

Matrix Switch Corporation Embedded Web Page System Manual

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1 Web page interface

1.1 Overview

All Matrix Switch Corporation Router and Remote Panel systems include a built in web page that can be used with any standards compliant Javascript enabled web browser, including but not limited to Firefox, Chrome, Safari and recent versions of Internet Explorer.

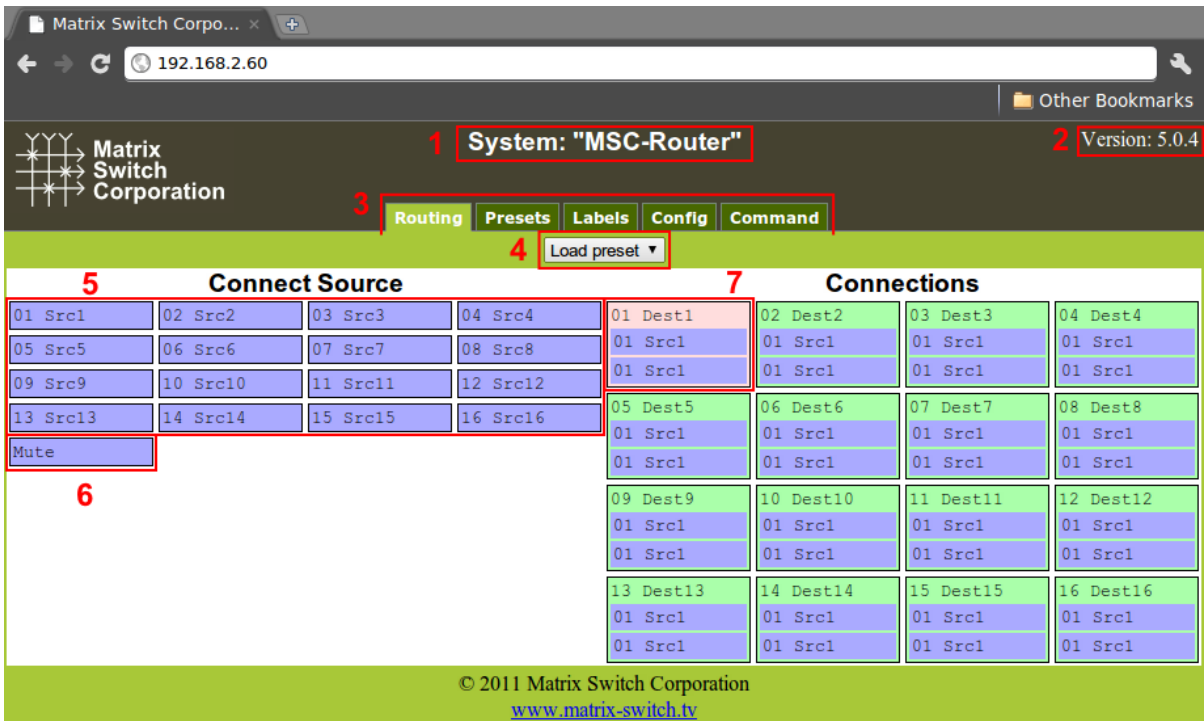


Figure 1

Figure 1 shows the Routing tab of a 16x16 switcher with 2 levels with numbered outlines to aid in further description below. The web page interface for other router systems is sized appropriately. Remote Panels show only the Config and Command tabs.

Descriptions of numbered sections in Figure 1

1. System name (can be assigned on the Config tab)
2. System firmware version
3. Tab navigation
4. Preset load drop down selection
5. Source connect buttons
6. Mute button (may not be available on all switchers and levels)
7. Currently selected destination (destination name followed by currently connected source names for both levels).

1.2 Routing Tab

The right side of the Routing tab interface under the title “Connections” displays the current state of the routing matrix. Each destination is depicted as a box containing the destination number/label followed by one or more source numbers/labels of the currently connected sources for each level of the destination. The currently selected destination is highlighted in red (#7 in Figure 1). For multi-level systems either the destination or one of the levels can be individually selected for changing all levels or a single level.

