

Exterior Linear Pro Series

Exterior Linear Pro QUAD Cove and QUAD Graze
Exterior Linear Pro CTC Cove and CTC Graze
Exterior Linear Pro DV

User manual

(with Installation and Safety Manual attached)

QUAD Cove



QUAD Graze



QUAD DV



CTC Cove



CTC Graze



Junction Box Power DMX to PD



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Introduction



Warning! Before installing, operating or servicing the Exterior Linear Pro lighting fixture, read the latest version of the fixture's Safety and Installation Manual, paying particular attention to the Safety Precautions section. The Safety and Installation Manual is supplied with the fixture and also included at the back of this user manual.

Important! Full specifications for Exterior Linear Pro fixtures and accessories are available in the Exterior Linear Pro area of the Martin® website at www.martin.com.

Thank you for selecting the Exterior Linear Pro lighting fixture from Martin.

This User Guide is a supplement to the Safety and Installation Manual that is supplied with the fixture and attached to the back of this User Manual. This combined User Manual plus Safety and Installation Manual is available for download from the Exterior Linear Pro area of the Martin website at www.martin.com. The User Manual contains information that is mainly of interest for lighting designers and operators, whereas the Safety and Installation Manual contains important information for all users, especially installers and technicians.

We recommend that you check the Martin website regularly for updated documentation. We publish revised versions each time we can improve the quality of the information we provide and each time we release new firmware with changes or new features. Each time we revise this guide we list any important changes on page 2 so that you can keep track of updates.

Exterior Linear Pro Series

The Exterior Linear Pro Series from Martin is a line of rugged LED-based outdoor lighting fixtures. Variants are available to suit a range of applications.

Applications and design

Three types of fixture design are available:

- **Graze** variants are designed for illumination of walls or other surfaces.
- **Cove** variants are designed for a range of indirect lighting applications.
- **DV** variants are designed for direct viewing and feature 6-inch (15 cm) segment control for low-resolution animation effects.

Color and CTC

QUAD color mixing

Exterior Linear Pro QUAD variants feature RGBW LEDs and offer RGB control with automatic addition of White. They have a resolution of 8 x LEDs per foot (30 cm). QUAD fixtures have a dedicated color temperature control channel which accurately follows the black body curve from 1000 K to 12 850 K.

Besides global control of the fixture, QUAD variants feature DMX modes that give RGB control of individual segments. In segment control modes, you can adjust the default color temperature via RDM.

QUAD fixtures are available in the following variants:

- **Graze** (15° beam angle)
- **Cove** (100° beam angle)
- **DV** (Direct View with round diffuser)

CTC

Exterior Linear Pro Controllable Color Temperature (CTC) variants feature even higher light quality and efficacy than QUAD variants. They offer White CT mixing from 2700 to 6500 K with 3 x discrete color LEDs for high efficacy, with a resolution of 12 x LEDs per foot (30 cm).

CTC fixtures are available in the following variants:

- **Graze** (9° native beam angle)
- **Cove** (100° native beam angle)

Fixture length

All fixtures are available in **1.02 ft.** (312 mm) and **4.02 ft.** (1227 mm) lengths.

Mounting options

A range of mounting options is available. See the Exterior Linear Pro Series Safety and Installation Manual for details.

Asymmetric diffusers for Graze variants

Microlens asymmetric diffuser film accessories are available for Graze variants only. The diffusers give additional beam angle options. See the Exterior Linear Pro area of the Martin website at www.martin.com for details.

Features

All Exterior Linear Pro Series fixtures feature:

- Long-life, high output LEDs
- DMX control
- RDM configuration and addressing
- Stand-alone light show function with up to 20 scenes, compatible with other Martin fixtures
- Functional and discreet optional glare shield and louvre accessories
- Operation as single units or divided into segments down to 6 inches (15 cm) in length
- IP66 ingress protection rating (suitable for permanent outdoor use)
- Integrated 100-277 V, 50/60 Hz auto-ranging AC power supply
- Easy cabling with hybrid (combined power and data) daisy-chain cables
- Range of mounting options
- Local diagnostics called up by swiping magnet over fixture.

Before using the product for the first time

1. Check the Exterior Linear Pro area of the Martin website at www.martin.com for the most recent user documentation and technical information about the fixture. Martin user manual revisions are identified by the revision letter at the bottom of the inside cover. Read the latest revision of the Exterior Linear Pro Safety and Installation Manual that is included at the end of the User Manual, paying particular attention to the 'Safety Precautions' section.
2. Unpack and ensure that there is no transportation damage before using the fixture. Do not attempt to operate a damaged fixture.
3. Before operating, ensure that the voltage and frequency of the power supply match the power requirements of the fixture.
4. Remove the protective film from the front lens when you have finished installing the fixture.
5. If fixtures are exposed to a sudden temperature change, give them time to warm or cool to the ambient temperature before applying power. This will help avoid damage due to condensation.

Setting up fixtures



Warning! Read the Safety and Installation Manual that is included at the end of this User Manual, paying particular attention to the Safety Precautions section, before setting up the fixture for use.

This chapter covers the use of Martin Companion to set up and manage the Exterior Linear Pro via RDM. While we recommend the use of Martin Companion, most of the commonly available RDM controllers also support the Exterior Linear Pro. Check with the controller manufacturer if you cannot find the Martin Exterior Linear Pro in the list of supported fixtures. The exact procedures and command names used by different RDM controllers vary.

