DR-PRO RACK



User's Manual

Safety Precaution

Note

Please read this entire manual to fully understand and safely use this product.

Specifications are subject to change without prior notice.

Unpacking

- Unpack and carefully examine the product.
- Report any damage and save all packing materials if any parts damaged during transport.
- Do not attempt to use this apparatus if it is damaged.

This shipment packing includes:

- DR-PRO Rack, 1pcs
- User's Instruction, 1pcs
- USB Cable, 1pcs
- Transformer, 1pcs

Safety Note

Please read all instruction prior to assembling, mounting, and operating your DMX Recorder Pro Rack. To protect against fire, electric shock and injury to persons, please follow the safety precautions listed below and observe all warnings in this manual and warnings printed on the console. The following rules give important information regarding safety during operation and maintenance for long term use. If you have any questions regarding operation of this console, please contact our local suppliers or distributors.

- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- To reduce the risk of fire or electrical shock, do not expose this unit to rain or high levels of moisture. Do not use this unit near water.
- Refer any service operation not described in this manual to a qualified technician.
- Do not dismantle or modify this unit as there are no user serviceable parts inside. Refer all service related issues to a qualified technician.
- Handle this unit carefully. Any strong shock or vibration may result in malfunction.
- Do not operate this unit when front face panel is removed.
- Any damaged or crimped AC cable should be replaced immediately. Protect the power supply cable from being walked on or pinched.
- Do not allow children to play with this unit.
- Keep these instructions for future use.
- Heed all warnings.
- Follow all instructions.
- Clean only with dry cloth.
- Do not install near any heat sources such as heaters, stoves, amplifiers or any other heat generating apparatus.
- Only use attachments and accessories specified by Philips Professional.
- Unplug this unit during lighting storms or when unused for long periods of time.

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Rev 1.1

General Instructions

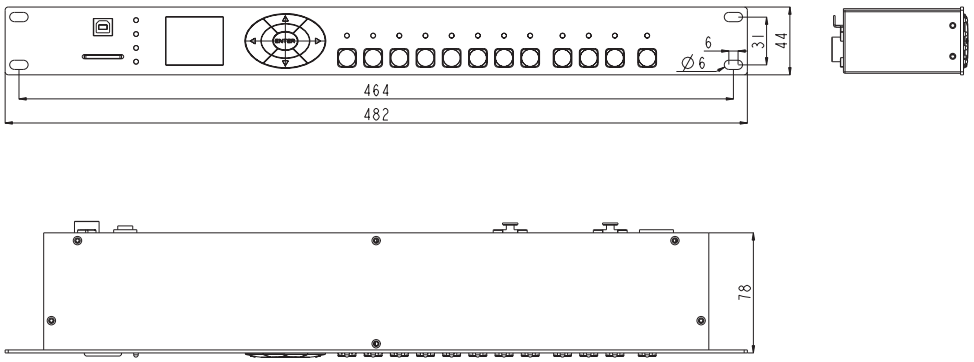
Descriptions

Thanks for you purchasing Philips Showtec DMX Recorder Pro Rack. The present content pretends to make a description of the technical features, Specifications and operation, etc.

Features

- 128x160 Characters color LCD display
- Up to 8 memories with individual Master setting allows users to assign Scenes, Chases or Shows.
- Consisting of 5 operation modes: Manual control, Real-time trigger, SMPTE/MIDI time code trigger, DMX trigger and DMX monitor
- Over 5 hours recording time for Show and up to 4 different recording modes available, including Manual, Auto, Semi-Auto and Smart
- Allows to record SCENE, create CHASE and set Fade/Hold time for every step of the CHASE.
- Password lock function
- Standard DMX-512(1990) and DMX-1000K(1M) protocol compatible
- 3pin XLR DMX male/female connector, SD card port, USB port, 3pin SMPTE port and 5pin MIDI input
- External Dry Contact available
- Programme updatable

