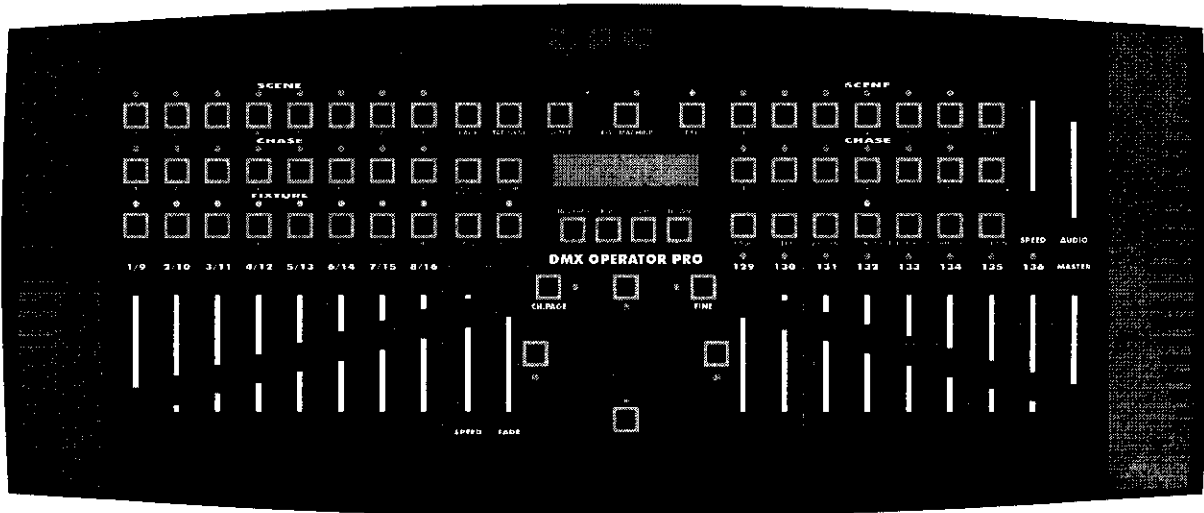




DMX OPERATOR PRO

User Instructions



Rev 1.0

No. 24-004-1152

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1 **General introduction**

Thanks for your purchase of our product **DMX OPERATOR PRO**. 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 **DMX OPERATOR PRO** more availablely and effectively, please take good care of this unit. The following rules give important information regarding safety during use and maintenance.

2.1 **Warnings:**

- This product is not intended for any 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.
- Should any liquid be spilled on the unit, disconnect the power supply to the product immediately.
- Do not operate this unit if the ambient temperature exceeds 45°C.

2.2 **Cautions:**

- Do not make any inflammable liquids or metal objects enter the unit.
- Be careful of high voltage connected with the unit.
- Do not allow children to tamper or play with this unit.
- Do not open the unit --- there is no user serviceable parts inside.
- Handle this product with great care, any strong shocks or vibration may result in malfunction.

It is of **great benefit** for you to keep the Introduction Manual for 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 doings 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 future information or

latest **DMX OPERATOR PRO** software updating, please visit our web-site :
www.americadj.com

- **Copyright notice:** no part of the 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 build-in microphone for music sync. function

4.2 Specifications

- | | |
|-----------------|--------------------------------|
| • Model | DMX OPERATOR PRO |
| • 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(1~16, 129~136):**
To control and adjust relevant channel levels of the lightings.
- **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 the relevant LED lights up, that means the disabled DMX output. Press this button again the LED will be “off”, which means that the DMX output can be done effectively.
- **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 this button for about 3 seconds to access the Scene/Chase mode, and also use this button to record Scenes or Chases.
- **ESC button:**
To cancel operations or to exit.
- **UP/DOWN buttons:**
To select or adjust during operating.
- **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:**
To adjust the relevant levels finely by a small margin .
- **“^ v < >” buttons:**
Used to adjust PAN / TILT movement finely.

- **Joystick:**
Used to control and adjust the relevant levels more conveniently through the Pan or Tilt movement .
- **STANDBY button:**
Press this button to enable or disable the PARs' outputting. 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 adjust the speed at which scenes will chase.
- **FADE slider:**
Used to adjust FADE TIME.
- **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 fog machine.
- **CF CARD slot :**

To put in / out the CF CARD.

- **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 the relevant button. The LED will flash when being selected. And tap the button again to close the fixture.
- More fixtures can be selected while holding down the "Group" button simultaneously.
- "Joystick" can be used to control the running fixtures conveniently. And the relevant data will be shown on the LCD-display through 100/255 models.
- Operation of those running fixtures will keep their relevant normal states, not being effected by "joystick".
- The disabled fixtures will show no signal input.
- Output channels can be distributed according to the user's requirements, including the operation of "joystick" (PAN,TILT,PAN FINE,TILT FINE).
- When "joystick" distributed, "FAST" and "FINE" can be used to adjust operation, relevant LEDs will light up, " ^ v < . > " buttons can be used to adjust operation also.

