Alcorn McBride Inc.

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DMX OverRide™

Power Green: OK
       Orange: Charging
       Red: On Battery

Scene - - - - 1 - - - - - - 2 - - - - - - 3 - - - -
       Off: Idle   Green: Active   Red: Record Mode (Press To Capture)

Resume
Pass-Through
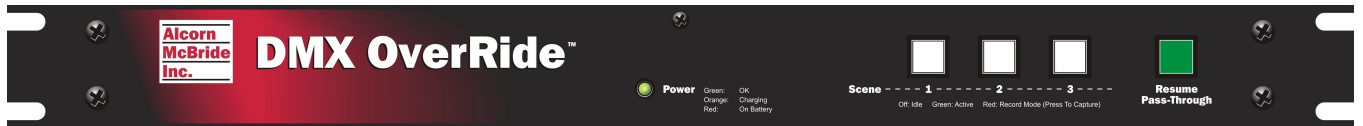
DMX OverRide™

User's Guide

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Every effort has been made to assure the accuracy of the information contained in this manual, and the reliability of the Alcorn McBride DMX OverRide™ hardware and software. Errors can sometimes go undetected, however. If you find one, please bring it to our attention so that we can correct it for others. Alcorn McBride welcomes comments and suggestions on the content and layout of its documentation.

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Welcome!

Thank you for purchasing the Alcorn McBride DMX OverRide™. The DMX OverRide allows you to take manual control of your DMX network. In normal operation it simply feeds through your DMX stream. But activate any of its remote inputs or pushbuttons, and it automatically overrides the streams with any of three pre-programmed looks. That makes the DMX OverRide ideal for fire alarm lights, work-light presets, manual Blackouts, and much more.

A simple press of the Resume button or remote input returns the unit to normal feed-through operation. A switch on the rear of the unit enables or disables DMX input termination, and the DMX output is re-buffered to maintain DMX signal integrity.

The DMX OverRide can also protect against DMX data problems by automatically switching to a preset look when a dropout is detected, and it can even maintain a preset DMX output in the event of a Control System power failure by using its built-in rechargeable battery*.

Getting Started

Let's get your DMX OverRide installed and up and running. Unpack the unit and verify you have all the hardware and documentation. You should have the following:

1. DMX OverRide unit
2. DMX Patch Cable
3. This User's Manual

Battery Connection

If your installation requires the use of the DMX OverRide's backup battery, you'll need to open the top cover of the unit and plug it in. The unit ships from the factory with the battery disconnected.

Remove the screw located in the upper center of the front panel. The top cover is hinged to the rear of the unit. Plug the battery into the battery connector. It is keyed and clearly marked "BATTERY" with a sticker. (WARNING: Do not plug the battery into any other jumper or connector on the PCB or else it will damage the product.) Replace the cover and screw. At this point, depending on whether or not the Battery Enable DIP switch is turned on, some LEDs on the front panel may be lit.

The battery is good for over an hour of backup operation, and it charges in one to two hours.

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* The DMX OverRide™ is not intended for emergency egress or other life safety applications. By setting lighting to a known state it can assist in the response to unexpected events, but it is not a replacement for battery-backed emergency lighting fixtures. The DMX OverRide is not safe to use for applications involving life safety, such as controlling pyrotechnics or laser-lighting where audience or performer safety is involved.

