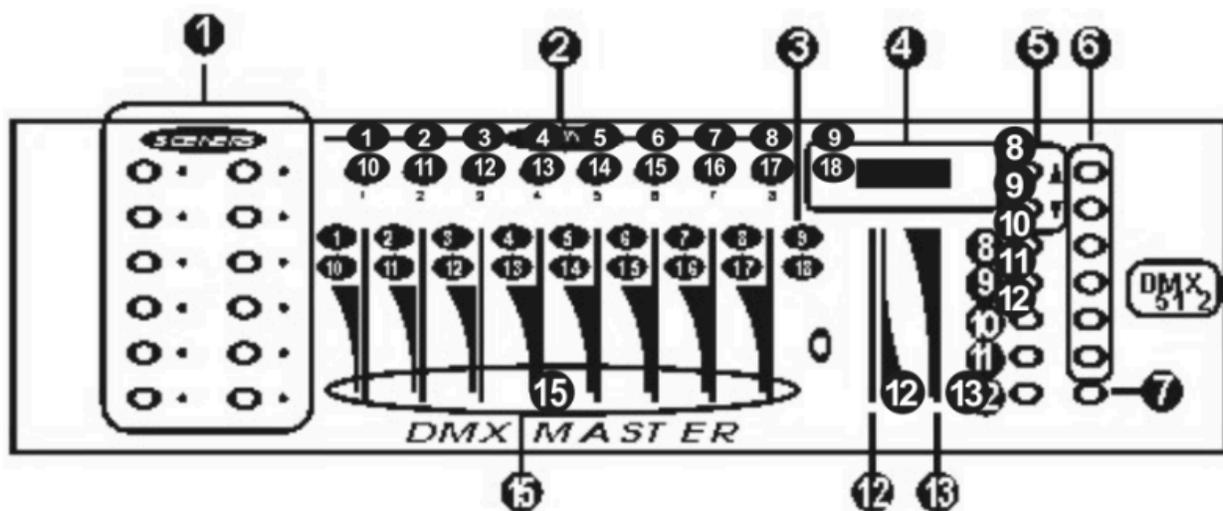# DMX-12
192-Channel DMX-512 Controller

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

USER MANUAL

1. Technical Specifications

Power Input	DC 9V–12V, 300mA minimum
DMX Output	3-pin female XLR
Dimensions	483 × 133 × 76mm

2. Controls & Functions

2.1 Front Panel

No.	Button	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	**PAGE SELECT (A/B)**	Toggles between Page A (channels 1–8) and Page B (channels 9–16) for fixtures with more than 8 channels.
4	**LCD DISPLAY**	4-digit display showing current values, bank numbers, scene numbers, and settings.
5	**BANK UP / BANK DOWN**	Navigate through the 30 available scene banks.
6	**CHASES (1–6)**	Select and run one of the 6 available chase programs.
7	**BLACKOUT**	Disables all DMX channel outputs immediately.
8	**PROGRAM**	Activates programming mode. The display links indicator illuminates when active.
9	**AUTO / DEL**	In Chase mode: activates Auto Run. In Program mode: deletes the selected scene or chase.
10	**MUSIC / BANK COPY**	In Chase mode: activates sound-active (music-triggered) chase. In Program mode: copies a bank of scenes to another bank.
11	**TAP SYNC / DISPLAY**	In Auto Chase mode: tap to set chase speed by tempo. In Program mode: toggles the LCD display value format.
12	**FADE TIME SLIDER**	Adjusts the transition time between scenes. Fade Time is the duration the controller takes to fully transition from one scene to the next.
13	**SPEED SLIDER**	Adjusts the chase speed in Auto mode.
14	**CHANNEL SLIDERS (1–16)**	Adjust the DMX output level of each channel from 0–255 (0%–100%).

