

Appendix B: MX⁴ Front Panel Controls

The front panel of the MX⁴ consists of an LCD and 7 buttons (Figure 25 and Figure 26). The front panel controls provide special systems management and technical support functions. Normally there is no need to use the front panel beyond viewing status. Typically, the front panel is used for the following tasks:

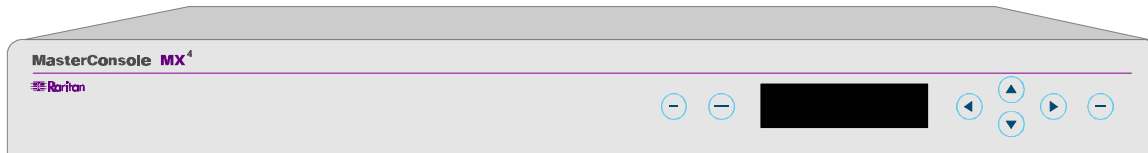


Figure 25 MX⁴ Front Panel

1. Confirming power on
2. Programming an MX⁴ unit for second-tier operation
3. Changing video-sync signal type for certain monitors

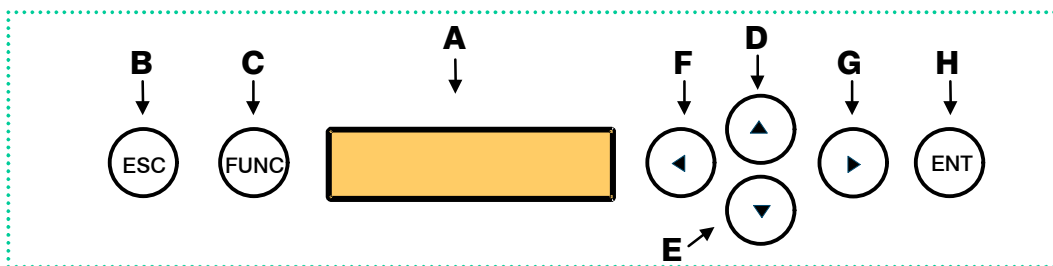


Figure 26 MX⁴ Front Panel Buttons

Front Panel Components and Functions

- The **LCD (A)** shows the status of the system and indicates the functions that can be selected by pressing the front panel control buttons.
- The **ESC button (B)** is used for canceling the displayed function and returning the system to the normal state.
- The **FUNC button (C)** is used to select the various functions.
- The **↑, ↓, ← and → buttons (D), (E), (F) and (G)** are used for selecting or setting various options depending on the function being performed.
- The **ENT button (H)** is used for confirming and executing the selected function.

Start-Up Display

When the MX⁴ is turned on, it performs a start-up test. It checks each channel and user port to detect connections. If an error is detected, it displays “ERROR!” and stops the process.

- Press **ENT** to continue checking the remaining channels and ports.

- Recycle the power by turning the MX⁴ off and on to clear the error conditions.
- If error persists, power down all computers and devices and then recycle the power again.
- If error condition still persists, contact Raritan Technical Support for further assistance.

Normal Display

After the start-up test, the LCD panel displays 2 circulating messages:

- Top line: “RARITAN <Model>: <Unit Name>”
Where, Model=“MX48”, “MX416”, or “MX432”, and Unit Name is the device name of the unit. The default unit names are “Base MX48”, “Base MX416”, or “Base MX432”. The base unit device name can be changed using the System Configuration option of the administration menu. The second tier device name can be changed using the Channel Configuration option and the Set 2nd Tier Names option of the administration menu. Please refer to those sections for details.
- Second line: user port status (Figure 27). The user port status line displays a scrolling status of all 4 user ports, one user port per second. The user’s active channel, Ch #, is displayed after the user port number. The first 3 positions of the display denote the Scan/Skip/Tier status—S, K, or T—or a *dot* if these options are not active.
 - First position: S—the user port is in **AutoScan** mode.
 - Second character: K—the user port is in **AutoSkip** mode.
 - Third character: T—the user port is configured to connect to another MX⁴—tier.
 - A *dot* appearing in any of these 3 positions indicates none of the above 3 options are activate.

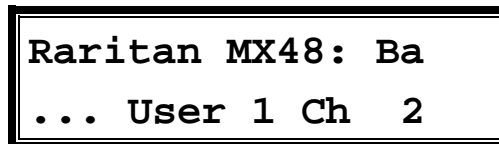


Figure 27 LCD Normal Display

Function Selection Screen

Seven functions can be performed from the front panel control: Set LCD Contrast, Set Tier, Set Password, Disable Password, Logout, Select Sync Type, and Reset MX⁴. The following sections describe those functions.



Figure 28 Function Selection

Function Selection:

1. Press **FUNC** to enter the Function selection mode (Figure 28).
2. Use the **↑** or **↓** buttons to scroll through the Function List.
3. Press **ENT** to select the displayed function. Follow the sections below to perform the individual selected function.
4. Press **ESC** at any time to return to the Normal Display.

Set LCD Contrast

The Set LCD Contrast function modifies the contrast level of the front panel LCD display. (See Figure 29.)

To modify the LCD contrast:

1. Press the **↑** and **↓** buttons to increase and decrease the contrast.
 2. Press **ESC** to return to the normal display.
- ☞ The LCD contrast can also be adjusted by holding **←** button and pressing the **↑** or the **↓** buttons anytime during normal display.

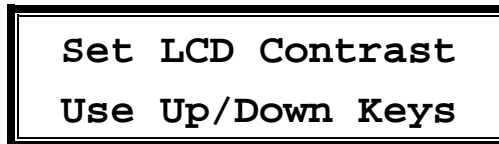


Figure 29 Set LCD Contrast

Set Tier

The Set Tier function should be used only on second-tier MX⁴ units. Be sure to carefully review Two-Tier Installation on page 19 before proceeding with the Set Tier function (Figure 30).

