ERA 600 Performance
ERA 600 Profile
User Guide

Martin
by HARMAN

User Documentation update information

Any important changes in the ERA 600 Performance / Profile User Guide are listed below.

Revision E

Updated to include ERA 600 Profile.

Revision D

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

Revision C

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

Revision B

Rotating gobo wheel on page 6 is viewed from front, not LED side.

Revision A

First version released. Covers ERA 600 Performance firmware version 1.1.0

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ERA 600 Performance / Profile / ERA 600 Profile User Guide, P/N 5124286-00 Rev. E

Contents

Introduction

Warning! Before installing, operating or servicing the ERA 600 Performance / Profile 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. The latest version is also available for download from the ERA 600 Performance / Profile area of the Martin® website at www.martin.com.

Thank you for selecting an ERA 600 Performance or ERA 600 Profile moving head lighting fixture from Martin®.

This User Guide is a supplement to the Installation and Safety Manual that is supplied with the fixture. Both these documents are available for download from the ERA 600 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 600 Performance and Profile models

The ERA 600 Performance and ERA 600 Profile fixtures share the effects described in this user guide apart from one difference – the ERA 600 Performance has a four-blade rotating framing module while the ERA 600 Profile has an additional rotating gobo wheel with seven rotating gobos.

Spare parts available from Martin let you convert fixtures from ERA 600 Performance to ERA 600 Profile and vice versa. You can find details of the parts required and the conversion procedure in the ERA 600 Performance / Profile Safety and Installation Manual.

From firmware version 2.3.0, the same firmware can be installed in the ERA 600 Performance and ERA 600 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 600 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 600 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 fixture 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 600 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 fixture'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. 1 Hz 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 fixture 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 fixture provides a color wheel that lets you select from seven 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.

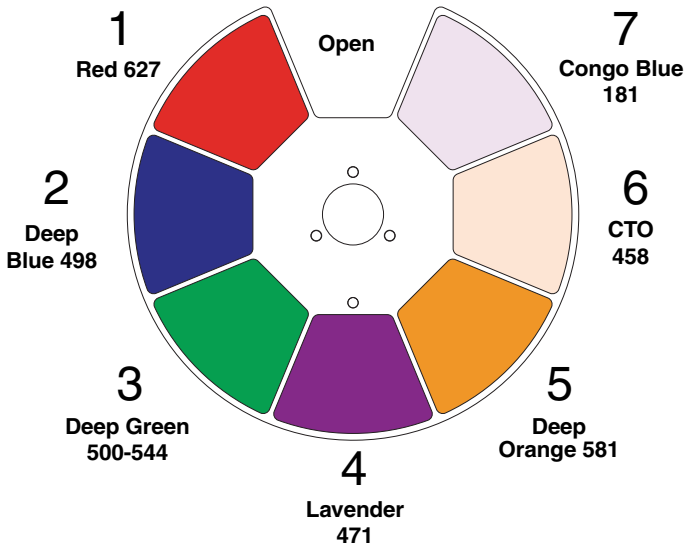


Figure 1: Color wheel

Rotating gobos

The ERA 600 Performance has one rotating gobo wheel (Gobo Wheel 1) and a rotating framing effect, while the ERA 600 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 600 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.

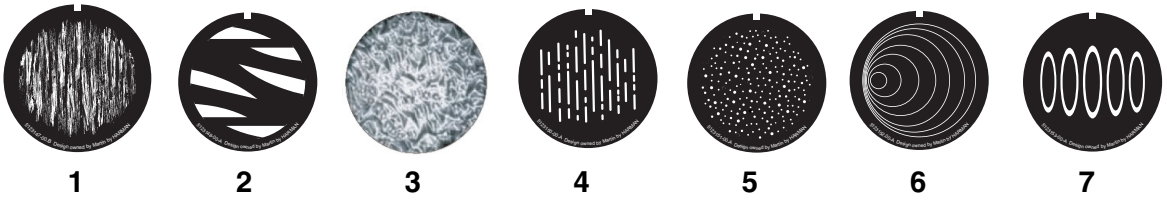
A CRI (color rendering index) boost filter is available from Martin as an accessory (see the product specifications at www.martin.com). If you replace one of the gobos with the CRI boost filter, you can obtain a CRI of over 80.

