

# EasyMix DSP Remote Control Model EM12 User Guide

The Tactile DSP Remote Control Solution



EM12 - Flout in (w/ optional  
connect-style oak wrapper)

**MYSTERY**  
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## How to connect to the EM12.

The EM12 is set to use DHCP by default. The easiest method of locating the EM12 is to connect it to a LAN that has a DHCP server. You can manually assign a static IP after accessing the EM12 setup pages.

If your LAN has a DHCP server enabled:

- 1) Connect the EM12 to your LAN.
- 2) Use one of the following options to locate the IP address of the EM12.
  - a) View the IP address in your DHCP server's address table.
  - b) Download and run our Windows [discovery tool](#).
  - c) Install and run a network diagnostic app such as Fing.

If your LAN doesn't have a DHCP server enabled:

- 1) Connect the EM12 to your LAN
- 2) The default static IP address is 192.168.0.205

## Home (status) page

<a href="#">Home</a> <a href="#">Site Setup</a> <a href="#">Network</a> <a href="#">EM 12 setup</a> <a href="#">Fader Cal</a> <a href="#">Update</a> <a href="#">Help</a>	
Status	Online
Connection info	Connected
Easy Mix IP	192.168.50.31
DSP IP	192.168.50.210
Selected type	Symetrix
DSP response time	4.3
DSP Loop	0.0
Button pressed	None
Firmware Version	1.51.8

[Test faders](#) [Test indicators](#)

- **Status** Shows connection status
- **Connection Info** Shows DSP brand specific connection info
- **EasyMix IP** EasyMix IP Address
- **DSP IP** DSP IP Address
- **Selected Type** Displays currently selected DSP brand or model
- **DSP response time** Displays the amount of time it takes for the DSP to respond to requests from the EM12.
- **DSP Loop** Elapsed time since last communication with the DSP.
- **Button Pressed** Currently pressed button on the EasyMix.
- **Firmware Version** Currently loaded firmware version.

Test Faders – allows you to run a test of the fader motors

Test Indicators – allows you to run a test of the LEDs.

# Site Setup Page

The Site Setup page allows you to link the EM12 controls to the controls in your DSP configuration file. The following controls are available for linking.

- Faders 1-24 (Banks A, B, C, and D)
- Low Shelf 1-24 (Banks A, B, C, and D)
- Hi Shelf 1-24 (Banks A, B, C, and D)
- Mid EQ 1-24 (Banks A, B, C, and D)
- Auto button 1-24 (upper button above each fader) (Banks A, B, C, and D)
- Mute button 1-24 (lower button above each fader) (Banks A, B, C, and D)
- Meter 1-24 (lower led above each fader) (Banks A, B, C, and D)
- HG 1-24 (upper led above each fader) (Banks A, B, C, and D)
- System Buttons 1-12
- Status 1-4

Choose a DSP from the dropdown list to load the default configuration for that DSP.

## Site Setup Page – BSS Soundweb London

Home Site Setup Network EM 12 setup Fader Cal Update Help

DSP	ID	Site name
BSS	0001	BSS Default

Save to EM12 Export from EM12 Import to page

No.	EM12	Bank	ON	Link	Object ID	SV ID	Type	Scale	Rate(s)
1	Fader	A	✓	✓	00.10.01	0000	Virtual Audio	Fader	0.000
2	Fader	A	✓	✓	00.10.01	0064	Virtual Audio	Fader	0.000
3	Fader	A	✓	✓	00.10.01	00C8	Virtual Audio	Fader	0.000
4	Fader	A	✓	✓	00.10.01	012C	Virtual Audio	Fader	0.000
5	Fader	A	✓	✓	00.10.01	0190	Virtual Audio	Fader	0.000
6	Fader	A	✓	✓	00.10.01	01F4	Virtual Audio	Fader	0.000
7	Fader	B	✓	✓	00.10.01	0258	Virtual Audio	Fader	0.000
8	Fader	B	✓	✓	00.10.01	02BC	Virtual Audio	Fader	0.000
9	Fader	B	✓	✓	00.10.01	0320	Virtual Audio	Fader	0.000
10	Fader	B	✓	✓	00.10.01	0384	Virtual Audio	Fader	0.000
11	Fader	B	✓	✓	00.10.01	03E8	Virtual Audio	Fader	0.000
12	Fader	B	✓	✓	00.10.01	044C	Virtual Audio	Fader	0.000

Choose BSS to load the default settings for a BSS DSP. The default settings set the DSP ID to 1 and the DSP and Communication type (found on the Network page). Note: Refer to the Audio Architect help file for instructions on how to obtain the correct Object ID's and SV ID's from your DSP file.