Rear Panel

The rear panel of the DMX OverRide includes the DMX Input and Output connectors, the configuration DIP switches, and the Power connector.
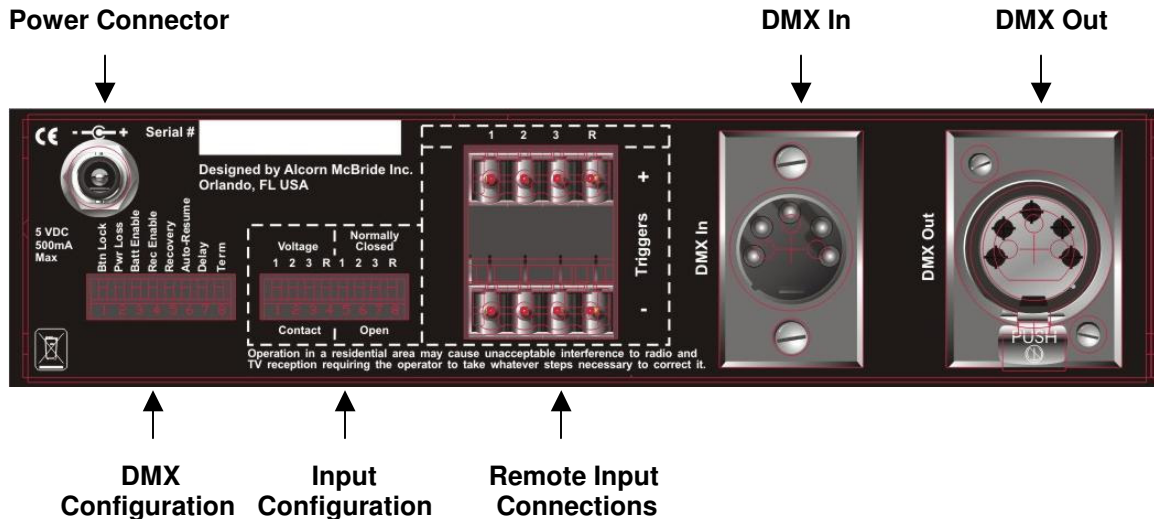
Rear-Panel DIP Switch Settings

If possible, it's a good thing to make sure the rear-panel DIP switches are set the way you want before installing into the rack. The DMX OverRide rear panel contains two banks of DIP switches. In many cases, you can leave these switches in their factory-default positions, but if you need to change anything here's how each switch works.

Left DIP Switch Bank - DMX Configuration	
Position	**Function (ON = Down)**
1	**Front Panel Lock** – Turn ON to disable the Front Panel Scene Buttons.
2	**Power Loss Detect** – Turn ON to cause the unit to go to Scene 2 upon power failure. The Scene 2 look will remain when power is restored.
3	**Battery Enable** – Enables the internal battery.
4	**Record Enable** – Turn this switch ON to record DMX Scenes 1, 2, and 3.
5	**DMX Dropout Recovery Enable** – If this switch is ON, Scene 1 is automatically activated if DMX drops out while in Resume mode.
6	**DMX Dropout Auto Resume Mode** – The unit will automatically return to Resume mode once DMX is restored if this switch is ON. When this switch is OFF, a Channel #512 value sequence input from the lighting controller of 0% - 75% - 25% - 100%, followed by *any value other than 100%* on Channel #512 will cause a return to Resume mode (see note on Resume Code Feature).
7	**DMX Dropout Delay** – Turning ON this switch will cause the unit to ignore DMX dropouts shorter than approximately one second and delay the automatic switch to Scene 1 when the Dropout Recovery Enable switch is ON.
8	**Termination** - This switch enables the 110-ohm DMX input termination.

Right DIP Switch Bank - Input Configuration			
Position	**Input**	**OFF (UP)**	**ON (DOWN)**
1	SCENE1	Voltage Input	Contact Closure
2	SCENE2	Voltage Input	Contact Closure
3	SCENE3	Voltage Input	Contact Closure
4	RESUME	Voltage Input	Contact Closure
5	SCENE1	Normally Closed	Normally Open
6	SCENE2	Normally Closed	Normally Open
7	SCENE3	Normally Closed	Normally Open
8	RESUME	Normally Closed	Normally Open

Unit Connections

Connections to the DMX OverRide consist of the DMX I/O, Remote Control, and Power.

DMX Connections

The DMX OverRide is simply inserted into the DMX line between your lighting console, playback device, or controller and your DMX-512 lighting network. The console or controller output is plugged into the DMX OverRide DMX input, and the network connects to the output. The unit is supplied with a 5-pin DMX patch cable to make it easy to add the DMX OverRide into an existing installation.