Setting up single or multiple fixtures

You can set behavior in one fixture by sending a unicast RDM command to that one fixture only, or you can set behavior in all the fixtures on the data link by sending a broadcast RDM command to all the fixtures.

Martin Companion[®] and RDM

To set up Exterior Linear Pro fixtures via RDM, we invite you to use the **Martin Companion Cable** PC-to-DMX interface that is available as an accessory from Martin suppliers. This tool plugs into the USB port of a Windows PC and connects to Martin fixtures over the DMX data link. The Martin Companion Cable is designed to work together with the **Martin Companion software suite** for Windows PCs that can be downloaded free of charge from the Martin website at www.martin.com. The Martin Companion software suite will always offer the latest Exterior Linear Pro features and firmware when your PC is connected to the Internet.

Instructions for connecting the Martin Companion Cable are supplied with the tool and can also be downloaded from the Martin website.

Martin Companion offers the following features:

- Simple PC-based user interface
- Update of fixture firmware
- RDM configuration and addressing
- Standalone show programming with automatic start when fixtures are powered on.

RDM functions

A full list of the RDM functions that Exterior Linear Pro fixtures support is given at the end of this chapter. These functions are generally referred to using the more specific term 'PIDs' or 'Parameter IDs'.

Fixture discovery

Before you can communicate with fixtures using RDM, you must send a scan command (fixture discovery command) to all the devices on the data link so that the RDM controller can identify them. It does this by retrieving each device's factory-set unique identifier (UID). This process can take some time, depending on the number of devices on the link.

To identify the fixtures on the link:

1. Check that the fixtures are correctly connected to the RDM controller on the data link and that power is applied to all fixtures.
2. Send a discovery command via RDM (Martin Companion does this automatically as soon as the cable is connected).
3. Give the controller time to identify the devices on the link and prepare for communication with the devices.

Supported parameters

Exterior Linear Pro fixtures can communicate the control parameters that they support to the RDM controller and give brief information on each parameter.

Setting up DMX operation

Setting DMX mode

This RDM command lets you set the DMX mode of fixtures on the data link. The different DMX modes available give you a range of options for color or color temperature control as well as letting you control the fixture as one unit or divide the fixture into individually controlled segments. See the 'DMX protocols' section at the end of this manual for details of the modes and control options available.

Because DMX mode affects the number of DMX channels a fixture uses, it will affect the assignment of DMX addresses to fixtures. You should therefore set the DMX mode of all the fixtures in the installation before you set their DMX addresses.

See the 'DMX protocols' section at the end of this manual for an overview of the functions available and number of DMX channels used by Exterior Linear Pro fixtures.

You can set the DMX mode of one fixture by sending a unicast RDM command to that one fixture only, or you can set the DMX mode of all the fixtures on the data link by sending a broadcast RDM command to all the devices on the link.

Setting DMX addresses

This RDM command lets you set the DMX addresses of fixtures on the data link.

A fixture's DMX address is the first DMX channel it uses to receive data communication. It uses this channel and the channels immediately above it. If a fixture has DMX address 001 and the fixture uses four DMX channels, it will use channels 001, 002, 003 and 004. DMX address 005 will be available as a DMX address for the next fixture on the data link. If this fixture also uses four DMX channels, the next available DMX address will be 009, and so on.

You can set the DMX address of one fixture by sending a unicast RDM command to that one fixture only, or you can set all the fixtures on the data link to the same DMX address by sending a broadcast RDM command to all the devices on the link. If all the fixtures have the same DMX address, they will behave identically and you will not be able to control any single fixture independently.

An example procedure might look like this, depending on which RDM controller you use:

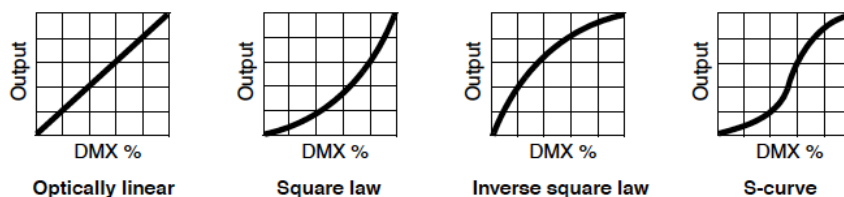
1. Go to Scan → Properties → Advanced → Choose PID → SET DMX START ADDRESS.
2. Enter the DMX address that you want to give to the fixture (or give to all the fixtures if you are sending a broadcast command).
3. Confirm your selection.

Behavior when no DMX signal is present

Using RDM, you can define how fixtures behave if power is applied but fixtures are not receiving a DMX signal (or if fixtures are powered on and being controlled by DMX, and then the DMX signal stops). Four options are available:

- **Blackout** – Fixture intensity set to zero light output when no DMX signal is being received.
- **Standalone** – Fixture goes to standalone operation when no DMX signal is being received. If you have programmed a scene or scenes via RDM and DMX, the fixtures will display that scene when no DMX signal is present.
- **Last received value** – Fixture follows the last DMX values it received.
- **Default value** – All LEDs go to 100% intensity when no DMX signal is being received.

Dimming curves



Four dimming curves are available via RDM:

- **Optically linear** – The increase in light intensity appears to be linear as DMX value is increased.
- **Square law** (default setting) – light intensity control is finer at low levels and coarser at high levels.

