

ERA 800 Performance ERA 800 Profile

User Guide



Martin[®]
by HARMAN

User Documentation update information

Any important changes in the ERA 800 Performance / Profile User Guide are listed below.

Revision E

Updated to include ERA 800 Profile.

Revision D

Covers firmware version 2.3.0. Theater Mode added. Calibration settings management improved. Minor corrections to control panel menus.

Revision C

Not released. Revisions go from B directly to D in order to stay parallel with Safety and Installation Manual.

Revision B

Zoom control via DMX corrected: operates from narrow to wide as DMX values are increased.

Revision A

First version released. Covers ERA 800 Performance firmware version 1.1.0

©2019-2020 HARMAN PROFESSIONAL DENMARK ApS. All rights reserved. Features, specifications and appearance are subject to change without notice. HARMAN PROFESSIONAL DENMARK ApS and all affiliated companies disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. Martin is a registered trademark of HARMAN PROFESSIONAL DENMARK ApS registered in the United States and/or other countries.

HARMAN PROFESSIONAL DENMARK ApS, Olof Palmes Allé 44, 8200 Aarhus N, Denmark
HARMAN PROFESSIONAL SOLUTIONS U.S., 8500 Balboa Blvd., Northridge CA 91329, USA

www.martin.com

Contents

Introduction	4
Operating the fixture	4
Effects	5
Shutter and strobe effects	5
Dimming	5
Color mixing	5
Color temperature control	5
Color wheel	5
Rotating gobos	6
Static gobos	8
Animation wheel	9
Frost	9
Rotating prisms	9
Iris	9
Framing (ERA 800 Performance)	9
Zoom and focus	9
Pan and tilt	9
Control panel	10
Control options	12
DMX	12
RDM	12
Fixture setup	14
Fixture ID	14
Personality	14
Factory defaults	15
Test sequences	15
Fixture information readouts	15
DMX signal monitoring	16
Manual control	16
Service	16
Adjusting settings via DMX	17
Resetting	17
Illuminating the display	17
Control menu setting overrides	17
DMX protocol	18
ERA 800 Performance	18
ERA 800 Profile	22
Control panel menus	26
Status messages	28

Introduction



Warning! Before installing, operating or servicing the ERA 800 Performance / Profile, read the latest version of the product's Safety and Installation Manual, paying particular attention to the Safety Precautions section. The Safety and Installation Manual is supplied with the fixture. The latest version is also available for download from the ERA 800 Performance / Profile area of the Martin® website at www.martin.com.

This User Guide is a supplement to the Installation and Safety Manual that is supplied with the ERA 800 Performance / Profile. Both these documents are available for download from the ERA 800 Performance / Profile area of the Martin website at www.martin.com. This User Guide 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, because 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.

ERA 800 Performance and Profile models

The ERA 800 Performance and ERA 800 Profile fixtures share the effects described in this user guide apart from one difference – the ERA 800 Performance has a four-blade rotating framing module while the ERA 800 Profile has an additional rotating gobo wheel with six rotating gobos.

Spare parts available from Martin let you convert fixtures from ERA 800 Performance to ERA 800 Profile and vice versa. You can find details of the parts required and the conversion procedure in the ERA 800 Performance / Profile Safety and Installation Manual.

From firmware version 2.3.0, the same firmware is installed in the ERA 800 Performance and ERA 800 Profile. When running version 2.3.0 or later, the fixture automatically recognizes its physical configuration (Performance or Profile) and adapts its DMX protocol, control panel menus and RDM PIDs to match the correct fixture type. The fixture type appears in the control panel display at startup and can be called up in the INFORMATION menu in the control panel at any time.

ERA 800 Profile fixtures feature a lithium battery that can power the control panel, letting you set up the fixture without being connected to mains power. A fully charged battery can hold a charge for up to 3 months. Connecting a fixture that has been in storage or a new fixture to mains power for at least two hours will fully charge the battery.

Operating the fixture

Before applying power to or operating the ERA 800 Performance / Profile:

- Read the 'Safety Information' section of the fixture's Safety and Installation Manual.
- Check that the installation is safe and secure.
- Check that the base is fastened securely so that the torque reaction when the head moves will not cause the base to move.
- Check that the head tilt lock is released.
- Be prepared for the fixture to light up suddenly. Check that no-one is looking at the fixture from close range.
- Be prepared for the head to move suddenly. Check that there will be no risk of collision with persons or objects.

The ERA 800 Performance / Profile does not have an On/Off switch. To apply power to the fixture, apply power to the power input cable. The fixture's Neutrik powerCON TRUE1 connectors can also be connected live or under load.

Effects

This section gives details of the effects available in the ERA 800 Performance / Profile. See the DMX protocol table on page 18 for a list of channels and commands used to control the effects via DMX.

Where fine control is available, the main control channel sets the first 8 bits (the most significant byte or MSB), and the fine channels set the second 8 bits (the least significant byte or LSB) of the 16-bit control byte. In other words, the fine channel works within the position set by the coarse channel.

Shutter and strobe effects

The ERA 800 Performance / Profile's electronic shutter effect provides instant blackout and snap open as well as regular or random strobe and pulse effects with variable speed from approx. 1Hz to 20 Hz.

Dimming

Smooth 0-100% overall dimming is available with 16-bit control resolution. Four dimming curves are available (see Figure 7 on page 14).

Color mixing

The ERA 800 Performance / Profile features dichroic CMY color filters, with 16-bit continuous color mixing available on six DMX channels.

Color temperature control

16-bit color temperature control is available on two dedicated CTO channels. You can adjust the fixture's color temperature smoothly and continuously from 6500 K to 2700 K.

Color wheel

The ERA 800 Performance / Profile provides a color wheel that lets you select from six dichroic color filters plus open (see Figure 1).

The color wheel can be scrolled continuously with variable speed and direction.

All color filters are interchangeable.

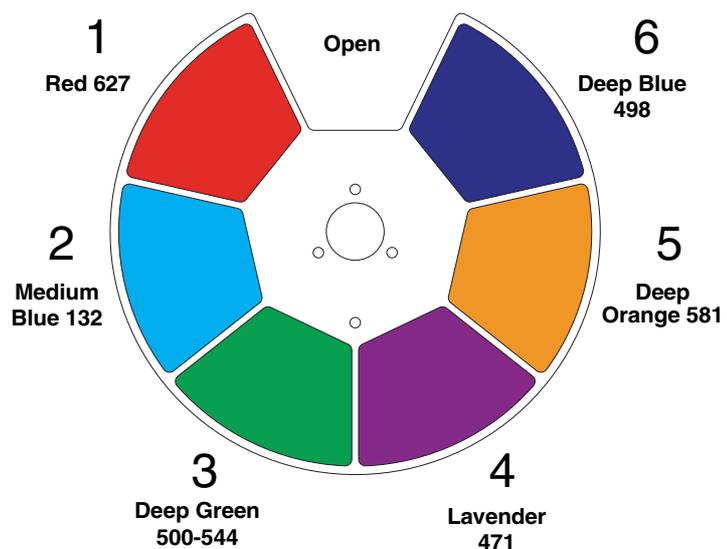


Figure 1: Color wheel

Rotating gobos

The ERA 800 Performance has one rotating gobo wheel (Gobo Wheel 1) and a rotating framing effect, while the ERA 800 Profile has two rotating gobo wheels (Gobo Wheel 1 and Gobo Wheel 3) and no framing effect.

The gobos on Gobo Wheel 3 in the ERA 800 Profile have the same dimensions and specifications as those on Gobo Wheel 1 and are therefore interchangeable, but the goboholders on the two gobo wheels are slightly different and are not interchangeable.

