DMX Thief™
EvenLED Panel Configuration Tool
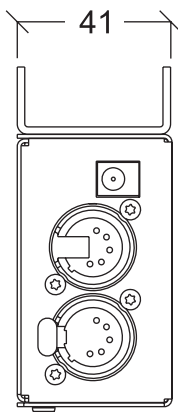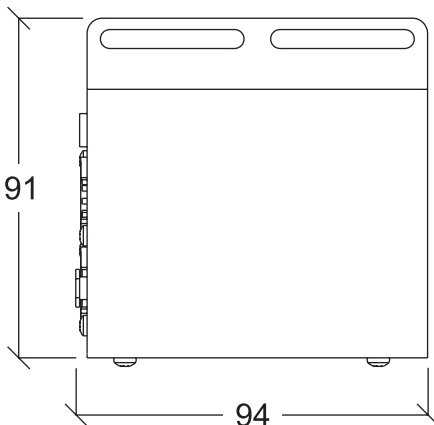
User manual

DC

DMX IN

DMX OUT

THIEF

MENU   ENTER   UP   DOWN
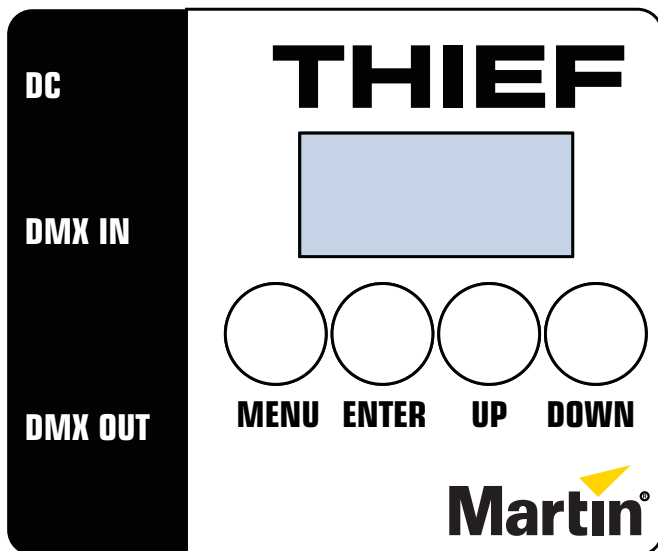
Martin®

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Dimensions

All dimensions are in millimeters

91

94

41

P/N 35000224, Rev. A

Safety information

Warning!   **This product is not for household use. Read this manual before operating the product, follow the safety precautions listed below, and observe all warnings in this manual and printed on the product. Use the product only as described in this manual and in accordance with all applicable laws and regulations.**

If you have questions about how to operate any product in a Martin EvenLED installation safely, please contact your Martin supplier or call the Martin 24-hour service hotline on +45 8740 0000, or in the USA on 1-888-tech-180.

- If this product, its external PSU (power supply unit) or any cables connected to them are in any way damaged, defective, wet, or show signs of overheating, disconnect them from power immediately and contact Martin for assistance.
- Do not operate the product or PSU if any parts are missing.
- The product and PSU are not waterproof. Do not allow them to get wet. Protect them from rain and water projections. Do not immerse them in water.
- There are no user-serviceable parts inside the product and PSU. Do not remove covers or attempt to repair a faulty product. Refer all service to a service technician authorized by Martin.
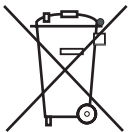
Disposing of this product

Martin products are supplied in compliance with Directive 2002/96/EC of the European Parliament and of the Council of the European Union on WEEE (Waste Electrical and Electronic Equipment), as amended by Directive 2003/108/EC, where applicable.

Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of Martin products.

Contents

Introduction

The DMX Thief™ from Martin Professional™ is a compact DMX signal processor for use in Martin EvenLED™ installations. It allows you to:

• Set custom DMX addresses for EvenLED panels.
• Control LEDs in panels as one or more groups.
• Emulate a panel to avoid changing DMX addresses at the controller if a panel is removed from an installation.
• Insert another DMX-controlled device on an EvenLED DMX data link.

The DMX Thief does not configure EvenLED panels, it simply processes the DMX signal to obtain the results listed above. To configure panels, you must send specific strings of DMX values from a DMX controller (see the EvenLED user manual for details).

The user documentation (including the most recent version of this manual) for all Martin EvenLED products is available for download free of charge from the Martin website at www.martin.com

Unpacking

A 12 V PSU (power supply unit) is packed with the DMX Thief. Do not supply the DMX Thief with power from any other device. Replacement PSUs are available from Martin.