- **Inverse square law** – Light intensity control is coarser at low levels and finer at high levels.
- **S-Curve** – light intensity control is finer at low levels and high levels and coarser at medium levels.

Color mode

You can select from two color management options:

- **Calibrated** – All colors stay consistent at all times.
- **Calibrated Extended** (default setting) – The White point is calibrated, but you can saturate colors to the maximum level available.

Default color temperature in segment DMX control

In Exterior Linear Pro QUAD variants, the segment DMX control modes offer RGB control only. The global default color temperature is set to 4000 K. However, it is possible to adjust the default color temperature via RDM. Using an RDM controller such as Martin Companion, you can enter the desired color temperature from 1000 K to 12850 K using the MANUAL CTC VALUE adjustment function.

Power limit mode

You can set the maximum power consumption of Exterior Linear Pro fixtures via RDM. The power limit mode settings let you adjust the balance between electrical power consumption versus light intensity. Three options are available:

- **Max. 12 watt per foot / 30 cm** (default setting) – Gives maximum light intensity. Power consumption will not exceed 12 W per foot / 30 cm length.
- **Max. 10 watt per foot / 30 cm** – Gives a small reduction in power consumption and light intensity.
- **Max. 5 watt per foot / 30 cm** – Gives a significant reduction in power consumption and light intensity. This setting complies with the Californian ASHRAE standard.

Fixture information

Exterior Linear Pro fixtures can communicate the following information to the RDM controller:

- Basic fixture information – type and length of fixture.
- Name of product and manufacturer.
- Device label – This information can be edited by the user, providing a means of giving an individual fixture its own ID number, for example.
- Currently installed firmware version.
- List of temperature sensors and sensor readouts.
- Number of hours fixture has had power applied since manufacture (non-resettable).
- Number of hours LEDs have been active since manufacture (non-resettable).
- Number of on/off power cycles since manufacture (non-resettable).
- Serial number – This is a factory-set serial number that cannot be changed.

Status messages

The Exterior Linear Pro features a self-diagnostic system that detects any issues concerning correct operation or safety (temperature that exceeds safe level, for example) and communicates the issues as status messages or warnings. These messages can be useful in connection with service and maintenance.

It is possible to:

- Call up a list of any status messages that the fixture has stored in memory.
- View information on the messages.
- Clear the stored list of status messages.

Utilities

The following useful functions are available via RDM:

- **Pixel flip** – Lets you invert the order of the segments in 2/4/8-segment mode. This can greatly speed up programming if fixtures are not all installed in the same orientation.
- **Reset device** – Carries out a full reset of all the fixture's electronics.
- **Perform self-test** – The fixture carries out a sequence of functions designed to test the fixture.

- **Self-test description** – Lets you select from various sequences that test the fixture’s functionality, the fixture’s LEDs or every aspect of the fixture.
- **Factory defaults** – Deletes any custom settings that have been configured via RDM and returns the fixture to its factory default settings.

Setting up standalone operation

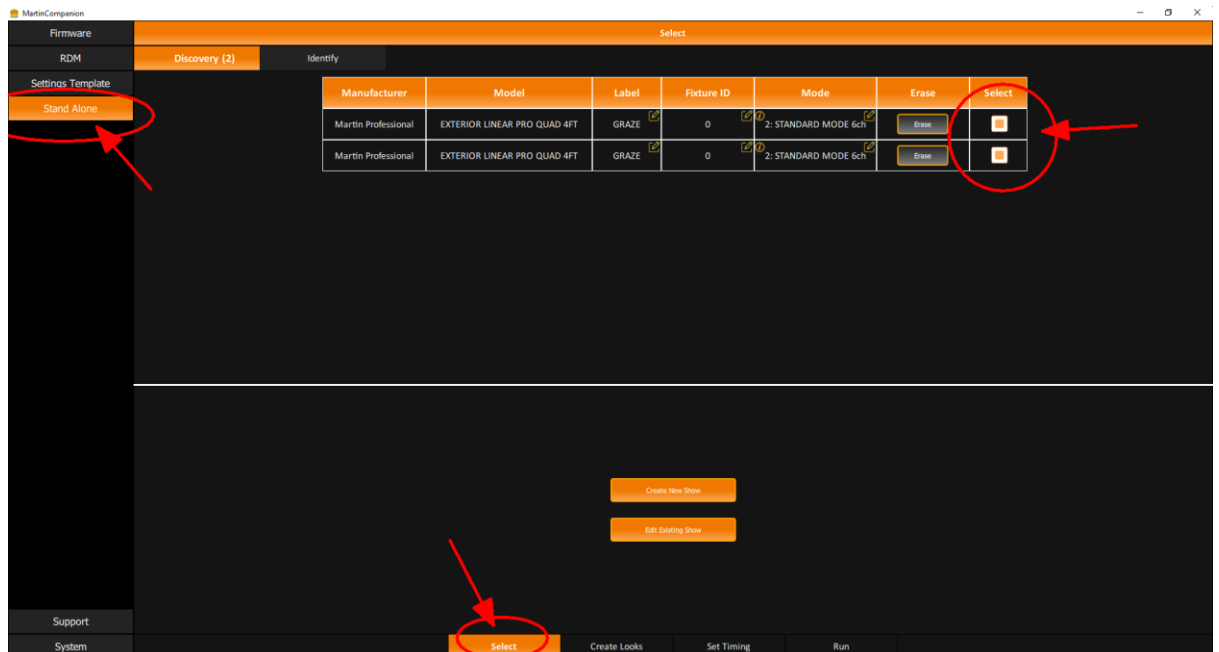
Standalone operation in the Exterior Linear Pro requires the use of Martin Companion. This hardware cable accessory and free software offers the following features:

