

Mini Recorder

1 DMX512 Universe Input, 1 DMX512 Universe output

The MiniRecorder board accepts 1 - DMX512 universe and merges it with a recorded scene on a highest takes precedence basis or in DMX override .

DMX512 output:

Merge2 uses controlled slew rate drivers, decreasing the EMI radiated from the RS485 lines, and improving signal fidelity with misterminated lines.

DMX512 input: Accepts DMX512 digital stage lighting protocol, 512 channels.
Uses quality low power DMX receiver chip equal to 1/8 unit load on DMX line.
Receivers have ESD protection and “fail safe” features on DMX receiver chip.

Only DMX packets with a zero start code will be accepted. Non-zero start code packets will be ignored.
If non-zero start codes and DMX512 utilizing RDM capability is needed for other DMX receivers down stream from the MiniRecorder, then a separate DMX through connector should be used for those devices.

DMX receivers

Mini Recorder receiver is equivalent to 1/8 unit load to the DMX input.
When the DMX signal is lost, the last valid input data will be cleared after 1 second of no valid DMX.
Subsequent DMX output will be zero's.

Main Screen

The number on the left is the current scene number with “SCENE” above. When scenes 1-4 are selected “SCENE” is in standard text, When scenes 4-8 are selected “SCENE” is displayed in inverse text.

To change between scenes 1-4 and 5-8 hit the **UP** or **DOWN** buttons. Either button will toggle between 1-4 or 5-8.

In the center is the dim level for the current scene. The scene level is a Master level, applied to all channels equally The level only affects the stored scene, not incoming DMX.
The slide pot is used to change level, just like an ordinary wall type dimmer.

Third line is the status of DMX input which displays the number of incoming DMX channels or “No DMX Signal”.

Setting the mode using the MODE button

There are 2 screens used to determine the configuration of the Mini Recorder.

Screen 1

RECORD DMX to current scene.

Select scene you want to record to.

Press the **MODE** button once. The screen will display “To record scene – select scene and press ENTER.”.

Press **ENTER**, the screen will display “Recording scene to memory”, If there is no valid DMX input the screen will display “No DMX to record”.

Screen 2

Basic merge or Highest takes precedence

Press **MODE** twice. The screen will display “Select merge, press ENTER to save”.

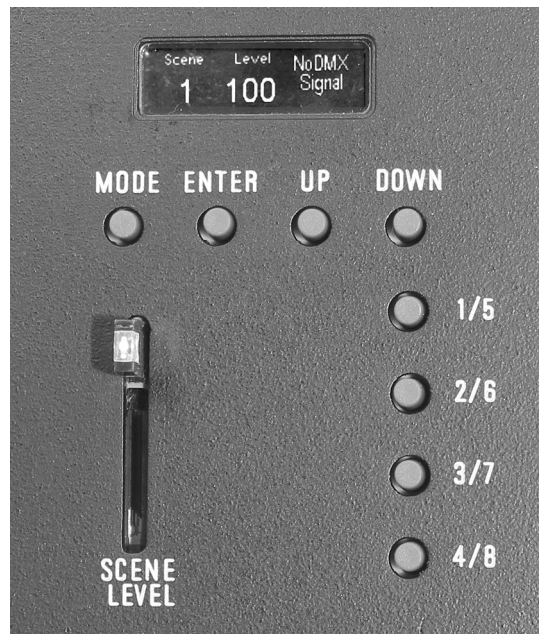
Use **UP** or **DOWN** to select “Highest takes precedence” or “DMX override”

The current selection is displayed in inverse text.

Press **ENTER** to make this the default mode.

Highest takes Precedence is a basic merge of incoming DMX and the current scene where the highest level of either the scene or incoming DMX is output

DMX override outputs incoming DMX only, regardless of the scene level..



SCENE buttons.

Pressing any scene button will instantly change to the selected scene.

The current scene is saved to memory and if power is lost it will start in the last scene when power is restored.

Power requirements: 5 to 9 volts DC @ 100 mA.

Power supply is included.

Board connections: Power and DMX output connections to the board are made via screw terminal blocks. Acceptable wire size is 18 – 24 AWG. See drawing for connector locations.

Physical Dimensions:

3.95" X 2.75" +/- .15"

DMX512 In connections

The DMX input pin numbers correspond to the XLR pin numbers.

The ground pin (1) is signal ground – not earth ground.

XLR pins 4 and 5 are not used.

PIN	WIRE	SIGNAL
1	signal	signal ground/return
2	signal	data compliment (-)
3	signal	data true (+)
4	signal	loop through(-)
5	signal	loop through(+)

Termination: Northlight's Merge2 has a terminating resistor on board for each DMX input.

Terminators on the transmitter end are not usually required.

Earth ground connection

The latest DMX version recommends use of earth ground referenced transmitting devices and isolated receiving devices.

The normal configuration for the Merge2 is to not use the earth ground.

The Merge2 is wired with the 0 volt power supply(circuit common ground), connected to both the receiver and transmitter.

The ground, pin 1, will be at the same potential for the receiver and transmitter.

The DC power supply should not have the 0 volt power supply connected to earth ground.

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If there is a defect, we will repair or replace the product at our discretion.

We offer a full refund on the purchase price if returned in original and "like new", condition in less than 30 days.

Return the product with a description of the problem. Free repairs are for defective parts or workmanship only.

Repairs due to improper hookup, over voltage, short circuits, physical damage etc., will be charged to the customer.

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Contact Northlight Systems Voice 480 949-2625 Info@NorthlightDMx.com