unit 0. Multiple modems are units 0-4, with the one closest to the disk drive unit 0.

Unfortunately, most telecom software will only support unit number 0 and will not let you change this unit number. This means that each modem may need its own device driver and its own modified telecom program. (Fortunately, this situation is changing as authors of terminal programs and BBSs modify their software to support multiple modems.)

The software you want to use will likely not let you select which unit number it uses. If this is the case, you need to install as many device drivers as 2400zi modems. If you have two 2400zi's, install **modem0.device** and **modem1.device** by copying them to your **DEVS:** directory. You can use **InstallDriver** to do this from **Workbench** if you wish, but you will need to run it once to install **modem0.device**, then add **DRIVER=modem1.device** as a tool type entry for **InstallDriver**, and then run **InstallDriver** again.

Modifying the Telecom Programs

You may also need to use **ModemModify** to modify one telecom program for each modem. Run **ModemModify** by *single* clicking on the **ModemModify** icon and then simultaneously holding down the **Shift** key and *double* clicking on a _back-up copy_ of the telecom program you wish to modify. This will change all references to **serial.device** within the program to **modem0.device**. You may want to change the name of this modified telecom program to indicate that it works with modem unit 0, which is the one closest to the floppy disk drive.

You now need to make **ModemModify** change your telecom program(s) to work with modem unit 1's driver. Do this by making a tool type entry for **ModemModify** of **NEW=modem1.device**. If you have more than two internal modems, you will need to repeat these procedures for each additional modem.

You should now be able to run multiple telecom programs and have each telecom program use a different modem. For example, you could be downloading a program from your local BBS with one telecom program while you check your mail on CompuServe with another.

SupraModem 2400zi Software Disk

The following table lists files included on the **SupraModem 2400zi Software disk**. The files and their function are explained in detail following the table.

File	Function
modem0.device	Handles SupraModem 2400zi units 0-4. The unit number supplied by the application, designates which modem is accessed.
modem1.device	Handles SupraModem 2400zi unit 1 only. Must be called with a unit number of zero.
modem2.device	Same as **modem1.device** but handles modem 2.
modem3.device	Same as **modem1.device** but handles modem 3.
modem4.device	Same as **modem1.device** but handles modem 4.
ModemModify	Modifies a telecom program by changing text. Default is to change **serial.device** to **modem0.device.**
InstallDriver	Copies a specified driver to the **DEVS:** directory. Default is **modem0.device**.
ShowModem	Displays a modem front panel for a specific unit. Defaults to **unit 0**.

Modem Device Drivers

modem0.device will handle all five possible internal modems if the application program that calls it specifies a unit number. Unit 0 is the modem furthest to the right and the unit numbers increase as modems are added to to the left of unit 0. It makes no difference which slot a modem is in or if there are slots between modems. The modem closest to the floppy disk is unit 0, the next one is unit 1, etc.

modem1-4.device handles only one modem unit. These drivers allow most telecom software to work with multiple SupraModem 2400zi's. These drivers will address the modem that corresponds with their name. For example, when a telecom program calls **modem3.device unit 0**, **modem3.device** accesses SupraModem 2400zi unit 3. These drivers should only be called with a unit number of 0.

ModemModify

Using ModemModify from Workbench
Single click on the **ModemModify** icon, and then simultaneously hold down the **Shift** key and *double* click on the icon of the program you wish to modify. You should only use **ModemModify** on a _back-up copy_ of the target program. **ModemModify** will search the target program for the text **serial.device** and change all occurrences to **modem0.device** as a default. You can make **ModemModify** change any name to any other name by making a **Tooltypes** entry. Do this by clicking on the **ModemModify** icon and selecting **Info** from the **Workbench** pull-down menu. This will open the **Info** window and expose the **Tooltypes** entry field. To add a **Tooltypes** entry, click on **ADD** which will activate the entry field for **Tooltypes**. Enter the desired text, press **RETURN**, and then click on the **SAVE** gadget in the lower left portion of the **Info** window.

ModemModify looks for the following **Tooltypes** entries:

> *OLD=originalname*
> *NEW=replacementname*

When **ModemModify** encounters these in the Tooltypes area, the **NEW=**_replacementname_ overrides the default **modem0.device**, and the **OLD=**_originalname_ overrides the default **serial.device**. You will normally only need to add a **NEW=modem***X***.device** to modify a target program to work with a specified internal modem unit. You could also use **ModemModify** to change a previously modified program back to its original form.