The left side of the Routing tab under the title “Connect Source” (#5 in Figure 1) displays all the available sources and Mute (if available) to connect from.

1.2.1 Changing a connection

To change a routing connection, select the desired destination by clicking on the Destination label or an individual level source label (multi-level systems only). Then click on a Source button or Mute (if available) from the “Connect Source” section. The clicked source will be connected to the selected Destination for one or more levels (depending on if the Destination or a single level is selected).

1.2.2 Loading a preset

Presets store connection states for one or more Destinations. Loading a Preset on the Routing tab consists of simply clicking on the “Load preset” drop down selector (#4 in Figure 1) and selecting the desired preset, which is then loaded and applied to the current routing matrix. More information on Presets is contained in the following Presets tab section.

Note: Presets in versions prior to 5.0.0 of Matrix Switch Corporation firmware would only store the entire matrix routing state. Versions following 5.0.0 have the ability to assign “No Change” to individual Destination levels, so that Incremental Presets can be created which only modify a subset of the available destinations.

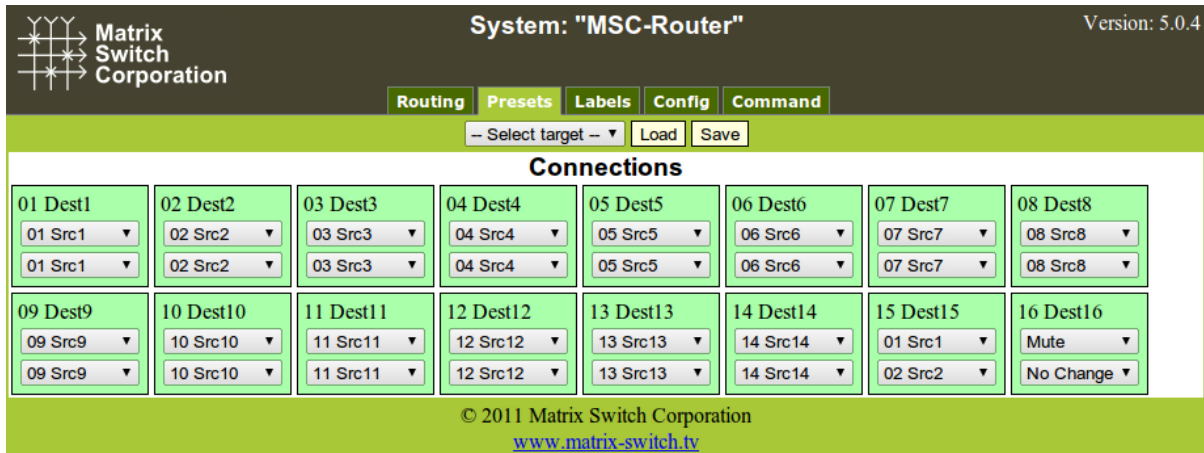


Figure 2

1.3 Presets Tab

Figure 2 depicts the Presets Tab which can be used to edit presets or perform batch matrix connection operations. Under the “Connections” title is shown the current **Work Matrix**. For each Destination the Destination number and label is displayed followed by one or more drop down selection lists for each source level. The selection lists contain all available sources (listed by source number and label) and the special values “No Change” and Mute (the latter only if available for the given level). The “No Change” option indicates that the Destination for the given Level should not be changed from its current value, when the Work Matrix is applied to the **Active Routing** matrix. Mute will output blank Video or silent Audio for the given Destination level.

1.3.1 Loading Work Matrix from a source target

The **Work Matrix** can be loaded from the current **Active Routing** matrix or a Preset. Simply select the desired source target from the “Select target” drop down list and click the **Load** button.

1.3.2 Saving Work Matrix to a target

The **Work Matrix** can be saved to one or more targets including the **Active Routing** matrix or a Preset. Simply select the desired destination target from the “Select target” drop down list and click the **Save** button.


1.3.3 Usage scenarios

The flexibility of the Presets Tab interface allows for several useful scenarios, some of which are described here.

1. Batch connection operations – To perform several connection operations all at the same time: make the desired connection changes to the **Work Matrix**, leaving all others as “No Change”, and then apply the changes to the **Active Routing** target by selecting it from the “Select target” drop down and clicking the **Save** button.