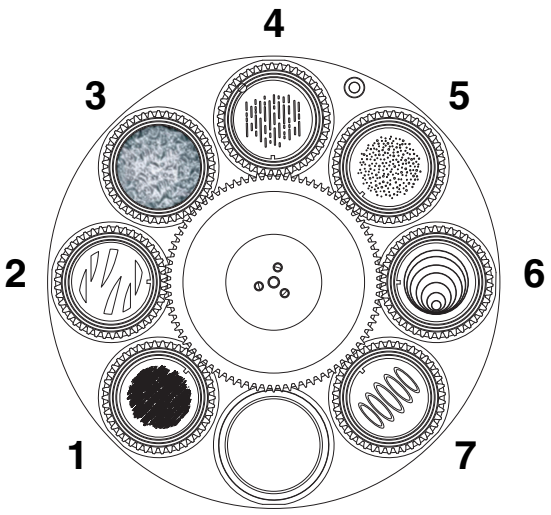
Martin is making parts available that allow you to convert between Performance and Profile models by swapping Gobo Wheel 3 and framing modules. See the ERA 600 Performance / Profile Safety and Installation Manual for details.

Gobo Wheel 1

Gobo Wheel 1 in the ERA 600 Performance / Profile has seven 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 600 Performance / Profile Safety and Installation Guide contains details of gobo replacement procedures.





Gobo Wheel 1 seen from front lens side

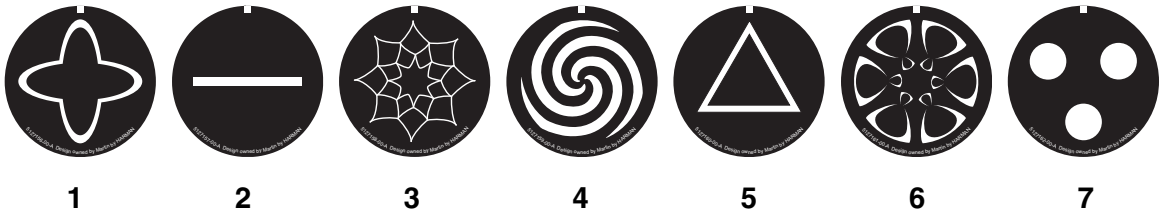
Slot - Gobo	Part number
1. Ray Brush	P/N 5123147-00
2. Too Many Doctors	P/N 5123148-00
3. Limbo (fused glass)	P/N 5123149-00
4. Light Lines	P/N 5123150-00
5. Dots in Space	P/N 5123151-00
6. Sonar	P/N 5123152-00
7. 5 Circles in Line	P/N 5123153-00

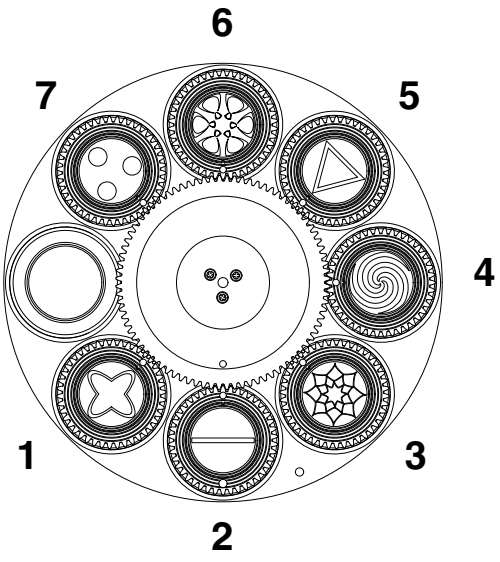
Figure 2: Rotating gobos installed on Gobo Wheel 1 as standard

Gobo Wheel 3 (ERA 600 Profile)

Gobo Wheel 3 in the ERA 600 Profile has seven 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 600 Performance / Profile Safety and Installation Guide contains details of gobo replacement procedures.





