DMX Switch Pack

user manual

Martin

Thank you for selecting the Martin *DMX Switch Pack*. This DMX-controlled switching device allows you to turn on and off up to six 350 watt devices with the Martin *2518 DMX Controller* or any other DMX board. It allows you to control non-intelligent lights; and is ideal for combining fixtures from Martin's DJ Series with intelligent lights.

The *DMX Switch Pack* is not suitable for switching products with discharge lamps (products with fluorescent tubes or metal halide lamps).

The *DMX Switch Pack* is ruggedly built for years of trouble-free use. Setup and operation are simple; please read this manual before setting up and operating the device.

Safety information

W A R N I N G !
This product presents risks of lethal or severe injury.

This product is for professional use only. It is not for household use. Read this manual before powering or installing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. If you have questions about how to operate the fixture safely, please contact your Martin dealer or call the Martin 24-hour service hotline at +45 70 200 201.

To protect yourself and others from electric shock

- Disconnect the fixture from AC power before removing or installing fuses or any part, and when not in use.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not expose the fixture to rain or moisture.
- Refer all service to a qualified technician.
- Never operate the fixture with missing or damaged covers.

To protect yourself and others from burns and fire

- Never use the device to power fixtures that exceed the specified maximum load.
- Never attempt to bypass the fuses.
- Always replace defective fuses with ones of the specified type and rating.
- Do not modify the fixture or install other than genuine Martin parts.

To protect yourself and others from injury due to falls

- When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
- Secure the device with a safety wire threaded through the side holes.
- Block access below the work area whenever installing or removing the fixture.

Setup

The *DMX Switch Pack* comes with a 5 meter shielded 3-pin XLR cable. In addition, the EU version includes 6 standard male IEC plugs for connecting fixtures.

The following installation steps are required:

1. Install a plug on the power cord
2. Install IEC plugs on the fixtures (EU version only)
3. Connect the data link
4. Set the DMX address

Install plug

The switch pack is delivered with no plug on the power cord. Following the manufacturer's instructions, install an approved 3-prong grounding-type plug that fits your supply. Connect the wires to the pins as listed below. The table shows some possible pin identification schemes; if the pins are not clearly identified, or if you have any doubts about proper installation, consult a qualified electrician.

Table 1: Plug Wiring

Wire (EU)	Wire (US)	Pin	Marking	Screw (US)
brown	black	live	"L"	yellow or brass
blue	white	neutral	"N"	silver
yellow/green	green	ground	⏚	green

Connect data link

Connect the data link cable to the "In" jack using a 3-pin female XLR connector. If using 5-pin cables, a 5-pin male to 3-pin female cable such as Martin P/N 309160 must be used. (Pins 4 and 5 are not used.)

Continue the data link by connecting the cable to the "Out" jack; use a 3-pin XLR male connector. Insert a termination plug in the "Out" jack if the switch pack is the last device on the link. A termination plug is simply a 3-pin male XLR connector with a 120 ohm resistor soldered between pins 2 and 3.

Connect fixtures, EU version

IEC male plugs, included, must be installed on the fixture power cords. Connect the wires as shown in the above table. Consult a qualified electrician if the power cord for your fixtures are colored differently.

Plug the fixtures into the power outputs. Each outlet can deliver up to 350 watts of power.

DO NOT connect higher wattage devices to the switch pack or connect more than one fixture to an output. DO NOT connect a product with a discharge lamp (e.g. a product with fluorescent tubes or metal halide lamp) to the DMX Switch Pack. Doing so can cause serious damage to both the DMX Switch Pack and the product connected to it.

Connect fixtures, US version

Plug the fixtures into the power outputs. Each outlet can deliver up to 350 watts of power. *Do not connect higher wattage devices to the switch pack or connect more than one fixture to an output.*

Set DMX address

The DIP-switch must be set to the start channel, also known as the address, which is the first of the six channels the controller uses to send instructions to the switch pack. Any channel between 1 and 512 may be selected as long as the last channel (6) is within the controller's range. The *2518 DMX Controller* has 72 channels; the highest useful start channel is 67.

Set the DIP-switch by switching ON one or more of the pins until their total value equals the start channel. Each ON pin adds the value listed below; OFF pins add no value.

The setting can be found by subtracting pin values, starting from the highest value that is less than or equal to the start channel, until the total of the values subtracted equals the channel number. See the examples below.

Table 2: Pin Values

pin	1	2	3	4	5	6	7	8	9	10
value	1	2	4	8	16	32	64	128	256	512

Example: Channel 13 **Set pins 1, 3, and 4 ON.**		**Example: Channel 67** **Set pins 1, 2, and 7 ON.**	
channel no. - value of **pin 4**	13 - 8	channel no. - value of **pin 7**	67 - 64
remainder - value of **pin 3**	5 - 4	remainder - value of **pin 2**	3 - 2
remainder - value of **pin 1**	1 - 1	remainder - value of **pin 1**	1 - 1
remainder	0	remainder	0

Operation

Apply power

The panel diode lights when power is applied to the *DMX Switch Pack*.

Control fixtures

Power output 1 is controlled on the first channel, power output 2 is controlled on the second channel, and so on. To turn a fixture on, set the channel's DMX value anywhere above 50 percent (DMX 128 - 255). To turn it off, set the value anywhere below 50 percent (DMX 0 - 127).

Maintenance

Replace fuses

If the power diode does not light when power is applied, the main fuse may be blown. The main fuse is found in a holder next to the power cord; it can be replaced without opening the cover.

Each power output is fused as well. If one channel does not function properly, the power output fuse may be blown. The cover must be removed from the unit to access these fuses. *Always disconnect the switch pack from electricity before servicing.*

If a fuse blows repeatedly, there is a malfunction with either the switch pack or one of the fixtures connected to it that must be referred to a service technician. *Always replace the fuse with one of the same size and rating.*

Specifications

Construction

- Housing...steel
- Finish ....electrostatic powder finish

Control

- Protocol..DMX-512
- DMX values, output power off.. 0 - 127
- DMX values, output power on .... 128 - 255
- Channels 6
- Address range .... 1 - 512
- Receiver type RS-485

Dimensions

- Length.. 250 mm (9.8 in)
- Width .... 150 mm (5.9 in)
- Height .... 71 mm (2.8 in)

Electrical, EU version

- Power supply .... 210-245 V / 50-60 Hz
- Maximum total power consumption..2200 W
- Maximum power per channel...350 W
- Main fuse ....10 A / 250 V time delay (T)
- Output fuses...2 A / 250 V time delay (T)

Electrical, US version

- Power supply .... 100-130 V / 50-60 Hz
- Maximum total power consumption..2200 W
- Maximum power per channel...350 W
- Main fuse ....20 A / 250 V time delay (T)
- Output fuses...4 A / 250 V time delay (T)

Panel connections

- Data input .... 3-pin XLR male
- Data output .... 3-pin XLR female
- Power outputs, EU version ....6 x grounded IEC female
- Power outputs, US version .... 6 x grounded Edison female

Martin