2. Store Active Routing matrix state to a Preset – The entire **Active Routing** matrix state can be stored to a Preset by first loading it to the **Work Matrix**, followed by selecting the desired target Preset and clicking the **Save** button.

3. Editing an existing Preset – Editing a Preset is done by loading it to the **Work Matrix**, making the desired changes and saving it back to the same Preset. All this is accomplished without changing the **Active Routing** matrix state.


System: "MSC-Router"
Version: 5.0.4

Routing
Presets
Labels
Config
Command

Save

Blank secondary level names use primary names.

#	Src Video	Src Audio	Dest Video	Dest Audio	#	Preset
1	Src1		Dest1		0	Startup
2	Src2		Dest2		1	Preset1
3	Src3		Dest3		2	Preset2
4	Src4		Dest4		3	Preset3
5	Src5		Dest5		4	Preset4
6	Src6		Dest6		5	Preset5
7	Src7		Dest7		6	Preset6
8	Src8		Dest8		7	Preset7
9	Src9		Dest9		8	Preset8
10	Src10		Dest10		9	Preset9
11	Src11		Dest11			
12	Src12		Dest12			
13	Src13		Dest13			
14	Src14		Dest14			
15	Src15		Dest15			
16	Src16		Dest16			

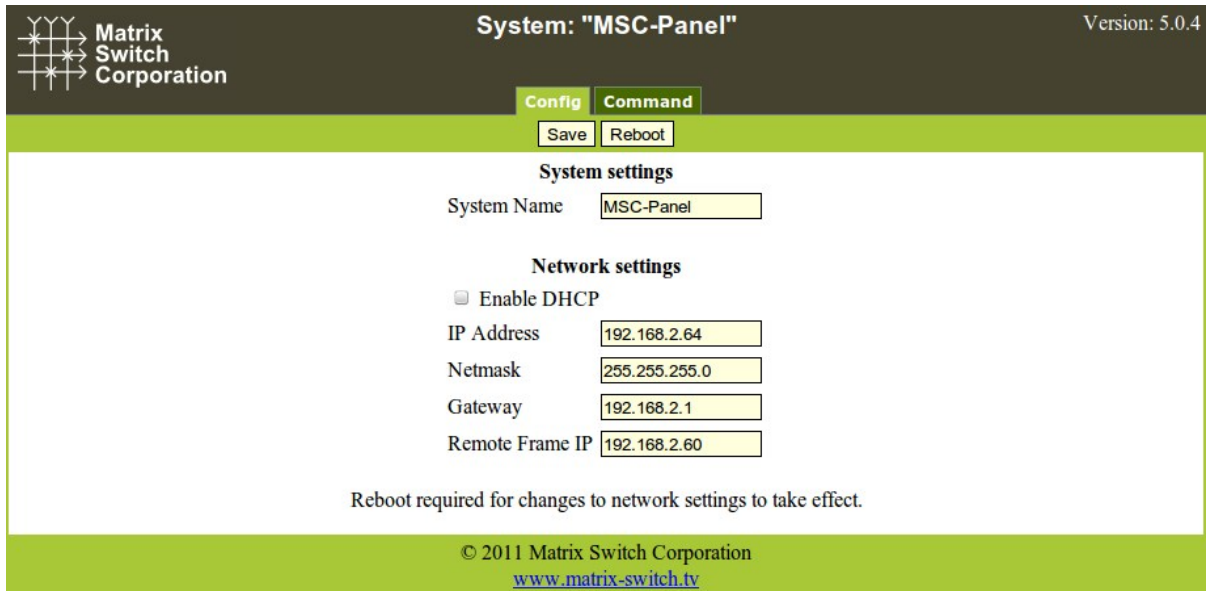
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Figure 3

1.4 Labels Tab

Figure 3 shows the Labels Tab. Click on a field or use the tab key to step between fields. Label names are limited to 8 characters including spaces. Multi-level routers will have columns for Video and Audio Sources and Destinations. Single level routers will have a column for Source labels and one for Destination labels. On multi-level routers, secondary levels can be left blank to use the same label as the first level. Presets can also be assigned label names.

