



Shamal

User Instructions



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1 **General introduction**

Thanks for your purchase of our product **SHAMAL**. This unit is a professional 136-channel DMX console with high performance and advanced capabilities. It is a refined digital light controller made up of two control parts — one part for Fixtures and one part for PARs, which can be used to control the Fixtures and the PARs jointly and effectively according to different requirements towards scenic lighting effect.

2 **Safety Rules**

In order to use the **SHAMAL** more available and effectively, please take good care of this unit. The following rules give important information regarding safety during use and maintenance.

- This product is not intended for domestic utilization.
- keep the unit dry, do not expose it to water or high levels of humid. And never operate the unit with wetted hands.
- Do not dismantle or modify the product non-authorizedly.
- If any liquid is spilled on or in the unit, disconnect the power supply to the product immediately.
- Do not open the unit --- there is no user serviceable parts inside.
- Handle this product carefully, and any strong shocks or vibration may result in malfunction.
- Do not allow children to tamper or play with this unit.

It is of **great benefit** for you to keep the Introduction Manual for future reference.

3 **Notice Information**

- Before operating, please make sure that the unit has not suffered any damage during transportation. should any damage have occurred, please do not use it and contact the local dealer immediately.
- We won't be responsible for any resulting damage due to your inobservance or improper operation on the unit. Never allow non-authorized or unqualified personnel with any kind of intervention to the product.
- Specifications are subject to change without notice. For further information or latest software updating, please visit our web site:

www.ayrton-light.com

- **Copyright notice:** no part of this product can be reproduced, transmitted, or translated into any language in any form without authorized permission.

4 Features and Specifications

4.1 Features

- Hybrid console for 16 DMX units (8 intelligent fixtures & 8 PARs)
- 6 freely programmable PAR programs, ONE/MIX/SEQ available
- 8 freely programmable fixture programs, MIX/SEQUENCE available
- 136 DMX channels(8 channels for PARs and up to 16 channels per fixture)
- 96 freely programmable fixture scenes / PAR scenes
- Speed, Fade Time and Master control for chases
- Joystick for Pan / Tilt & Pan fine / Tilt fine movement of fixture
- Free access of CF card(32M) for the exchange of data and memories
- Blackout overall output
- Fade time/Non-fade time under control
- Power failure memory and Fog Machine trigger
- MIDI control over scenes, chases and blackout
- Audio input and built-in microphone for music sync. function

4.2 Specifications

- Model SHAMAL
- Power Input DC 9~15V, 600 mA min.
- LCD 2×16 characters
- Audio Trigger Built-in microphone or line in
- DMX Output 3 PIN female DMX connector
- Dimensions 482×178×80mm
- Weight Approx. 6.2 kg

5 Basic Control Parts

5.1 Front view

- **SCENE buttons:**
Press the scene buttons to load or store relevant Scenes.
- **CHASE buttons:**
These buttons are used to load or store relevant Chases.
- **FIXTURE buttons:**
To select fixtures for setting, programming or recording.
- **Dimmer faders:**
To control and adjust relevant dimming level for each channel.
- **PAGE button:**
To select relevant Scene-page or Chase-page.

