Owner’s Manual
DMX CONTROLLER
Thank you for choosing our 16 channel DMX controller. Please read this user manual carefully and follow the instructions to avoid danger or damage to the unit due to mishandling. Keep this user guide for future reference. If you give the unit to another user, be sure that he also receives this instruction booklet.

**Safety instruction**

You have to carefully read the instruction, which includes important information about the installation, usage and maintenance, BEFORE operating this device.

- This device is exclusively meant to be used as a lighting control unit within the limits given in this manual. Using it in any other way you risk electric shock and warranty will become void.
- Never sever or manipulate any part of the mains connection. If a power cord is provided with an earth lead, this is mandatory to ensure safe operation! Otherwise a **LIFE THREATENING** situation exists!
- Unpack and check carefully there is no transportation damage before using the unit. Never put a damaged device into operation.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit as stated in this manual.
- The unit is for indoor use only. Use it only in a dry location. Exposing the device to rain or moisture would cause the risk of electrical shock or fire.
- DO NOT let any liquids or objects enter the unit. Should any liquid be spilled on the unit, DISCONNECT the power supply to the unit immediately and contact the service company.
- The unit must only be installed in a location with adequate ventilation. Be sure that no ventilation slots are blocked.
- Disconnect the device from the mains power before any servicing or maintenance.
- Notice regarding power disconnection:
  To disconnect the device from the power source the mains adaptor must be removed from the power socket. For this reason the device must be placed in a position where a constant unobstructed access to the power socket is assured, thus in an emergency situation you are able to immediately pull out the mains adaptor. To eliminate the risk of fire you must completely disconnect the mains adaptor from the power socket after the device has been used.
Always grasp the mains adaptor by the plug. Do not pull on the adaptor cord and never touch the mains adaptor with wet hands as this could result in a short circuit or an electrical shock. Do not place the device, speaker cabinets or anything else on the adaptor cord and make sure that it does not become clamped. Place the adaptor cord in a position where it can not be trod on. A damaged mains adaptor can cause a fire or an electrical shock. Check the mains adaptor and the adaptor cable from time to time. Should it become damaged contact our customer service centre to have it replaced.

You have to ensure, that the mains adaptor never becomes wet during operation.

Before a storm and/or a thunderstorm with a risk of lightning, disconnect the device from the mains power supply.

Under no circumstances may you open the housing of the device or the mains adaptor. Should you do so your safety would not be assured and the warranty will become void. There are no operational components whatsoever inside, only dangerous voltages that can give you a deadly shock!

NEVER use the unit under the following conditions:
> In places subject to vibrations or bumps.
> In places with a temperature of over 45 °C or less than 2 °C.
> In places subject to excessive dryness or humidity (ideal conditions are between 35% and 80%).

Never submerse the device in water or any other liquid. Only wipe it with a slightly damp cloth.

Never operate the device near flames, flammable, explosive materials, or hot surfaces. Otherwise you run the risk of causing a fire.

Never leave this device running unattended.

This appliance must not be used by individuals (including children) with restricted physical, physiological or intellectual abilities or deficiencies in experience and/or knowledge unless they are supervised by a person responsible for their safety or receive from this person instruction in how the appliance is to be used.

Keep children away from the device and mains adaptor! Children frequently underestimate the dangers of electrical devices. Also keep the plastic packaging well away from small children. There is a risk of suffocation!

In the event of serious operating problems, stop using the unit immediately. Never try to dismantle, repair or modify the unit by yourself. Otherwise warranty becomes void. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance centre.
**Introduction**

The DJ-X 16 is a 16 channel programming console with MIDI & DMX interface. The DJ-X 16 features include: 60 built-in patterns & 30 variable programs with max. 99 steps, MANUAL/AUTO/AUDIO/TAP SYNC/CROSS modes. Specially, the DJ-X 16 is equipped with PEROM to guarantee data security.