Save to EM12 - Saves the current configuration to the EM12. Specify a Site name to name the configuration.




Export from EM12 - Saves the current configuration stored in the EM12 to a file for later import.

Import to page - Load a configuration file to the user interface for editing.

Note: to save a configuration file for later import, configure your device and click Save to EM12. This stores the file to the EM12. Then click Export from EM12 to create a file that can be imported.

Toggle individual controls on or off independently.

Link show the status of a particular control.

-  = unknown. Save to EM12 to update the setup.
-  = no communication with particular control on the setup file. Check your settings.
-  = Communication established.

Enter the Object ID in hexadecimal for the processing block that you wish control. Note: Make sure your Audio Architect file is set to display Object ID's in hex. Go to File > Application Options > General Settings and enable both Display Addresses in Hex and Display Object addresses in Octals.

Enter the SV ID in hexadecimal for the individual control on the processing block. Do not enter 0x at the beginning of the ID.

Set the control Type.

Options are:

- Virtual Audio - For all audio objects
- Virtual Logic - For all logic objects.

Set the Scale to match the scaling of the control.

Options are:

- Button - Used for mutes and toggles.
- Fader - Level controls
- EQ Fader
- Meter
- Indicator

Set the control Rate as desired (seconds). Set meters to longer intervals to reduce load on the network.

# Site Setup Page – Rane HAL

Home Site Setup Network EM 12 setup Fader Cal Update Help

DSP	Site name
Rane	HAL Default

Save to EM12 Export from EM12 Import to page

No.	EM12	Bank	ON	Link	Control No.	Type
1	Fader	A	✓	?	1	Level
2	Fader	A	✓	?	2	Level
3	Fader	A	✓	?	3	Level
4	Fader	A	✓	?	4	Level
5	Fader	A	✓	?	5	Level
6	Fader	A	✓	?	6	Level
7	Fader	B	✓	?	7	Level
8	Fader	B	✓	?	8	Level
9	Fader	B	✓	?	9	Level
10	Fader	B	✓	?	10	Level
11	Fader	B	✓	?	11	Level
12	Fader	B	✓	?	12	Level

Choose Rane to load the default settings for a Rane DSP. The default settings set the DSP port and Communication type (found on the Network page). Note: Refer to the HAL help file for instructions on how use control numbers within your HAL system.

Save to EM12 - Saves the current configuration to the EM12. Specify a Site name to name the configuration.




Export from EM12 - Saves the current configuration stored in the EM12 to a file for later import.

Import to page - Load a configuration file to the user interface for editing.

Note: to save a configuration file for later import, configure your device and click Save to EM12. This stores the file to the EM12. Then click Export from EM12 to create a file that can be imported.

Toggle individual controls on or off independently.

Link show the status of a particular control.

-  = unknown. Save to EM12 to update the setup.
-  = no communication with particular control on the setup file. Check your settings.
-  = Communication established.

Enter the Control Number for the item that you wish control.

Set the Type to match the HAL control type.

Options are:

- EQ
- Level
- Toggle

## Site Setup Page – Symetrix SymNet and Jupiter

Home [Site Setup](#) Network EM 12 setup Fader Cal Update Help

DSP	Site name
Symetrix ▾	Symetrix

[Save to EM12](#) [Export from EM12](#) [Import to page](#)

No.	EM12	Bank	ON	Link	Control No.	Scale
1	Fader	A	✓	✓	1001	Fader ▾
2	Fader	A	✓	✓	1002	Fader ▾
3	Fader	A	✓	✓	1003	Fader ▾
4	Fader	A	✓	✓	1004	Fader ▾
5	Fader	A	✓	✓	1005	Fader ▾
6	Fader	A	✓	✓	1006	Fader ▾
7	Fader	B	✓	✓	1007	Fader ▾
8	Fader	B	✓	✓	1008	Fader ▾
9	Fader	B	✓	✓	1009	Fader ▾
10	Fader	B	✓	✓	1010	Fader ▾
11	Fader	B	✓	✓	1011	Fader ▾
12	Fader	B	✓	✓	1012	Fader ▾

Choose Symetrix or Jupiter to load the default settings for a Symetrix or Jupiter DSP. The default settings will match the example DSP Supermodule file found on [www.easymix.net](http://www.easymix.net). The default settings also set the DSP port and Communication type (found on the Network page). Note: Refer to the Symetrix help file for instructions on how to use control numbers within your SymNet or Jupiter Site file.