6.2 Program or record a Fixture Scene / Chase

Before programming, press RECORD button for about 5 seconds to enter the Scene/Chase mode, the RECORD LED will light up immediately, LCD shows:

SELECT A SCENE OR CHASE! PAGE × ×

6.2.1 Program / record a Fixture Scene

- (1) Press RECORD button to enter the CHASE/SCENE mode.
- (2) Select and press one of the Scene buttons , the relevant LED will flash . LCD shows:

EDIT SCENE XX/PG × ×
SAVE ESC PAGE × ×

And then, choose the scene page by UP / DOWN buttons.

- (3) Select one or more fixtures, set a scene by faders and scene buttons.
- (4) select another series of fixtures, repeat step (3).
- (5) Press RECORD button to record the scene, the relevant SCENE LED will light up.

Use DEL button to delete the scene, "ESC" to cancel the programming and go back to CHASE/SCENE mode.

6.2.2 Program / record a Fixture Chase

- (1) Press RECORD button for about 5 seconds to enter CHASE/SCENE mode.
- (2) Select the chase to be programmed, the relevant LED will start to flash .

LCD shows:

EDIT CHASE ××/TL××
ADD ESC STEP××

- (3) Use " UP / DOWN " to select the steps for programming.
- (4) Set a scene by chase buttons and faders.
- (5) Press "RECORD", all LEDs will blink briefly, and new step will be shown on the LCD-display.
- (6) Use "DEL" button to delete the step, all LEDs will blink briefly, the preceding step will be shown on the LCD-display.
- (7) Repeat (3)~(6) steps until it's finished.
- (8) Use "ESC" button to cancel and go back to CHASE/SCENE mode.

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 the speed mode of the chase**
Press a programmed chase button, then the relevant LED will flash. Fast flashings means the speed which set by SPEED slider or TAP SYNC button, while slow flashings means the chase speed when being programmed. You can switch the two speed modes by "MIX/SEQUENCE" . The Chase LED will go by your switching, but the sequence of the chases will not be changed.
- **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 XX/TLXX
ADD ESC STEPXX

("TLXX" means "TOTAL")

- (3) Press the chase button and "DEL" button simultaneously , the chase will be deleted within few seconds.
- (4) Press "ESC" to go back to CHASE/SCENE mode.

Additional: The last operation upon FIXTURES could be effective accordingly.

Operation upon PARs

6.5 Program or record a PAR Scene / Chase

6.5.1 Program / record a PAR Scene

- (1) Press RECORD button for 5 seconds to enter the CHASE/SCENE mode.
- (2) Select and press one of the (PAR) scene buttons, relevant LED will flash fast.
LCD shows:

EDIT SCENE ××/PG×× SAVE ESC PAGE××

And then, choose the scene page by UP / DOWN buttons.

- (3) Set a scene by scene buttons and faders.
- (4) Press "RECORD" to record this scene, the relevant LED will light up. Use DEL to delete the scene, ESC to exit CHASE/SCENE mode.

6.5.2 Program / record a PAR Chase

- (1) Press 'RECORD' for 5 seconds to enter the CHASE/SCENE mode.
- (2) Select the chase to be programmed, the relevant LED will light up.
LCD shows:

EDIT CHASE X/TL×× ADD ESC STEP ××

- (3) Use UP/DOWN buttons to select the step to be programmed.
- (4) Set a scene with scene buttons and faders.
- (5) Press the RECORD button, all LEDs will have a sudden flash. And new step will be shown on the LCD-display.
- (6) Use " DEL" to delete the step, all LEDs will blink briefly. The previous step will be shown on the LCD-display.
- (7) Repeat (3)-(6) steps until it's finished.
- (8) Use "ESC" to cancel and go back to CHASE/SCENE mode.

6.6 Select or deselect a PAR Scene / Chase

6.6.1 select / deselect a PAR Scene

- (1) Press the PAGE button and the relevant LED will light up, you can select the scene page by UP/DOWN buttons. And PAGE:×× will be shown on the top left corner of the LCD-display.

- (2) If the relevant Scene LED is “on”, that means the scene was programmed. While “off ” means unprogramed. If you want to reactive a scene, please press the relevant button, the flashing LED shows its restart.
- (3) Press the scene button again for closing.

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.

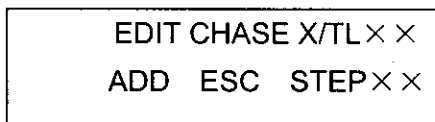
- (8) STAND BY

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:



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 your operation, 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:

FIXTURE1: ONLY
OK ESC SEL ADJ

- 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:

DISPLAY MODE : ×××
OK ESC CHANGE

- 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:

MIDI CH. <××>
OK ESC CHANGE

- 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 **DMX OPERATOR PRO**, 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 hold 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 :

CLEAR MEMORY NOW PLEASE WAIT..

Memory will be cleared within 5 seconds.