



DMX-12JOY

192-Channel DMX-512 Controller

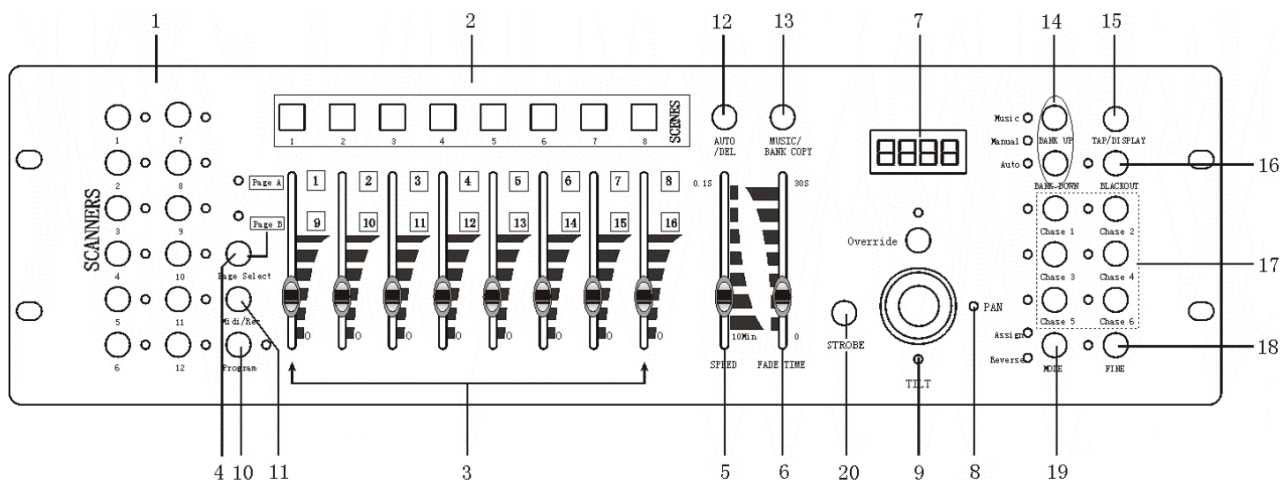
12-Fixture DMX Programmer with Joystick, Scene, Chase & Audio Control

USER MANUAL

1. Technical Specifications

Power Input	DC 9V–12V, 500mA minimum
DMX Output	3-pin male XLR
DMX Input	3-pin female XLR
MIDI Input	5-pin DIN
Audio Input	0.1V–1V peak-to-peak
Dimensions	482 × 134 × 85mm
Weight	2.7kg