Save to EM12 - Saves the current configuration to the EM12. Specify a Site name to name the configuration.




Export from EM12 - Saves the current configuration stored in the EM12 to a file for later import.

Import to page - Load a configuration file to the user interface for editing.

Note: to save a configuration file for later import, configure your device and click Save to EM12. This stores the file to the EM12. Then click Export from EM12 to create a file that can be imported.

Toggle individual controls on or off independently.

Link show the status of a particular control.

-  = unknown. Save to EM12 to update the setup.
-  = no communication with particular control on the setup file. Check your settings.
-  = Communication established.

Enter the Control Number for the item that you wish control.

Set the Scale to match the SymNet control.

Options are:













- Fader
- EQ
- BEQ (British EQ)
- Meter
- Switch

## Site Setup Page – Biamp Tesira

Home [Site Setup](#) Network EM 12 setup Fader Cal Update Help

DSP	Site name
Tesira	Tesira 1

Save to EM12
Export from EM12
Import to page

No.	EM12	Bank	ON	Link	Instance ID	Index	Type	Rate(s)
1	Fader	A	<input checked="" type="checkbox"/>		A1001	1	level	0.000
2	Fader	A	<input checked="" type="checkbox"/>		A1001	2	level	0.000
3	Fader	A	<input checked="" type="checkbox"/>		A1001	3	level	0.000
4	Fader	A	<input checked="" type="checkbox"/>		A1001	4	level	0.000
5	Fader	A	<input checked="" type="checkbox"/>		A1001	5	level	0.000
6	Fader	A	<input checked="" type="checkbox"/>		A1001	6	level	0.000
7	Fader	B	<input checked="" type="checkbox"/>		A1001	7	level	0.000
8	Fader	B	<input checked="" type="checkbox"/>		A1001	8	level	0.000
9	Fader	B	<input checked="" type="checkbox"/>		A1001	9	level	0.000
10	Fader	B	<input checked="" type="checkbox"/>		A1001	10	level	0.000
11	Fader	B	<input checked="" type="checkbox"/>		A1001	11	level	0.000
12	Fader	B	<input checked="" type="checkbox"/>		A1001	12	level	0.000

**Prerequisite:** You will need to enable Telnet communication within Tesira before the EM12 will connect.

Choose Tesira to load the default settings for a Tesira DSP. The default settings set the DSP port and the Communication type (found on the Network page). Note: Refer to the Tesira help file for instructions on how to obtain the correct Instance ID's, Indexes, and control Type from your DSP layout file.

Save to EM12 - Saves the current configuration to the EM12. Specify a Site name to name the configuration.






Export from EM12 - Saves the current configuration stored in the EM12 to a file for later import.

Import to page - Load a configuration file to the user interface for editing.

Note: to save a configuration file for later import, configure your device and click Save to EM12. This stores the file to the EM12. Then click Export from EM12 to create a file that can be imported.

Toggle individual controls on or off independently.

Link show the status of a particular control.

-  = unknown. Save to EM12 to update the setup.
-  = no communication with particular control on the setup file. Check your settings.
-  = Communication established.

Enter the Instance ID for the processing block that you wish control. This field is limited to 7 characters.

Enter the Index for the individual control in the processing block.

Set the control Type.

Options are:

- SourceSelection
- Bypass
- Mute
- GainReduction
- Level
- Gain
- State

Set the control Rate as desired (seconds). It is recommended that the following control types have a polling rate of at 3 seconds or more to reduce load on the DSP.

- Gain
- State
- SourceSelection
- Bypass

# Site Setup Page – Q-Sys

Home [Site Setup](#) Network EM 12 setup Fader Cal Update Help

DSP	Site name
Symetrix	Symetrix

[Save to EM12](#) [Export from EM12](#) [Import to page](#)

No.	EM12	Bank	ON	Link	Control No.	Scale
1	Fader	A	✓	✓	1001	Fader
2	Fader	A	✓	✓	1002	Fader
3	Fader	A	✓	✓	1003	Fader
4	Fader	A	✓	✓	1004	Fader
5	Fader	A	✓	✓	1005	Fader
6	Fader	A	✓	✓	1006	Fader
7	Fader	B	✓	✓	1007	Fader
8	Fader	B	✓	✓	1008	Fader
9	Fader	B	✓	✓	1009	Fader
10	Fader	B	✓	✓	1010	Fader
11	Fader	B	✓	✓	1011	Fader
12	Fader	B	✓	✓	1012	Fader

Choose Symetrix to load the default settings for a Q-Sys DSP. The default settings also set the DSP port and Communication type (found on the Network page). Note: Symetrix and Q-Sys are sharing the same external protocol for the EM12.