Click the **Save** button after making any changes.



System: "MSC-Panel" Version: 5.0.4

Matrix Switch Corporation

Config **Command**

System settings

System Name

Network settings

Enable DHCP

IP Address

Netmask

Gateway

Remote Frame IP

Reboot required for changes to network settings to take effect.

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Figure 4

1.5 Config Tab

Figure 4 depicts the Config Tab as seen on a Remote Panel system. Router systems do not have the **Remote Frame IP** field and also differ from the default values shown.

Configuration fields

- System Name – A descriptive name of the system (up to 15 characters), displayed at the top of the Web Page interface which is helpful when managing multiple systems.
- Enable DHCP – Check this box to enable DHCP. Disables IP Address, Netmask and Gateway fields since these settings are retrieved from the DHCP server.
 - **WARNING:** A DHCP server must be present on your network for this to function properly. Using DHCP allows for dynamic IP or fixed IP assignment from a central location (the DHCP server). Using this option is only recommended if using fixed IP assignment or if there is a way to determine what IPs the Matrix Switch Corporation systems get assigned. Otherwise it may become difficult to determine what IP address to use when accessing the Web Page interface.
- IP Address – The IP address of the system.
- Netmask – The system network mask.
- Gateway – The IP address of your network's Gateway, if applicable. Only necessary on systems which access other systems outside of your network (a remote panel which accesses a router on a different network or the Internet for example).
- Remote Frame IP – The IP address of the remote Router to control (shown on Remote Panel systems only).

WARNING: DHCP should only be enabled or the **IP Address** or **Netmask** changed if one has an understanding of TCP/IP network configuration. Once the save button is pressed any changes to DHCP enable, the IP Address or the Netmask shall result in having to access the web page with the new settings. If the system includes Matrix Switch Corporation remote control panels, they must also be changed to use the new router IP address as well.

After changing any configuration settings click the **Save** button. All **Network Settings** changes require a **Reboot** to take effect, except **Remote Frame IP**. After clicking **Save**, click the **Reboot** button to restart the system. Remember to enter a new IP address into your Web browser's Location bar, if the device's IP address has changed.

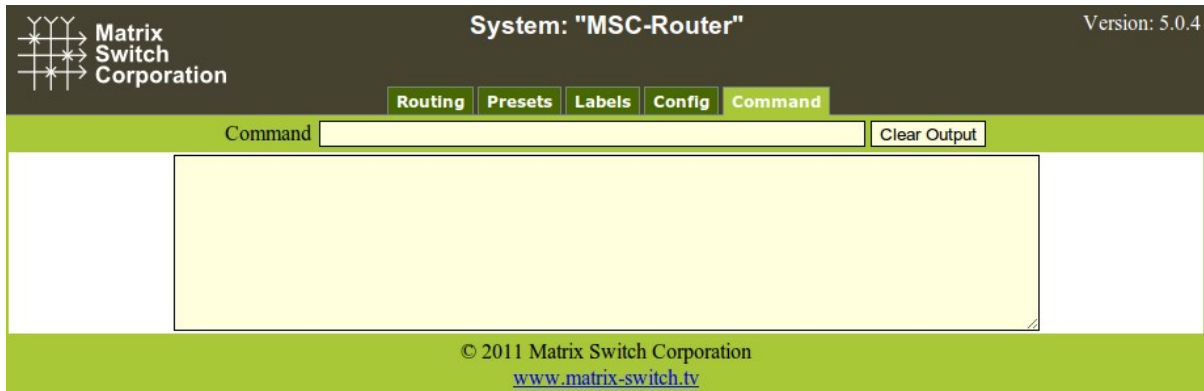


Figure 5

1.6 Command Tab

The Command Tab (Figure 5) provides access to the Mascot protocol interface. Commands are typed on the Command text entry line followed by pressing the Enter key to execute them. The results will be displayed in the text area below the command line. Clicking the **Clear Output** button will clear all command output in the lower area.

See the [Mascot Command Protocol](#) for more information.