**Control elements**

**On front panel**

1. Channel indicators
2. Channel fader Controls the level in ASSIGN PROGRAM mode or the channels in MANUAL mode.
3. LATCH button (CH 9~16) It functions as ASSIGN LATCH or channel LATCH in manual mode.
4. FLASH button (CH 1~16) It functions as ASSIGN FLASH or channel FLASH in MANUAL mode. SHIFT+FLASH button: Changes the BLIND setting in chase mode and when BLIND ENABLE indicator is lit.
5. MASTER fader It functions as a master fader for faders 1 to 8 or in chase mode and CROSS FUNCTION as a master for the pattern. The patterns
are executed step by step by moving the MASTER fader.

6. M indicator Indicating the MASTER status for faders 1 to 8.

7. A & B indicators Indicating the MASTER status of two neighbouring steps in cross mode.

8. LEVEL knob This knob functions as a master for the pattern in chase mode.

9. SPEED/FADE TIME knob This knob controls the chasing speed from 10 steps/second to 1 step/5 minutes and time from 0.1 second to 5 minutes in chase mode.

10. AUDIO knob This knob controls the sensitivity of music rhythms in audio chase mode.

11. LCD It shows the present operating mode and program options.

12. CROSS button Press this button to enter or leave CROSS mode in chase mode and when CROSS ON indicator is lit.

13. PATTERN ▲ button Press to increase the left two digits by one. Pressing this button for more than one second increases the digits quickly from present counter till the maximum and then increases from the minimum cyclically.

   SHIFT + BUTTON SETUP:
   Pressing SHIFT + BUTTON SETUP together sets the channel fader; LATCH button and FLASH button. Each pressing makes a new setting, and the matching indicator is lit.

14. PATTERN ▼ button Press to decrease the left two digits by one. Pressing this button for more than one second decreases the digits quickly from present counter till the minimum and then decreases the digits quickly from present counter till the maximum an then decreases from the maximum cyclically.

   SHIFT + FADE TIME SETUP:
   Pressing SHIFT + FADE TIME SETUP sets the fade time. When the NO FADE TIME indicator is lit, fade time is disabled. If STEP TIME indicator is lit, fade time is set by the SPEED knob and is identical to the step time.
15. **STEP ▲ button**
Press to increase the right two digits by one. Pressing this button for more than one second increases the digits quickly from present counter till the maximum and then increases from the minimum cyclically. In chase mode, press this button to execute the pattern by one step. Pressing for more than one second allows to execute the pattern by ten steps per second.

**SHIFT + CROSS SETUP button:**
Pressing SHIFT + CROSS SETUP together sets ENABLE or DISABLE for CROSS mode. If CROSS OFF indicator is lit, press the CROSS button to enter or leave CROSS mode.

16. **STEP ▼ button**
Press to decrease the right two digits by one. Pressing this button for more than one second decreases the digits quickly from present counter till the minimum and then decreases from the maximum cyclically. In chase mode, press this button to execute the pattern by one step. Pressing for more than one second allows to execute the pattern by ten steps per second.

**SHIFT + BLIND button:**
Pressing SHIFT + BLIND together sets ENABLE or DISABLE for BLIND mode. When BLIND mode is active, the ENABLE indicator is it.

17. **ADD/KILL button**
Press to select ADD or KILL mode. In KILL mode the indicator near this button is lit. In ADD mode, the FLASH button levels are isolated from other levels. In KILL mode and when the FLASH button levels are turned on, the other levels are set to zero.

18. **PROGRAM button**
Press this button for more than one second to enter PROGRAM mode. The indicator close to this button is lit, now 30 variable patterns (1-30) are ready to be programmed, each containing a maximum of 99 steps. Press this button to store your setting as one step. The LCD shows the next step to be programmed.
SHIFT + END STEP button:
In PROGRAM mode, pressing SHIFT + END STEP together sets the present step as the last step.

19. ASSIGN button
Press this button for more than one second to enter ASSIGN mode. The indicator close to it is lit. In ASSIGN mode, press ASSIGN button first, then press FLASH button to store the present level as ASSIGN.

SHIFT + DELETE PROGRAM button:
In PROGRAM mode, press SHIFT + DELETE PROGRAM together to delete the present pattern.