2. Controls & Functions



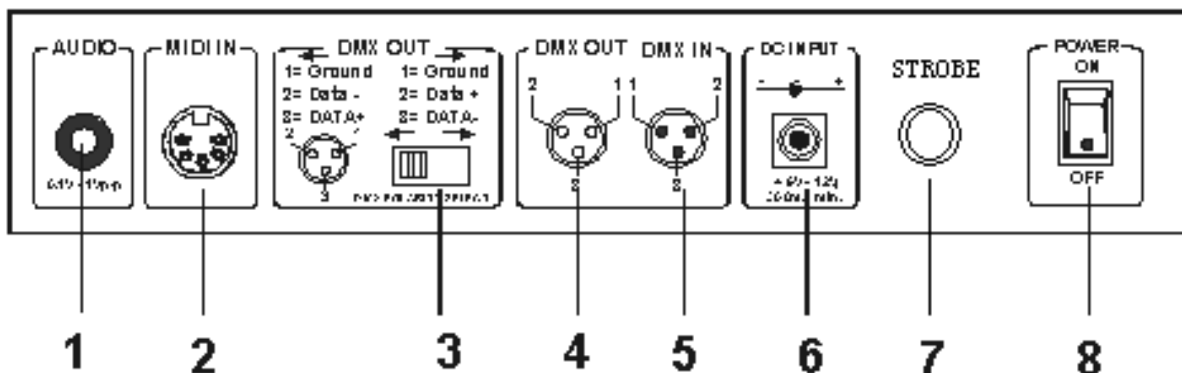
2.1 Front Panel

No.	Control	Function
1	SCANNERS (1–12)	Select any or all of the 12 available fixtures for control. Multiple fixtures can be selected simultaneously.
2	SCENES (1–8)	Store or recall scenes. Up to 8 scenes per bank, across 30 banks (240 scenes total).
3	CHANNEL SLIDERS (1–8)	Adjust the DMX output level of each channel from 0–255 (0%–100%). Controls channels 1–8 on Page A or channels 9–16 on Page B.
4	PAGE SELECT (A/B)	Toggles between Page A (channels 1–8) and Page B (channels 9–16) for fixtures with more than 8 channels.
5	SPEED SLIDER	Adjusts the chase speed in Auto mode (range: 0.1 seconds to 10 minutes per step).

No.	Control	Function
6	FADE TIME SLIDER	Adjusts the transition time between scenes. Fade Time is the duration the controller takes to transition from one scene to the next.
7	LCD DISPLAY	2-line, 8-character display showing current values, bank numbers, scene numbers, and settings.
8	PAN JOYSTICK	Controls the pan axis of the selected fixture, or is used for pan programming.
9	TILT JOYSTICK	Controls the tilt axis of the selected fixture, or is used for tilt programming.
10	PROGRAM	Activates programming mode. Press and hold for 3 seconds — the LED illuminates when active.
11	MIDI / REC	In Program mode: records scenes and chase steps. In MIDI mode: controls MIDI operations.
12	AUTO / DEL	In Chase mode: activates Auto Run. In Program mode: deletes the selected scene or chase.
13	MUSIC / BANK COPY	In Chase mode: activates sound-active (music-triggered) chase. In Program mode: copies a bank of scenes to another bank.
14	BANK UP / BANK DOWN	Navigate through the 30 available scene banks.
15	TAP SYNC / DISPLAY	In Auto Chase mode: tap to set chase speed by tempo. In Program mode: toggles the LCD display value format between % and 0–255.
16	BLACKOUT	Disables all DMX channel outputs immediately. Press again to resume output.
17	CHASES (1–6)	Select and run one of the 6 available chase programs.

No.	Control	Function
18	FINE	When active, the joystick controls the fixture in the smallest possible increments for precise positioning.
19	MODE	Used in combination with FINE to enter Assign or Reverse mode.
20	STROBE	Activates strobe/flash control.

2.2 Rear Panel



No.	Button	Function
1	AUDIO IN	3.5mm audio input jack for external audio triggering (0.1V–1V peak-to-peak).
2	MIDI IN	5-pin DIN socket for receiving MIDI data from an external MIDI controller or sequencer.
3	DMX POLARITY SELECT	DIP switch to set the DMX signal polarity. Match this to the polarity required by your fixtures (Pin 1 = Ground, Pin 2 = Data-, Pin 3 = Data+).

No.	Button	Function
4	DMX OUTPUT	3-pin XLR connector. Connect to the first fixture in your DMX chain.
5	DMX INPUT	3-pin XLR connector for receiving DMX input signals from another controller or upstream device.
6	DC INPUT	Power input jack. Accepts DC 9V–12V, 500mA minimum.
7	STROBE OUTPUT	Connector for controlling an external strobe/flash light.
8	POWER SWITCH	Powers the unit on or off.