- **STEP / MIX / SEQ button:**
To activate the “STEP” function or switch between the Mix mode and the Sequence mode.
- **TAP SYNC button:**
Repeatedly tap this button to establish different chase rate.
- **AUDIO button:**
Used to activate audio sync of chase rate or set a scene at audio effect.
- **GROUP button:**
To select more fixtures while holding down this button simultaneously.
- **BLACKOUT button:**
Press this button to enable or disable relevant DMX output. When its LED is lit, that means relevant DMX output is disabled. Press this button again the LED will be “off”, that means the DMX output is reactivated.
- **SETUP button:**
Press this button for about 3 seconds to access the SETUP menu.
- **FOG MACHINE button:**
This button is used to control the Fog machine. Relevant LED will show you the different working states(HEATING or READY).
- **DEL button:**
Press this button to delete relevant Scenes or Chases.
- **RECORD button:**
Press and hold down this button for about 5 seconds to access the Scene/Chase mode, and also use this button to record Scenes or Chases.
- **ESC button:**
To cancel relevant operation or to exit.
- **UP/DOWN buttons:**
To select or adjust desired item or level during operation.
- **CH.PAGE button:**
Press this button to switch between Ch1-8 and Ch9-16. LED “off ” means 1-8 channels available, while LED “on “ means 9-16 channels available.
- **FINE button:**
Use this button can adjust relevant level finely by a small margin .
- **“^ v < >” buttons:**
Used to adjust PAN / TILT movement.
- **Joystick:**
Used to control and adjust relevant level more conveniently through the Pan or Tilt movement.
- **STANDBY button:**
Press this button to enable or disable relevant output of PARs. Its function is similar to the BLACKOUT button.
- **FADE + SPEED button:**
To select FADE TIME or NO FADE TIME.

- **FULL ON button:**
Press this button to output all the PARs at full intensity.
- **AUTO button:**
Used to activate AUTO mode.
- **ONE/MIX/SEQ button:**
To select One mode, Mix mode or Sequence mode.
- **SPEED slider:**
Used to set or adjust relevant speed as user's desire.
- **FADE slider:**
Used to adjust the FADE TIME level.
- **AUDIO slider:**
To adjust for best audio effect.
- **MASTER slider:**
Used to proportionally and totally change the overall console output.

5.2 **Rear view**

- **POWER ON / OFF :**
Used to switch on / off the power.
- **DC INPUT :**
DC 9 ~15V , 500mA min.
- **AUDIO LINE INPUT :**
0.1V~1Vp-p.
- **DMX polarity select**
Used to select DMX polarity (2-,3+ / 2+,3-).
- **DMX OUT :**
To send DMX data.
- **MIDI IN :**
Used to receive MIDI data.
- **FOG MACHINE INPUT :**
To connect with the fog machine.
- **CF CARD socket:**
It is for CF CARD operation.
- **EXT STEP CONTROL INPUT :**
To input the external Step Control signals.

6 Operation guide

Operation upon Fixtures

6.1 Control Fixture channels by “joystick”

- This unit has 8 FIXTURE buttons to select 1—8 fixtures respectively.
- Each fixture can be selected by pressing relevant Chase button. Its LED will be lit when being selected. Pressing the Chase button again can turn off the fixture.
- More fixtures can be selected while holding down the “Group” button simultaneously.
- “Joystick” can be used to control the selected fixtures (its LED will blink) conveniently. And relevant adjustment will be shown on the LCD-display through 100/255 mode.
- The disabled fixtures (LED is “off”) will show no signal input.
- Fixture channel can be controlled by the “joystick”. Adjustment of PAN, TILT, PAN FINE and TILT FINE are available as user’s desire.

6.2 Program or record a Fixture Scene / Chase

Before programming, press and hold down the RECORD button for about 5 seconds to enter the Scene/Chase mode, its LED will be lit, LCD shows:

SELECT A SCENE OR CHASE! PAGE××

6.2.1 Program / record a Fixture Scene

- (1) Press and hold down the RECORD button for about 5 seconds to enter the CHASE/SCENE mode. Then choose the Scene page by UP or DOWN button.
- (2) Select and press a Scene button to be recorded, its LED will begin to blink quickly. LCD will show you as below:

EDIT SCENE× / PG××
SAVE ESC PAGE××

- (3) Select one or more fixtures, set a scene by faders. User can also insert a recorded scene for new scene setting.
- (4) select another series of fixtures, repeat step (3).
- (5) Press RECORD button to record this scene, all LEDs will flash suddenly. User can then set and record another Scene as desire.

Note: In Record mode, user can **delete a Fixture Scene**. Select and press a recorded Scene button in the Record mode, its LED will blink quickly. Then press the DEL button to delete the scene, all LEDs will blink suddenly. (Press ESC button to exit.)

