

## AS/400 Control Panel Functions

System operators and service representatives can use the control panel to perform a number of tasks. You can use the control panel to do an initial program load (IPL) and problem analysis. The details of the control panels are described following the illustrations.

**Power On:** The light comes on when there is power to the system unit.

*Note: The Power On light blinks when the system is being started up and when the system is manually turned off. When the Power Down System (PWRDWNSYS) command or the options on the Power On and Off Tasks (POWER) menu are used, the Power On light does not blink.*

**Power pushbutton:** You can press the pushbutton to start the system; press it again to stop the system. **Attention:** Using the Power pushbutton to turn off the system *may cause results* that cannot be predicted in your data files, and the next IPL will take longer to complete.

### **Note:**

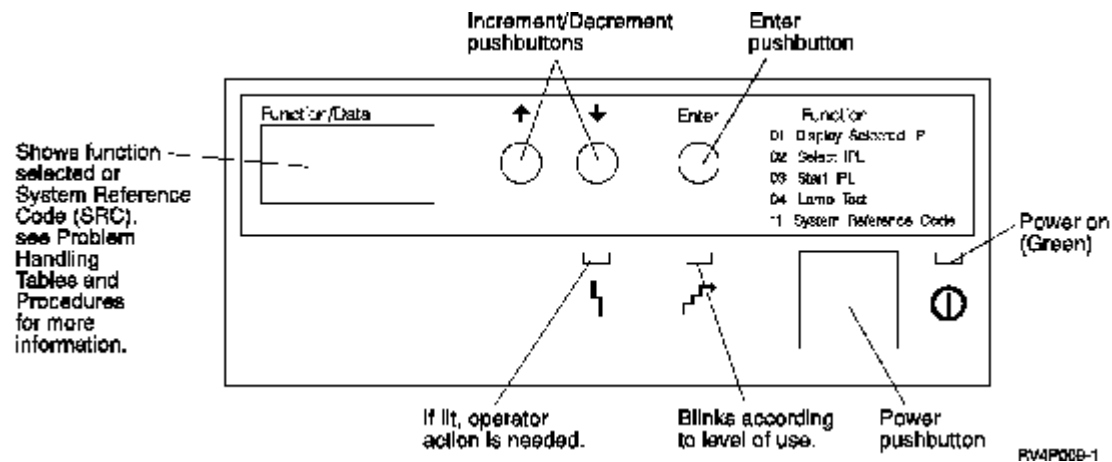
- Power on is allowed in Manual or Normal mode, and Power off is allowed in Manual mode only.
- In most cases, use the Power Down System (PWRDWNSYS) command on any command line of your display station to stop the system. *If you use the Power pushbutton to turn off your system, errors may occur with your data files.*

**Processor Activity** or **Processor Active:** Models 15x, 4xx, 60x, and some 62x System Units have one Processor Active light, and the light is on when programs are running. Models 5xx, 64x, 65x, and some 62x System Units have the Processor Activity lights that provide a graphical display of the processor activity.

**System Attention:** This light comes on when the system requires operator attention, such as correcting a severe system failure.

**Function/Data display:** The function number appears in the Function/Data display when you press the pushbutton (increment or decrement). Only the numbers of those functions that can be used in the present mode are displayable. This 8-character LCD display is used to:

- Display System Reference Codes (SRC's) when errors occur.
- Display valid functions to be performed.
- Display results of selected functions.



**Increment/Decrement buttons:** The Increment/Decrement buttons are used to cycle through the functions that are available in the *current operating environment*. If functions require additional input, these buttons also cycle through the valid selections within the function once the function is selected, and the Enter key is pressed.

The Increment/Decrement buttons are used to change the IPL type and mode on systems without a mode button. The IPL type (A, B, C or D) and Mode (Normal, Manual) can be selected by using **Function 02**. To select IPL type and mode, do the following:

1. Use the Increment/Decrement buttons to select Function 02, and press the Enter pushbutton.
2. Use the Increment/Decrement buttons to select the IPL type and mode you want, and then press the Enter pushbutton to save.
3. You can also specify a fast or slow IPL that can only be set one time at the console panel when the system is powered off. Select Function 02 and press the Enter key twice. Then, use the Increment/Decrement buttons to select F(Fast), S(Slow), or V(System Value).

Subsequent IPLs are determined by the system value. \*MIN is the recommended setting, however, if you anticipate any hardware problems, specify \*ALL on the Hardware diagnostics parameter. The

system value can be changed by using the Change IPL Attributes (CHGIPLA) command.

**Enter pushbutton:** The Enter pushbutton is used to process the function or subfunction that is displayed in the Function/Data display.

**Mode:** The mode button (only on systems with an electronic keystick) allows you to scroll through the four operating modes (Manual, Normal, Secure, and Auto) when the key stick is engaged. The active mode on these systems is indicated by which of the four lights is lit. For systems with keysticks, see **Electronic Keystick Slot** below.