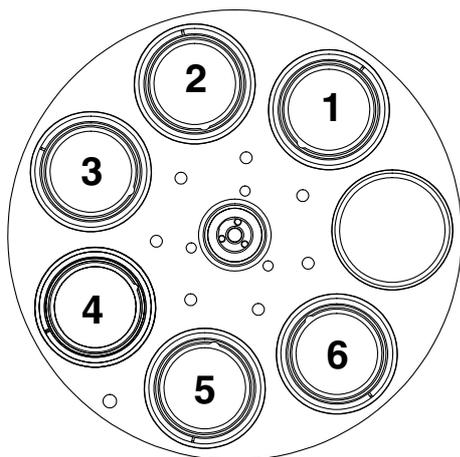
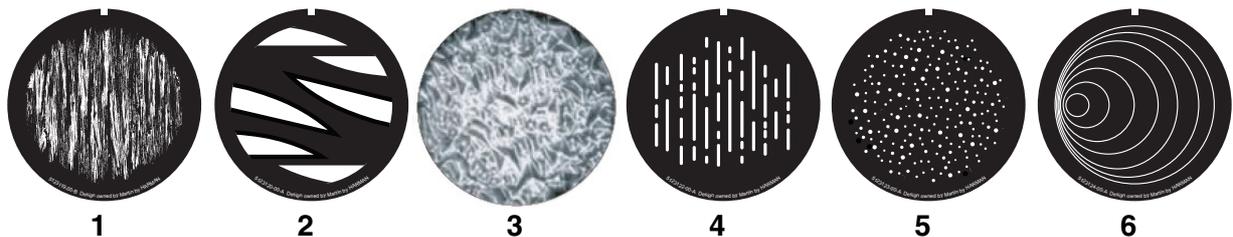
A CRI (color rendering index) boost filter is available from Martin as an accessory (see the product specifications at www.martin.com). If you replace one of the gobos with the CRI boost filter, you can obtain a CRI of over 80.

Martin is making parts available that allow you to convert between Performance and Profile models by swapping Gobo Wheel 3 and framing modules. See the ERA 800 Performance / Profile Safety and Installation Manual for details.

Gobo Wheel 1

Gobo Wheel 1 in the ERA 800 Performance / Profile has six rotating gobos that can be selected, indexed (positioned at an angle), rotated continuously and shaken (bounced). The gobo wheel itself can also be scrolled continuously or shaken. Gobo selection and control type (indexing, continuous gobo rotation, gobo shake or continuous gobo wheel scrolling) are selected on channel 13. Depending on what is selected on this channel, the gobo indexed angle or gobo rotation speed are set on channels 14 and 15 with 16-bit control resolution.

The standard gobos are shown in the correct order in Figure 2. All gobos are interchangeable except Gobo 3 (Limbo), which is fused glass and is glued into a special goboholder. The ERA 800 Performance / Profile Safety and Installation Guide contains details of gobo replacement procedures.



Slot - Gobo	Part number
1. Ray Brush	P/N 5123119-00
2. Too Many Doctors	P/N 5123120-00
3. Limbo (fused glass)	P/N 5123121-00
4. Light Lines	P/N 5123122-00
5. Dots in Space	P/N 5123123-00
6. Sonar	P/N 5123124-00

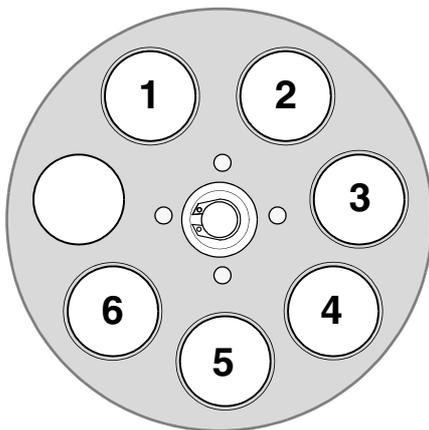
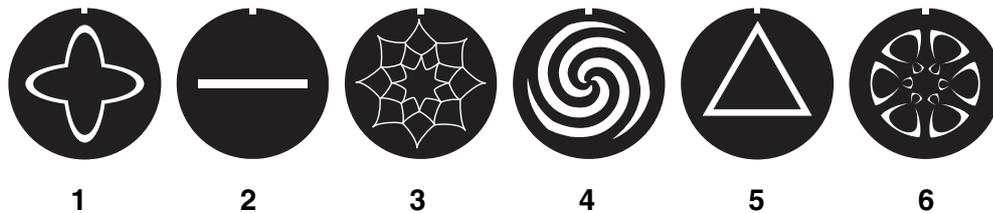
Rotating gobo wheel seen from LED side

Figure 2: Rotating gobos installed as standard

Gobo Wheel 3 (ERA 800 Profile)

Gobo Wheel 3 in the ERA 800 Profile has six rotating gobos that can be selected, indexed (positioned at an angle), rotated continuously and shaken (bounced). The gobo wheel itself can also be scrolled continuously or shaken. Gobo Wheel 3 selection and control type (indexing, continuous gobo rotation, gobo shake or continuous gobo wheel scrolling) are selected on channel 17. Depending on what is selected on this channel, the gobo indexed angle or gobo rotation speed are set on channels 18 and 19 with 16-bit control resolution.

The standard gobos are shown in the correct order in Figure 3. All gobos are interchangeable. The ERA 800 Performance / Profile Safety and Installation Guide contains details of gobo replacement procedures.



Slot - Gobo

Part number

- | | |
|-------------------|----------------|
| 1. 4D Cone | P/N 5127163-00 |
| 2. Bar | P/N 5127164-00 |
| 3. Spidey 1 | P/N 5127165-00 |
| 4. Spiral | P/N 5127166-00 |
| 5. Triangle | P/N 5127167-00 |
| 6. Bite It | P/N 5127168-00 |

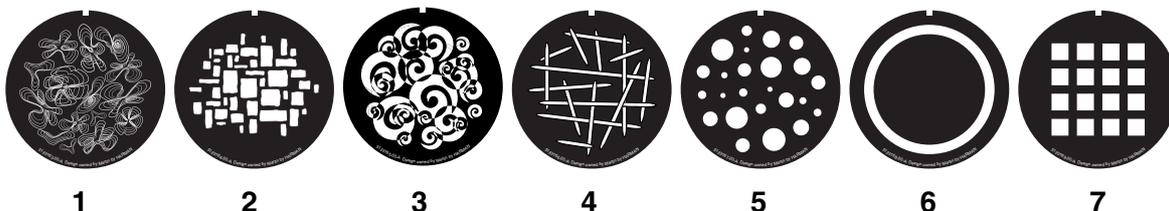
Gobo Wheel 3 seen from LED light source side

Figure 3: Rotating gobos installed on Gobo Wheel 3 as standard

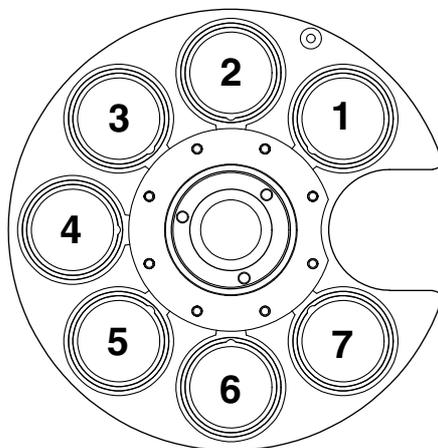
Static gobos

The static gobo wheel in the ERA 800 Performance / Profile has seven static gobos. The static gobo wheel can be scrolled continuously or shaken. Gobo selection and control type (indexing, continuous gobo rotation, gobo shake or continuous gobo wheel scrolling) are selected on channel 6. Depending on what is selected on this channel, the gobo indexing angle or gobo rotation speed are set on channels 7 and 8, where 16-bit control is available.