Remote Control Connections

You can connect wires to the screw terminals on the rear of the DMX OverRide to control the unit from a remote location. Be sure to set the DIP switches to match your particular control scheme, either normally-open or -closed, and voltage or contact-closure input.
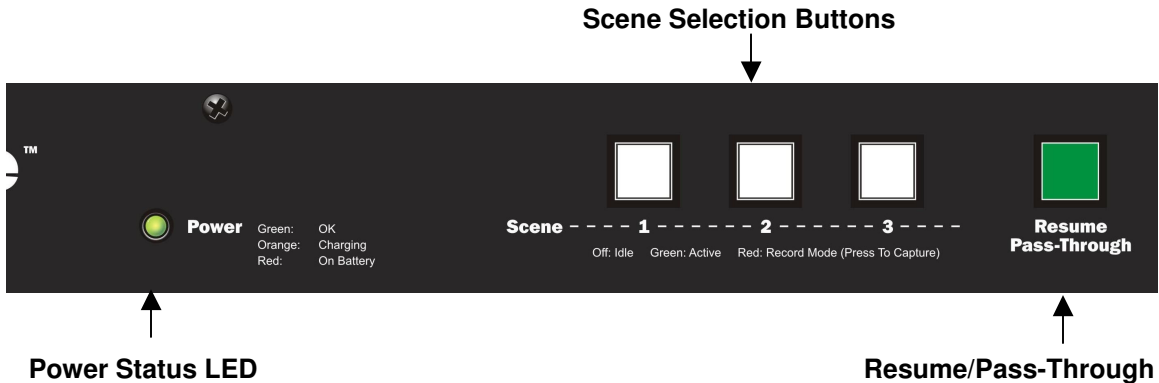
The remote inputs operate with momentary activation (either momentarily closing with a normally-open, or momentarily opening with a normally-closed configuration). Voltage level input in voltage mode is any voltage between 5 to 24VDC. The inputs are protected against reverse voltages and will not be damaged if this happens.

Power Input

The 5VDC power supply included with your DMX OverRide should be the only power source you use with the unit. It is a universal switching type and is compatible with all international and domestic power sources. The connector is a captive screw-type barrel connector.

Front Panel

The Front Panel of the DMX OverRide includes the Scene Select pushbuttons, the Resume pushbutton, and the Power LED. Each pushbutton also turns Green, Red, or Orange to indicate a particular operational mode or status. The color of the Power LED indicates power status.

Scene Selection Buttons

Power Green: OK Orange: Charging Red: On Battery	**Scene** - - - - 1 - - - - - - 2 - - - - - - 3 - - - - Off: Idle Green: Active Red: Record Mode (Press To Capture)	**Resume Pass-Through**

Power Status LED   **Resume/Pass-Through**

Power Status LED

The Power Status LED indicates power status as follows:

>   **GREEN** – The unit is connected to input power and the battery is fully charged.
>   **RED** – The unit is running on backup battery power (input power is not present.*)
>   **ORANGE** – Battery is charging and input power is present.

>   * The unit can automatically go to Scene 2 upon power failure if the Power Loss
>   Detect DIP switch is enabled.

Scene Select Buttons

The Scene pushbuttons select the preset "Scenes" that you want to Play or Record.
   Note: Confirm that the Front Panel Disable DIP switch is **Off** if you want to use the Scene pushbuttons.

Record Mode
Record Mode is active when the Record Enable DIP switch is **On**. In this mode, all of the Scene pushbuttons will be Red. A particular Scene is recorded as a preset by pressing the corresponding Scene button.

Playback Mode
With the Record Enable DIP switch **Off**, each Scene button activates the previously-recorded Scene. In this mode, the active Scene button will be Green.

Resume Button

Pressing the Resume Button will always cause the DMX OverRide to pass DMX data from the input to the output. The button's multi-color LED indicates the following:

> **GREEN** – Resume Mode is active and DMX is actively detected on the input and being passed to the output.

> **ORANGE** – DMX is not detected on the input. If the Dropout Enable mode is activated with the rear-panel DIP switch, Scene 1 will activate and the corresponding Scene 1 button will be Green.

Operation

Operating your DMX OverRide is easy! Basically you just feed it DMX and record your 3 presets or "Scenes". Once you've done that you can press each of the buttons on the front panel to activate each scene, or use the remote inputs to do the same thing.

Recording a Scene

A Scene is a single-frame snapshot of the DMX universe. Here's how to record a Scene.

1. Set the Record Mode DIP switch to the down-position. The Scene buttons on the front panel of the DMX OverRide will all turn RED, and the DMX input is passed directly to the DMX output.

2. Set your DMX universe to the desired preset. For house-lights or maintenance this might be all channels at 100%. For emergency lighting you might choose to run just the exit lights to 100%.