- Simple PC-based user interface
- Programming from a remote location over the DMX link.
- Easy programming of multiple fixtures simultaneously
- Combining different types of Martin fixture in one stand-alone show
- Standalone show programming with possibility of automatic start when fixtures are powered on
- Programming of up to twenty scenes with global or individual fade and hold times

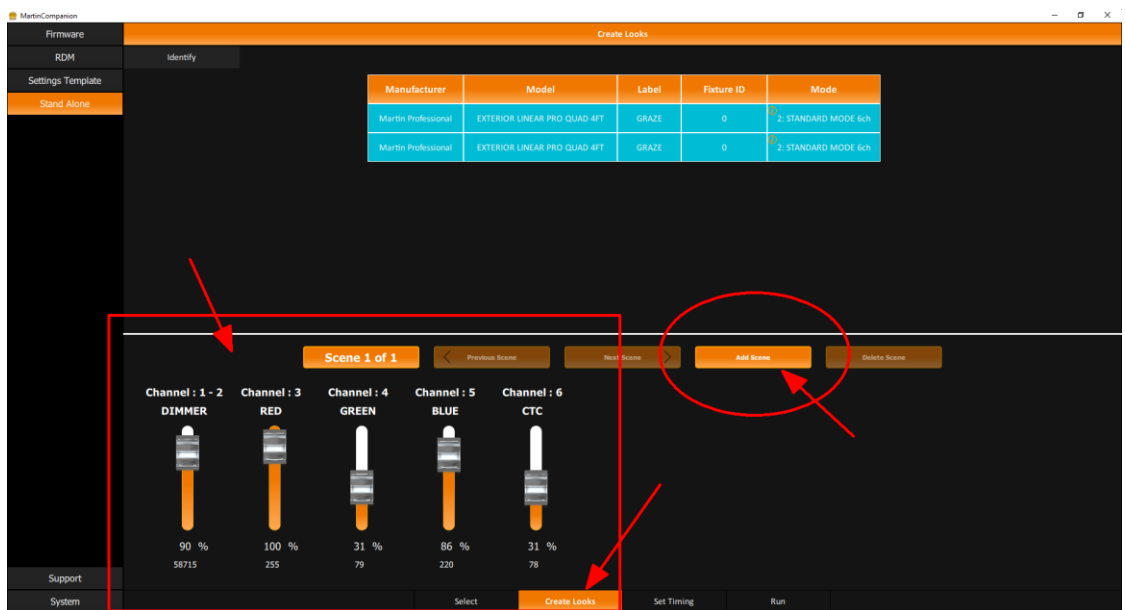
In standalone mode, fixtures display a ‘scene’ (a color and intensity) or a sequence of up to twenty scenes if you use Martin Companion. Once scenes have been programmed, fixtures can display them without needing a DMX signal.

To program standalone operation using Martin Companion:

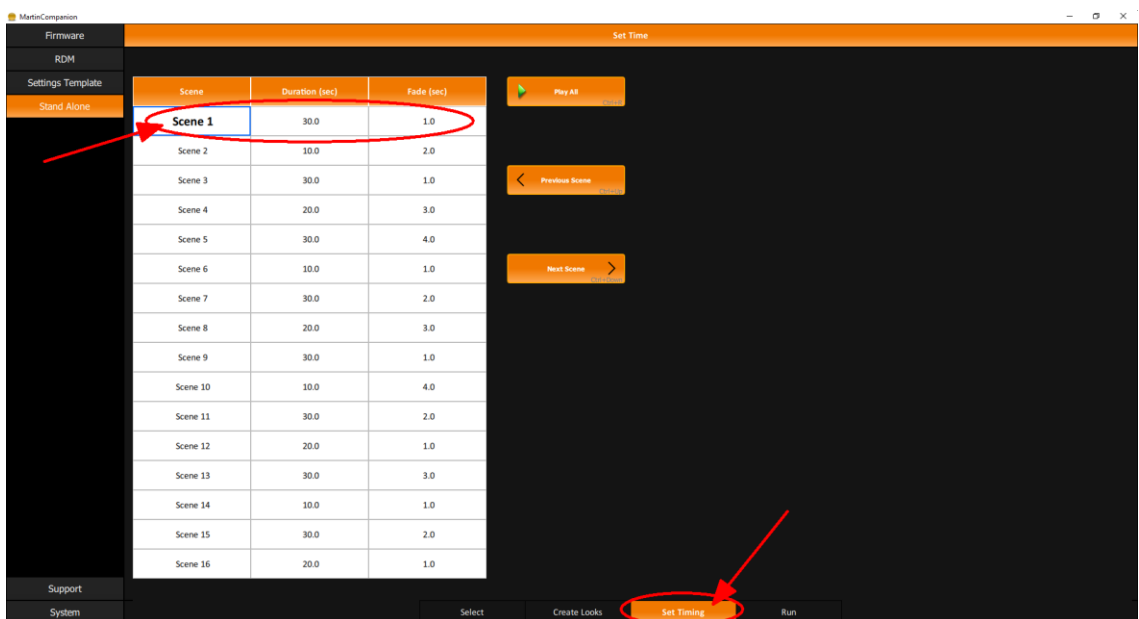
1. Connect the Martin Companion Cable and a PC running the Martin Companion application to the DMX link. Apply power to the fixtures on the DMX link that you want to program. If the fixtures have not already been discovered by Martin Companion, wait until the **Discovery** counter stops. This will indicate that all fixtures have been discovered.
2. Once all fixtures have been discovered and are shown in the list of connected fixtures, set them all to the desired DMX Mode using the **Mode** column. The DMX Mode that you select for a fixture determines what controls are available when you create scenes in the next steps.
3. See screenshot below. Select the fixtures that you want to set up for stand-alone operation using the checkboxes in the **Select** column, and then click **Create New Show** to continue to the next step (it is also possible to edit an existing show that has already been programmed into the fixtures).