The standard gobos are shown in the correct order in Figure 4.



Slot - Gobo	Part number
1. Ray Flowers	P/N 5123163-00
2. Brick It	P/N 5123164-00
3. Happy	P/N 5123165-00
4. Mikado	P/N 5123166-00
5. Dots	P/N 5123167-00
6. Lasercone Single	P/N 5123168-00
7. Squares	P/N 5123169-00



Static gobo wheel seen from LED side

Figure 4: Static gobos installed as standard

Static gobos may be replaced by Martin Global Service or its authorized agents only.

Animation wheel

The ERA 800 Performance / Profile is supplied with the “Radial Breakup” animation wheel installed. The wheel can be used to add animation effects to gobo projections.

When using gobo animation, adjust the fixture’s focus to obtain the most realistic results.

Frost

The ERA 800 Performance / Profile has two frost effects: a soft and a heavy frost. You can use the frost filters to give wash-type projections and soften gobo outlines.

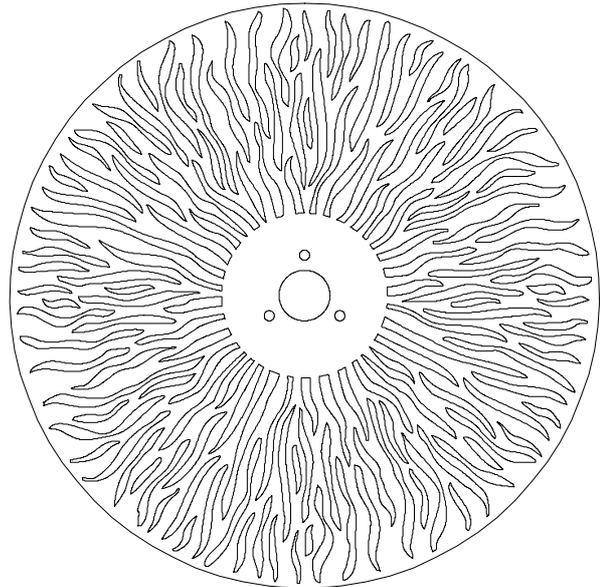


Figure 5: ‘Radial Breakup’ animation wheel

Rotating prisms

The ERA 800 Performance / Profile has two rotating prisms: one four-facet circular prism and one six-facet linear prism. Both prisms can be inserted into the beam at indexed angles or rotated with variable direction and speed.

Iris

The iris diameter can be varied continuously from fully open to almost closed. Opening and closing pulse effects with variable speed are also available.

Framing (ERA 800 Performance)

The 4-blade framing module in the ERA 800 Performance can be rotated to an indexed position within a total range of 120°.

The framing blades have independent control of angle and amount of insertion for each blade. By adjusting these parameters you can form the beam into any shape with three or four sides.

Zoom and focus

Adjusting focus lets you vary the sharpness of projected images at different distances. It can be particularly effective when used together with gobos and the animation wheel.

The ERA 800 Performance / Profile’s zoom lens varies the focused beam angle from 7° to 56°. Wide zoom angles allow sharp focus on projection surfaces close to the fixture. At narrower zoom angles, sharp focus is only possible further from the fixture.

Long-range focus can always be set to infinity.

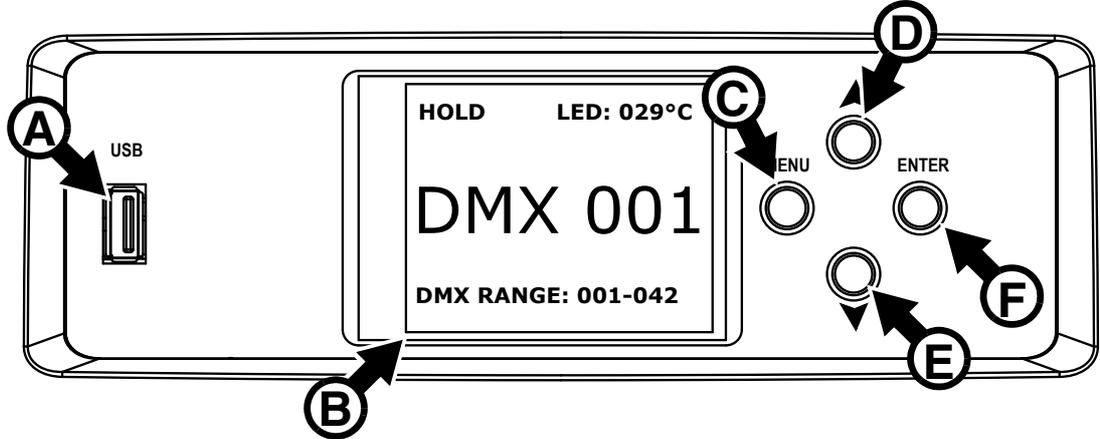
Pan and tilt

The ERA 800 Performance / Profile offers 540° of pan and 260° of tilt.

16-bit pan and tilt control are available. In each case, the second (LSB) DMX channel adjusts the position set on the first (MSB) channel.

Control panel

You can configure individual fixture settings (such as the fixture's DMX address), read out data, execute service operations and view error messages using the fixture's backlit graphic display and control panel.



A - USB port
B - LCD display
C - Menu button

D - Up button
E - Down button
F - Enter button

Figure 6: Display and control panel

When the fixture is powered on, it boots and carries out a reset. Then it shows the default information display shown in Figure 6:

- Fixture's DMX address
- 'No data' mode setting (in Figure 6 it is set to HOLD)
- Current LED temperature sensor reading.
- DMX channels occupied by the fixture. If the DMX address is set to 001, for example, an ERA 800 Performance fixture will occupy channels 001–042.

Status messages

If the fixture has registered any error or warning messages while it boots, the display will show a red warning triangle. Press the ENTER button to see the messages.

Display appearance

The display flashes if no DMX signal is being received.

The display enters sleep mode and blacks out after 60 seconds with no activity. If you want to see the display of a fixture that is hanging in a rig, for example, you can bring it out of sleep mode remotely by sending a 'Display ON' command on the Control / Settings DMX channel.

The display can be rotated to match standing or hanging fixture orientation in the **PERSONALITY** → **DISPLAY** menu.

Using the control panel

- Press the Menu button **C** or Enter button **F** to access the menus.
- Use the Up and Down buttons **D** and **E** to scroll up and down menus.
- Press the Enter button **F** to enter a menu or make a selection.
- The currently selected item in a menu is indicated by a star ✱.
- Press the Menu button **C** to step backwards through the menus.

Key combination shortcuts

The following control panel key combinations have special functions:

- Hold the MENU button pressed in – opens a shortcut menu with two menu items:
 - **RESET ALL**
 - **ROTATE DISPLAY**
- Hold the MENU button pressed in and press the UP button – makes the fixture carry out a reset.
- Hold both the MENU and ENTER buttons pressed in when you apply power to the fixture – puts the fixture into Service mode (pan and tilt motors powered off, head can be moved freely by hand). To take the fixture out of Service mode, power the fixture off and then apply power normally.
- Hold both the UP button pressed in and press the DOWN button – rotates the display 180°.

Settings stored permanently

The following settings are stored permanently in the fixture memory and are not affected by powering the ERA 800 Performance / Profile off and on or by updating the fixture software:

- DMX address
- Fixture ID
- All personality settings (pan/tilt, cooling mode, dimming curve, display settings etc.)
- Resettable counters
- Service settings

Using the control panel on battery power (ERA 800 Profile)

The ERA 800 Profile contains a lithium battery that lets you use the control panel to set up the fixture even when it is not connected to mains power.