Physical Dimensions



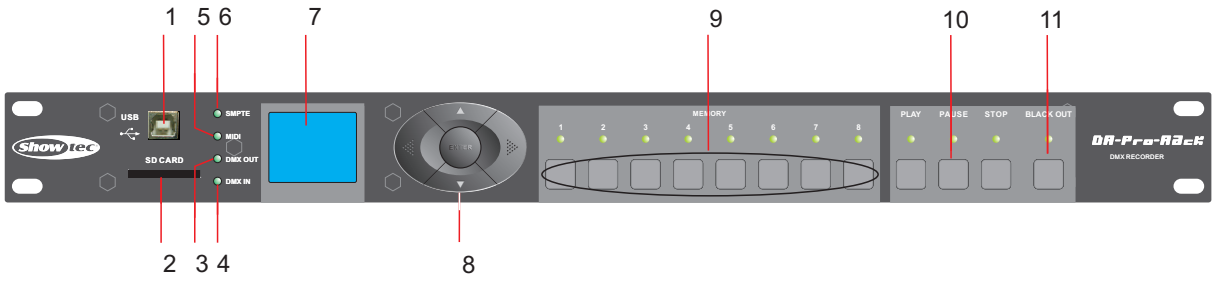
Unit: mm

Technical Specification

POWER INPUT	DC9-12V, 500mA Min
CONNECTOR	3-pin XLR connectors for DMX in/out, USB port for communicating with PC, 3pin SMPTE input, 5pin MIDI input
LCD DISPLAY	128x160 Characters
COMPLIANT PROTOCOLS	Standard DMX-512(1990) and DMX-1000K(1M) protocol compatible
HOUSING	Metal sheet with powder finishing
LISTING	CE certified
INGRESS PROTECTING RATING	IP20
OPERATING TEMPERATURE	-10 degC to +50 degC
STORAGE TEMPERATURE	-20 degC to +70 degC
DIMENSIONS	482(L) x 78(W) x 44(H)mm
WEIGHT	1.2kg

Overview

Front View



1. USB Port

Connects to PC for communications and program updating.

2. SD Card Port

Use to insert SD card for data transmission.

3. DMX OUT Indicator

This LED blinks when sending DMX signal.

4. DMX IN Indicator

This LED blinks when DMX signal inputs.

5. MIDI Indicator

This LED will blink when an available MIDI time received in SMPTE/MIDI Trigger mode.

6. SMPTE Indicator

This LED will blink when an available SMPTE time received in SMPTE/MIDI Trigger mode.

7. 128x160 color LCD Display

Shows the current activities.

8. LEFT/RIGHT/UP/DOWN/OK Button

Used to select function.

9. Memory 1~8 Button

Used to select the memory you want to play in Manual mode.

10. PLAY/PAUSE/STOP Button

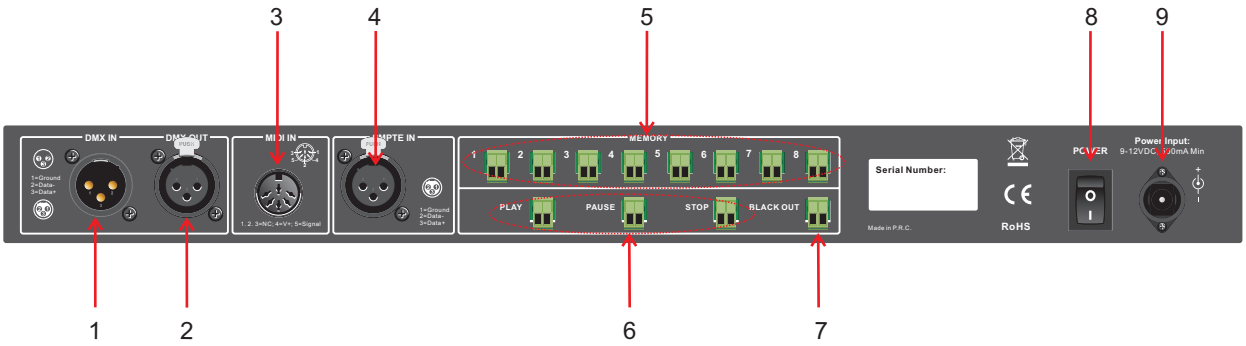
Used to select the running status of memory in Manual mode.

11. BLACK OUT Button

Controls DMX output in Manual mode.

Overview

Rear View



1. DMX IN

Inputs the external DMX signal

2. DMX OUT

Outputs the DMX signal

3. MIDI IN Port

Inputs MIDI time

4. SMPTE IN Port

Inputs SMPTE time

5. MEMORY1~8 contact point

Connects the external contact point switch may control the Memory1~8

6. PLAY/PAUSE/STOP contact point

Connects the external contact point switch may control the function of PLAY/PAUSE/STOP

7. Blackout contact point

Connects the external contact point switch may control the Blackout function

8. ON/OFF

Power On/Off the unit

9. DC In

Connects the power source of DC 9~12V

Operation Guide

1)Select Work Mode

There are 5 work modes available for DMX Recorder Pro Rack:

1)Manual control
2)Real-time trigger
3)Time code trigger
4)External DMX trigger
5)DMX monitor

The user may press the OK Button and keep hold it for 2 seconds, the Work Mode option menus appears, now use Up/Down button to select the work mode, and press OK to confirm.

2)Set User Parameters

2.1)When the Work Mode option menu appears, use Up/Down button to select "SET & MODIFY", press OK and input password "1234"(the default password was set as "1234"), the function option menu appears.