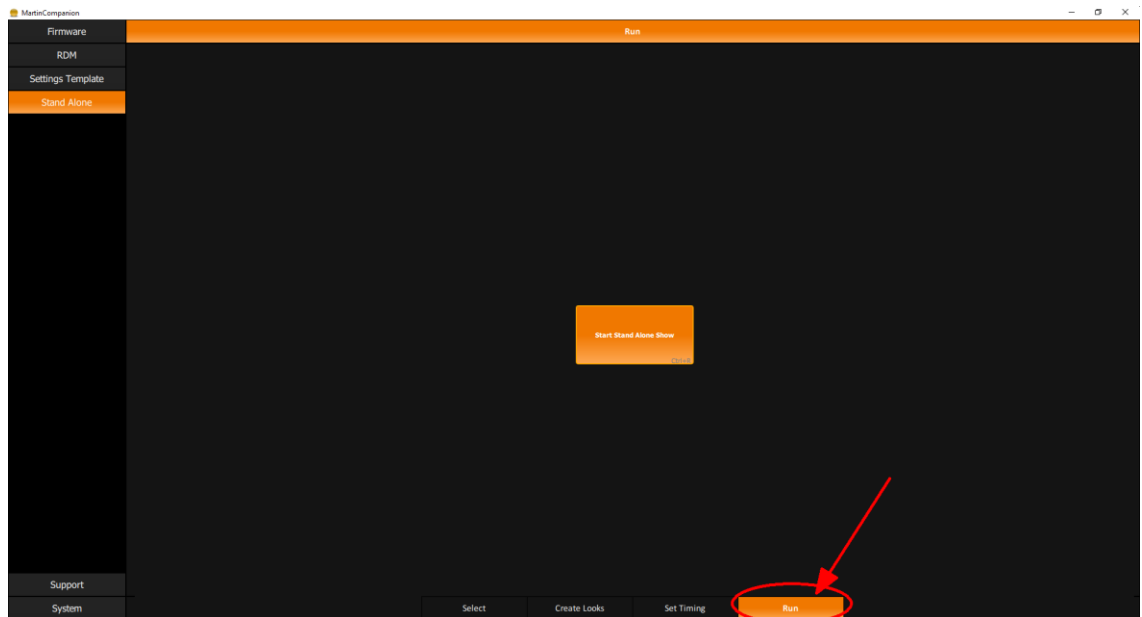
4. See screenshot below. Click on the **Create Looks** button to open the scene creation controls.
 - a. Select the fixture or fixtures that you want to control in the list at the top of the screen.
 - b. Create the desired look for the selected fixture(s) in Scene 1 using the sliders shown below. The sliders shown depend on which DMX Mode you set for the fixtures in the previous step.
 - c. Select any other fixtures that you want to control in the list at the top of the screen.
 - d. Repeat steps b. and c. until you are happy with the output from ALL the fixtures in Scene 1.
 - e. To create a second scene, click on **Add Scene**.
 - f. Repeat steps a. to d. to create the desired look for all the fixtures in scene 2.
 - g. Repeat steps e. and f. to add more scenes.
 - h. You can step through the scenes that have been programmed using the **Previous Scene** and **Next Scene** buttons.
 - i. When you have finished creating scenes, click on **Set Timing** to continue to the next step.



5. See screenshot below. On the **Set Timing** page, you can now set the **Duration** and **Fade Time** for each scene. Simply select one or multiple cells to edit the timing values. You can click **Play All** to let all fixtures play the recorded scenes with the entered Duration and Fader times. Once you are satisfied with the result, click on **Run** to continue to the next step.



6. See screenshot below. In the **Run** tab, simply click on **Start Stand Alone Show** to finalize programming. The application will now tell you to disconnect the DMX cable between Martin Companion and the fixtures. Once you do that, the fixtures will start to run their standalone show.



Synchronized standalone operation

All fixtures programmed together for standalone operation will also synchronize the playback of their standalone scenes. Fixtures need to be connected with each other using DMX cables (but not to a DMX controller) to allow this synchronization to happen. The synchronization makes sure that all fixtures switch to the same scene number with the same duration and fade time. But each fixture can have a different look programmed into it for each scene.

Note that Martin Companion automatically assigns one fixture as the standalone host, and all the others as clients. The host fixture only tells the client fixtures to “go to scene X with fade time Y”. The color / dimmer level / CTC that each fixture uses in a specific scene is stored inside each fixture individually. Again, not all fixtures have to show the same color in each scene. Only the duration and fade times are synchronized.