All the main setup options in the control panel are accessible on battery power but the **DMX LIVE** and **MANUAL CONTROL** menus are not available.

Control options

DMX

The ERA 800 Performance / Profile accepts a DMX-512A data signal.

DMX setup

The DMX address, also known as the start channel, is the first channel used to receive instructions from the controller. For independent control, each fixture must be assigned its own control channels. If you give two fixtures of the same type the same address, they will behave identically. Address sharing can be useful for diagnostic purposes and symmetrical control, particularly when combined with the inverse pan and tilt options.

DMX addressing is limited to make it impossible to set the DMX address so high that you are left without enough control channels for the fixture.

To set the fixture's DMX address:

1. Press Menu to open the main menu. Scroll to **DMX SETUP**.
2. Press Enter to enter the **DMX ADDRESS** menu, then scroll to the desired address and press Enter to save.
3. Press Menu to exit.

RDM

The ERA 800 Performance / Profile can communicate using RDM (Remote Device Management) in accordance with ESTA's *American National Standard E1.20-2010*.

RDM is a bi-directional communications protocol for use in DMX512 control systems, it is the open standard for DMX512 device configuration and status monitoring.

The RDM protocol allows data packets to be inserted into a DMX512 data stream without affecting existing non-RDM equipment. It allows a console or dedicated RDM controller to send commands to and receive messages from specific fixtures.

Note that a firmware update can sometimes expand a fixture's RDM functionality. If this happens, the firmware release notes will give details.

RDM ID

Each ERA 800 Performance / Profile has a factory-set RDM UID (unique identification number) that makes it addressable and identifiable in RDM systems. The number can be found in the control panel **INFORMATION** menu under **RDM UID**.

Supported RDM PIDs

The ERA 800 Performance / Profile supports the standard RDM PIDs (Parameter IDs) required by ESTA plus two manufacturer-specific PIDs that:

- Set how the fixture behaves if the DMX signal is lost
- Select from one of the four available dimming curves.

See the following tables.

Standard RDM Parameter IDs

GET allowed	SET allowed	RDM parameter IDs	Notes
Network Management			
		DISC_UNIQUE_BRANCH	
		DISC_MUTE	
		DISC_UN_MUTE	
Status Collection			
✓		QUEUED_MESSAGE	
✓		STATUS_MESSAGES	
✓		STATUS_ID_DESCRIPTION	
	✓	CLEAR_STATUS_ID	
RDM Information			
✓		SUPPORTED_PARAMETERS	
Product information			
✓		DEVICE_INFO	
✓		DEVICE_MODEL_DESCRIPTION	
✓		MANUFACTURER_LABEL	
✓	✓	DEVICE_LABEL	
✓		SOFTWARE_VERSION_LABEL	
✓		BOOT_SOFTWARE_VERSION_ID	
✓		COMMS_STATUS	
DMX Setup			
✓	✓	DMX_PERSONALITY	
✓		DMX_PERSONALITY_DESCRIPTION	
✓	✓	DMX_START_ADDRESS	
Sensors			
✓		SENSOR_DEFINITION	
✓		SENSOR_VALUE	
Usage information			
✓	✓	DEVICE_HOURS	
Configuration			
✓	✓	PAN_INVERT	
✓	✓	TILT_INVERT	
Control			
✓	✓	IDENTIFY_DEVICE	
	✓	RESET_DEVICE	

Manufacturer-specific RDM Parameter IDs

GET allowed	SET allowed	RDM parameter ID's (slot 21-22)	Notes
Fixture behavior			
	✓	LAST_STATE (0XA004)	Behavior if loss of DMX signal. Set to: 00 BLACKOUT 01 HOLD
	✓	DIMMER_CURVE (0X0343)	Set dimming curve to: 00 LINEAR 01 SQUARE LAW 02 INV SQ LAW 03 S-CURVE

Fixture setup

The onboard control panel (see “Effects” on page 5) and the Control / settings DMX channel let you configure the fixture via a range of fixture settings.

Fixture ID

The ERA 800 Performance / Profile lets you set a four-digit ID number to ease identification of the fixtures in an installation. When a fixture is powered on for the first time, it displays its DMX address by default. As soon as you set an ID number other than **0** in **FIXTURE ID**, the ERA 800 Performance / Profile will display this ID number by default, and indicate **FIXTURE ID** in the display.

Personality

The ERA 800 Performance / Profile provides several options that let you optimize the fixture for different applications in the **PERSONALITY** menu:

- **PAN INVERSE** and **TILT INVERSE** let you invert the direction of pan and tilt movement. This can be a fast way of setting symmetrical action in multiple fixtures with no need to reprogram cues.
- **PAN/TILT SPEED** lets you set pan and tilt movement to **FAST** (optimized for speed) or **SLOW** (optimized for smooth movement – useful for slow movements in long-throw applications).

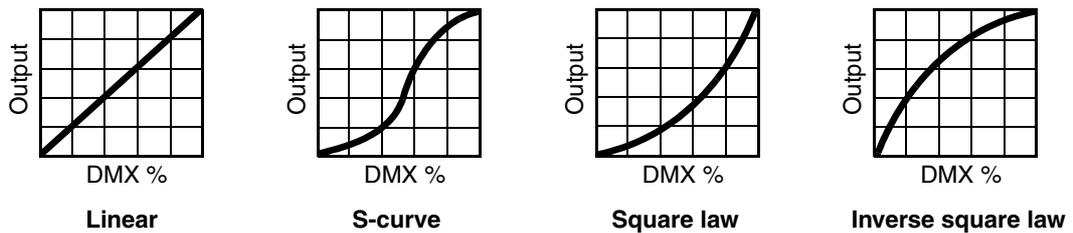


Figure 7: Dimming curve options

- **DIMMER CURVE** provides four dimming options (see Figure 7) that you can scroll through in the selection pane:
 - **LINEAR** – (optically linear) the increase in light intensity appears to be linear as DMX value is increased.
 - **S-CURVE** – light intensity control is finer at low levels and high levels and coarser at medium levels. This curve emulates the RMS voltage dimming characteristics of an incandescent lamp such as the tungsten halogen lamp of the Martin™ MAC TW1™.
 - **SQUARE LAW** – light intensity control is finer at low levels and coarser at high levels.
 - **INV SQUARE LAW** – light intensity control is coarser at low levels and finer at high levels.
- **DIMMING SPEED** lets you select a speed for reactions to changes in dimming level. At the **FAST** setting, the fixture reacts immediately to any change in dimming level and snaps to the new level. At the **SLOW** setting, the fixture will always carry out a short, smooth fade from one dimming level to the next.
- **NO DATA MODE** defines how the fixture reacts if it is powered on but not receiving a DMX signal (for example, if the DMX signal is lost during a show). If set to **BLACKOUT**, the fixture will black out. If set to **HOLD**, the fixture will hold all the last DMX values that it received and continue to show its current scene. It will continue to show this scene until it receives new DMX signals or it is powered off.

- **COOLING MODE** lets you select between three cooling fan options:
 - **REGULATED FANS** optimizes cooling fan operation for light output. It controls fixture temperature by varying cooling fan speed up to the maximum speed available and does not limit light intensity provided that the ambient temperature does not exceed the specified maximum of 40° C (104° F).
 - **FULL** optimizes cooling fan operation for the lowest possible temperature by setting cooling fans to run constantly at full speed.
 - **THEATER MODE** optimizes the fixture to obtain the lowest possible noise levels. It limits maximum light output to 70% of the normal maximum level, it sets cooling fans to run at **REGULATED** speed (see above) and it sets the LED PWM frequency to 19 200 Hz.
- **DISPLAY** offers the following options for the LCD display:
 - **DISPLAY ROTATION** lets you rotate the display manually through 180° so that it can be read easily no matter how the fixture is oriented.
 - **DISPLAY INTENSITY** lets you adjust the brightness of the display backlighting by setting the intensity to a level from 10% to 100%.
 - **TEMPERATURE UNIT** lets you choose whether the fixture should display all temperature readings in Celsius or Fahrenheit.