20. PATCH button
Press this button for more than one second to enter or leave PATCH mode. In PATCH mode, the LCD shows the level with the left two digits, and shows DMX channel NO. with the right two digits. When the left two digits show 00, the DMX channel level is 0, if it shows FF, the DMX channel level is maximum. And if it shows 01 to 16, the DMX channel level is 1 to 16 channel level. In MIDI CHANNEL mode, this button is invalid.

SHIFT + MIDI CHANNEL button:
Press SHIFT + MIDI CHANNEL together for more than one second to enter or leave MIDI CHANNEL mode. In MIDI CHANNEL mode, press STEP ▲ or STEP ▼ button to select the desired channel. The LCD shows CH:XX. MIDI CHANNEL lapse if the indicator close to PATCH button is lit.

21. FULL ON button
Press to activate full intensity for channels 1-8 and STAND BY is not effective.

22. SHIFT button
This button is valid only used with other function button.

23. LOOP button
In CHASE mode, press this button to enter LOOP CHASE mode and define present pattern as the 1st pattern run by LOOP, the LCD shows XX:LP. Press this button again to add the pattern (showing XX) to the patterns run by LOOP. Up to 100 patterns can be run by LOOP. If over 100 patterns, the LCD shows XX:FL, if the LOOP button
is not pressed within 10 seconds, the LCD shows XX:CL. The present pattern is XX, press LOOP button, the LCD turns to XX:LP, now the patterns are ready to be added to the patterns run by LOOP.

SHIFT + LOOP EXIT button:
Press SHIFT + LOOP EXIT together to leave LOOP CHASE mode.

24. CHASE button
Press to enter AUTO CHASE mode, the status LED “Audio” is lit. In this mode, the chasing speed is controlled by the SPEED knob and the pattern is controlled by the LEVEL knob.

SHIFT + AUDIO button:
Press SHIFT + AUDIO together to enter AUDIO CHASE mode. The status LED “Chase” is lit.

25. TAP SYNC button
In CHASE mode, press this button to enter TAP SYNC chase mode, the status LED “Tap Sync” is lit. In this mode, the interval of the last two pressing on TAP SYNC button is set to step time. A single pressing is invalid. To leave this mode turn the SPEED knob to enter AUTO CHASE mode.

SHIFT+MANUAL STEP button:
Press SHIFT + MANUAL STEP together to enter MANUAL CHASE mode. The status LED “Manual Step” is lit. In this mode, press STEP ▲ or STEP ▼ to execute the patterns.

26. STAND BY button
Press to enter or leave STAND BY mode. In STAND BY mode, the indicator close to this button is flashing. Channel fader, LATCH button and the master level generated by present pattern are turned off, FLASH button level remains.

SHIFT + MANUAL button:
Press SHIFT + MANUAL together to enter MANUAL mode, the status LED “Manual” is lit and the LCD shows the MASTER fader with 000 to 100.
On rear panel

1. DC input
   DC 12 V-20 V, 250 mA min., connect to AC outlet via AC/DC adaptor provided.

2. POWER switch
   Press to turn the power on/off.

3. DMX polarity selector
   Slide to select the polarity arrangement for DMX output.

4. DMX output
   16 DMX channel output.

5. MIDI THRU
   Transmits MIDI data received on the MIDI IN connector.

6. MIDI IN
   Receives MIDI data.

7. AUDIO line input
   Line in for sound control, 100 mv to 1 Vpp sensitivity. If it is connected, the built-in microphone is disabled, and when it is not connected, the microphone is enabled.

8. FOOT CONTROL

   FOOT CONTROL

   Use to connect to foot controller for remote control.

<table>
<thead>
<tr>
<th>PIN</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>STEP (up)</td>
</tr>
<tr>
<td>2</td>
<td>PATTERN (up)</td>
</tr>
<tr>
<td>3</td>
<td>STAND BY</td>
</tr>
<tr>
<td>4</td>
<td>FULL ON</td>
</tr>
<tr>
<td>5</td>
<td>COMMON</td>
</tr>
</tbody>
</table>
Instructions for foot controller

1. STAND BY button  Press to change the STAND BY status causing its indicator to change from flashing to off or from off to flashing.