2.3 LCD Display Reference

The LCD contains 2 lines of 8 characters. Below are the display indicators:

Display.	Meaning
SN1	Scene 1
BK1	Bank 1
CHASE1	Chase 1 is activated
STEP 009	The ninth step of a chase
DATA 184	DMX value (range: 000–255)
SP: 1M54s	Current chase speed is 1 minute 54 seconds
TP: 4.25s	Time between the last two taps is 4.25 seconds
ASS 04 05	DMX channels 4 and 5 are assigned
RES 10 13	DMX channels 10 and 13 are reversed

3. Operating Instructions

3.1 DMX-512 Addressing

The unit allocates 16 DMX channels per fixture. Each fixture must be assigned a unique DMX start address, spaced 16 channels apart, using its onboard DIP switches. Addresses are set using binary code — each DIP switch represents a value, and the desired address is the sum of all switches turned ON.

DIP Switch No.	1	2	3	4	5	6	7	8	9
Value	1	2	4	8	16	32	64	120	256

Set the fixture DIP switches according to the table below:

Scanner	Channels	DIP Switches ON
1	1 – 16	1
2	17 – 32	1, 5
3	33 – 48	1, 6
4	49 – 64	1, 5, 6
5	65 – 80	1, 7
6	81 – 96	1, 5, 7
7	97 – 112	1, 6, 7
8	113 – 128	1, 5, 6, 7
9	129 – 144	1, 8
10	145 – 160	1, 5, 8

Scanner	Channels	DIP Switches ON
11	161 – 176	1, 6, 8
12	177 – 192	1, 5, 6, 8

Note: When addressing your fixtures, use the starting addresses listed in this table — not the addressing guide in your fixture's own user manual.

3.2 Joystick Setup

The joystick must be assigned to the correct DMX channels for each fixture before use.

- Press and hold the **PROGRAM** button until the LED is lit.
- Press and hold **MODE** and **FINE** simultaneously — the Assign LED should light. If the Reverse LED lights instead, press **FINE** and **MODE** again to enter Assign mode.
- Use **BANK UP / BANK DOWN** to select the axis you wish to assign (Pan or Tilt).
- Press the **TAP/DISPLAY** button to select 8-channel or 16-channel mode.
- Press the **SCANNER** button corresponding to the fixture you wish to assign.
- While holding **MODE**, press the **SCENE** button corresponding to the slider that controls the axis. For example, if Pan is controlled by slider 4, hold **MODE** and press Scene 4.
- When finished, press **MODE** and **FINE** simultaneously again to exit Assign mode.

3.3 Scene Programming

- Press and hold the **PROGRAM** button for 3 seconds to enter Program mode. The LED will illuminate to confirm.
- Verify that the Blackout LED is off. If it is on, press **BLACKOUT** once to deactivate.
- Set both the Speed and Fade Time sliders to zero.
- Press any or all **SCANNER** buttons (1–12) to select the fixture(s) you want to program.

- Adjust the channel sliders and joystick to set the desired output levels. Press PAGE SELECT (A/B) if the fixture uses more than 8 channels. When switching pages, move the sliders to activate the channels on that page.
- Use BANK UP / BANK DOWN to select the bank where you want to store the scene. There are 30 banks, each holding up to 8 scenes (240 scenes total).
- Press and release the MIDI/REC button.
- Press the desired SCENE button (1–8) to store the scene. All LEDs will flash 3 times to confirm. The LCD will display the bank and scene number.
- To deselect a fixture and switch to another, press the active Scanner button again to deselect it, then select the next fixture.
- Repeat steps 4–8 to record additional scenes.
- Press and hold PROGRAM for 3 seconds to exit Program mode.

Note: You can copy a fixture's settings to another scanner slot. Press and hold the source Scanner button, then press the destination Scanner button.

3.4 Scene Editing

This function allows you to modify a previously programmed scene.

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Use **BANK UP / BANK DOWN** to navigate to the bank containing the scene you want to edit.
- Press the **SCENE** button corresponding to the scene you want to edit.
- Adjust the channel sliders and/or joystick to make the desired changes.
- Press **MIDI/REC**, then press the same **SCENE** button to overwrite and save the edited scene.

Note: You must select the same scene you originally loaded. Selecting a different scene will overwrite it.

3.5 Scene Copy

This function copies the settings of one scene to another scene slot.