Using ModemModify from CLI

From CLI, the following command will change all **serial.device** references to **modem0.device** in the program *programname.*

> 1> **ModemModify** *programname*

There are two command line options which allow you to override the default **serial.device** and **modem0.device** strings. The **-n** option specifies that the replacement driver name follows, and overrides **modem0.device**. The **-o** option specifies that the original driver name follows, and overrides **serial.device**.

For example, the following command will change all **serial.device** references to **modem1.device** in the program *programname:*

> 1> **ModemModify -nmodem1.device** *programname*

The following command will change all **modem0.device** references to **serial.device** in the program *programname* and could be used to restore a previously modified program to its original state:

> 1> **ModemModify -nserial.device -omodem0.device** *programname*

InstallDriver

This program may be used from **Workbench** to install the desired modem driver in your **DEVS:** directory. If its **Workbench** icon has the following **Tooltypes** entry, InstallDriver will attempt to copy *drivername* from the release disk to your **DEVS:** directory. Otherwise, it will copy the default of **modem0.device**.

> **DRIVER=***drivername*

Read the previous section on using **ModemModify** from **Workbench** for more information on setting **Tooltypes**. You may wish to use **InstallDriver** to install the driver to additional diskettes or hard disk partitions that you use for booting your Amiga. Your **DEVS:** directory should not be reassigned to a **RAM:** or **RAD:** disk when you run **InstallDriver** since you would loose the installed driver when you turn off your computer.

ShowModem

ShowModem opens a small window with simulated modem status indicator lights in it. **ShowModem** keeps you informed as to the status of various modem functions in the same manner as the indicator lights on our external SupraModem's.

ShowModem can be used from either **Workbench** or **CLI**. It has three options: the rate at which **ShowModem** updates, which modem **ShowModem** displays the status of, and the name of the screen on which **ShowModem** displays.

ShowModem tries to show the modem activity and status. It may not be exactly synchronized with modem activity due to timing between **ShowModem** and the device driver. You may be able to make **ShowModem** more accurate by increasing the update rate, but then it will use more of your Amiga's CPU time.

ShowModem displays the status of SupraModem 2400zi unit 0 by default, but you can change this. Only one **ShowModem** program can monitor each modem.

ShowModem displays on top of the **Workbench** screen by default, but you can make it attach to a different screen — typically your terminal program or BBS — by specifying an optional screen title.

Caution: When **ShowModem** is attached to a program's screen you *must* close **ShowModem** before you exit the program it is attached to. If you don't close **ShowModem** first, you will likely crash the system when you exit the program. Some programs may check for the presence of an attached window like **ShowModem's** before they will let you close them, but don't count on it.

Running ShowModem From the Workbench
To run **ShowModem** from **Workbench**, simply double click on the **ShowModem** icon. You can set the three options by using the following **Tooltypes** entries. Read the section on **ModemModify** for information on changing **Tooltypes**.

> MICROS=*update rate in microseconds* (default is 200000)
> UNIT= *modem unit to monitor* (default is 0)
> SCREEN=*screen name to attach to* (default is **Workbench**)

The screen name specified does not need to be the full length of the screen title. For example, **SCREEN=Access!** will match the screen title **Access!   (C) 1987/1988**.

Running ShowModem From CLI
To run **ShowModem** from the **CLI**, simply type **ShowModem**. You can set the three options as shown and explained below:

> 1>**ShowModem -t***xxxxxxx* **-u***x* **-s***screenname*

The options function as follows:

- **t**_xxxxxx_ indicates the update rate in microseconds. The default is 200000, which is 1/5 second.

- **u**_x_ is the modem unit to monitor. The default is 0.

- **s**_screenname_ specifies the screen title of the screen to **Show-Modem** is to appear upon. The default is **Workbench**. The screen name specified does not need to be the full length of the screen title. For example, **SCREEN=Access!** will match the screen title **Access!   (C) 1987/1988**.

ShowModem Indicator Lights

HS (High Speed). When lit, indicates the modem is communicating at 2400 bps.

CD (Carrier Detect). When lit, indicates the SupraModem 2400zi is receiving a valid carrier signal from the remote modem and it has locked onto that signal.

RD (Receive Data). Flashes on and off quickly as data is received.

SD (Receive Data). Flashes on and off quickly as data is being sent from your Amiga 2000 to the remote system.

TR (Terminal Ready). When lit, indicates the SupraModem is ready to communicate with the terminal.

MR (Modem Ready). When lit, indicates the modem is receiving power.

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