Factory defaults

DEFAULT SETTINGS lets you reload the fixture's factory default settings. Effect calibration settings are not affected, but all other user settings are returned to factory defaults.

Test sequences

The **FIXTURE TEST** menu lets you test:

- all the fixture's effects
- dimming functionality
- each individual mechanical effect, or
- pan and tilt only.

Before you run a test, prepare for the head to move and the fixture to light up suddenly without warning.

To run a test:

- In the **FIXTURE TEST** menu, scroll to **TEST ALL**, **TEST DIMMER**, **TEST EFFECTS** or **TEST PAN/TILT** and press Enter.
- In the **TEST EFFECTS** menu, scroll to the effect you want to test and press Enter to start a test sequence for that effect.
- In the **TEST PAN/TILT** menu, choose **PAN** or **TILT**, make sure that the fixture is held securely and that there is no danger of the head colliding, then press Enter to start the test sequence.
- Press Menu to stop the test sequence.

Fixture information readouts

The following fixture information can be called up in the display:

- **POWER ON TIME** is a non user-resettable counter that displays total hours the fixture has been powered on since manufacture.
- **LED HOURS** is a non user-resettable counter that displays total hours the LEDs have been powered on since manufacture.
- **SW VERSION** displays the currently installed firmware (fixture software) version.
- **FIXTURE ID** lets you set a custom four-digit ID number for the fixture.
- **RDM UID** displays the fixture's factory-set unique ID for identification in RDM systems.
- **TEMPERATURES** displays the current PCB temperature readouts for the fixture's base and LED array.
- **FIXTURE TYPE** displays the current fixture configuration: ERA 800 Performance or ERA 800 Profile. If you convert the fixture by removing the Performance's framing module and replacing it with the Profile's Gobo Wheel 3 module, for example, the fixture will automatically detect the new module and switch to the

ERA 800 Profile fixture type. It will adapt its DMX control functions to match the Gobo Wheel 3 module. The **FIXTURE TYPE** readout lets you check which module is installed (or check that the fixture has updated itself after you have carried out a conversion).

DMX signal monitoring

The **DMX LIVE** menu lets you scroll through all the fixture's DMX channels and display the DMX values from 0 - 255 that are being received on each channel.

Manual control

The **MANUAL CONTROL** menu lets you reset the ERA 800 Performance / Profile and operate the fixture without a DMX controller.

To execute commands in the **MANUAL CONTROL** menu, select the effect that you want to control, then enter a value from 0 to 255 to apply a command. The menu items and values correspond to the commands listed in the DMX protocol in this User Manual.

When you exit the **MANUAL CONTROL** menu, the fixture reverts to default positions and settings.

Service

Servicing the fixture and the contents of the **SERVICE** menu are covered in the ERA 800 Performance / Profile Safety and Installation Manual supplied with fixtures and available for download from the product pages on the Martin website at www.martin.com.

Adjusting settings via DMX

Certain fixture settings and parameters can be adjusted from the DMX controller on Channel 42, the Fixture control/settings channel.

Commands sent on the fixture control channel override any settings entered in the fixture's onboard control menus.

To help you avoid accidentally applying a setting that may disrupt a light show, for example, the commands must be held for a certain time before they are applied. For example, the command that turns off the display illumination must be held for one second to activate it. The command that resets the fixture must be held for five seconds to activate it. The DMX protocol table in this user manual gives details of times required.

Resetting

Either the entire fixture or individual effects can be reset to their initial positions. Resetting individual effects can allow on-the-fly recovery if an effect loses its correct position, for example, without having to reset the entire fixture.

Illuminating the display

The fixture's display panel can be set to ON or OFF with a DMX command. This makes it possible to read the fixture's DMX address while the fixture is installed in the rig but black out the display panel during a show.

If the display is set to ON via DMX, it will enter sleep mode and black out after a short period of inactivity. To bring it out of sleep mode, set the display to ON again via DMX.

Control menu setting overrides

The following fixture settings can be adjusted via DMX, overriding the settings entered in the onboard control menus. Changes to these settings are not affected by cycling power off and on.

- Dimming curve
- Pan and tilt speed
- Cooling mode

See the Control/Settings channels in the DMX protocols later in this User Guide for full details of the options available.

DMX protocol

This chapter lists the DMX control commands implemented in firmware version 2.3.0. The fixture recognizes automatically its physical configuration (Performance or Profile) and adapts its DMX protocol to match the correct fixture type.

ERA 800 Performance

Channel	DMX Value	Function	Fade type	Default value
1	0 - 19	Strobe/shutter effect Shutter closed	Snap	0
	20 - 24	Shutter open		
	25 - 64	Strobe, slow → fast		
	65 - 69	Shutter open		
	70 - 84	Opening pulse, slow → fast		
	85 - 89	Shutter open		
	90 - 104	Closing pulse, slow → fast		
	105 - 109	Shutter open		
	110 - 124	Random strobe, slow → fast		
	125 - 129	Shutter open		
	130 - 144	Random opening pulse, slow → fast		
	145 - 255	Shutter open		
	2	0 - 65535		
3	Dimmer fade, fine (LSB)		Fade	0
4	0 - 65535	Cyan (MSB) 0 → 100%	Fade	0
5		Cyan fine (LSB) 0 → 100%	Fade	0
6	0 - 65535	Magenta (MSB) 0 → 100%	Fade	0
7		Magenta fine (LSB) 0 → 100%	Fade	0
8	0 - 65535	Yellow (MSB) 0 → 100%	Fade	0
9		Yellow fine (LSB) 0 → 100%	Fade	0
10	0 - 65535	CTO (MSB) 0 → 100%	Fade	0
11		CTO fine (LSB) 0 → 100%	Fade	0

Table 1: ERA 800 Performance DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
12	0 - 6	Color wheel	Fade	0
	7 - 13	Indexing		
	14 - 20	<i>Solid colors</i>		
	21 - 27	Open		
	28 - 34	Color 1 (Red)		
	35 - 41	Color 2 (Medium Blue)		
	42 - 48	Color 3 (Deep Green)		
	49 - 51	Color 4 (Lavender)		
	52 - 61	Color 5 (Deep Orange)		
	62	Color 6 (Deep Blue)		
	63 - 72	<i>Split colors (continuous color wheel indexing)</i>		
	73	Open		
	74 - 83	Open → Color 1		
	84	Color 1 (Red)		
	85 - 94	Color 1 → Color 2		
	95	Color 2 (Medium Blue)		
	96 - 105	Color 2 → Color 3		
	106	Color 3 (Deep Green)		
	107 - 116	Color 3 → Color 4		
117	Color 4 (Lavender)			
118 - 127	Color 4 → Color 5			
128 - 190	Color 5 (Deep Orange)			
191 - 192	Color 5 → Color 6			
193 - 255	Color 6 (Deep Blue)			
128 - 190	Color 6 → open			
191 - 192	Continuous rotation			
193 - 255	CW, fast → slow			
	Stop (wheel stops at current position)			
	CCW slow → fast			
13	0 - 6	Gobo wheel 1 (rotating gobos)	Snap	0
	7 - 13	Gobo selection		
	14 - 20	Open		
	21 - 27	Gobo 1 (Ray Brush)		
	28 - 34	Gobo 2 (Too Many Doctors)		
	35 - 41	Gobo 3 (Limbo)		
	42 - 48	Gobo 4 (Light Lines)		
	49 - 55	Gobo 5 (Dots in Space)		
	56 - 62	Gobo 6 (Sonar)		
	63 - 69	Gobo 1 shake		
	70 - 76	Gobo 2 shake		
	77 - 83	Gobo 3 shake		
	84 - 90	Gobo 4 shake		
91 - 171	Gobo 5 shake			
172 - 174	Gobo 6 shake			
175 - 255	Continuous gobo wheel rotation			
	CCW fast → slow			
	Stop (wheel stops at current position)			
	CW slow → fast			
14	0 - 127	Gobo wheel 1	Snap	0
	128 - 190	Gobo indexing/rotation		
	191 - 192	Gobo indexing 0 - 360°		
	193 - 255	Gobo rotation CW fast → slow		
		Stop		
	Gobo rotation CCW slow → fast			
15	0 - 255	Gobo wheel 1	Fade	0
		Gobo indexing/rotation fine		
		Indexed position / rotation speed fine		