Gobo Wheel 3 seen from LED light source side

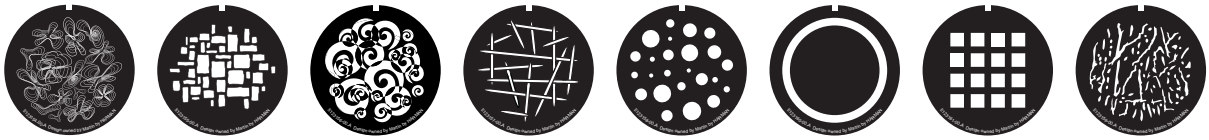
Slot - Gobo	Part number
1. 4D Cone	P/N 5127156-00
2. Bar	P/N 5127157-00
3. Spidey 1	P/N 5127158-00
4. Spiral	P/N 5127159-00
5. Triangle	P/N 5127160-00
6. Bite It	P/N 5127161-00
7. Triple Beam	P/N 5127162-00

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

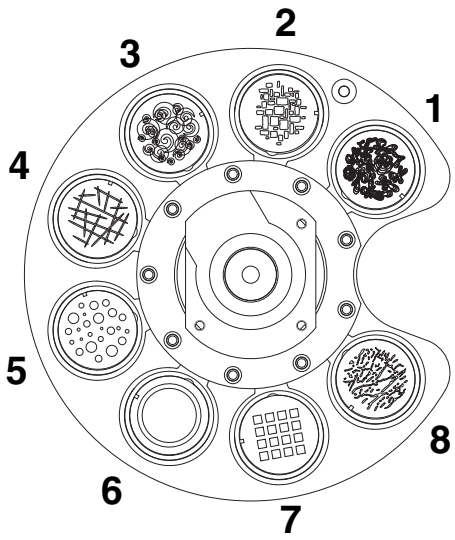
Static gobos

The static gobo wheel in the ERA 600 Performance / Profile has eight 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 5123154-00
2. Brick It	P/N 5123155-00
3. Happy	P/N 5123156-00
4. Mikado	P/N 5123157-00
5. Dots	P/N 5123158-00
6. Lasercone Single	P/N 5123160-00
7. Squares	P/N 5123161-00
8. Marble Veins	P/N 5123159-00



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 600 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.

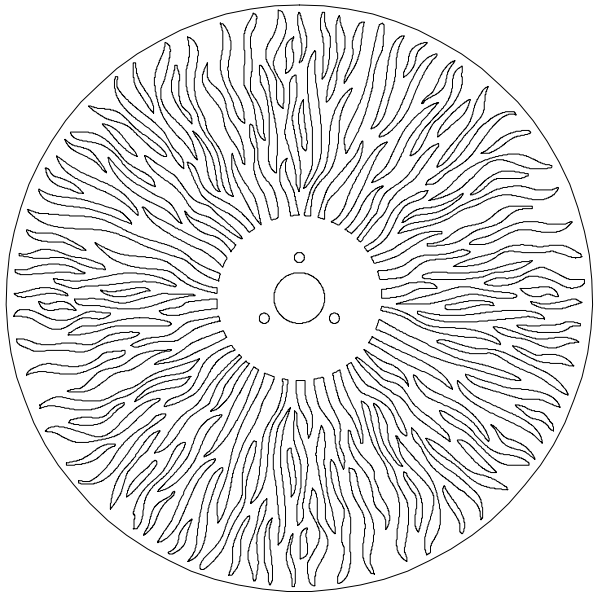


Figure 5: ‘Radial Breakup’ animation wheel

Frost

The fixture has a frost effect that gives a wash-type projection and softens gobo outlines.

Rotating prisms

The ERA 600 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 closed. Opening and closing pulse effects with variable speed are also available.

Framing (ERA 600 Performance)

The 4-blade framing module in the ERA 600 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 600 Performance / Profile’s zoom lens varies the focused beam angle from 6° to 45°. 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.

