
# DMX-SPLIT

## 6-Channel DMX512 Splitter

Electrically Isolated DMX Signal Distributor with Buffered Outputs

## USER MANUAL

# 1. Technical Specifications

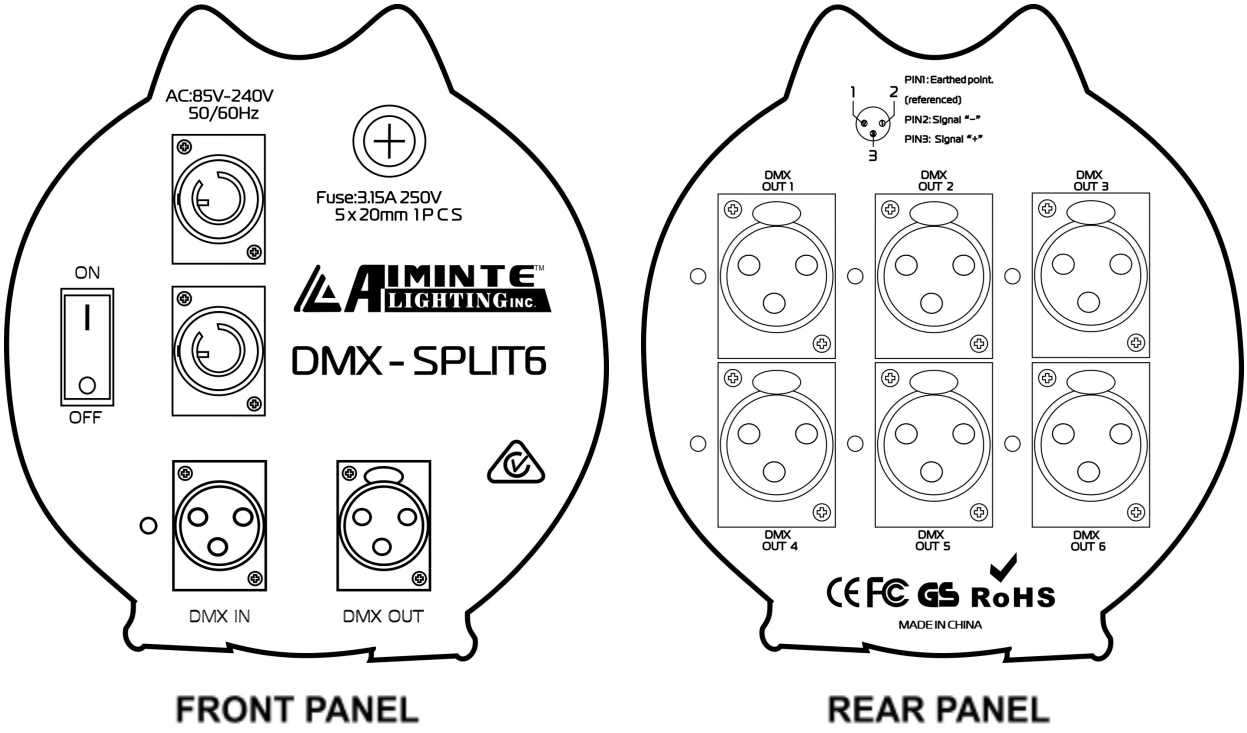
| | |
|---|---|
| **Power Input** | AC 85–240V, 50/60Hz |
| **Internal Fuse** | F3.15A 250V (5×20mm) |
| **DMX Input** | 3-pin XLR (male) |
| **DMX Output (Direct)** | 3-pin XLR (female) — direct pass-through |
| **DMX Outputs (Buffered)** | 6× 3-pin XLR (female) — electrically isolated |
| **Max Fixtures per Output** | 64 |
| **Dimensions** | 116 × 204mm |
| **Weight** | 2.5kg |

# 2. Product Overview

The DMX-SPLIT is a 6-channel buffered DMX512 signal splitter. It takes a single DMX512 input and distributes it across six electrically isolated outputs, each with its own signal amplifier and status LED. A seventh direct pass-through output is also provided on the front panel.

Electrical isolation between the input and each output prevents ground loops and signal interference — particularly important in larger lighting rigs where multiple fixture chains share a common DMX source. Each buffered output supports up to 64 fixtures, and the final output in the chain includes a built-in termination resistor to suppress signal reflections.

# 3. Controls & Connections




FRONT PANEL REAR PANEL

## 3.1 Front Panel

| Component | Description |
|---|---|
| **Power Inlet** | IEC mains power inlet. Accepts AC 85–240V, 50/60Hz. |
| **Fuse Holder** | Houses the internal fuse (F3.15A 250V, 5×20mm). Accessible from the front panel for replacement. |
| **Power Switch** | Rocker switch — ON/OFF. |
| **DMX IN** | 3-pin male XLR connector. Connect to the DMX output of your lighting controller or upstream device. |
| **DMX OUT (Direct)** | 3-pin female XLR connector. Direct pass-through of the incoming DMX signal — not buffered or isolated. |

## 3.2 Rear Panel

| Component | Description |
|---|---|
| **DMX OUT 1–6** | Six 3-pin female XLR connectors. Each output is electrically isolated and individually buffered, with its own signal amplifier and LED indicator. |
| **Signal LEDs** | Each output channel has a corresponding LED that illuminates when a valid DMX signal is present on that output. |

## XLR Pin Assignment

| Pin | Function |
|---|---|
| **1** | Ground (earth reference) |
| **2** | Data− (signal negative) |
| **3** | Data+ (signal positive) |

# 4. Operating Instructions

## 4.1 Setup

1. Connect the DMX output of your lighting controller to the **DMX IN** connector on the front panel using a 3-pin XLR cable.
2. Connect your fixture chains to the **DMX OUT 1–6** connectors on the rear panel.
3. If you need an additional unbuffered pass-through, use the **DMX OUT (Direct)** connector on the front panel.
4. Connect the unit to mains power and switch on.
5. Verify that the signal LEDs on the rear panel illuminate, confirming that a valid DMX signal is being received and distributed.

## 4.2 Signal Chain Notes

- Each of the six buffered outputs supports up to **64 fixtures** per chain.
- The input signal and each output signal are **electrically isolated** from one another, preventing ground loops between fixture chains.
- The final output in the splitter includes a **built-in termination resistor** to suppress signal reflections. If you are daisy-chaining from any output, ensure the last fixture in that chain is also properly terminated (120Ω resistor across pins 2 and 3).
- The **DMX OUT (Direct)** on the front panel is a non-isolated pass-through. Use this for short cable runs to nearby fixtures or to link to another splitter.

## 4.3 Replacing the Fuse

1. **Disconnect the unit from mains power.**
2. Use a flat-head screwdriver to unscrew the fuse holder on the front panel.
3. Remove the blown fuse and insert a replacement of the exact same type (F3.15A 250V, 5×20mm).
4. Tighten the fuse holder back into place.

**Important:** Always use the same fuse type. If you are unsure, consult an authorised service technician before replacing.

# 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.
- 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.
- This unit operates on mains voltage. Always ensure it is connected to a properly earthed power supply.
- Ensure the local mains voltage matches the unit's rated input range before connecting.
- Do not operate this unit if the power cord is frayed or damaged. Do not run the power cord through areas where it may be stepped on or pinched.
- Disconnect from mains power before making any connections or performing fuse replacement.
- Do not remove the outer casing under any circumstances.
- Disconnect from mains power when the unit will not be used for an extended period.
- Do not spill liquids on or into the unit.
- 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)
- Retain the original packaging in case the unit needs to be returned for service.
- This unit should be operated by adults only. Keep out of reach of children.