Table 1: ERA 800 Performance DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
16	0 - 6	Gobo wheel 2 (static gobos) Gobo selection Open	Snap	0
	7 - 13	Gobo 1 (Ray Flowers)		
	14 - 20	Gobo 2 (Brick It)		
	21 - 27	Gobo 3 (Happy)		
	28 - 34	Gobo 4 (Mikado)		
	35 - 41	Gobo 5 (Dots)		
	42 - 48	Gobo 6 (Lasercone Single)		
	49 - 55	Gobo 7 (Squares)		
	56 - 62	Gobo 1 shake		
	63 - 69	Gobo 2 shake		
	70 - 76	Gobo 3 shake		
	77 - 83	Gobo 4 shake		
	84 - 90	Gobo 5 shake		
	91 - 97	Gobo 6 shake		
98 - 104	Gobo 7 shake			
105 - 178	Continuous gobo wheel rotation CCW fast → slow			
179 - 182	Stop (wheel stops at current position)			
183 - 255	CW slow → fast			
17	0 - 5	Animation Open	Snap	0
	6 - 128	Indexing CCW 0° → 540°		
	129 - 191	Continuous rotation CW fast → slow		
	192	Stop		
193 - 255	Continuous rotation CCW slow → fast			
18	0 - 255	Frost 1: Light frost No frost → full frost	Fade	0
19	0 - 255	Frost 2: Heavy frost No frost → full frost	Fade	0
20	0 - 10	Rotating Prism 1 deployment Off	Snap	0
	11 - 255	On		
21	0 - 127	Rotating Prism 1 movement Indexing 0° - 360°	Snap	0
	128 - 190	Rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Rotation CCW slow → fast		
22	0 - 10	Rotating Prism 2 deployment Off	Snap	0
	11 - 255	On		
23	0 - 127	Rotating Prism 2 movement Indexing 0° - 360°	Snap	0
	128 - 190	Rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Rotation CCW slow → fast		
24	0 - 255	Iris Open → closed	Fade	0
25	0 - 65535	Zoom (MSB) Narrow → wide	Fade	0
26		Zoom fine (LSB)	Fade	0
27	0 - 65535	Focus (MSB) Infinity → near	Fade	0
28		Focus fine (LSB)	Fade	0
29	0 - 255	Framing blade 1: position Out → in	Fade	0
30	0 - 126	Framing blade 1: angle Angle –	Fade	127
	127 - 128	Parallel		
	129 - 255	Angle +		
31	0 - 255	Framing blade 2: position Out → in	Fade	0

Table 1: ERA 800 Performance DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
32	0 -126	Framing blade 2: angle Angle – Parallel Angle +	Fade	127
	127 - 128			
	129 - 255			
33	0 - 255	Framing blade 3: position Out → in	Fade	0
34	0 -126	Framing blade 3: angle Angle – Parallel Angle +	Fade	127
	127 - 128			
	129 - 255			
35	0 - 255	Framing blade 4: position Out → in	Fade	0
36	0 -126	Framing blade 4: angle Angle – Parallel Angle +	Fade	127
	127 - 128			
	129 - 255			
37	0 -126	Framing module angle Minimum (-60°) 0° Maximum (+60°)	Fade	127
	127 - 128			
	129 - 255			
38	0 - 65535	Pan (MSB) Left → right	Fade	32768
39		Pan, fine (LSB)		
40	0 - 65535	Tilt (MSB) Up → down	Fade	32768
41		Tilt, fine (LSB)		
42	0 - 9	Fixture control/settings <i>(hold for number of seconds indicated to activate)</i> <i>No function</i>	Snap	0
	10 - 14	Reset entire fixture – 5 sec.		
	15	<i>No function</i>		
	16	Reset color – 5 sec.		
	17	Reset beam only – 5 sec.		
	18	Reset pan and tilt only – 5 sec.		
	19 - 22	<i>No function</i>		
	23	Linear dimming curve – 1 sec. (menu override)		
	24	Square law dimming curve – 1 sec. (menu override, default setting)		
	25	Inverse square law dimming curve – 1 sec. (menu override)		
	26	S-curve dimming curve – 1 sec. (menu override)		
	27	<i>No function</i>		
	28	Fast pan and tilt speed – 5 sec. (menu override, default setting)		
	29	Smooth pan and tilt speed – 5 sec. (menu override)		
	30 - 51	<i>No function</i>		
	52	Control panel display = ON – 1 sec.		
	53	Control panel display = OFF – 1 sec.		
	54	Regulated fan speed, fixed light output intensity – 1 sec. (menu override, default setting)		
	55	Full fan speed, regulated light output intensity – 1 sec. (menu override)		
	56	Theater mode: reduced light output, low-noise operation – 1 sec. (menu override)		
57 - 255	<i>No function</i>			

Table 1: ERA 800 Performance DMX Protocol

ERA 800 Profile

Channel	DMX Value	Function	Fade type	Default value
1	0 - 19	Strobe/shutter effect Shutter closed	Snap	0
	20 - 24	Shutter open		
	25 - 64	Strobe, slow → fast		
	65 - 69	Shutter open		
	70 - 84	Opening pulse, slow → fast		
	85 - 89	Shutter open		
	90 - 104	Closing pulse, slow → fast		
	105 - 109	Shutter open		
	110 - 124	Random strobe, slow → fast		
	125 - 129	Shutter open		
	130 - 144	Random opening pulse, slow → fast		
145 - 255	Shutter open			
2	0 - 65535	Dimmer fade (MSB) Closed → open	Fade	0
3		Dimmer fade, fine (LSB)	Fade	0
4	0 - 65535	Cyan (MSB) 0 → 100%	Fade	0
5		Cyan fine (LSB) 0 → 100%	Fade	0
6	0 - 65535	Magenta (MSB) 0 → 100%	Fade	0
7		Magenta fine (LSB) 0 → 100%	Fade	0
8	0 - 65535	Yellow (MSB) 0 → 100%	Fade	0
9		Yellow fine (LSB) 0 → 100%	Fade	0
10	0 - 65535	CTO (MSB) 0 → 100%	Fade	0
11		CTO fine (LSB) 0 → 100%	Fade	0
12		Color wheel Indexing <i>Solid colors</i> Open	Fade	0
	0 - 6	Color 1 (Red)		
	7 - 13	Color 2 (Medium Blue)		
	14 - 20	Color 3 (Deep Green)		
	21 - 27	Color 4 (Lavender)		
	28 - 34	Color 5 (Deep Orange)		
	35 - 41	Color 6 (Deep Blue)		
	42 - 48	<i>Split colors (continuous color wheel indexing)</i> Open		
	49 - 51	Open → Color 1		
	52 - 61	Color 1 (Red)		
	62	Color 1 → Color 2		
	63 - 72	Color 2 (Medium Blue)		
	73	Color 2 → Color 3		
	74 - 83	Color 3 (Deep Green)		
	84	Color 3 → Color 4		
	85 - 94	Color 4 (Lavender)		
	95	Color 4 → Color 5		
	96 - 105	Color 5 (Deep Orange)		
	106	Color 5 → Color 6		
	107 - 116	Color 6 (Deep Blue)		
117	Color 6 → open			
118 - 127	Continuous rotation CW, fast → slow			
128 - 190	Stop (wheel stops at current position)			
191 - 192	CCW slow → fast			
193 - 255				