3. Press a scene button (1, 2, or 3) to store the current DMX preset. The button will turn GREEN while the data is written to nonvolatile memory.

4. Repeat steps 2 and 3 for the other Scenes, each time commanding your DMX controller or lighting console to the desired preset.

5. When you're done recording your Scenes flip the Record Enable DIP switch up to disable recording and place the unit into playback mode.

Recalling a Scene

To recall a Scene all you need to do is press one of the 3 Scene buttons on the front panel, or activate one of the corresponding Remote inputs. To return to normal where DMX is passed from input to output, press the Resume button, or activate the Resume remote input.

Resume Code Feature

For applications where you would like your lighting console (or lighting programmer) to resume the lighting without being in front of the DMX OverRide, you can use the Resume Code feature. To do so, the first step is to verify that DIP switch number 6 is OFF.

If the DMX OverRide is in an override mode, the console can return the unit to Resume mode by setting channel number 512 to the following values (in order):

$0\% \Rightarrow 75\% \Rightarrow 25\% \Rightarrow 100\%$, followed by *any value other than 100%*

This unique pattern will allow you to resume DMX feedthrough from your console without interfering with the normal operation of your lighting.

Applications

Here are some ideas of how the DMX OverRide can be used in your installation.

Worklights or Maintenance Lighting

Many times the person who's in charge of running the lighting console isn't around when it comes time to clean the place, or do some work on the theatre. Set up a Work Light preset where the house lights and other general lighting are activated by recording this preset to Scene 2 or 3. That way anybody who needs to do some maintenance at night can bring up the house lights without knowing how to bring up the entire lighting-control system. As part of your facility's normal start-up routine, simply press the Resume button or have your control system activate the Resume remote input.

Emergency Lighting*

The standard Emergency Lighting system in your installation can be augmented by your DMX controlled lighting by activating a Scene from the DMX OverRide to command specific fixtures to turn on, lighting the way out.

Special Purpose Lighting

Let's say that during the day you need to have the lighting console control your lights, and at night you sometimes have special events (dinner or cocktail parties, etc.) that just require a static lighting look. With a simple push of a button the DMX OverRide can set this nighttime lighting mood without the need to mess with the lighting console. The next day the console (or building control system) can take over by commanding the DMX OverRide to Resume Mode and take back control of the lights.

Simple DMX Controller

Say your lighting program only requires 3 presets. Well, use the DMX OverRide! Store the presets into each of the 3 Scenes and when you're done, remove the expensive lighting console and operate your show using the remote inputs.

Tell Us About Your Application!

If you come up with a unique application for the DMX OverRide, we'd love to hear about it! Send us an email at info@alcorn.com.

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Troubleshooting Guide

Troubleshooting Guide		
Symptom	**Cause(s)**	**Solution(s)**
1) No Front Panel display or LEDs	a) Input power not connected. b) Battery Dead or disconnected	a) Check Power connections b) Replace or Connect Battery
2) Previous scene not restored after power is cycled	a) Scene selected by rear inputs that are not in the proper position. b) Switch configuration incorrect	a) Open scene selection input or close it depending on switch configuration b) NO or NC verify switch configuration
3) Resume button keeps flashing orange.	a) It is possible that your DMX input is dropping out intermittently. b) DMX input not terminated.	a) Check cabling. Check DMX source. b) Turn on DMX termination DIP switch.
4) No DMX Output	a) Mis-wired or loose DMX cables/connections.	a) Confirm DMX connections are secure. b) Plug DMX input cable into output cable to verify.
5) Power LED is always orange or blinking	a) Battery can no longer be recharged or is defective.	a) Please contact factory for a replacement battery.

Specifications*

DMX Standard – USITT DMX512/1990
Power – 5 VDC at 0.5 Amps max, AC Adapter included
Operating Temperature – 0°C (32°F) to 70°C (140°F), free air circulation
Operating Environment – 0-90% relative humidity, non-condensing
Size – 19" W x 1.75" H x 11" D (48.3 cm W x 4.4 cm H x 28 cm D)
Weight – 7 lbs, 3.1 Kg
Compliance – CE, UL, CSA, WEEE, RoHS

*Specifications are subject to change without notice