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Use **BANK UP / BANK DOWN** to navigate to the bank containing the source scene.
- Press the **SCENE** button of the scene you want to copy.
- Use **BANK UP / BANK DOWN** to navigate to the destination bank.
- Press **MIDI/REC**, then press the **SCENE** button of the destination slot.

3.6 Delete a Scene

This function resets all DMX channels associated with a scene to 0.

- Enter Program mode.
- Press and hold **AUTO/DEL**, then press the **SCENE** button (1–8) you want to delete.
- When deleted, all DMX channel values for that scene will be set to 0.

3.7 Erase All Scenes

This will erase all scenes across all banks. All scene values are reset to 0.

- With the unit powered off, press and hold **PROGRAM** and **BANK DOWN** simultaneously.
- Power the unit back on — all scenes will be cleared.

3.8 Copy a Bank of Scenes

This function copies all scenes from one bank to another.

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Use **BANK UP / BANK DOWN** to navigate to the source bank.
- Press and release **MIDI/REC**.
- Use **BANK UP / BANK DOWN** to navigate to the destination bank.
- Press the **MUSIC/BANK COPY** button. All LEDs will flash 3 times to confirm the copy is complete.
- Press and hold **PROGRAM** for 3 seconds to exit Program mode.

3.9 Chase Programming

Scenes must be programmed before chases can be created. It is recommended to delete all existing chases before programming new ones for the first time (see Section 3.14).

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Press the **CHASE** button (1–6) to select the chase you want to program.
- Select the desired scene from any bank.
- Press **MIDI/REC** — all LEDs flash 3 times to confirm the step has been added.
- Repeat steps 3–4 to add more steps. Up to 240 scenes can be recorded into a single chase.
- Press and hold **PROGRAM** for 3 seconds to exit Program mode.

3.10 Copy a Bank to a Chase

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Select the chase you wish to program.
- Use **BANK UP / BANK DOWN** to select the bank of scenes you wish to copy.
- Press **MUSIC/BANK COPY**.
- Press **MIDI/REC** — all LEDs will flash 3 times to confirm the operation.

3.11 Editing Chases

Adding a Step to a Chase

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Press the **CHASE** button corresponding to the chase you wish to edit.
- Press **TAP/DISPLAY** — the LCD shows the current step.
- Use **BANK UP / BANK DOWN** to scroll to the position where you want to insert the step.
- Press **MIDI/REC** — the step counter on the LCD will advance by one.
- Press **TAP/DISPLAY** again. The LCD shows the current chase, scene, and bank. Create a new scene or select a previously programmed scene to add.

- Press **MIDI/REC** again — all LEDs will flash 3 times to confirm the step has been inserted.

Deleting a Step from a Chase

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Select the chase (1–6) containing the step you wish to delete.
- Press **TAP/DISPLAY** — the LCD shows the current step.
- Use **BANK UP / BANK DOWN** to scroll to the step you wish to delete.
- Press **AUTO/DEL** — all LEDs will flash 3 times to confirm the step has been deleted.

Delete a Chase

- Press the **CHASE** button corresponding to the chase you wish to delete.
- Press and hold **AUTO/DEL** while holding the same **CHASE** button. All LEDs will flash 3 times to confirm deletion. Scenes remain unaffected.

Delete All Chases

- With the unit powered off, press and hold **AUTO/DEL** and **BANK DOWN** simultaneously.
- Power the unit back on — all chases will be cleared. Scenes remain unaffected.

3.12 Running Scenes

Manual Mode

- When the unit is first powered on, it defaults to Manual mode.
- Confirm that the **AUTO** and **MUSIC** LEDs are off.
- Use **BANK UP / BANK DOWN** to navigate to the bank containing the scenes you want to run.
- Press the desired **SCENE** button to activate it.

Auto Mode

This mode runs all programmed scenes in a sequential loop.