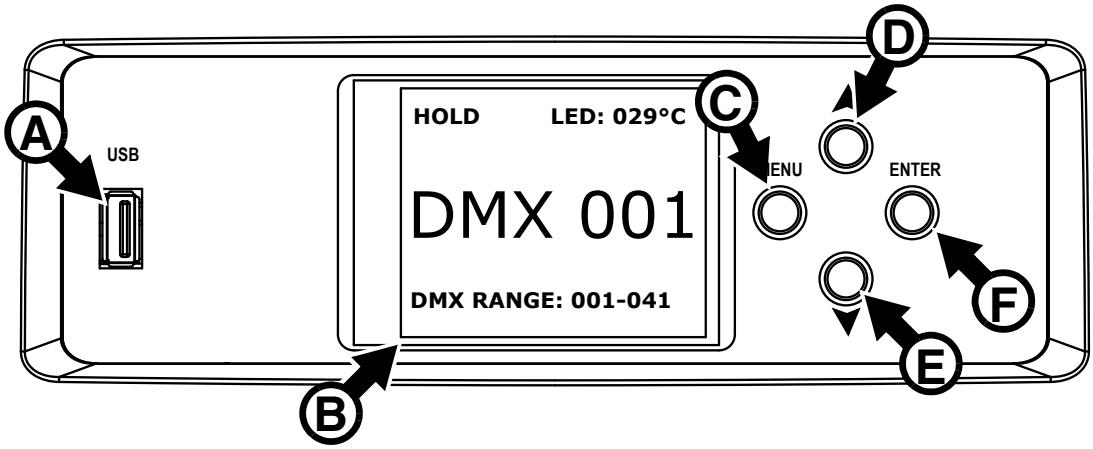
Pan and tilt

The ERA 600 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, and ERA 600 Performance fixture will occupy channels 001–041.

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 fixture 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 600 Profile)

The ERA 600 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 600 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 fixture 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 fixture 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 fixture 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 fixture 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 fixture will display this ID number by default, and indicate **FIXTURE ID** in the display.

Personality

The fixture 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).

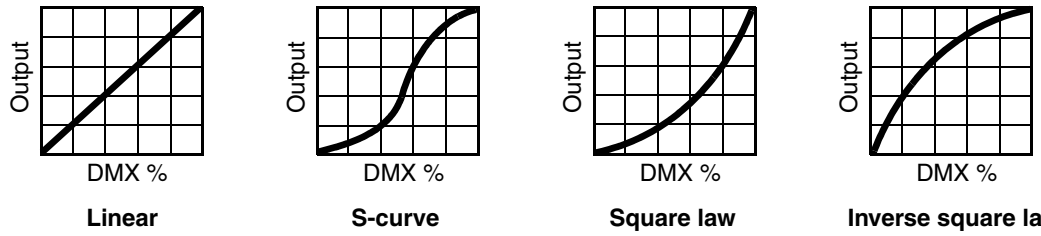


Figure 7: Dimming curve options

- **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 1200 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 600 Performance or ERA 600 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 600 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 fixture and operate it 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 will keep its effect positions and settings until you enter a new menu. When you do this, the fixture will revert to default positions and settings. The fixture will also revert to default positions and settings if you exit and then re-enter **MANUAL CONTROL**.

Service

Servicing the fixture and the contents of the **SERVICE** menu are covered in the ERA 600 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 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 tables 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 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 protocols

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 600 Performance

Channel	DMX Value	Function	Fade type	Default value
1	0 - 19 20 - 24 25 - 64 65 - 69 70 - 84 85 - 89 90 - 104 105 - 109 110 - 124 125 - 129 130 - 144 145 - 255	**Strobe/shutter effect** Shutter closed Shutter open Strobe, slow → fast Shutter open Opening pulse, slow → fast Shutter open Closing pulse, slow → fast Shutter open Random strobe, slow → fast Shutter open Random opening pulse, slow → fast Shutter open	Snap	0
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

