
Chapter 2. Installing Your System Unit

This chapter provides instructions to help you set up your 7588 Computer. For complete system-unit dimensions, see Appendix B, "Physical Dimensions."

Before You Begin

- Know the correct voltage setting for your country. If you are not sure of the voltage setting for your country, contact your place of purchase.
- Make sure you have an adequate number of properly grounded electrical outlets for your system unit, display, and printer.
- Prepare a location for your system unit that is dry and as clean as possible. Contaminants can damage the system unit.
- Leave enough space around the system unit for proper cooling and servicing. (The space needed varies depending on the type of mounting used.)
- For ac power supply, have this book handy in case you need additional information.
- For dc power supply, refer to the *-48 Volt Power Supply Information* book.
- Have blank diskettes available to create backups of the utility and startup programs.

Task 1. Unpack Your System Unit

CAUTION:

To avoid possible injury while moving or lifting the system unit, ask another person to help you.

Remove the 7588 Computer from its shipping carton, along with any other materials in the carton. Also unpack any components that will be attached externally to the system unit, for example a keyboard, display, mouse, or cables. *To prevent possible damage to adapters and internal options, do not unpack these components until you are ready to install them.*

If any items are missing, contact your place of purchase.

Task 2. Check the Voltage Range

The 7588 Computer has an automatic range-detecting power supply. There is nothing to set as long as the voltage is within the following units:

- 100 to 127
- 200 to 240

Attention

For the ac power supply, the voltage must be between 100 and 127 volts or 200 and 240 volts. If the voltage is not within these limits, you can damage your system unit. Refer to the *-48 Volt Power Supply Information* book for the limitations on the dc power supply.

Task 3. Secure the System Unit

Rubber feet are included with the system unit. Attach the feet to the bottom of the system unit. Make sure the system unit is standing firmly on all four padded feet; then proceed to the next task.

Task 4. Install Internal Options

Internal options are devices that are installed inside your system unit. Some internal options (memory) are installed directly onto the SBC; other internal options are installed in the drive bays and expansions slots, such as hard disk drives and adapters.

Note: Some options require device drivers. Refer to the instructions that came with each option to determine if a device driver is required and how to install it.

- If you do not have any options to install inside your system unit, go to “Task 5. Connect the Cables.”
- If you have options to install but you want to check out your system unit before installing the options, go to “Task 5. Connect the Cables.”
- If you have options to install, install them before the system unit is mounted and the cables are attached. For option installation instructions, use the appropriate procedures in Chapter 3, “Installing Options,” and then go to “Task 5. Connect the Cables.”

Task 5. Connect the Cables

Connect the system unit cables in the following order.

1. Connect all cables between the system unit and the keyboard, the mouse, the display, and any other peripheral devices.
2. Connect the power cords to the system unit, the display, and other peripheral devices.
3. Plug the power cords from the system unit, display, and other devices into properly grounded electrical outlets.
4. Continue with “Task 7. Run the Configuration/Setup Utility Program.”

Task 6. Perform the Check-Out Procedure

Perform the check-out procedure at least one time to determine whether the system unit is functioning properly and to familiarize yourself with the power-up sequence and system messages that occur during power up.

The system displays a message to run the Configuration/Setup utility. To run this utility, go to “Using the Configuration/Setup Utility Program” on page 4-6, then return here to complete the system-unit check-out.


1. Turn on your display and adjust the brightness and contrast controls to the approximate midpoint. (You can readjust these controls for personal viewing comfort later.)

2. Turn on the system unit.

The power-on indicator light comes on.

3. Watch the display screen and listen for a single beep.

A series of coded messages should appear on the screen. These messages are part of the normal power-on process, which occurs each time you turn on the system unit. The following is a typical power-on sequence.

- a. A blinking cursor appears on the screen.
 - b. After a short time, an icon, depicting a system-unit screen, appears in the upper-right corner,  and the memory-test message appears in the upper-left corner.
 - c. The system unit starts the power-on self test (POST).
4. After the system completes POST, it displays the amount of available memory and indicates the status of the self tests.
 - If POST is completed successfully, the system sounds a single beep. Continue with “Task 8. Finish the Installation.”
 - If an error is detected, the system displays the error code, and either sounds multiple beeps or does not beep at all (depending on the type of error):
 - If you have changed the configuration by adding or changing options, the screen will display an error message indicating that the Configuration/Setup Utility must be run. In that case, perform “Task 7. Run the Configuration/Setup Utility Program” on page 2-4; then perform this task again to complete the system-unit check-out.
 - Record the error message and number of beeps; then go to “Troubleshooting Charts” on page 5-4 to resolve the problem. After correcting the problem, return to the start of this procedure.

Task 7. Run the Configuration/Setup Utility Program

If your system unit has never had its Configuration/Setup Utility program run, or if you have changed the configuration by adding or changing a feature, run the Configuration/Setup Utility program as described in “Using the Configuration/Setup Utility Program” on page 4-6, and then return to “Task 6. Perform the Check-Out Procedure” on page 2-3.

Note: This step assumes you have installed all options in your system unit, as instructed in “Task 4. Install Internal Options” on page 2-2. If you have not, install those options now. For option installation instructions, use the appropriate procedures in Chapter 3, “Installing Options.”

If you have no device drivers to install, proceed to the next step.

Task 8. Finish the Installation

Your system unit hardware is now set up, and you are ready to finish the installation by installing the required software and completing the paperwork. The final steps are different for various configurations and applications, but you can use the following checklist as a guide.

- **Install the operating system.**
Refer to the documentation and instructions supplied with your operating system.
- **Install device drivers**
Refer to the information that came with the options you installed for instructions on installing device drivers.

For instructions on installing the video and Ethernet device drivers, refer to the readme files on the IBM Embedded Systems CD. The latest updates are under *Support Information* on the Web at:
<http://www.clearlake.ibm.com/mfg/bocaraton/Services/IC/>
- **Install your application programs.**
Refer to the documentation and instructions supplied with your application programs.
- **Make backup copies.**
It is very important that you keep a backup copy of the system partition and reference diskette.
- **Record your identification numbers.**
Your system unit has important identification information that you will need if you have it serviced or if you need to order duplicate keys (for system units with keylocks). You should record this information in Appendix A, “System Records” or in another safe place.