

DCRD Users Guide (V3.1x)

DMX Channel Reassign with 7 Segment Display



DESCRIPTION

The DCRD-PCB is a DMX input channel reassignment module. Easily reassigns the DMX start channel of a fixture or DMX device that either has a difficult to set dip switch, or doesn't have a user settable DMX channel option. Designed to mount inside a DMX device (custom cutouts needed for external access). Simply loop the DMX input data through the DCRD module, set the original device to channel 1 (if available to do so), then apply power, set the channel via the up/down switches, and operate as normal.

FEATURES:

- Engineered with quality parts and a reliable design
- Assign the DMX start address channel to any of the 512 channels to any DMX device
- Optional 5V or 12VDC power option (factory set)
- Screw terminals installed for easy connection
- Optional off board screw terminal connections for external up/down switch installation (recommended for industrial or outdoor DMX equipment where a more robust switch is needed)
- Set DMX Loss Directive to either set the DMX output levels (fixture brightness) or turn off the DMX
- Dimmable display

OPERATION

WITH A VALID DMX INPUT: To readdress the DMX start channel - Tap either UP or DOWN to initiate a DMX channel (start address) reassign command, the current display channel will blink. Set the desired channel by tapping UP or DOWN to increment or decrement one at a time, or hold to change the channel setting rapidly. When released, the display will blink for 3 seconds, stop blinking, store the new setting, and will then engage the new channel.

WITHOUT A VALID DMX INPUT: If no DMX signal is present the DCRD unit will either turn off the DMX output or enter the LEVEL mode depending on the mode setting. The display will show either "nd" or, "L" as the left most digit or "FUL" indicating 100% (FULL). The set DMX Level value is in the range of 0 to 100%, and is sent to all 512 DMX channels. To change the level press (optionally hold) the up or down button to adjust/set the output. If re-powered, or the DMX Start Ch is changed, the outputs will be at zero.

SETUP

WITHOUT A VALID DMX INPUT: To change the DMX start channel press and hold both buttons for 3 seconds, until you see the current readdress to channel display. Change it as desired start channel. The new value will be stored. To change the brightness and DMX loss directive press and hold both buttons for 6 seconds and the menu will advance to the "bri" setting. Press the up or down button to set it to the desired level. Wait 3 seconds and the menu will advance to DMX loss directive indicated by "n=n" or "n=L". ("n" for no DMX). Press the either button to toggle between the two settings. After 3 seconds all 3 segments will illuminate for 1 second for segment checking, and then stores the new settings.

WITH A VALID DMX INPUT: To enter the setup mode, press and hold both buttons for 3 seconds until the display changes to "bri". Press the up or down button to set it to the desired level. Wait 3 seconds and the menu will advance to DMX loss directive indicated by "n=n" or "n=L". ("n" for no DMX). Press the either button to toggle between the two settings. After 3 seconds all 3 segments will illuminate for 1 second for segment checking, and then stores the new settings.

DMX loss directive. If set to "n=n" then upon DMX loss the DMX output will turn off. Allowing downstream equipment to respond to a no DMX/standalone state. If set to "n=L" then upon DMX loss the DMX output will be active and then all of the DMX channels will be controlled by the "L" level setting allowing the unit to control the brightness of some fixtures.

NOTE: If the connected DMX device has a dip switch or other means of setting the DMX start channel, set it to DMX channel 1, allowing the DCRD-PCB to reassign the DMX channel correctly.