Table 1: ERA 600 Performance DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
12		**Color wheel**	Fade	0
		Indexing		
		Solid colors		
	0 - 5	Open		
	6 - 11	Color 1 (Red)		
	12 - 17	Color 2 (Deep Blue)		
	18 - 23	Color 3 (Deep Green)		
	24 - 29	Color 4 (Lavender)		
	30 - 35	Color 5 (Deep Orange)		
	36 - 41	Color 6 (CTO)		
	42 - 47	Color 7 (Congo Blue)		
		Split colors (continuous color wheel indexing)		
	48	Open		
	49 - 57	Open → Color 1		
	58	Color 1 (Red)		
	59 - 67	Color 1 → Color 2		
	68	Color 2 (Deep Blue)		
	69 - 77	Color 2 → Color 3		
	78	Color 3 (Deep Green)		
	79 - 87	Color 3 → Color 4		
	88	Color 4 (Lavender)		
	89 - 97	Color 4 → Color 5		
	98	Color 5 (Deep Orange)		
	99 - 107	Color 5 → Color 6		
	108	Color 6 (CTO)		
	109 - 117	Color 6 → Color 7		
	118	Color 7 (Congo Blue)		
	119 - 127	Color 7 → open		
		Continuous rotation		
	128 - 190	CW, fast → slow		
	191 - 192	Stop (wheel stops at current position)		
	193 - 255	CCW slow → fast		
13		**Gobo wheel 1 (rotating gobos)**	Snap	0
		Gobo selection		
	0 - 6	Open		
	7 - 13	Gobo 1 (Ray Brush)		
	14 -20	Gobo 2 (Too Many Doctors)		
	21 - 27	Gobo 3 (Limbo)		
	28 - 34	Gobo 4 (Light Lines)		
	35 - 41	Gobo 5 (Dots in Space)		
	42 - 48	Gobo 6 (Sonar)		
	49 - 55	Gobo 7 (5 Circles in Line)		
	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		
	105 - 178	CW, fast → slow		
	179 - 181	Stop (wheel stops at current position)		
	182 - 255	CCW slow → fast		
14		**Gobo wheel 1**	Snap	0
		Gobo indexing/rotation		
	0 - 127	Gobo indexing 0 - 360°		
	128 - 190	Gobo rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Gobo rotation CCW slow → fast		
15		**Gobo wheel 1**	Fade	0
		Gobo indexing/rotation fine		
	0 - 255	Indexed position / rotation speed fine		

Table 1: ERA 600 Performance DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
16		**Gobo wheel 2 (static gobos)** **Gobo selection** 0 - 6 Open 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 8 (Marble Veins) 63 - 69 Gobo 1 shake 70 - 76 Gobo 2 shake 77 - 83 Gobo 3 shake 84 - 90 Gobo 4 shake 91 - 97 Gobo 5 shake 98 - 104 Gobo 6 shake 105 - 111 Gobo 7 shake 112 - 118 Gobo 8 shake **Continuous gobo wheel rotation** 119 - 185 CCW, fast → slow 186 - 188 Stop (wheel stops at current position) 189 - 255 CW slow → fast	Snap	0
17	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
18	0 - 255	**Frost** No frost → full frost	Fade	0
19	0 - 10 11 - 255	**Rotating Prism 1 deployment** Off On	Snap	0
20	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
21	0 - 10 11 - 255	**Rotating Prism 2 deployment** Off On	Snap	0
22	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
23	0 - 255	**Iris** Open → closed	Fade	0
24	0 - 65535	**Zoom (MSB)** Narrow → wide	Fade	0
25		**Zoom fine (LSB)**	Fade	0
26	0 - 65535	**Focus (MSB)** Infinity → near	Fade	0
27		**Focus fine (LSB)**	Fade	0
28	0 - 255	**Framing blade 1: position** Out → in	Fade	0
29	0 -126 127 - 128 129 - 255	**Framing blade 1: angle** Angle – Parallel Angle +	Fade	127
30	0 - 255	**Framing blade 2: position** Out → in	Fade	0