- Press **AUTO/DEL** once to activate Auto mode. The Auto LED will illuminate.
- Use **BANK UP / BANK DOWN** to select the bank of scenes to run.

- Use the **SPEED** and **FADE TIME** sliders to adjust playback speed and transition time.
- Alternatively, press **TAP SYNC/DISPLAY** to set speed by tempo — the interval between the last two taps sets the step time.
- Press **AUTO/DEL** again to exit Auto mode.

Music Mode

- Press the **MUSIC/BANK COPY** button to activate Music mode.
- Use **BANK UP / BANK DOWN** to select a bank of scenes to run. Scenes will cycle in sync with audio detected by the built-in microphone.
- Press **MUSIC/BANK COPY** again to exit Music mode.

MIDI Run Scenes

Select a bank to run scenes via MIDI in Manual, Auto, or Music Run modes.

3.13 Running Chases

Manual Mode

- When the unit is powered on, it enters Manual mode by default.
- Press the corresponding **CHASE** button to activate a chase. Press the same button again to deselect it.

Auto Mode

- Press any or all **CHASE** buttons (1–6) to select the desired chase(s).
- Press **AUTO/DEL** to activate Auto mode.
- Adjust the **SPEED** and **FADE TIME** sliders to control chase playback.
- To override the speed with a tap tempo, press **TAP SYNC/DISPLAY** — the chase will run based on the interval between taps.

Note: Never set the Fade Time slower than the Speed setting, or scenes will not complete their transition before the next step begins.

Music Mode

- Press one of the six **CHASE** buttons to select the desired chase.

- Press **MUSIC/BANK COPY** to activate Music mode.
- The chase will now run in sync with the incoming audio signal.

Note: When exiting a chase by pressing its Chase button, the controller will revert to running the scenes in the last accessed bank. To stop all light output, use the **BLACKOUT** button, or press **MUSIC** (if in Music mode) or **AUTO** (if in Auto mode).

3.14 Reverse Joystick / DMX Channel

This function allows you to reverse the direction of joystick movement or individual DMX channels.

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Press **FINE** and **MODE** to enter Assign mode, then press **FINE** and **MODE** again to enter Reverse mode. The Reverse LED will illuminate.
- Use **BANK UP / BANK DOWN** to switch between Pan and Tilt axes.
- Press **TAP/DISPLAY** to toggle between 8-channel and 16-channel mode.
- Press the **SCANNER** button to select the fixture.
- While holding **MODE**, press the **SCENE** button corresponding to the channel you wish to reverse. For example, if Tilt is on slider 5, hold **MODE** and press Scene 5.
- You may reverse up to 48 channels across 12 scanners.
- Press **FINE** and **MODE** simultaneously to exit Reverse mode.

3.15 Delete Assigned / Reversed DMX Channels

Delete a Single Scanner's Assignments

- Enter Assign or Reverse mode.
- Press the **SCANNER** button for the fixture you wish to clear.
- Press **MODE** and **AUTO/DEL** simultaneously. All LEDs will flash 3 times to confirm.

Clear All DMX Channel Assignments

- With the unit powered off, press and hold **MODE** and **AUTO/DEL** simultaneously.
- Power the unit back on — all assignments will be cleared. All LEDs will flash briefly to confirm.
- Press **MODE** and **AUTO/DEL** simultaneously. All LEDs will flash 3 times to confirm.

3.16 Display Assigned DMX Channels

- Press **FINE** and **MODE** simultaneously to enter Assign mode.
- Press **FINE** and **MODE** again to enter Reverse mode (the Reverse LED illuminates).
- Press the **SCANNER** button for the fixture you want to check — the LCD will display the DMX values for Pan and Tilt.

3.17 Fade Time / Assign Fade Time

- With the unit powered off, press and hold **MODE** and **TAP/DISPLAY** simultaneously.
- Power the unit back on.
- Press **TAP/DISPLAY** to toggle between Fade Time and Assign Fade Time.
- Press **MODE** and **TAP/DISPLAY** simultaneously to store your setting into memory.
- If you do not wish to save your setting, press **BLACKOUT** to exit without saving.