Operating the fixture



Warning! Read the Safety and Installation Manual that is included at the end of this User Manual, paying particular attention to the Safety Precautions section, before operating the fixture.

Be aware that the output of LEDs, like all light sources, changes gradually over many thousands of hours of use. If you require products to perform to very precise color specifications, you may eventually need to make small readjustments at the lighting controller.

Test sequences and fixture status

The Exterior Linear Pro Series Safety and Installation Manual that is included at the end of this User Manual contains information on displaying fixture status codes and running test sequences that you may find useful before starting fixture operation.

Controlling via DMX

Once you have set up fixtures' DMX modes and DMX addresses via RDM, you can control fixtures using the DMX controller that is connected to the installation.

See the 'DMX protocols' section at the end of this manual for details of the control options available.

Identifying fixtures in the installation

To help with programming scenes and controlling the installation, it is possible to send an RDM command that causes a fixture to flash a signal so that you can identify it. To identify a fixture:

1. Black out all fixtures if you have been using them.
2. Send an IDENTIFY DEVICE unicast command to an individual fixture in the installation via RDM. The fixture will respond by flashing white, letting you identify it. In Martin Companion you can simply enable the "Identify" button in the toolbar, and then any fixture(s) you select will immediately identify itself. You can even use arrow keys to navigate through the list of fixtures, with the corresponding fixture flashing as soon as you get to it.
3. If your RDM-compatible DMX controller allows it, you can now identify the fixture at the controller.

DMX protocols

QUAD color mixing models

QUAD models feature RGBW LEDs. The following DMX control modes are available:

All models

- **Standard mode** gives 16-bit control of overall fixture intensity, RGB control of the fixture using one channel per color with White added automatically, and a CTC channel with color temperature variable from 1000 K to 12 850 K in 50 K steps.
- **Raw mode** gives raw RGBW control of the fixture using one channel per color.

4 ft. models

- **8-segment mode** (8 x 15 cm/6 in. segments)
 - **4-segment mode** (4 x 30 cm/1 ft. segments)
 - **1-segment mode** (1 x 120 cm/4 ft. segment)
- give RGB control of segments. White is added automatically.

1 ft. models

- **2-segment mode** (2 x 15 cm/6 in. segments)
 - **1-segment mode** (1 x 30 cm/1 ft. segment)
- give RGB control of segments. White is added automatically.

In segment modes, you can adjust the global default color temperature via RDM.

Standard Mode – 6 DMX channels

Channel	DMX Value	Function	Fade type	Default value
1 and 2	0-65535	Dimmer Overall intensity 0 – 100%	Fade	0
3	0-255	Red Intensity 0-100%	Fade	255
4	0-255	Green Intensity 0-100%	Fade	255
5	0-255	Blue Intensity 0-100%	Fade	255
6	0-18 19-77 78 79-127 128 129-254 255	Color Temperature Control 1000 K 1050 K to 3950 K in 50 K steps 4000 K 4050 K to 6450 K in 50 K steps 6500 K 6550 K to 12 800 K in 50 K steps 12 850 K	Fade	78

Raw Mode – 4 DMX channels

Channel	DMX Value	Function	Fade type	Default value
1	0-255	Red Intensity 0-100%	Fade	0
2	0-255	Green Intensity 0-100%	Fade	0
3	0-255	Blue 0-100%	Fade	0
4	0-255	White 0-100%	Fade	0

1-segment Mode – 3 DMX channels

Channel	DMX Value	Function	Fade type	Default value
1	0-255	Red Intensity 0-100%	Fade	0
2	0-255	Green Intensity 0-100%	Fade	0
3	0-255	Blue 0-100%	Fade	0

2-segment Mode (1 ft. models only) – 6 DMX channels

Channel	DMX Value	Function	Fade type	Default value
Segment 1				
1	0-255	Red Intensity 0-100%	Fade	0
2	0-255	Green Intensity 0-100%	Fade	0
3	0-255	Blue Intensity 0-100%	Fade	0
Segment 2				
4	0-255	Red Intensity 0-100%	Fade	0
5	0-255	Green Intensity 0-100%	Fade	0
6	0-255	Blue Intensity 0-100%	Fade	0

4-segment Mode (4 ft. models only) – 12 DMX channels

Channel	DMX Value	Function	Fade type	Default value
Segment 1				
1	0-255	Red Intensity 0-100%	Fade	0
2	0-255	Green Intensity 0-100%	Fade	0
3	0-255	Blue Intensity 0-100%	Fade	0
Segment 2				
4	0-255	Red Intensity 0-100%	Fade	0
5	0-255	Green Intensity 0-100%	Fade	0
6	0-255	Blue Intensity 0-100%	Fade	0
Segment 3				
7	0-255	Red Intensity 0-100%	Fade	0
8	0-255	Green Intensity 0-100%	Fade	0
9	0-255	Blue Intensity 0-100%	Fade	0
Segment 4				
10	0-255	Red Intensity 0-100%	Fade	0
11	0-255	Green Intensity 0-100%	Fade	0
12	0-255	Blue Intensity 0-100%	Fade	0