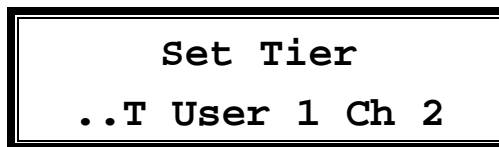


Figure 30 Set Tier

The Set Tier function programs the user ports of a second-tier MX⁴ to properly perform as a second-tier device. Each of the 4 user ports on a second-tier MX⁴ unit must be programmed as follows. **Perform steps 1-3 of Function Selection first.**

To set a second-tier user port to connect to a Base MX⁴:

1. Press the ↑ or ↓ buttons to select the user port number you wish set to second-tier status.
2. Press the ← button to toggle the tier indicator—denoted by “T”—on and off.
3. Press **ENT** to confirm the selected settings, or,
4. Press **ESC** to return to the Normal Display and retain the previous setting.

Set Password

The Set Password function enables the administrator to password protect access to front panel functions (Figure 31). A valid front panel password consists of a sequence of exactly six button presses, which must be repeated exactly to gain access. **Perform steps 1-3 of Function Selection first.**



Figure 31 Set Front Panel Password

To set the password for the front panel:

1. When prompted, enter a sequence of any 6 front panel button presses except **ESC**. The second line of the LCD display will show an asterisk (*) for each button pressed.
 - ☞ Pressing **ESC** before finishing the 6 button presses exits this function without setting a front panel password.
2. The LCD display will prompt you to enter the button sequence a second time for confirmation. Entering the new 6-button password confirms it.
3. Press **ESC** to return to the Normal Display.
 - ☞ If the front panel is password protected, you must enter your password to access any of the front panel functions.

Disable Password

The Disable Password function disables the front panel password and allows unrestricted access to front panel functions (Figure 32). **Perform steps 1-3 of Function Selection first.**



Figure 32 Disable Front Panel Password

1. When this function is selected, the LCD confirms that the password has been deactivated.
2. Press **ESC** to return to the Normal Display.

Logout

If a front panel password has been established, the Logout function exits the current front panel operation and returns to password protected (Figure 33). A password is needed to gain control of the front panel functions. **Perform steps 1-3 of Function Selection first.**

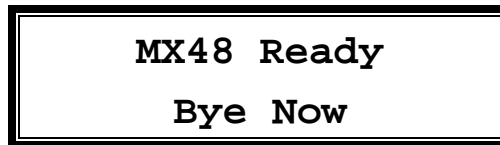


Figure 33 Logout

1. When this function is selected, the LCD display confirms the logout by showing "Bye Now!" on the second line.
2. Press **ESC** to return to the Normal Display.

Select Sync Type

This function is disabled on models with Automatic Sync Setting feature. (See System Configuration page 12)

The Select Sync Type function enables the MX⁴ to accommodate as many types of VGA monitors as possible, as some monitors may function erratically without continuous synchronization (Figure 34). The MX⁴ can generate either continuous sync signal or regular sync signal. If a user console monitor exhibits abnormal behavior, try changing this setting for the user port to which it is connected. **Perform steps 1-3 of Function Selection first.** To control the sync type generated for a user port:

1. Press **↑** or **↓** buttons to select the user port number.
2. Press the **←** button to toggle the sync type between regular and continuous.
3. Press **ENT** to confirm the selected setting, or
4. Press **ESC** to return to the Normal Display and retain the previous setting.

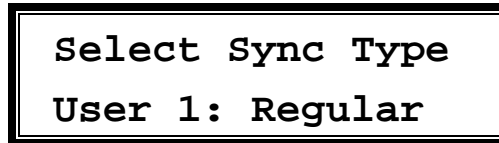


Figure 34 Select Sync Type

☞ Certain versions of MX4 hardware have the auto sync detection function built-in, which will disable this front panel function.

Reset MX⁴

The Reset MX⁴ function lets you restart the MX⁴ unit as if you had physically turned the unit's power off and back on again. However, the MX⁴ will not perform the start-up test unless you hold down the **ENT** button during restart. **Perform steps 1-3 of Function Selection first.**

Display Serial Number (DSP Serial Numbr)

The Display Serial Number function lets you review the serial number of your MX⁴ unit. See Figure 35. **Perform steps 1-3 of Function Selection first.**

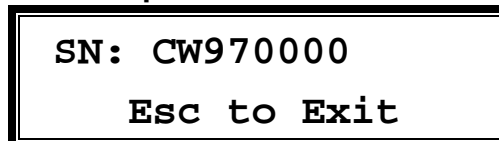


Figure 35 Display Serial Number

1. Press the ↑ or ↓ buttons until "DSP Serial Numbr" appears.
2. Press the **ENT** button to display the serial number of the unit.
3. Press **ESC** to return to the Normal Display and retain the previous setting.

Display Firmware Version (DSP Firmware Vsn)

The Display Firmware Version function lets you review the version of control firmware running on your MX⁴ unit. See Figure 36. **Perform steps 1-3 of Function Selection first.**

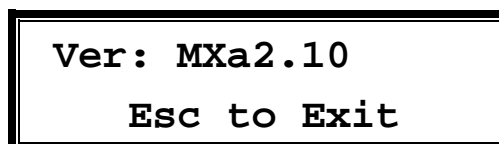


Figure 36 Display Firmware Version

1. Press the ↑ or ↓ buttons until "DSP Firmware Vsn" appears.
2. Press the **ENT** button to display the serial number of the unit.
3. Press **ESC** to return to the Normal Display and retain the previous setting.