Save to EM12 - Saves the current configuration to the EM12. Specify a Site name to name the configuration.




Export from EM12 - Saves the current configuration stored in the EM12 to a file for later import.

Import to page - Load a configuration file to the user interface for editing.

Note: to save a configuration file for later import, configure your device and click Save to EM12. This stores the file to the EM12. Then click Export from EM12 to create a file that can be imported.

Toggle individual controls on or off independently.

Link show the status of a particular control.

-  = unknown. Save to EM12 to update the setup.
-  = no communication with particular control on the setup file. Check your settings.
-  = Communication established.

# Network Page

Home Site Setup <b>Network</b> EM 12 setup Fader Cal Update Help	
EasyMix Static IP address	<input type="text" value="192.168.0.205"/>
DHCP	<input type="text" value="DHCP"/>
DSP IP address	<input type="text" value="192.168.50.210"/>
DSP Port	<input type="text" value="48631"/>
Communication type	<input type="text" value="TCP/IP"/>
<input type="button" value="Save changes"/>	

EasyMix Static IP address – Set a static IP address for the EasyMix.

DHCP – Select Static IP or DHCP. If DHCP is enabled and a DHCP server is present on your network then the static IP address entered above will be ignored.

DSP IP address – Set the IP address of your DSP.

DSP Port – Set the port used by your DSP. Note: this setting defaults to the correct port used by the DSP when set in the Site Setup Page. Change here for advanced purposes.

Communication Type – UDP/IP or TCP/IP

# EM 12 Setup Page

## Misc. Settings

Home Site Setup Network <b>EM 12 setup</b> Fader Cal Update Help	
Misc Settings	
EQ timeout	<input type="text" value="10"/>
Minimum Loop (ms)	<input type="text" value="10"/>
Mute LEDs	<input type="text" value="Normal"/>
Auto LEDs	<input type="text" value="Normal"/>

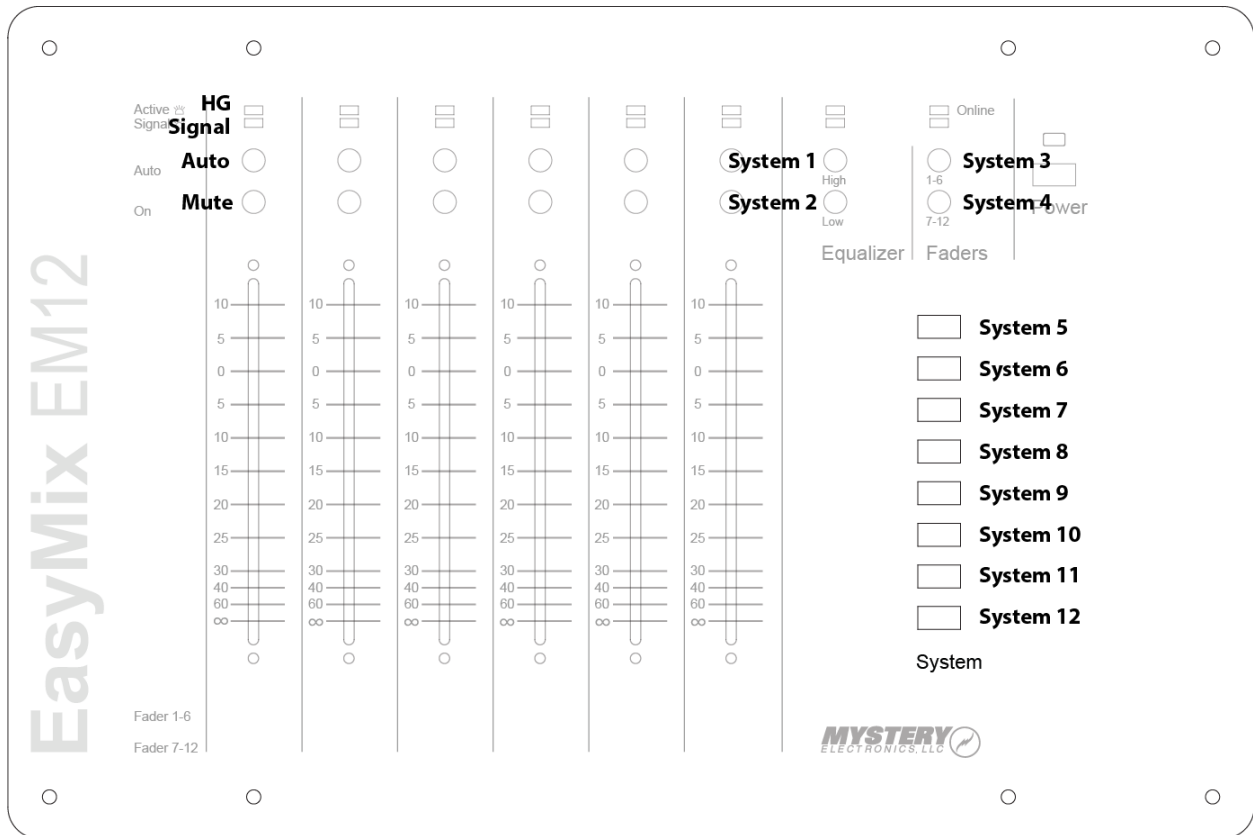
- EQ Timeout – This is the amount of time that the EM12 remains in EQ mode before reverting back to fader mode.
- Minimum Loop (ms) – Unused
- Mute LEDs – Choose between Invert or Normal to change the state of the LED in relation to the state of the button in the DSP.
- Auto LEDs – Choose between Invert or Normal to change the state of the LED in relation to the state of the button in the DSP.