6.2.2 Program / record a Fixture Chase

- (1) Press and hold down the RECORD button for about 5 seconds to enter the CHASE / SCENE mode.

- (2) Select and press a Chase button to be recorded, its LED will begin to blink quickly.
LCD will show you as below:

EDIT	CHASE×	/ TL××
ADD	ESC	STEP××

- (3) Use UP or DOWN button to select the Chase Step to be programmed.
 (4) Set a scene for Chase recording.
 (5) Press the RECORD button, all LEDs will blink briefly, and LCD will show you the new step.
 (6) Pressing the DEL button can delete the current step, all LEDs will blink briefly.
 (7) User can press ESC button to exit .

6.3 Select or deselect a Fixture Scene / Chase

6.3.1 Select / deselect a Fixture Scene

- Press “PAGE” button, the relevant LED will light up, you can just use UP/DOWN buttons to select the scene page. And **PAGE : ××** will be shown on the top left corner of the LCD-display.
- If the scene LED is “on”, that means the scene was programmed, while “off” means unprogrammed. When the LED lights up, press its relevant button to start the scene, the LED will start to flash.
- You can also control the channels by using “joystick”.
- Press the scene button for 1 second to restart , and press it again for “off” .

6.3.2 Select / deselect a Fixture Chase

- **Choose program mode:**
Press “MIX/SEQUENCE” button to select program mode when no program running. When LED is “on”, that means it is in “MIX” mode, while “flashing” means “SEQUENCE” mode. The “MIX / SEQUENCE” button is useless when program is running .
- **Sequence mode:**
Enter this mode, press corresponding buttons to operate the programs. The LED flashes when relevant program runs, while other LEDs don’t flash. Close all the running programs before exit this mode.
- **Mix mode:**
In this mode, LEDs (relevant to the running programs) will flash simultaneously and programs can also run synchronously. If there are several programs going upon one fixture, the last one should be effective. Close all the running programs before exit this mode.

- **Select Chase speed mode**
Press a programmed Chase button, its LED will be lit to indicate its Speed mode. Fast flashing means user can set the speed by SPEED Slider or the TAP SYNC button, while slow flashing means the Chase speed has already been programmed (Speed adjusting will be of no effect at this moment). **User can switch the Chase speed mode by pressing the “STEP/MIX/SEQ” button while pressing and holding down the programmed Chase button.** (the priority of Chasing sequence keeps unaffected.)
- **Operate relevant chase by faders**
You can control any of the channels by faders while the chase running. If you want to return to its former track, please press any of the chase button .
All scenes are disabled when chases running.
- **STEP**
Press STEP button, the chase will step forward while the program running.
- **AUDIO**
Press AUDIO button while chase running, the AUDIO LED will light up, that means you have entered the “AUDIO” mode. FADE TIME will be useless, and the “TAP SYNC” LED will blink according to the audio effect.
- **FADE TIME/SPEED**
If the chase runs under the SPEED MODE which set by the SPEED slider or TAP SYNC button, you can then use the SPEED and FADE faders to control SPEED and FADE TIME.
- **PAN/TILT FADE ONLY**
You can select relevant channel only for PAN/TILT, or select all channels for FADE TIME.

6.4 Delete a Fixture Chase

- (1) Press RECORD button for about 5 seconds to enter CHASE/SCENE mode.
- (2) Select the Fixture Chase to be deleted, relevant LED will flash fast.

LCD shows:

EDIT CHASE × / TL × ×
ADD ESC STEP × ×

(“TL × ×” means “TOTAL”)

- (3) press the “DEL” button while pressing and holding down the Chase button simultaneously, the chase will be deleted within few seconds (all LEDs will blink suddenly).
- (4) Press “ESC” to exit.

Operation upon PARs

6.5 Program or record a PAR Scene / Chase

6.5.1 Program / record a PAR Scene

- (1) Press and hold down the RECORD button for about 5 seconds to enter the CHASE/SCENE mode. Then choose the Scene page by UP or DOWN button.
- (2) Select and press a Scene button to be recorded, its LED will begin to blink quickly. LCD will show you as below:

EDIT	SCENE×	/PG××
SAVE	ESC	PAGE××

- (3) Set a scene by faders. User can also insert a recorded scene for new scene setting.
- (4) Press RECORD button to record this scene, all LEDs will flash suddenly. User can then set and record another Scene as desire.