To change modes for systems without keysticks, do the following:

1. Use the Increment/Decrement buttons to select Function 02, and press the Enter pushbutton.
2. Use the Increment/Decrement buttons to select the mode, then press Enter. The Increment/Decrement buttons are also used to select IPL type.

**Electronic keystick slot:** This slot accepts an electronic keystick that, when engaged, allows you to change operating modes. A system operator can prevent unwanted operations by selecting the appropriate mode and removing the keystick. *(Available on selected AS/400 models).*

## List of System Reference Codes

### System Reference Code Starting with 11-3

### What You Should Do

<b>0000 AABB</b> <b>0000 AACC</b>	You attempted a timed, remote, or automatic IPL with the system in the Secure or Manual mode. Set the system to the Normal or Auto mode and do the IPL again.
<b>0000 AADD</b>	You attempted a manual IPL with the system in the Secure or Auto mode. Set the system to the Normal or the Manual mode and try the operation again.
<b>1xxx D101</b> <b>1xxx D102</b>	Battery Power Unit x failed. Battery Power Unit x test failed. Replace the battery power unit.
<b>63xx xxxx</b>	The tape unit failed.
<b>93xx xxxx</b>	A disk or diskette Unit failed.
<b>A6xx 500x</b>	Workstation controller failure.
<b>A1xx xxxx</b> <b>B1xx xxxx</b>	IPL load device failure.
<b>A900 2000</b>	The IPL completed normally, Does the system console have a sign on screen? If the system varied on, check the QSYSARB job log for the message and follow the corrective actions indicated in the message. To view the QSYSARB job log, use the Work with Active Job (WRKACTJOB) command, and then select Option 10 (Display jobs) to view the job log. You need to have *QSECOFR authority to view the job log.
<b>B0xx xxxx</b>	Failure detected by communication Licensed Internal Code. Make sure the latest PTF package is installed.
<b>B6xx xxxx</b>	Not enough auxiliary storage. If your system unit has some

disk storage space available,  
add more to auxiliary storage  
pool 1.

<b>B9xx xxxx</b>	OS/400 installation failure
<b>C1xx xxxx</b> <b>C3xx xxxx</b> <b>C5xx xxxx</b>	IPL status.  This is a normal indication during the IPL. You may suspect a hang or loop condition if the SRC does not change during the two-minute period
<b>D1xx xxxx</b>	Diagnostic status.  This is a normal indication while the system main storage is being saved to disk.
<b>D6xx xxxx</b>	Diagnostic status.  This is a normal indication while the system is being powered down. When xxxx is changing, the system is doing a main storage dump.

## Mode Descriptions

### **Manual:**

When the mode is set to Manual, the system allows you to do all manual IPLs, such as an *operator-attended IPL* from disk or tape, and manual control functions, such as select an IPL or display the kind of IPL that the system is set to run. However, you cannot do a remote IPL, an IPL by date and time, or an IPL after a power failure.

*Note: You should only set the mode to Manual when necessary. This will ensure that no one accidentally presses the Power pushbutton and causes the system to stop.*

### **Normal:**

The Normal mode allows you to manually turn the power on and to do each of the automatic operations. That is, you can start the system by doing a manual or remote IPL, an IPL by date and time, or an IPL after a power failure.

If you want to stop the system when the mode is set to Normal, use the *Power Down System (PWRDWNSYS)* command at any display station. You must have QSYSOPR authority to use the Power Down System (PWRDWNSYS) command.

### **Auto:**

The Auto (automatic) mode allows a remote IPL, an IPL by date and time, and an IPL after a power failure.

When the mode is set to Auto, you cannot:

- Start the system by doing an IPL manually.
- Stop the system by using the Power pushbutton.
- Select a different IPL type by using the Increment/Decrement buttons.

### **Secure:**

The Secure mode locks the control panel on the system unit. You can only stop the system from a display station by using the Power Down System (PWRDWNSYS) command.

## IPL Overview

The following table shows the system reference codes that are displayed and approximately how long they remain displayed while the IPL is progressing.

*In the diagram, x can be any number 0 through 9 or letter A through F.*

<b>C1XX BXXX</b>	Input/Output processor testing (1-5 minutes)
<b>C1XX 1XXX</b>	Input/Output processor loading (1-10 minutes)
<b>C3XX 3XXX</b>	System processor testing (2-10 minutes)
<b>C1XX 2XXX</b>	System processor loading (2-10 minutes)
<b>C1XX 202E</b>	Testing system main storage (30 seconds-10 minutes, depending on size of main storage)
<b>C1XX D009</b>	System power hardware ready (10 seconds)
<b>C1XX 2034</b>	IPL control passed to system processor (10 seconds)
<b>C6XX 4XXX</b>	Testing system configuration (1 - 10 minutes)
<b>C6XX 4XXX</b>	IPLing OS/400
<b>C6XX 4260</b>	System disk data recovery
<b>C9XX 2XXX</b>	Operating system starting
<b>C900 29C0</b>	Operating system (recovery)