2.1 Rear Panel
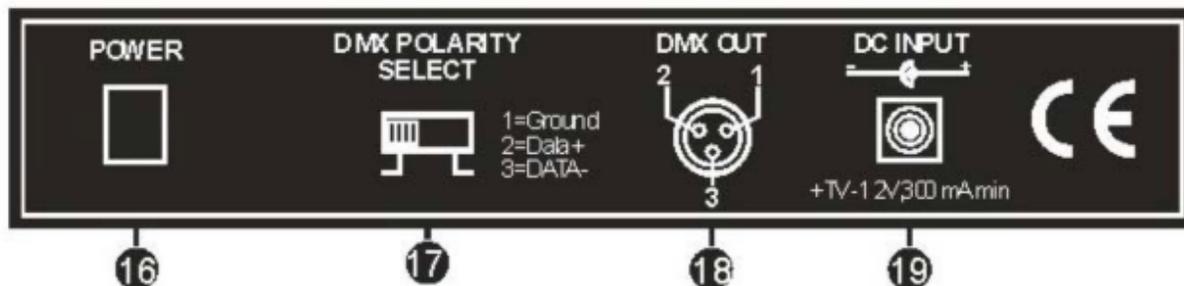
No.	Button	Function
16	**POWER BUTTON**	Powers the unit on or off.
17	**DMX POLARITY SELECT**	DIP switch to set the DMX signal polarity. Match this to the polarity required by your fixtures (Pin 1 = Ground, Pin 2 = Data+, Pin 3 = Data−).
18	**DMX OUTPUT**	3-pin female XLR connector. Connect to the first fixture in your DMX chain.
19	**DC INPUT**	Power input jack. Accepts DC 9V–12V, 300mA minimum.

3. Operating Instructions

3.1 DMX-512 Addressing

Each fixture must be assigned a unique DMX start address 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

DIP switch 10 is not used for DMX addressing — it is typically used to select fixture operating modes such as Master/Slave or sound activation. Each of the 12 fixtures is assigned 16 DMX channels. Set the fixture DIP switches according to the table below:

Scanner	Channels	DIP Switches ON
1	1 – 16	0 or 1 (based on scanner setting)
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
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 Scene Programming

- Press and hold the PROGRAM button for 3 seconds to enter Program mode. The LCD display next to "Program" will blink to confirm.
- Press any or all SCANNER buttons (1–12) to select the fixture(s) you want to program.
- Adjust the channel sliders to set the desired output level for each channel (e.g. Colour, Gobo, Pan, Tilt). Press PAGE SELECT A/B if the fixture uses more than 8 channels. When switching from Page A to Page B, move the sliders to activate the channels on that page.
- To lock in a fixture's settings and move to the next, press the SCANNER button of the fixture you have finished adjusting — this holds it at its current configuration. Then select the next fixture(s) and adjust their sliders.
- Repeat steps 2–4 until all fixtures are configured as desired.
- Press and release the MIDI/Add button.
- Use the BANK UP / BANK DOWN buttons 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 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 where the scene was saved.
- Repeat steps 2–8 to record additional scenes.

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.

To exit Program mode, press and hold the PROGRAM button for 3 seconds. If the Blackout LED illuminates upon exiting, press the BLACKOUT button to deactivate it.

3.3 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 to make the desired changes.
- Press MIDI/Add, 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.

3.4 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/Add, then press the SCENE button of the destination slot.

3.5 Delete a Scene

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

- Navigate to the desired bank using BANK UP / BANK DOWN.
- Press and hold AUTO/DEL, then press the SCENE button (1–8) you want to delete.

3.6 Erase All Scenes

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

- Press and hold PROGRAM and BANK DOWN simultaneously, then power off the unit.
- Reconnect power — all scenes will be cleared.

3.7 Copy Bank

This function copies all scenes from one bank to another.

- Press and hold PROGRAM for 3 seconds to enter Program mode.
- Navigate to the source bank using BANK UP / BANK DOWN.
- Press and release MIDI/Add.
- Navigate to the destination bank using BANK UP / BANK DOWN.
- Press the MUSIC/Bank-Copy button. The LCD will flash briefly to confirm the copy is complete.

3.8 Delete a Bank

- Press and hold PROGRAM for 3 seconds to enter Program mode.
- Navigate to the bank you want to delete.
- Press AUTO/Del and MUSIC/Bank-Copy simultaneously. The LCD will flash to confirm deletion.

3.9 Chase Programming

Scenes must be programmed before chases can be created.

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Select the chase (1–6) you want to program using the **CHASE** buttons.
- Select the desired scene from any bank. Scenes play back in the order they are added to the chase.
- Press **MIDI/Add** — 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 bank of scenes you want to copy.
- Select the target chase using the CHASE buttons.
- Press MUSIC/Bank-Copy and MIDI/Add simultaneously. All scenes from the bank are copied into the chase.
- Press and hold PROGRAM for 3 seconds to exit Program mode.