Table 1: ERA 600 Performance DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
31	0 -126 127 - 128 129 - 255	**Framing blade 2: angle** Angle – Parallel Angle +	Fade	127
32	0 - 255	**Framing blade 3: position** Out → in	Fade	0
33	0 -126 127 - 128 129 - 255	**Framing blade 3: angle** Angle – Parallel Angle +	Fade	127
34	0 - 255	**Framing blade 4: position** Out → in	Fade	0
35	0 -126 127 - 128 129 - 255	**Framing blade 4: angle** Angle – Parallel Angle +	Fade	127
36	0 -126 127 - 128 129 - 255	**Framing module angle** Minimum (-60°) 0° Maximum (+60°)	Fade	127
37	0 - 65535	**Pan (MSB)** Left → right	Fade	32768
38		**Pan, fine (LSB)**		
39	0 - 65535	**Tilt (MSB)** Up → down	Fade	32768
40		**Tilt, fine (LSB)**		
41		**Fixture control/settings** *(hold for number of seconds indicated to activate)* 0 - 9 *No function* 10 - 14 Reset entire fixture – 5 sec. 15 *No function* 16 Reset color – 5 sec. 17 Reset beam only– 5 sec. 18 Reset pan and tilt only – 5 sec. 19 - 22 *No function* 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 *No function* 28 Fast pan and tilt speed– 5 sec. (menu override, default setting) 29 Smooth pan and tilt speed– 5 sec. (menu override) 30 - 51 *No function* 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 *No function*	Snap	0

Table 1: ERA 600 Performance DMX Protocol

ERA 600 Profile

Channel	DMX Value	Function	Fade type	Default value
1		**Strobe/shutter effect**	Snap	0
	0 - 19	Shutter closed		
	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** *Solid colors*	Fade	0
	0 - 5	Open		
	6 - 11	Color 1 (Red)		
	12 - 17	Color 2 (Deep Blue)		
	18 - 23	Color 3 (Deep Green)		
	24 - 29	Color 4 (Lavender)		
	30 - 35	Color 5 (Deep Orange)		
	36 - 41	Color 6 (CTO)		
	42 - 47	Color 7 (Congo Blue)		
		Split colors (continuous color wheel indexing)		
	48	Open		
	49 - 57	Open → Color 1		
	58	Color 1 (Red)		
	59 - 67	Color 1 → Color 2		
	68	Color 2 (Deep Blue)		
	69 - 77	Color 2 → Color 3		
	78	Color 3 (Deep Green)		
	79 - 87	Color 3 → Color 4		
	88	Color 4 (Lavender)		
	89 - 97	Color 4 → Color 5		
	98	Color 5 (Deep Orange)		
	99 - 107	Color 5 → Color 6		
	108	Color 6 (CTO)		
	109 - 117	Color 6 → Color 7		
	118	Color 7 (Congo Blue)		
	119 - 127	Color 7 → open		
		Continuous rotation		
	128 - 190	CW, fast → slow		
	191 - 192	Stop (wheel stops at current position)		
	193 - 255	CCW slow → fast		

Table 2: ERA 600 Profile DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
13		**Gobo wheel 1 (rotating gobos)** **Gobo selection**	Snap	0
	0 - 6	Open		
	7 - 13	Gobo 1 (Ray Brush)		
	14 -20	Gobo 2 (Too Many Doctors)		
	21 - 27	Gobo 3 (Limbo)		
	28 - 34	Gobo 4 (Light Lines)		
	35 - 41	Gobo 5 (Dots in Space)		
	42 - 48	Gobo 6 (Sonar)		
	49 - 55	Gobo 7 (5 Circles in Line)		
	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		
	105 - 178	CW, fast → slow		
	179 - 181	Stop (wheel stops at current position)		
	182 - 255	CCW slow → fast		
14		**Gobo wheel 1** **Gobo indexing/rotation**	Snap	0
	0 - 127	Gobo indexing 0 - 360°		
	128 - 190	Gobo rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Gobo rotation CCW slow → fast		
15		**Gobo wheel 1** **Gobo indexing/rotation fine**	Fade	0
	0 - 255	Indexed position / rotation speed fine		
16		**Gobo wheel 2 (static gobos)** **Gobo selection**	Snap	0
	0 - 6	Open		
	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 8 (Marble Veins)		
	63 - 69	Gobo 1 shake		
	70 - 76	Gobo 2 shake		
	77 - 83	Gobo 3 shake		
	84 - 90	Gobo 4 shake		
	91 - 97	Gobo 5 shake		
	98 - 104	Gobo 6 shake		
	105 - 111	Gobo 7 shake		
	112 - 118	Gobo 8 shake		
		Continuous gobo wheel rotation		
	119 - 185	CCW, fast → slow		
	186 - 188	Stop (wheel stops at current position)		
	189 - 255	CW slow → fast		