8-segment Mode (4 ft. models only) – 24 DMX channels

Channel	DMX Value	Function	Fade type	Default value
Segment 1				
1	0-255	Red Intensity 0-100%	Fade	0
2	0-255	Green Intensity 0-100%	Fade	0
3	0-255	Blue Intensity 0-100%	Fade	0
Segment 2				
4	0-255	Red Intensity 0-100%	Fade	0
5	0-255	Green Intensity 0-100%	Fade	0
6	0-255	Blue Intensity 0-100%	Fade	0
Segment 3				
7	0-255	Red Intensity 0-100%	Fade	0
8	0-255	Green Intensity 0-100%	Fade	0
9	0-255	Blue Intensity 0-100%	Fade	0
Segment 4				
10	0-255	Red Intensity 0-100%	Fade	0
11	0-255	Green Intensity 0-100%	Fade	0
12	0-255	Blue Intensity 0-100%	Fade	0
Segment 5				
13	0-255	Red Intensity 0-100%	Fade	0
14	0-255	Green Intensity 0-100%	Fade	0
15	0-255	Blue Intensity 0-100%	Fade	0
Segment 6				
16	0-255	Red Intensity 0-100%	Fade	0
17	0-255	Green Intensity 0-100%	Fade	0
18	0-255	Blue Intensity 0-100%	Fade	0
Segment 7				
19	0-255	Red Intensity 0-100%	Fade	0
20	0-255	Green Intensity 0-100%	Fade	0
21	0-255	Blue Intensity 0-100%	Fade	0
Segment 8				
22	0-255	Red Intensity 0-100%	Fade	0
23	0-255	Green Intensity 0-100%	Fade	0
24	0-255	Blue Intensity 0-100%	Fade	0

CTC models

Color Temperature Control (variable CT white) models offer 0 to 100% intensity control and color temperature control from 2700 K to 6500 K in 50 K steps. The following DMX control modes are available:

All models

- **Standard mode** gives 16-bit control of overall fixture intensity and a CTC channel with color temperature variable from 2700 K to 6500 K in 50 K steps.

4 ft. models

- **8-segment mode** (8 x 15 cm/6 in. segments)
- **4-segment mode** (4 x 30 cm/1 ft. segments)
- **1-segment mode** (1 x 120 cm/4 ft. segment)

give raw control of 2700 K, 4000 K and 6500 K white LEDs, allowing flexible control of color temperature and intensity.

1 ft. models

- **2-segment mode** (2 x 15 cm/6 in. segments)
- **1-segment mode** (1 x 30 cm/1 ft. segment)

give raw control of 2700 K, 4000 K and 6500 K white LEDs, allowing flexible control of color temperature and intensity.

Standard Mode – 3 DMX channels

Channel	DMX Value	Function	Fade type	Default value
1 and 2	0-65535	Dimmer Overall intensity 0 – 100%	Fade	0
3	0-51 52 53-77 78 79-127 128-255	Color Temperature Control 2700 K 2700 K 2750 K to 3950 K in 50 K steps 4000 K 4050 K to 6450 K in 50 K steps 6500 K	Fade	78

1-segment Mode – 3 DMX channels

Channel	DMX Value	Function	Fade type	Default value
1	0-255	2700 K Intensity 0-100%	Fade	0
2	0-255	4000 K Intensity 0-100%	Fade	0
3	0-255	6500 K Intensity 0-100%	Fade	0

2-segment Mode (1 ft. models only) – 6 DMX channels

Channel	DMX Value	Function	Fade type	Default value
Segment 1				
1	0-255	2700 K Intensity 0-100%	Fade	0
2	0-255	4000 K Intensity 0-100%	Fade	0
3	0-255	6500 K Intensity 0-100%	Fade	0
Segment 2				
4	0-255	2700 K Intensity 0-100%	Fade	0
5	0-255	4000 K Intensity 0-100%	Fade	0
6	0-255	6500 K Intensity 0-100%	Fade	0

4-segment Mode (4 ft. models only) – 12 DMX channels

Channel	DMX Value	Function	Fade type	Default value
Segment 1				
1	0-255	2700 K Intensity 0-100%	Fade	0
2	0-255	4000 K Intensity 0-100%	Fade	0
3	0-255	6500 K Intensity 0-100%	Fade	0
Segment 2				
4	0-255	2700 K Intensity 0-100%	Fade	0
5	0-255	4000 K Intensity 0-100%	Fade	0
6	0-255	6500 K Intensity 0-100%	Fade	0
Segment 3				
7	0-255	2700 K Intensity 0-100%	Fade	0
8	0-255	4000 K Intensity 0-100%	Fade	0
9	0-255	6500 K Intensity 0-100%	Fade	0
Segment 4				
10	0-255	2700 K Intensity 0-100%	Fade	0
11	0-255	4000 K Intensity 0-100%	Fade	0
12	0-255	6500 K Intensity 0-100%	Fade	0