2.2)Record/modification of DMX data.

2.2.1)Record DMX

The user may use this function to record SCENE and SHOW, use the recorded SCENE to edit CHASE.

2.2.2)Record a SCENE

To choose and access Record SCENE function, use function button to modify SCENENAME. Select Confirmation & Record, press OK to record the current inputed DMX data. The LED indicator will flash 3 times. After finish, to select "Finish & Return" to return.

2.2.3)Record a SHOW

To choose and access Record SHOW function, use function button to modify SHOWNAME. There are 4 record methods for user choice: Manual, Auto,Semi-Auto and Smart.

2.2.3.1)Manual

Press Start button to start record, and then press Stop button to finish.

2.2.3.2)Auto

Once the recorder received at least a frame which all DMX data are "zero", the recorder is assumed to be in the state of ready to record, when received any “nonzero" DMX data, start to record, when received all "zero" DMX data again, record completed.

2.2.3.3)Semi Auto

The theory is the same as the Auto mode. The difference is that in Semi Auto mode, need to press "Stop" to finish record. Or, when received all "zero" DMX data, record completed.

2.2.3.4)Smart

This mode is applied to those DMX data which were played in a circle with changes, and the DMX data frame must be the totally same in the circle playback.

2.2.3.5)Select "Confirm & Record" to access Record control state.

Select "Start Record" to record. The recorder will handle the record in terms of the selected record method. If want to finish record in advance, you can select" Stop & Return".

2.2.4)Add a Chase(The user may use this recorder to edit Chase only if the Scene had been recorded in it.)

2.2.4.1)Select Add Chase to edit Chase.

2.2.4.2)Use function button to modify CHASENAME.

2.2.4.3)In "STEP: xxx/yyy", the specified step may be modified.

xxx: the current step
yyy: the recorded total steps of this Chase, up to 200 steps can be recorded.

2.2.4.4)Select the Scene of Step in "SceneName xxx/yyy".

xxx: the current Scene
yyy: the total Scenes available for option

2.2.4.5)Modify the time parameters of the current step in "HoldTime/FadeYime".

2.2.4.6)After the current parameters setting completed, select "Confirm & Save" to record the current step parameter.

2.2.4.7)Select " Finish & Return" to return.

2.2.5)Modify the recorded Chase

2.2.5.1)To select "Edit Chase" and access it, use Up/Down to select the Chase you want to modify, press OK to confirm.

2.2.5.2)Now the user may use function button to modify ChaseName, the Scene of the specified Step, HoldTime and FadeTime.

2.2.5.3)Also the user may do "Insert Step" and " Delete Step".

2.2.5.4)Select "Confirm & Return" to return.

2.2.6)Delete Scene/Delete Show/Delete Chase

2.2.6.1)Use this function will delete the specified Scene/Show/Chase.

2.2.6.2)Select "Finish & Return" to return.

2.3)Edit the trigger event

2.3.1)Select "Trigger Event"

2.3.2)There are 3 trigger methods available: Time Event, SMPTE/MTC Event and external DMX trigger.

2.3.3)Time Event

2.3.3.1)The Time Event includes Weekly and Dately mode. In this trigger method, the event will be triggered according to the calendar clock.

2.3.3.2)Weekly Mode

2.3.3.2.1)Add a Weekly event

2.3.3.2.2)Select Weekly

2.3.3.2.3)Use function button to modify EventName, trigger time, trigger memory, memory playback state, output state, etc.

2.3.3.2.4)Select "Confirm& Save", record the current event.

2.3.3.2.5)Select "Finish & Return" to return.

2.3.3.3)Dately Mode

2.3.3.3.1)Add a Dately event

2.3.3.3.2)Select Dately

2.3.3.3.3)Use function button to modify EventName, trigger time/date, trigger memory, memory playback state, output state, etc.

2.3.3.3.4)Select "Confirm& Save", record the current event.

2.3.3.3.5)Select "Finish & Return" to return.

Note: Due to the precedence of Dately event is higher than Weekly event, in order to trigger the Weekly event while the Dately event finished it is required to add a "no memory" Trigger after the Dately event .

2.3.3.4)Edit Weekly Event

2.3.3.4.1)Select "Edit Weekly"

2.3.3.4.2)Use function button may modify EventName, trigger time, trigger memory, memory playback state, output state, etc.

EventName xxx/yyy
xxx, the current event serial number.
yyy, the total event quantity.

2.3.3.4.3)Use function "Select Event" and press Left/Right button to select event.

2.3.3.4.4)Select "Finish & Return" to return.

2.3.3.5)Edit Dately Event

2.3.3.5.1)Select "Edit Dately"

2.3.3.5.2)Use function button may modify EventName, trigger time, trigger memory, memory playback state, output state, etc.