3.18 File Transfer

File Transfer allows you to transfer all stored data from one DMX-12JOY to another. Connect both units using 3-pin XLR cables — the sending unit uses the DMX OUT connector, and the receiving unit uses the DMX IN connector.

Sending a File Dump

- With the unit powered off, press and hold **SCANNER 2**, **SCANNER 3**, and **SCENE 1** simultaneously.

- Power the unit back on while holding these buttons. The LCD will display "TRANSMIT".
- Press **SCENE 7** and **SCENE 8** simultaneously to begin the file transfer.
- If an error occurs, the LCD will display "ERROR".

Receiving a File Dump

- With the unit powered off, press and hold **SCANNER 8**, **SCANNER 9**, and **SCENE 2** simultaneously.
- Power the unit back on while holding these buttons. The LCD will display "RECEIVE".
- When the transfer is complete, the unit will automatically return to normal operation.

3.19 MIDI Channel Setting

- Press and hold the **MIDI/REC** button for 3 seconds. The LCD will display the last saved MIDI channel.
- Use **BANK UP / BANK DOWN** to select the desired MIDI channel (01–16).
- Press and hold **MIDI/REC** again to save. All LEDs will flash 3 times to confirm.

4. Troubleshooting

Symptom	Possible Cause & Solution
Colours / channels don't respond when sliders are moved	Check that the fixture DMX address is set correctly. If the XLR cable run exceeds 30 metres, ensure it is properly terminated.
Moving mirror / pan-tilt does not respond	Verify the DMX address is correct. Adjust speed if available on the fixture. If the cable run exceeds 30 metres, check termination. Not all fixtures support speed adjustment.
Scenes don't run after recording	Ensure you pressed MIDI/REC before pressing the SCENE button. Confirm you are in the correct bank containing recorded scenes.
Scenes don't run correctly	Ensure all fixtures were recorded in the scene. Verify you are in the correct bank. If the cable run exceeds 30 metres, check termination.
Chase doesn't run after recording	Press MIDI/REC after pressing the SCENE button — the LED should flash to confirm. Verify you are in the correct chase with steps recorded. In Auto mode, confirm speed was adjusted after selecting Auto. Check that Fade Time is not set slower than Speed. If the cable run exceeds 30 metres, check termination.

5. Safety & Operational Notes

5.1 Important Notices

- There are no user-serviceable parts inside this unit. Do not attempt repairs yourself.
- If the unit requires service, contact your nearest authorised dealer.
- After unpacking, inspect the unit for any damage incurred during shipping. If in doubt, do not use it — contact your authorised dealer.
- If serious operational issues arise, stop use immediately and contact your dealer.
- Do not disassemble or modify this unit in any way.

5.2 Safety Tips

- To reduce the risk of electric shock or fire, do not expose this unit to rain or moisture.
- Frequent memory clearing may cause damage to the memory chip — avoid initialising the unit unnecessarily.
- Use only the recommended AC/DC power adaptor specified for this unit.
- Retain the original packaging in case the unit ever needs to be returned for service.
- Do not spill liquids on or into the unit.
- Ensure the local power supply voltage matches the unit's requirements before connecting.
- Do not operate this unit if the power cord is frayed or damaged. Keep the power cord clear of foot traffic.
- Do not remove the ground prong from the power cord — it is designed to reduce the risk of electric shock and fire.
- Disconnect from power before making any connections.
- Do not remove the top cover under any circumstances. There are no user-serviceable parts inside.
- Disconnect from power when the unit will not be used for an extended period.
- This unit should be operated by adults only. Keep out of reach of children.
- Do not operate under the following conditions:
 - Environments with excessive humidity
 - Environments subject to excessive vibration or physical shock
 - Temperatures above 45°C (113°F) or below 2°C (35.6°F)