

Probel SW-P-08 Setup

A third-party router can communicate with the MC1-MK via the Probel SW-P-08 over a serial or ethernet connection.

License Key

You must have the MC1-RTR license key installed on your MC1-MK before you can set up communications via the Probel SW-P-08 protocol. Refer to the *MC1-MK Installation Manual* for details on installing a license key.

Cabling

Refer to the third-party router documentation for specific cabling requirements.

Serial Connection

The third-party router connects to the MC1-MK via the **Serial** port on the MC1-MK rear module.

Refer to the *MC1-MK Installation Manual* for cabling pinouts for the **Serial** port. Ross Video does not supply this cable.

Ethernet Connection

Contact your IT Department before connecting to your facility network to ensure that there are no conflicts. They will provide you with an appropriate value for the IP Address, Subnet Mask, and Gateway for the MC1-MK and your third-party router.

You will require a standard network CAT-5 cable to connect the MC1-MK to your facility network.

Communications Setup

This section outlines how to configure the MC1-MK to communicate with the third-party router.

To set up serial communications

1. From the **Tree View**, expand the node for the MC1-MK you want to access.
2. Select the **Configuration** node to display the interface in the right-half of Dashboard.

3. Select the **Config** tab.
4. Select the **Remote Control** tab.
5. Use the **Port Type** menu to select the transmission standard the MC1-MK uses to communicate with the router.
6. Use the **Protocol** menu to select **Probel SW-P-08 Router**.
7. Use the **Bit Rate, Data Bits, Parity, and Stop Bits** as required.
8. Use the **Flow Control** menu to determine the data flow between the MC1-MK and the router.
9. Select the **Port Enabled** box to apply your changes and enable serial communications between the MC1-MK and the router.

To set up ethernet communications

1. From the **Tree View**, expand the node for the MC1-MK you want to access.
2. Select the **Configuration** node to display the interface in the right-half of Dashboard.
3. Select the **Config** tab.
4. Select the **Remote Control** tab.
5. Locate the **Probel Router** row in the **Ethernet Port** area of the tab.
6. From the **Role** menu, select **Client**.
7. From the **Protocol** menu, select **TCP**.
8. From the **IP Address** menu, specify the IP Address of the third-party router.
9. From the **Port** menu, specify the port number for the third-party router that is connected to the MC1-MK.
10. Select the **Enabled** box.
11. Confirm that the **Remote Control** field reports "Connected". If it does not, verify the third-party router setup.

To set up the protocol personality

1. From the **Tree View**, expand the node for the MC1-MK you want to access.
2. Select the **Configuration** node to display the interface in the right-half of Dashboard.
3. Select the **Probel Router Setup** tab.

4. Select the **Probel Protocol Setup** tab located at the bottom of the **Probel Router** tab.
5. Use the **Matrix** menu to specify the logical matrix on the router to use when communicating with the MC1-MK.
6. Use the **Level** menu to specify which level on the router the transitions commands sent from the MC1-MK will occur on.
7. Use the **Read Back Label Size** menu to specify the length of the labels to display on the MC1-MK crosspoint buttons.
8. Use the **Enable Log Messages** options to select what type of information the protocol log files will capture when communicating with the MC1-MK.
9. Select the **Router Status** tab.
10. Use the **Minimum Delay** slider to specify the number of frames the MC1-MK waits between sending the next switch commands to the router.
11. Use the **Retry Interval** slider to specify the number of frames the MC1-MK waits before re-sending the same switch command to the router.
12. Use the **Maximum Retries** slider to specify the maximum number of times the MC1-MK will send the same switch command to the router before the switch is abandoned and an error condition is raised.

Command	Command Byte	Description
Extended Crosspoint Interrogate	129	Where Levels are greater than 16, and Destinations are greater than 1024.
Crosspoint Connect	02	Where Levels are less than or equal to 16, Sources are less than or equal to 1024, and Destinations are less than or equal to 1024
Extended Crosspoint Connect	129	Where Levels are greater than 16 or Sources are greater than 1024, or Destinations are greater than 1024.
All Source Names Request	100	User selectable choice of 4, 8, or 12 character labels.

Supported Probel SW-P-08 Commands

The MC1-MK supports a number of Probel SW-P-08 commands. The exact commands and how the card reacts to the commands is outlined in **Table 1**.

Note that the MC1-MK attempts to use the short form of the interrogate and connect message. The extended form is used whenever the source or destination numbers exceed 1024 or the level number exceeds 16.

Table 1 Probel SW-P-08 Commands

Command	Command Byte	Description
Crosspoint Interrogate	01	Where Levels are less than or equal to 16, and Destinations are less than or equal to 1024.