EventName xxx/yyy
xxx, the current event serial number.
yyy, the total event quantity.

2.3.3.5.3)Use function "Select Event" and press Left/Right button to select event.

2.3.3.5.4)Select "Finish & Return" to return.

2.3.3.6)Delete Weekly/Delete Dately

Use this function may delete the specified event.

2.3.4)Select "Finish & Return" back to the previous level.

2.3.5)SMPTE/MTC Event

This event is triggered by the external assigned time.

2.3.5.1)The user may add Trigger Event, edit event and delete event in this mode.

2.3.5.2)Select Add SMPTE/EMC

2.3.5.3)The user may set EventName, Frame Rate, trigger time, trigger memory, playback state, output state, etc.

2.3.5.4)Select "Confirm & Save" to record the current event

2.3.5.5)Select "Finish & Return" to return.

2.3.6)Select "Edit SMPTE/MTC"

2.3.6.1)The user may set EventName, Frame Rate, trigger time, trigger memory, playback state, output state, etc.

2.3.6.2)Use function "Select Event" and press Left/Right button to select event.

2.3.6.3)Select "Finish & Return" to return.

2.3.7)Select "Delete SMPTE/MTC" to delete the specified event.

2.4)Set DMX trigger parameters

2.4.1)Set DMX Start Address

This recorder receives three channels DMX data, the operation instructions detailed as below.

DMX Channel	DMX Values
Starting Channel	0 ~3, Trigger Memory 1; 4~7, Trigger Memory 2; 9~11, Trigger Memory 3; ..... 28~31, Trigger Memory 8; Above 31, the Memory unchanged.
Starting Channel +1	0~79 , Pause; 80~159 , Play; Above 159 , Stop.
Starting Channel +2	0~127 , Normal Output, Above 127, Blackout.

2.4.2)No DMX IN

This function is used to set Manual/Timer to trigger event while there is no DMX input in the work mode of DMX Trigger or DMX Monitor.

2.4.3)No SMPTE/MIDI IN

This function is used to set Manual/Timer to trigger event while there is no external time input in the work mode of SMPTE/MIDI Trigger or DMX Monitor.

2.5)Assign Memory

2.5.1) Select Assign Memory

2.5.2) Select Memory1-8, and play Memo/Stop Memo/Blackout Memo

2.5.3) Select Assign Type(Scene, Chase and Show are available for option)

xxx/yyy

xxx, the current Type serial number

yyy, the total available Type quantity

2.5.4) "Assign" is used to assign the specified contents.

2.5.5) "Master" is used to set the Master value for the current memory.

2.5.6) Select "Scene" may set FadeTime for it.When select Chase or Show, may set the Speed Scale of playback.

2.5.7) Select "Finish & Return" to return.

2.6)Modify Clock

This function is used to modify the inner calendar clock.

2.7)Set password

This function is used to modify user password.

2.8)Data Backup

This function is used to copy the parameters of this recorder.

2.8.1)Data Backup

It has to insert SD card prior to using this function.

2.8.2)The detail function will be instructed as below.

Scene→SD Card: Copy all the data of Scene from recorder to SD card.
Chase→SD Card: Copy all the data of Chase from recorder to SD card.
Show→SD Card: Copy all the data of Show from recorder to SD card.
Memory→ SD Card : Copy all the assigned data of memory from recorder to SD card.
Event →SD Card: Copy all the Event information from recorder to SD card.
Picture→SD Card: Copy all the pictures from recorder to SD card.
All→SD Card: Copy all the above data from recorder to SD card.
SD Card → Scene: Copy all the data of Scene from SD card to recorder.
SD Card → Chase: Copy all the data of Chase from SD card to recorder.
SD Card → Show: Copy all the data of Show from SD card to recorder.
SD Card → Memory: Copy all the data of Memory from SD card to recorder.(This operation will overwrite the old Memory in recorder.)
SD Card → Event: Copy all the Event information from SD card to recorder.(This operation will overwrite the old Event in recorder.)
SD Card → Picture: Copy all the pictures from SD card to recorder.
SD Card → All: Copy all the above data from SD card to recorder.

2.8.3)Select "Exit" to return.

3)Communications

DMX Recorder Pro Rack pro also can communicate with PC via USB cable. In your PC you will find a dummy U disk while the recorder connected to PC so that you can copy the data directly.

Note: The recorder can only read/process the file which name length not exceed 8 characters and the extension length not exceed 3 characters.

4)Program Updating

Disconnect the main power, and keep pressing the Right button and OK button, then power on the device again. Connect the device with PC via a USB cable, and the unit will be recognized as a removable storage, Copy the latest updating file to the to the removable storage will finish the update process.