Table 2: ERA 600 Profile DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
17		**Gobo wheel 3 (rotating gobos)** **Gobo selection**	Snap	0
	0 - 6	Open		
	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 7 (Triple Beam)		
	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		
	105 - 178	CCW, fast → slow		
	179 - 181	Stop (wheel stops at current position)		
	182 - 255	CW slow → fast		
18		**Gobo wheel 3** **Gobo indexing/rotation**	Snap	0
	0 - 127	Gobo indexing 0 - 360°		
	128 - 190	Gobo rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Gobo rotation CCW slow → fast		
19		**Gobo wheel 3** **Gobo indexing/rotation fine**	Fade	0
	0 - 255	Indexed position / rotation speed fine		
20		**Animation**	Snap	0
	0 - 5	Open		
	6 - 128	Indexing CCW 0° → 540°		
	129 - 191	Continuous rotation CW fast → slow		
	192	Stop		
	193 - 255	Continuous rotation CCW slow → fast		
21		**Frost**	Fade	0
	0 - 255	No frost → full frost		
22		**Rotating Prism 1 deployment**	Snap	0
	0 - 10	Off		
	11 - 255	On		
23		**Rotating Prism 1 movement**	Snap	0
	0 - 127	Indexing 0° - 360°		
	128 - 190	Rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Rotation CCW slow → fast		
24		**Rotating Prism 2 deployment**	Snap	0
	0 - 10	Off		
	11 - 255	On		
25		**Rotating Prism 2 movement**	Snap	0
	0 - 127	Indexing 0° - 360°		
	128 - 190	Rotation CW fast → slow		
	191 - 192	Stop		
	193 - 255	Rotation CCW slow → fast		
26		**Iris**	Fade	0
	0 - 255	Open → closed		
27		**Zoom (MSB)**	Fade	0
	0 - 65535	Narrow → wide		
28		**Zoom fine (LSB)**	Fade	0
29		**Focus (MSB)**	Fade	0
	0 - 65535	Infinity → near		
30		**Focus fine (LSB)**	Fade	0
31		**Pan (MSB)**	Fade	32768
	0 - 65535	Left → right		
32		**Pan, fine (LSB)**		

Table 2: ERA 600 Profile DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
33	0 - 65535	**Tilt (MSB)** Up → down	Fade	32768
34		**Tilt, fine (LSB)**		
35		**Fixture control/settings** *(hold for number of seconds indicated to activate)*	Snap	0
	0 - 9	*No function*		
	10 - 14	Reset entire fixture – 5 sec.		
	15	*No function*		
	16	Reset color – 5 sec.		
	17	Reset beam only– 5 sec.		
	18	Reset pan and tilt only – 5 sec.		
	19 - 22	*No function*		
	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	*No function*		
	28	Fast pan and tilt speed – 5 sec. (menu override, default setting)		
	29	Smooth pan and tilt speed – 5 sec. (menu override)		
	30 - 51	*No function*		
	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	*No function*		

Table 2: ERA 600 Profile DMX Protocol

Control panel menus

ERA 600 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 1200 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	All temperature readouts 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 ... BLADE 4 ANGLE		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
	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
	TEMPERA-TURES	LED / BASE		Scroll through current readings on all PCB temperature sensors
	FIXTURE TYPE	ERA 600 PERFORMANCE / ERA 600 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 DEFAULTS	LOAD	Load the factory default calibration settings
			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	ERA600 1.1.0 ... ERA600 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***

Service and display messages

The ERA 600 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 effect error
GoboFan	Gobo wheel cooling fan warning
GoboRot	Gobo rotation error
HeadFan1	Head cooling fan 1 error

Table 4: Status messages

Code	Notes
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