## System Buttons

Location	Map	Delay	Invert
System 1	High	0	Invert
System 2	Low	0	Invert
System 3	1-6	0	Normal
System 4	7-12	0	Normal
System 5	Unused	0	Invert
System 6	Unused	0	Invert
System 7	System 3	0	Invert
System 8	System 4	0	Invert
System 9	System 5	0	Invert
System 10	System 6	0	Invert
System 11	System 7	0	Invert
System 12	System 8	0	Invert

This section allows you to map the 12 System button on the EasyMix to a function or control in the **Site Setup Page**.

- Map – Choose from:
  - Unused
  - 1-6 (Bank A)
  - 7-12 (Bank B)
  - 13-18 (Bank C)
  - 19-24 (Bank D)
  - Hi
  - Low
  - Mid
  - System 1 through System 12
- Delay – Choose 0 for a latched button. Choose a value other than 0 to make the button act as a momentary button. Time is in milliseconds.
- Invert - Choose between Invert or Normal to change the state of the LED in relation to the state of the button in the DSP.



## Faders

Faders					
Location	Fader	Auto	Mute	Signal	High Gain
Fader 1	Fader	OFF	OFF	ON	ON
Fader 2	Fader	OFF	OFF	ON	ON
Fader 3	Fader	OFF	OFF	ON	ON
Fader 4	Fader	OFF	OFF	ON	ON
Fader 5	Fader	OFF	OFF	ON	ON
Fader 6	Fader	OFF	OFF	ON	ON

This section allows you to configure the 6 faders and the buttons and LEDs above the faders.

- Fader – Choose between Fader and Master. A Fader designated as a Master fader will remain available on every layer.
- Auto – Enables or disables the upper button above each fader.
- Mute - Enables or disables the lower button above each fader.
- Signal – Enables or disables the lower LED above each fader.
- High Gain - Enables or disables the upper LED above each fader.

# Fader Cal Page

Calibrate the faders using the adjustments available on this page.

Home Site Setup Network EM 12 setup **Fader Cal** Update Help

	Fader 0	Fader 1	Fader 2	Fader 3	Fader 4	Fader 5
Raw value	241	373	442	476	491	499
0 Value	<input type="text" value="405"/>	<input type="text" value="405"/>	<input type="text" value="405"/>	<input type="text" value="405"/>	<input type="text" value="405"/>	<input type="text" value="405"/>
30 Value	<input type="text" value="75"/>	<input type="text" value="75"/>	<input type="text" value="75"/>	<input type="text" value="75"/>	<input type="text" value="75"/>	<input type="text" value="75"/>
Move to 0 db	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>
Move to -30 db	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>	<input type="button" value="Go"/>

# Update Page

Home Site Setup Network EM 12 setup Fader Cal **Update** Help

Bootloader Version 1.00.4

No file chosen

Upload firmware updated to the EasyMix from this page. You must have a USB drive in the USB slot on your EasyMix for this to work.

1. Browser to select the firmware update
2. Upload Firmware
3. Reboot

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.