Note: In Record mode, user can **delete a PAR Scene**. Select and press a recorded Scene button in the Record mode, its LED will blink quickly. Then press the DEL button to delete the scene, all LEDs will blink suddenly. (Press ESC button to exit.)

6.5.2 Program / record a PAR Chase

- (1) Press and hold down the RECORD button for about 5 seconds to enter the CHASE / SCENE mode.
- (2) Select and press a Chase button to be recorded, its LED will begin to blink quickly. LCD will show you as below:

EDIT	CHASE×	/TL××
ADD	ESC	STEP××

- (3) Use UP or DOWN button to select the Chase Step to be programmed.
- (4) Set a scene for Chase recording.
- (5) Press the RECORD button, all LEDs will blink briefly, and LCD will show you the new step.
- (6) Pressing the DEL button can delete the current step, all LEDs will blink briefly.
- (7) User can press ESC button to exit .

6.6 Select or deselect a PAR Scene / Chase

6.6.1 select / deselect a PAR Scene

- (1) Press the PAGE button, its LED will be lit, you can select t scene page by UP/DOWN button. **PAGE:××** will be shown on the top left corner of the LCD-display.
- (2) If the Scene LED is “on”, that means the scene was programmed. While “off” means unprogramed. Press the programmed Scene button to reactivate the PAR Scene.
- (3) Pressing the scene button again can disable the related Scene.

6.6.2 *select / deselect a PAR Chase*

(1) Choose chase mode:

Press ONE/MIX/SEQ button to select the chase mode when no chase running. “off ” LED means “ONE” mode, “on” LED means “MIX” mode, and “flashing” LED means “SEQ” mode. It would be ineffective when chase running.

(2) “ONE” mode:

Enter this mode, then press the programmed chase button, the relevant LED will light up. The other running PAR chases will be closed.

close all the running chases when exit this mode.

(3) SEQUENCE mode:

In this mode, you should press the programmed chase buttons in turn to operate the chases. The relevant LEDs will flash when chases are running.

Close all the running chases when exit this mode.

(4) MIX mode

In this mode, chases can run at the same time. The relevant LEDs will light up when programs running. You should close all the running chases when exit.

(5) AUDIO

Press AUDIO button while chase running, the AUDIO LED will light up, that means you have entered the “AUDIO” mode. FADE TIME will be useless, and the “TAP SYNC” LED will flash according to the audio effect.

(6) STEP

Press “STEP” button, the relevant LED will blink briefly, and the chase will go forward for one step.

(7) FADE TIME / NO FADE TIME

Press “FADE+SPEED” to select “FADE TIME / NO FADE TIME”.

FADE TIME and SPEED can interact on each other jointly.

(8) STAND BY

Press this button will shutter the PAR’s output during operating.

6.7 *Delete a PAR Chase*

(1) Press RECORD key to enter CHASE/SCENE mode.

(2) Select the PAR Chase to be deleted, and the relevant LED will flash fast.

LCD shows:

EDIT CHASE X/TL × ×
ADD ESC STEP × ×

(3) Press the corresponding Chase button and “DEL” button simultaneously, and then the Chase can be deleted within few seconds.

(4) Press ”ESC” to exit.

7 Settings

7.1 Enter the setting mode

- Press SETUP for 5 seconds while no program running, relevant LED will light up. LCD will show you:

```
1. CF CARD      ↓
2. ASSIGN CH.
```

(3.P/T FADE ONLY 4.DISPLAY MODE 5.MIDI CH.)

Use UP/DOWN" to scroll, "RECORD" to enter, and "ESC" to exit.