Installing the DMX Thief

Connecting to power

The PSU supplied with the DMX Thief is auto-sensing and accepts AC mains power at 100-240 V, 50/60 Hz. Plug it into a mains power outlet and connect the lead from the PSU to the DC power input socket on the DMX Thief.

Connecting on a DMX link

The DMX Thief can be connected at any point after the controller on a DMX link using its 5-pin XLR **DMX IN** and **DMX OUT** connectors.

Using the DMX Thief

Before using the DMX Thief, we strongly recommend that you read the EvenLED user manual, particularly the section on planning the DMX control system. This section explains how EvenLED panels handle DMX channels and DMX addressing.

Using the control panel

When you power the DMX Thief on, it displays its product name, software (firmware) version and then current DMX address in its 7-segment LED display.
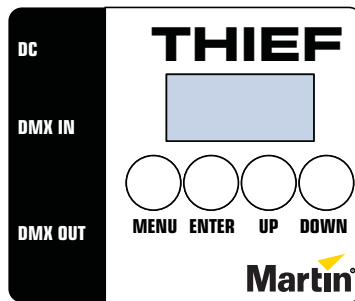
Figure 1. : DMX Thief control panel

- To enter a menu, press **MENU**.
- Press **UP** and **DOWN** to move within the menu.
- To confirm a selection or enter a submenu, press **ENTER**.
- To escape a function or menu, press **MENU**.

Resetting to factory defaults

Holding the **MENU** button pressed down while you apply power to the DMX Thief resets it to the factory defaults when you release the button. The default configuration is:

- DMX address **001**
- **16-bit** resolution at both input and output
- Y-scale mode **Normal**
- Patch mode **Normal**
- Steal mode **Off**

Control menus

The following menu commands and options are available in the control panel:

Menu	Item	Options	Function
Intro	When power is applied, the DMX Thief scrolls its product name and software version number twice and then enters start mode		
Start mode	Shows DMX address as H-**XXX**, where **XXX** is a DMX address from $00 1$ to $5 10$		
$nEnU$	$Hddr$		Set the DMX Thief's DMX address
	$[onF$	$I n$	Toggles between 8- or 16-bit input from the lighting desk
		$0UE$	Toggles between 8- or 16-bit output to the panel(s)
		$I nu$	Selects Y inversion ($YI nu$) and normal Y axis($Ynor$)
	$PREC$	$n0rn$	Sets normal mode (individual pixel control)
		$qUAd$	Sets quad mode (4-block control)
		$H0r2$	Sets horizontal 2 mode (2 horizontal strips)
		$H0r4$	Sets horizontal 4 mode (4 horizontal strips)
		$uEr2$	Sets vertical 2 mode (2 vertical strips)
		$uEr4$	Sets vertical 4 mode (4 vertical strips)
		$FULL$	Sets full panel mode
	$5EEA$		Steal mode
	$I nF0$	$uEr5$	Displays software version
		$I n$	Displays input setting (8- or 16-bit)
		$0UE$	Displays output setting (8- or 16-bit)
		$I nu$	Displays inversion mode setting
		$PREc$	Displays patch mode setting
		$5EEA$	Displays steal mode setting
	$r9b$		Starts RGB test sequence (red, green, blue, open white, off)

Table 2: Control menus

DMX address setting in the $Hddr$ menu

The DMX address of a DMX-compliant device is the first of the DMX channels the device will accept control commands on.

As explained in the EvenLED user manual, EvenLED panels only respond to commands sent on DMX channels starting at channel 1. However, the DMX Thief lets you send DMX commands to EvenLED panels at any DMX address.

For example, if you set the DMX Thief to:

- 16-bit mode input and output in the $ConF$ menu (when both controller and EvenLED panels are in 16-bit mode and use 6 DMX channels per pixel)
- Normal mode in the $PAtC$ menu (so that you control each of the panels' 16 LEDs as individual pixels)
- DMX address 33

then:

- the DMX Thief will receive DMX commands from the controller via the DMX Thief's **DMX IN** on 96 DMX channels starting at channel 33 (i.e. on channels 33 to 128)
- the DMX Thief will re-send those DMX commands to the next EvenLED panel on the link via the DMX Thief's **DMX OUT** on 96 DMX channels starting at channel 1 (i.e. on channels 1 - 96)
- DMX channels 1 - 32 and channels 129 - 512 at the controller are available to control other devices.

8- and 16- bit modes in the $ConF$ menu

The DMX Thief is set to 16-bit mode input and output by default. If you are using 8-bit mode at your controller and have set EvenLED panels to 8-bit mode, set the DMX Thief to 8-bit input and output in the $ConF$ menu. The DMX Thief will receive and send commands on the 48 coarse control channels only.