8-segment Mode (4 ft. models only) – 24 DMX channels

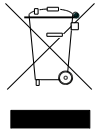
Channel	DMX Value	Function	Fade type	Default value
Segment 1				
1	0-255	2700 K Intensity 0-100%	Fade	0
2	0-255	4000 K Intensity 0-100%	Fade	0
3	0-255	6500 K Intensity 0-100%	Fade	0
Segment 2				
4	0-255	2700 K Intensity 0-100%	Fade	0
5	0-255	4000 K Intensity 0-100%	Fade	0
6	0-255	6500 K Intensity 0-100%	Fade	0
Segment 3				
7	0-255	2700 K Intensity 0-100%	Fade	0
8	0-255	4000 K Intensity 0-100%	Fade	0
9	0-255	6500 K Intensity 0-100%	Fade	0
Segment 4				
10	0-255	2700 K Intensity 0-100%	Fade	0
11	0-255	4000 K Intensity 0-100%	Fade	0
12	0-255	6500 K Intensity 0-100%	Fade	0
Segment 5				
13	0-255	2700 K Intensity 0-100%	Fade	0
14	0-255	4000 K Intensity 0-100%	Fade	0
15	0-255	6500 K Intensity 0-100%	Fade	0
Segment 6				
16	0-255	2700 K Intensity 0-100%	Fade	0
17	0-255	4000 K Intensity 0-100%	Fade	0
18	0-255	6500 K Intensity 0-100%	Fade	0
Segment 7				
19	0-255	2700 K Intensity 0-100%	Fade	0
20	0-255	4000 K Intensity 0-100%	Fade	0
21	0-255	6500 K Intensity 0-100%	Fade	0
Segment 8				
22	0-255	2700 K Intensity 0-100%	Fade	0
23	0-255	4000 K Intensity 0-100%	Fade	0
24	0-255	6500 K Intensity 0-100%	Fade	0

RDM functions

Exterior Linear Pro fixtures support the following RDM PIDs:

PID	Name	Description	GET	SET
Device discovery				
0x0001	DISC_UNIQUE_BRANCH	Fixture discovery	N/A	N/A
0x0002	DISC_MUTE	Fixture discovery	N/A	N/A
0x0003	DISC_UN_MUTE	Fixture discovery	N/A	N/A
Device information				
0x0060	DEVICE_INFO	Get basic fixture info	✓	
0x0080	DEVICE_MODEL_DESCRIPTION	Product Name	✓	
0x0081	MANUFACTURER_LABEL	Manufacturer Name	✓	
0x0082	DEVICE_LABEL	Info label (user-settable)	✓	✓
0x8003	FIXTURE_ID	Fixture number (user- settable)	✓	✓
0x8700	SERIAL_NUMBER	Fixture serial number	✓	
0x00C0	SOFTWARE_VERSION_LABEL	Firmware version	✓	
0x0200	SENSOR_DEFINITION	Sensor description	✓	
0x0201	SENSOR_VALUE	Sensor value	✓	✓
0x0400	DEVICE_HOURS	Fixture hours (non-resettable)	✓	✓
0x0401	LAMP_HOURS	LED hours (non-resettable)	✓	✓
0x0405	DEVICE_POWER_CYCLES	Fixture power cycles (non-resettable)	✓	✓
DMX setup				
0x00E0	DMX_PERSONALITY	DMX mode	✓	✓
0x00E1	DMX_PERSONALITY_DESCRIPTION	DMX mode details	✓	
0x00F0	DMX_START_ADDRESS	DMX start address	✓	✓
0x0121	SLOT_DESCRIPTION	DMX channel details	✓	
Device management				
0x0050	SUPPORTED_PARAMETERS	Parameter discovery	✓	
0x0051	PARAMETER_DESCRIPTION	Parameter discovery	✓	
0x0090	FACTORY_DEFAULTS	Reset to factory defaults	✓	✓
0x1000	IDENTIFY_DEVICE	Identify fixture in rig	✓	✓
0x1001	RESET_DEVICE	Reset fixture		✓
0x1020	PERFORM_SELFTEST	Run self-test	✓	✓
0x1021	SELF_TEST_DESCRIPTION	Self-test description	✓	
0x8004	COLOR_MODE	Set color mode	✓	✓
0x8310	DIMMER_CURVE	Set dimmer curve	✓	✓
0x832F	PIXEL_FLIP	Invert order of segments	✓	✓
0x8335	POWER_LIMIT_MODE	Max. power per foot setting	✓	✓
0x8339	MANUAL_CTC_VALUE	Set default color temp. in Segment DMX modes	✓	✓
Status messages				
0x0020	QUEUED_MESSAGE	Get Queued Messages	✓	
0x0030	STATUS_MESSAGES	Get Status/Error Information	✓	
0x0031	STATUS_ID_DESCRIPTION	Status/Error Description	✓	
0x0032	CLEAR_STATUS_ID	Clear Status/Error Queue	✓	✓

PID	Name	Description	GET	SET
Standalone operation				
0x1030	CAPTURE_PRESET	Capture current DMX values for use as standalone preset		✓
0x1031	PRESET_PLAYBACK	Play back standalone preset	✓	✓
0x8220	MANUAL_MODE_OVERRIDE	Remote manual control	✓	✓
0x810B	PRESET_PLAYBACK_LIMIT	Standalone cue counter	✓	✓
0x8101	SYNCHRONIZED	Sync mode in standalone	✓	✓
0x810C	OFFLINE_MODE	Set behavior when DMX stops	✓	✓

	<p>Disposing of this product</p> <p>Martin® products are supplied in compliance with Directive 2012/19/EC of the European Parliament and of the Council of the European Union on WEEE (Waste Electrical and Electronic Equipment), 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.</p>
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Compliance and specifications

See the Safety and Installation Manual attached to this user manual for details of this product's compliance with national and international standards, FCC rules etc. See the Martin website at www.martin.com for technical specifications for this product.