Table 2: ERA 800 Profile DMX Protocol

Channel	DMX Value	Function	Fade type	Default value		
13	0 - 6	Gobo wheel 1 (rotating gobos) Gobo selection Open	Snap	0		
	7 - 13	Gobo 1 (Ray Brush)				
	14 - 20	Gobo 2 (Too Many Doctors)				
	21 - 27	Gobo 3 (Limbo)				
13	28 - 34	Gobo 4 (Light Lines)	Snap	0		
	35 - 41	Gobo 5 (Dots in Space)				
	42 - 48	Gobo 6 (Sonar)				
	49 - 55	Gobo 1 shake				
	56 - 62	Gobo 2 shake				
	63 - 69	Gobo 3 shake				
	70 - 76	Gobo 4 shake				
	77 - 83	Gobo 5 shake				
	84 - 90	Gobo 6 shake				
		Continuous gobo wheel rotation CCW fast → slow			Snap	0
	91 - 171	Stop (wheel stops at current position)				
	172 - 174	CW slow → fast				
175 - 255						
14	0 - 127	Gobo wheel 1 Gobo indexing/rotation Gobo indexing 0 - 360°	Snap	0		
	128 - 190	Gobo rotation CW fast → slow				
	191 - 192	Stop				
	193 - 255	Gobo rotation CCW slow → fast				
15	0 - 255	Gobo wheel 1 Gobo indexing/rotation fine Indexed position / rotation speed fine	Fade	0		
16	0 - 6	Gobo wheel 2 (static gobos) Gobo selection Open	Snap	0		
	7 - 13	Gobo 1 (Ray Flowers)				
	14 - 20	Gobo 2 (Brick It)				
	21 - 27	Gobo 3 (Happy)				
	28 - 34	Gobo 4 (Mikado)				
	35 - 41	Gobo 5 (Dots)				
	42 - 48	Gobo 6 (Lasercone Single)				
	49 - 55	Gobo 7 (Squares)				
	56 - 62	Gobo 1 shake				
	63 - 69	Gobo 2 shake				
	70 - 76	Gobo 3 shake				
	77 - 83	Gobo 4 shake				
	84 - 90	Gobo 5 shake				
	91 - 97	Gobo 6 shake				
	98 - 104	Gobo 7 shake				
		Continuous gobo wheel rotation CCW fast → slow			Snap	0
	105 - 178	Stop (wheel stops at current position)				
179 - 182	CW slow → fast					
183 - 255						
17	0 - 6	Gobo wheel 3 (rotating gobos) Gobo selection Open	Snap	0		
	7 - 13	Gobo 1 (4D Cone)				
	14 - 20	Gobo 2 (Bar)				
	21 - 27	Gobo 3 (Spidey 1)				
	28 - 34	Gobo 4 (Spiral)				
	35 - 41	Gobo 5 (Triangle)				
	42 - 48	Gobo 6 (Bite It)				
	49 - 55	Gobo 1 shake				
	56 - 62	Gobo 2 shake				
	63 - 69	Gobo 3 shake				
	70 - 76	Gobo 4 shake				
	77 - 83	Gobo 5 shake				
	84 - 90	Gobo 6 shake				
		Continuous gobo wheel rotation CCW, fast → slow			Snap	0
	91 - 171	Stop (wheel stops at current position)				
	172 - 174	CW slow → fast				
	175 - 255					

Table 2: ERA 800 Profile DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
18	0 - 127 128 - 190 191 - 192 193 - 255	Gobo wheel 3 Gobo indexing/rotation Gobo indexing 0 - 360° Gobo rotation CW fast → slow Stop Gobo rotation CCW slow → fast	Snap	0
19	0 - 255	Gobo wheel 3 Gobo indexing/rotation fine Indexed position / rotation speed fine	Fade	0
20	0 - 5 6 - 128 129 - 191 192 193 - 255	Animation Open Indexing CCW 0° → 540° Continuous rotation CW fast → slow Stop Continuous rotation CCW slow → fast	Snap	0
21	0 - 255	Frost 1: Light frost No frost → full frost	Fade	0
22	0 - 255	Frost 2: Heavy frost No frost → full frost	Fade	0
23	0 - 10 11 - 255	Rotating Prism 1 deployment Off On	Snap	0
24	0 - 127 128 - 190 191 - 192 193 - 255	Rotating Prism 1 movement Indexing 0° - 360° Rotation CW fast → slow Stop Rotation CCW slow → fast	Snap	0
25	0 - 10 11 - 255	Rotating Prism 2 deployment Off On	Snap	0
26	0 - 127 128 - 190 191 - 192 193 - 255	Rotating Prism 2 movement Indexing 0° - 360° Rotation CW fast → slow Stop Rotation CCW slow → fast	Snap	0
27	0 - 255	Iris Open → closed	Fade	0
28	0 - 65535	Zoom (MSB) Narrow → wide	Fade	0
29		Zoom fine (LSB)	Fade	0
30	0 - 65535	Focus (MSB) Infinity → near	Fade	0
31		Focus fine (LSB)	Fade	0
32	0 - 65535	Pan (MSB) Left → right	Fade	32768
33		Pan, fine (LSB)		
34	0 - 65535	Tilt (MSB) Up → down	Fade	32768
35		Tilt, fine (LSB)		

Table 2: ERA 800 Profile DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
36		Fixture control/settings <i>(hold for number of seconds indicated to activate)</i>		
	0 - 9	<i>No function</i>		
	10 - 14	Reset entire fixture – 5 sec.		
	15	<i>No function</i>		
	16	Reset color – 5 sec.		
	17	Reset beam only– 5 sec.		
	18	Reset pan and tilt only – 5 sec.		
	19 - 22	<i>No function</i>		
	23	Linear dimming curve – 1 sec. (menu override)		
	24	Square law dimming curve – 1 sec. (menu override, default setting)		
	25	Inverse square law dimming curve – 1 sec. (menu override)		
	26	S-curve dimming curve – 5 sec. (menu override)	Snap	0
	27	<i>No function</i>		
	28	Fast pan and tilt speed – 5 sec. (menu override, default setting)		
	29	Smooth pan and tilt speed– 5 sec. (menu override)		
	30 - 51	<i>No function</i>		
	52	Control panel display = ON – 1 sec.		
	53	Control panel display = OFF – 1 sec.		
	54	Regulated fan speed, fixed light output intensity – 1 sec. (menu override, default setting)		
	55	Full fan speed, regulated light output intensity – 1 sec. (menu override)		
56	Theater mode: reduced light output, low-noise operation – 1 sec. (menu override)			
57 - 255	<i>No function</i>			

Table 2: ERA 800 Profile DMX Protocol

Control panel menus

ERA 800 Performance / Profile firmware version 2.3.0.