7.2 Save data to the CF card

- Enter the setting mode, choose 1. CF CARD and press RECORD button , LCD will show you:

```
1. READ FROM CF
2. STORE TO CF
```

Then please press "UP/DOWN" to choose 2 .STORE TO CF , press "RECORD" again for further operation.

- Select relevant location (1-99) by UP/DOWN buttons to save the data, and then press the RECORD button for recording , press ESC button to exit.

7.3 Read from the CF card

- Enter the setting mode, choose 1. CF CARD and press RECORD , LCD will show you:

```
1. READ FROM CF
2. STORE TO CF
```

- Use UP/DOWN buttons to choose 1. READ FROM CF , and press the RECORD button to enter.
- Select relevant location (1-99) by UP/DOWN buttons, and press the RECORD button for data reading, use ESC to cancel or exit.

7.4 Patch channel (assign)

- Enter the setting mode to choose 2. ASSIGN CH. , and press RECORD to enter channel distributing mode. LCD shows:

```
CHANNEL1 > OUT1
OK  ESC  SEL  ADJ
```

- select the fixtures to be distributed.
- Use UP button to select relevant channel number, and press DOWN to select the channel number to be distributed.
- Press RECORD button to confirm, and press ESC button to cancel or exit.

7.5 PAN/TILT FADE ONLY

- Enter the setting mode to choose item 3. P/T FADE ONLY , and press the RECORD button to enter “PAN/TILT FADE ONLY” mode.

Further information will be shown on the LCD:

<p>FIXTURE1: ONLY OK ESC SEL ADJ</p>
--

- Select fixtures by the UP button, and press the DOWN button to select “FADE ONLY” or “FADE ALL”.
- Press “RECORD” to confirm your operation, and “ESC” to cancel or exit.

7.6 Display mode (100/255)

- Enter the setting mode and choose item 4. DISPLAY MODE , then press the RECORD button to enter. LCD will show you:

<p>DISPLAY MODE : ××× OK ESC CHANGE</p>

- Select mode100 or mode255 by UP/DOWN buttons.
- Press “RECORD” to confirm your operation, use “ESC” to cancel or exit.

7.7 MIDI channel

- Enter the setting mode and choose 5. MIDI CH. , then press RECORD button to enter the relevant further operation. LCD will show you:

<p>MIDI CH. <××> OK ESC CHANGE</p>
--

- Select relevant MIDI channels(1-16) by UP/DOWN buttons.
- Press “RECORD” to confirm your operation, and use “ESC” to cancel or exit.

8 Notice for CF card

- Do not pull out the CF card when being used.
- Power must be assured “on”, when reading or storing to CF card.
- Turn off the power when connect or disconnect CF card with the unit.
- CF card (32M) can be used only for **SHAMAL**, otherwise the data would probably be missing.

- Outputting of DMX would be stopped during the reading or storing to CF card. And so does to "ASSIGN CH." mode.
- CF card may become hot during use. Please observe due caution when removing memory cards from this device.
- Take good care of the CF card, and keep it in good conditions.

9 *MIDI Implementation*

This unit can receive and transmit MIDI NOTE information according to the relevant channels. Please keep the following list for reference.

NOTE NUMBER	FUNCTION
23-34	FIXTURE PAGE 1-12
35-50	PAR PAGE 1-16
51-58	FIXTURE SCENE 1-8
59-66	FIXTURE CHASE 1-8
67-72	PAR SCENE 1-6
73-78	PAR CHASE 1-6
79	PAR STANDBY
80	PAR FADE + SPEED
81	FIXTURE BLACKOUT
82	FIXTURE AUDIO
83	PAR AUDIO
84	PAR AUTO
85	PAR STEP
86	FIXTURE MIX/SEQ
87	PAR ONE/MIX/SEQ
88	PAR FULL ON

10 *To clear the memory*

Turn off the power, simultaneously holding down the Chase buttons 3, 6 and the Fixture buttons 2, 7, and at the same time, turn on the power.

LCD will show you :

<p>CLEAR MEMORY NOW PLEASE WAIT..</p>

Memory will be cleared within 5 seconds.