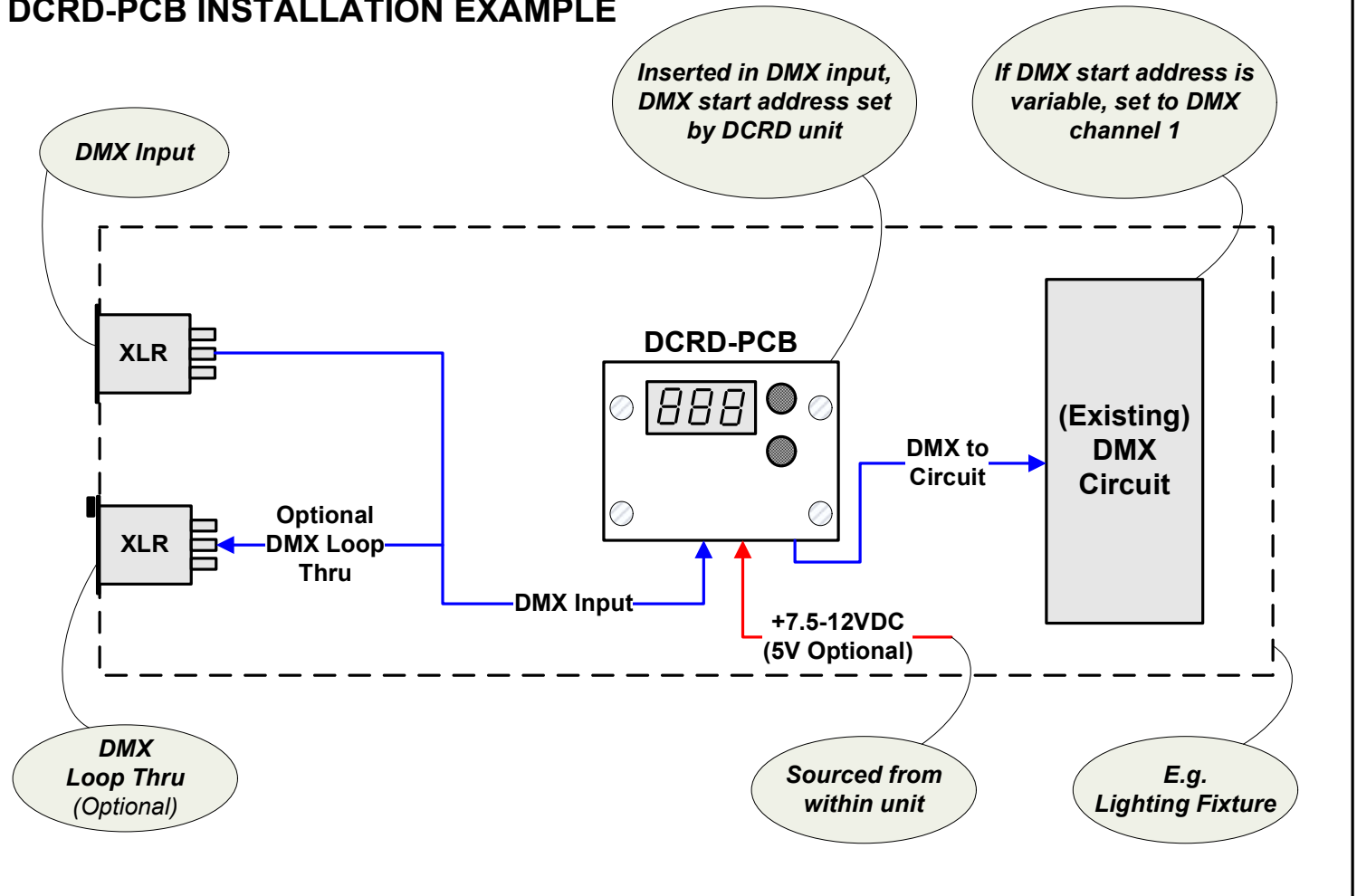


DCRD Installation Guide (V3.1x)

DMX Channel Reassign with 7 Segment Display



DCRD-PCB INSTALLATION EXAMPLE



DCRD-PCB INSTALLATION INSTRUCTIONS

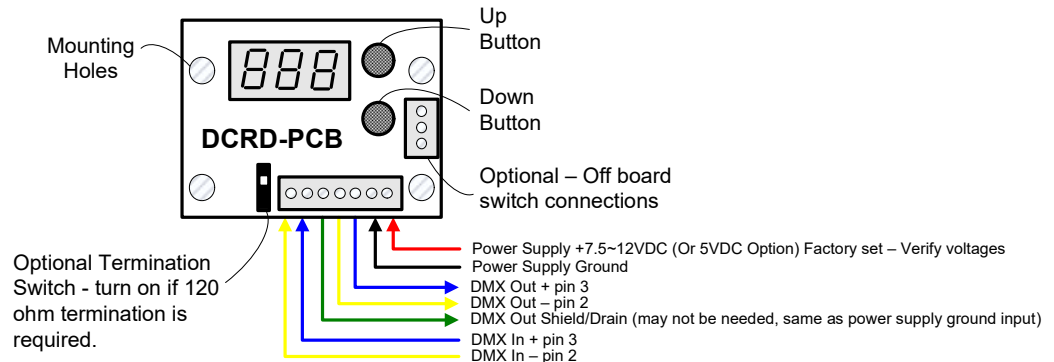
1. Using the drill template, create the necessary cutouts for the 2 buttons (if installed), 7 segment display, and the 4 mounting screws in the enclosure. Insure there is enough clearance with the unit closed.
2. Connect the DMX input wires (from the XLR connector if applicable) to the input terminals of the DCRD-PCB. Connect pin 2 of the XLR to the terminal labeled "2", and pin 3 to "3".
3. If a loop thru DMX connector is installed, maintain the existing wire connections. Set the "TERM" dip switch to the OFF position. If there is NOT a loop thru DMX connector, set the "TERM" dip switch to the ON position to properly terminate the DMX signal.
4. Connect the DMX output wires from the DCRD-PCB labeled "2" and "3" to the DMX input to the device maintaining the polarity.
5. The DCRD-PCB is factory set for +5VDC or +12VDC, insure that the device being used has the proper voltage, and can supply an additional 120mA of current. Add 2 power wires, Gnd and the +5VDC OR +12VDC power connections appropriately from the (existing) power source to the DCRD-PCB "PWR IN" terminals.
6. If the DCRD-PCB onboard tact switches are not installed;
 - Add a Gnd wire to both switches from DCRD-PCB terminal "G" (loop from switch 1 to switch 2 if desired)
 - Add a wire from the "UP" switch to the DCRD-PCB terminal "U"
 - Add a wire from the "DN" switch to the DCRD-PCB terminal "D"
7. Test for proper power and operation

DCRD Installation Guide (V3.1x)

DMX Channel Reassign with 7 Segment Display



DCRD-PCB WIRING DIAGRAM



DCRD-PCB SPECIFICATIONS

- DMX CONTROL WARNING: NEVER use DMX data devices where human safety must be maintained.
- NEVER use DMX data devices for pyrotechnics or similar controls.
- Manufacturer: ELM Video Technology
- MPN: DCRD-PCB
- DMX Data: 250 kHz
- Voltage Input: Regulated +12VDC or +5VDC – Factory Set
- Current Input: 120mA (apx)
- Data Input: DMX512, [Pin 2 Data -, Pin 3 Data +]
- Data Output: DMX512, [Pin 1 - Power supply common, Pin 2 Data -, Pin 3 Data +]
- Dimensions: 2" W x 1.5" L x .95" H (top of tact switches)
- PCB Fuse: SMT - 500mA
- Standoff Height: .25" (7 Segment display mounts flush to surface)
- Button Height above standoff: .3"