If you do not need fine control and want to work in 8-bit mode at your controller to reduce the number of controller channels required, but you want to leave all your EvenLED panels in 16-bit mode, set the DMX Thief to 8-bit input and 16-bit output. The DMX Thief will receive commands on only the 48 coarse control channels in the 8-bit range (channels 1, 2, 3, 4 ... up to channel 48) but it will reallocate the commands to only the coarse control channels in the 16-bit range (channels 1, 3, 5, 7 ... up to channel 96). The 48 fine control channels will simply stay at zero.

It is also possible to work in 16-bit mode at the controller with panels set to 8-bit mode. In this case, set the DMX Thief to 16-bit input and 8-bit output. The DMX Thief will receive commands on coarse and fine control channels but it will only send commands on the coarse control channels in the 8-bit range (channels 1, 2, 3, 4 ... up to channel 48). Commands sent on the fine control channels at the controller will be ignored.

Y-axis inversion in the ⌐onF menu

Inverting the Y-axis reverses the order in which DMX channels are mapped to rows of pixels. Figure 3. shows pixel mapping for a panel in 16-bit mode.

73	79	85	91
49	55	61	67
25	31	37	43
1	7	13	19

Normal

1	7	13	19
25	31	37	43
49	55	61	67
73	79	85	91

Inverted

Figure 3. Y-axis inversion

Grouped LED control options in the PAtC menu

You can put LEDs into groups that are controlled as single units (i.e. single pixels) at the DMX controller.

Note that if you group LEDs, panels will still use 96 channels in 16-bit mode or 48 channels in 8-bit mode, so you will not reduce the number of DMX channels each panel uses.

With the EvenLED panel set to 16-bit mode with Y-axis **Normal**, you can use the PAtC menu to put LEDs into the groups shown in Figure 4.

13	19
1	7

Quad

7
1

Horizontal 2

19
13
7
1

Horizontal 4

1

Full

1	7

Vertical 2

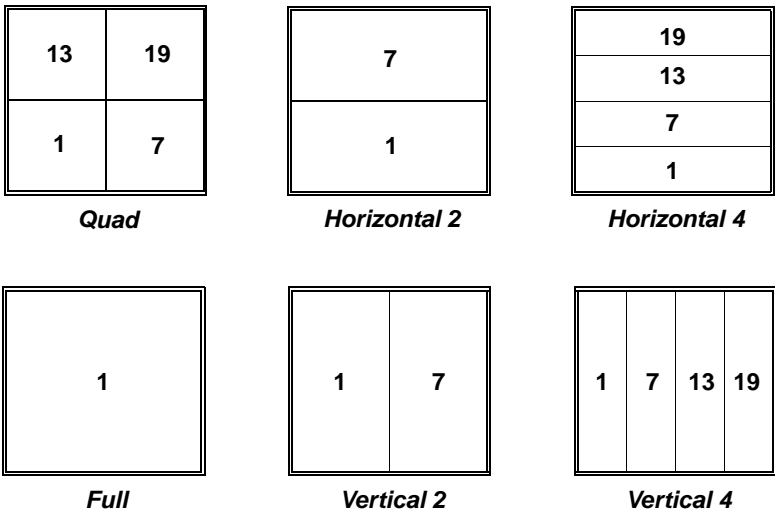| 1	7	13	19

Vertical 4

Figure 4. Groupings, 16-bit, Y-axis normal

If the panel is set to 16-bit mode with the Y-axis **Inverted**, you can put LEDs into the **Quad** and **Horizontal** groups shown in Figure 5.
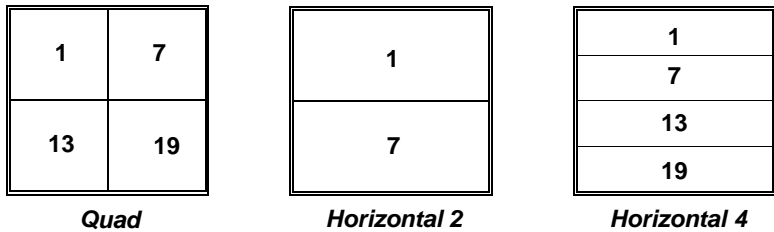
1	**7**
13	**19**

Quad

1
7

Horizontal 2

1
7
13
19

Horizontal 4

Figure 5. Groupings, 16-bit, Y-axis inverted

If you put the panel into 8-bit mode:

• groups controlled on channel 7 in the diagrams above are controlled on channel 4

• groups controlled on channel 13 in the diagrams above are controlled on channel 7

• groups controlled on channel 19 in the diagrams above are controlled on channel 10.