2. FULL ON button  Press this button down, channel 1 to channel 8 are full on and not controlled by STAND BY.

3. STEP ▲ button  In CHASE mode, press to execute the pattern by one step. Pressing for more than one second would execute the pattern by 10 steps per second.

4. PATTERN ▲ button  In CHASE mode, press to select pattern by plus one, press for more than one second would increase the pattern quickly till the maximum and then increase from 01.

5. CONTROL OUTPUT cable  Connect to the FOOT CONTROL socket located on the rear of unit.

MIDI setting

1. NOTE DATA

<table>
<thead>
<tr>
<th>NOTE NUMBER</th>
<th>VELOCITY</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-81</td>
<td>master level for the pattern</td>
<td>turn on/off 1-60 patterns</td>
</tr>
<tr>
<td>82-97</td>
<td>channel dimmer</td>
<td>identical to that set by FLASH1-16</td>
</tr>
<tr>
<td>99</td>
<td></td>
<td>FULL ON</td>
</tr>
<tr>
<td>101</td>
<td></td>
<td>execute the pattern by one step</td>
</tr>
<tr>
<td>102</td>
<td></td>
<td>change the STAND BY status</td>
</tr>
</tbody>
</table>

2. If MIDI signal disappears, 10 minutes later the matching indicator is off and the MIDI settings are dumped.

3. To receive MIDI signal, set the MIDI channel according to the setting of the MIDI controller.

4. The patterns turned on by MIDI are not controlled by LEVEL knob and not shown in the LCD. All turned on patterns are executed synchronously and the terminal level is synchronised by the levels of the turned on patterns.
Operating instructions

You may only connect the device to a properly wired and earthed mains power wall outlet, after all connections have been established. The wall outlet must provide the correct mains voltage as stated in this manual. You may run the DJ-X 16 only using the mains adaptor provided.

1. RUN PATTERN
   A. Press the appropriate function button(s) to select the desired chasing mode from AUTO, MANUAL AUDIO or TAP SYNC. The LCD shows the pattern and the step.
   B. Press PATTERN ▲ or PATTERN ▼ to select the desired pattern from 30 built-in patterns (31-60) and 30 variable patterns (1-30). If the right two digits show 00, the pattern is blank or had been deleted.

2. FULL ON button
   Press this button down, channel 1 to channel 8 are full on and not controlled by STAND BY.

3. STEP ▲ button
   In CHASE mode, press to execute the pattern by one step. Pressing for more than one second would execute the pattern by 10 steps per second.

4. PATTERN ▲ button
   In CHASE mode, press to select pattern by plus one. Pressing for more than one second would increase the pattern quickly till the maximum and then increase from 01.

5. CONTROL OUTPUT cable
   Connect to the FOOT CONTROL located on the rear of DJ-X 16

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<th>PIN</th>
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<tbody>
<tr>
<td>1</td>
<td>STEP ▲</td>
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</tbody>
</table>
Technical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply voltage</td>
<td>Adaptor: AC 230 V~, 50 Hz</td>
</tr>
<tr>
<td></td>
<td>Main unit: DC 12-20 V, 250 mA min</td>
</tr>
<tr>
<td>DMX output</td>
<td>3 pin XLR socket</td>
</tr>
<tr>
<td>Audio input</td>
<td>100 mV - 1 Vpp</td>
</tr>
<tr>
<td>MIDI interface</td>
<td>5 pin DIN socket</td>
</tr>
<tr>
<td>Optional accessory</td>
<td>Foot controller</td>
</tr>
<tr>
<td>Dimension</td>
<td>482 x 177.5 x 72.7 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>2.3 kg</td>
</tr>
</tbody>
</table>

As we continuously strive to improve our products, all specifications and appearance are subject to change without prior notice.

Disposal

Do not dispose of the device at the end of his operating life in your normal domestic waste. This device is subject to the European Guidelines 2002/96/EC.

- Have the product disposed of by a professional disposal company or by your communal disposal facility.
- Observe the currently applicable regulations. In case of doubt contact your disposal facility.
- Dispose of packaging materials in an environmentally responsible manner.