Menu level 1	Menu level 2	Menu level 3	Menu level 4	Notes (Default settings in bold print)	
DMX SETUP	DMX ADDRESS	1 – XXX		DMX address (default address = 1). The DMX address range is limited so that the fixture will always have enough DMX channels within the 512 available.	
PERSONALITY	PAN INVERSE	NO/YES		Inverse DMX pan control: right → left	
	TILT INVERSE	NO/YES		Inverse DMX tilt control: down → up	
	PAN/TILT SPEED		FAST		Optimize pan/tilt movement for speed
			SLOW		Optimize pan/tilt movement for smoothness
	DIMMER CURVE		LINEAR		Optically linear dimming curve
			SQUARE LAW		Square law dimming curve
			INV SQ LAW		Inverse square law dimming curve
			S-CURVE		S-curve (fixture emulates incandescent lamp voltage linear RMS dimming curve)
	DIMMING SPEED		FAST		Snap dimmer reaction
			SLOW		Short crossfade when dimmer value changes
	NO DATA MODE		BLACKOUT		If data signal stops, fixture blacks out
			HOLD		If data signal stops, fixture holds last received data on all channels (holds current scene)
	COOLING MODE		REGULATED FANS		Fan speed optimized for light intensity: temperature-controlled by regulating fan speed, light output unaffected as long as ambient temperature is within specified range, max. 40° C (104° F)
			FULL		Fans run at constant full speed
THEATER MODE				Low-noise mode. Maximum output limited to 70%, fans set to Regulated , PWM frequency set to 19 200 Hz.	
DISPLAY		DISPLAY ROTATION	NORMAL / ROTATE 180	Display orientation normal or rotated 180°	
		DISPLAY INTENSITY	10 ... 100 %	Set display intensity in % (default = 100)	
		TEMPERATURE UNIT	°C / °F	Set temperature readouts to display in Celsius / Fahrenheit	
DEFAULT SETTINGS	FACTORY DEFAULT	LOAD	ARE YOU SURE? YES/NO	Return all settings (except calibrations) to factory defaults	
FIXTURE TEST	TEST ALL	TESTING		Run test sequence of all LEDs and all effects	
	TEST DIMMER	DIMMER		Run dimming test sequence. Press Enter to pause and to restart test sequence. Press Menu button to exit test	
	TEST EFFECTS	CYAN ...		Run test sequence of effects. To test a specific effect, use Up/Down buttons to scroll to effect. Press Enter to pause and restart test sequence. Press Menu button to exit test	
		BLADE 4 ANGLE			
TEST PAN/TILT		PAN		Run test sequence of pan functions. Press Menu button to exit test	
		TILT		Run test sequence of tilt functions. Press Menu button to exit test	

Table 3: Control menus

Menu level 1	Menu level 2	Menu level 3	Menu level 4	Notes (Default settings in bold print)	
INFORMATION	POWER ON TIME	0 ... XXXH		Display number of hours fixture has been powered on since manufacture (not user-resettable)	
	LED HOURS	0 ... XXXH		Display number of hours LEDs have been powered on since manufacture (not user-resettable)	
	SW VERSION	V.X.X.X		Displays currently active fixture software (firmware) version	
	FIXTURE ID	0000 - 9999		User-settable ID number. Use Up and Down buttons to scroll to the chosen ID number. Use Enter to confirm.	
	RDM UID	4D50XXXXXXXX		Displays fixture's unique RDM ID	
	TEMPERATURES	LED / BASE		Scroll through current readings on all PCB temperature sensors	
	FIXTURE TYPE	ERA 800 PERFORMANCE / ERA 800 PROFILE		Displays the configuration that the firmware has recognized: Performance or Profile	
DMX LIVE	STROBE ... PAN/TILT SPEED	0 - 255		Scroll to see values currently being received on each DMX channel	
MANUAL CONTROL	RESET	ALL		Reset fixture	
		PAN / TILT		Reset pan and tilt only	
		EFFECTS		Reset effects only	
	STROBE ... TILT FINE			Scroll through effects, then manually control an effect	
SERVICE*	PAN/TILT FEEDBACK	ON		Enable pan/tilt position feedback system	
		OFF		Disable pan/tilt position feedback system	
	CALIBRATION	PAN ... BLADE4 ANGLE (in Performance fixtures) or FOCUS (in Profile fixtures)	-127 – +128 ... -127 – +128		Scroll through effects, press ENTER to select effect. Adjust home position from -127 to +128 and press ENTER to confirm the new custom setting. Important! If you want to keep custom settings you must apply a SAVE SETTING → SAVE command before you leave the CALIBRATION menu.
			LOAD		Load the factory default calibration settings
		LOAD DEFAULTS	SAVE		Save current custom calibration settings as default settings. Important! Applying LOAD DEFAULTS → SAVE and confirming with SAVE SETTING → SAVE will permanently overwrite the factory default calibration settings and should normally be used by Martin Service only!
		SAVE SETTING	SAVE		Confirm any changes made to calibration values and any changes made in the LOAD DEFAULTS and CLEAR ALL VALUES menus
		CLEAR ALL VALUES	RESTORE		Reset all calibration values to zero. Important! Applying CLEAR ALL VALUES → RESTORE and confirming with SAVE SETTING → SAVE will permanently overwrite the factory default calibration settings and should normally be used by Martin Service only!
	USB	UPDATING FILES	ERA800 1.1.0 ... ERA800 X.X.X		Displays firmware upload status

Table 3: Control menus

* See the fixture's Safety and Installation manual for full details of the SERVICE control menu functions

Status messages

The ERA 800 Performance / Profile monitors its own performance and has a diagnostic error recognition system that lets it display messages with information about any problem detected.

If the fixture has a status message to report, a red warning triangle appears in the bottom right of the control panel display. If the red triangle is present, pressing the Enter button displays any active status messages.

Excessively high temperatures

If any of the temperature sensors reports that the fixture has exceeded its recommended temperature range, the fixture reports a temperature warning and reduces light output to reduce its temperature. If the temperature reaches a dangerous level, light output is shut down completely.

Temperature warnings are canceled and full light output becomes available again as soon as the temperature returns to normal.

Status message list

The status messages that the fixture can display are listed in Table 4 below:

Code	Notes
Animation 1	Animation wheel error
BaseFan	Base cooling fan warning
BaseTemp	Base temperature warning
Blade	Framing module error
CoolFan1	LED cooling fan 1 warning
CoolFan2	LED cooling fan 2 warning
CoolFan3	LED cooling fan 3 warning
CoolFan4	LED cooling fan 4 warning
CoolFan5	Cooling fan 5 warning
CoolFan6	Cooling fan 6 warning
CMYFan1	CMY module cooling fan 1 error
CMYFan2	CMY module cooling fan 2 error
CPU1	CPU 1 (Display PCB) error
CPU2	CPU 2 (Pan/tilt control) error
CPU3	CPU 3 (CMY control) error
CPU4	CPU 4 (Gobo/color wheel control) error
CPU5	CPU 5 (Framing control) error
CPU6	CPU 6 (Zoom/focus control) error
CPU7	CPU 7 (Prism/frost control) error
CPU8	CPU 8 (LED control) error
CTO	Color Temperature Control color flag error
Cyan	Cyan color flag error
FixedGobo	Fixed gobo wheel error
Focus	Focus error
Frost1	Frost 1 (Light Frost) error
Frost2	Frost 2 (Heavy Frost) error
GoboFan	Gobo wheel cooling fan warning
GoboRot	Gobo rotation error

Table 4: Status messages

Code	Notes
HeadFan1	Head cooling fan 1 error
HeadFan2	Head cooling fan 2 error
HeadTemp	Head temperature warning
Magenta	Magenta color flag error
Pan	Pan error
Prism1	Prism 1 error
Prism1Rot	Prism 1 rotation error
Prism2	Prism 2 error
Prism2Rot	Prism 2 rotation error
RotGobo	Rotating gobo wheel error
Temp	LED temperature error
Tilt	Tilt error
Yellow	Yellow color flag error
Zoom	Zoom error

Table 4: Status messages



www.martin.com