Emulating panels in � mode

If you set **Steal** mode to **On**, the DMX Thief emulates an EvenLED panel by subtracting DMX channels from the DMX signal and re-addressing the remaining channels to DMX address 001 (see the EvenLED panel user manual for details of how panels subtract DMX channels).

You can therefore insert the DMX Thief on the DMX link as a substitute for an EvenLED panel if you need to remove that panel from the link. Because the DMX Thief emulates the missing panel, you do not have to change the addresses of other panels at your DMX controller.
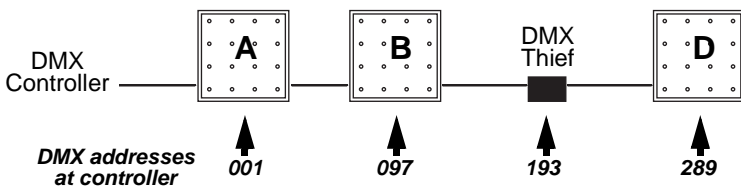

Figure 6. Emulating an EvenLED panel

An example is shown in Figure 6. In an installation with the DMX controller and all EvenLED panels operating in 16-bit mode and with four panels: **A**,

B, **C** and **D**, you remove panel **C**. Set the DMX Thief to 16-bit input and output, set it to **Steal** mode and connect it in place of panel **C** between panels **B** and **D**. The DMX Thief subtracts 96 channels from the DMX signal, meaning that you do not have to change the address of panel **D** at the DMX controller.

Viewing status information in the I nFo menu

The I nFo menu lets you view the current DMX Thief settings, but it does not allow you to change them. In the I nFo menu you can check the 16-bit or 8-bit settings for input and output, the Y-axis inversion setting, pixel grouping, and you can see whether steal mode is active.

Running a test with the r9b command

Applying an r9b command starts a test sequence in which pixels light red, green, blue, open white, and then zero intensity.

Service

There are no user-serviceable parts in the DMX Thief or its external PSU. Service and repairs must be carried out by a service technician authorized by Martin.

To clean the DMX Thief, use a soft cloth slightly dampened with a solution of water and detergent. Do not use solvents or abrasives. Do not allow the DMX Thief or PSU to come into contact with water.

Troubleshooting

Problem	Probable cause(s)	Suggested remedy
No response from DMX Thief	PSU not connected	Check connections
Unexpected behavior from panels on DMX link	Fault in cable or connections	Check for faults or bad connections
	Faulty device	Bypass devices by connecting DMX input and output cable connectors together until normal operation is restored. Have faulty device serviced.
Unexpected behavior from panels downstream of DMX Thief on DMX link	DMX Thief is not set to correct DMX address	Check DMX address setup at controller and adjust DMX Thief's DMX address
	Pixels incorrectly grouped	Adjust pixel grouping in DMX Thief's PREC menu
	Incorrect 8-bit or 16-bit input or output settings	Check that settings in DMX Thief's ConF menu match controller and panel settings
Unexpected behavior from panels downstream of DMX Thief when used to substitute for a panel or insert a different fixture	DMX Thief not set to Steal mode	Set to StEA mode in control menu
Impossible to adjust settings in DMX Thief control menu	You are in the InFo menu	Exit the InFo menu and use the other menus to adjust settings

Specifications

Physical

Height . . . . 91 mm (3.6 in.)
Width. . . . . 41 mm (1.6 in.)
Depth . . . . 94 mm (3.7 in.)
Weight. . . . . 350 g (12.4 oz.)
Construction . . . . Steel

Installation

Orientation . . . . Any
Minimum ambient temperature . . . . .5° C (41° F)
Maximum ambient temperature . . . . .45° C (113° F)

Electrical

Voltage range, external PSU. . . . . .100-240 V, 50/60 Hz

Connections

DMX in/out . . . . 5-pin locking XLR
External PSU . . . . Barrel connector

Included items

External PSU (EU models) . . . . .P/N 06190010
External PSU (US models) . . . . .P/N 06190011
DMX Thief™ user manual . . . . .P/N 35000224

Accessories

EvenLED™ Software Uploader . . . . .P/N 90758097

Ordering information

EvenLED™ DMX Thief™, EU model . . . . .P/N 90758096
EvenLED™ DMX Thief™, US model . . . . .P/N 90758098

Specifications subject to change without notice

Notes

DMX Thief user manual

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