3.11 Editing Chases

Adding a Step to a Chase

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Select the chase (1–6) you want to edit.
- Press **TAP SYNC/Display** — the LCD shows the current scene and bank. This is the bank containing the scene you want to add.
- Press **TAP SYNC/Display** again — the LCD shows the selected chase.
- Use **BANK UP / BANK DOWN** to scroll through the chase to the desired position.
- Press **MIDI/Add** — the step counter on the LCD advances by one.
- Press the **SCENE** button you want to insert.
- Press **MIDI/Add** again to confirm the new step.
- Press and hold **PROGRAM** for 3 seconds to exit Program mode.

Deleting a Step from a Chase

- Press and hold **PROGRAM** for 3 seconds to enter Program mode.
- Select the chase (1–6) you want to edit.
- Press **TAP SYNC/Display** — the LCD shows the selected chase.
- Use **BANK UP / BANK DOWN** to scroll to the step you want to delete.
- Press **AUTO/Del** — the step is deleted.
- Press and hold **PROGRAM** for 3 seconds to exit Program mode.

Delete a Chase

- Press the CHASE button you want to delete.
- Press and hold AUTO/Del, then press and hold the same CHASE button. The LEDs will flash 3 times.
- Release both buttons — the chase is deleted. Scenes remain unaffected.

Delete All Chases

- Press and hold BANK DOWN and AUTO/Del simultaneously, then power off the unit.
- Reconnect power — all chases will be deleted. Scenes remain unaffected.

3.12 Running Scenes

Manual Run

- When the unit is first powered on, it defaults to Manual Scene mode.
- If in Program mode, press and hold PROGRAM for 3 seconds to exit. The Program LED will turn off.
- Confirm that the AUTO and MUSIC button 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 Run Scenes

This mode runs all programmed scenes in a sequential loop.

- Press AUTO/Del once to activate Auto Run mode.
- Use BANK UP / BANK DOWN to select the bank of scenes to run.
- Use the SPEED and FADE TIME sliders to adjust playback to your preference. The Fade Time setting should never be slower than the Speed setting, or scenes will not complete their transition before the next step begins.
- Use BANK UP / BANK DOWN to change banks on the fly during playback.

Music Run Scenes

- Press the MUSIC/Bank-Copy button — the corresponding indicator on the LCD will illuminate.
- Use BANK UP / BANK DOWN to select the bank of scenes to run, or control playback via MIDI signals.
- 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 Run Chases

This mode allows you to step through a chase manually.

- Press and hold PROGRAM for 3 seconds to enter Program mode.
- Select a chase using one of the six CHASE buttons.
- Press TAP SYNC to step through the chase one step at a time.
- Use BANK UP / BANK DOWN to scroll between chases.
- Press and hold PROGRAM for 3 seconds to exit.

Auto Run Chases

This mode allows you to step through a chase manually.

- Press any or all CHASE buttons (1–6) to select the desired chase(s).
- Press and release AUTO/Del — the corresponding LED will flash.
- Adjust the SPEED and FADE TIME sliders to your desired settings. The chase will run according to these settings.
- To override the speed with a tap tempo, press TAP SYNC/Display three times — the chase will run based on the interval between taps.

Note A: Never set the Fade Time slower than the Speed setting, or scenes will not complete before the next step is triggered.

Note B: To include all chases, press AUTO/Del before selecting a chase.

Music Run Chases

- Press one of the six **CHASE** buttons to select your desired chase.
- Press and release **MUSIC/Bank-Copy**.
- The corresponding LED will flash in the LCD display.
- 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 automatically revert to running the scenes in the last accessed bank. To stop all light movement, use the **BLACKOUT** button, or press **MUSIC** (if in Music mode) or **AUTO** (if in Auto mode).

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/Add 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/Add 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.
- This unit is intended for indoor use only.
- After unpacking, inspect the unit for any damage incurred during shipping. If in doubt, do not use it — contact your authorised dealer.
- Keep all packaging materials (plastic bags, foam, etc.) out of reach of children.
- 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 broken. Keep the power cord clear of foot traffic.
- Disconnect from mains 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 is not intended for home use.
- If the unit appears damaged upon unpacking, do not attempt to operate it — contact your dealer immediately.
- 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)