

# ERDMX-E

## Install Guide



This guide covers models ERDMX-EU-LV which has a 902MHz radio.

The Echoflex Solutions DMX Scene Controller (ERDMX-E) controls DMX512 compatible lighting by recalling user recorded lighting presets. The ERDMX-E supports up to eight presets of 48 channels.

As a lighting controller, the UADMX controls lights based on switch actions from a linked Echoflex wireless switch.

## Controller Operation

The DMX Scene Controller allows for wireless dual switches to recall pre-recorded scenes, controlling DMX fixtures and dimmers. Each DMX Scene Controller supports DMX channels 1-48, with storage capabilities for up to eight scenes.

Configuration of the DMX Scene Controller requires no software, instead wireless dual switches are used for scene programming and assignment of which scene is recalled for each switch action.

To record DMX scenes into the controller, you will temporarily need a DMX control source (such as a control console; SmartFade, Ion, etc.). After initial power-up, all 48 DMX channels will output values of 0%, and the "Status LED" will blink at a rate of approximately two times per second which indicates the controller is in scene playback mode.

During normal operation, if power is lost and returns, the controller will resume its previous output.

At least one dual switch is required to be linked to the DMX Scene Controller before DMX scenes can be recorded and played back.

## Preparing to Install the Controller

The controller is mounted to an electrical junction box or panel with a ½" threaded nipple. The controller must be mounted on the outside of a junction box either directly at the electrical load or before the load in the circuit. The controller is for indoor use only. You will require hand tools to gain access to the junction box and remove any cover plates or other hardware.

## Installing the Controller

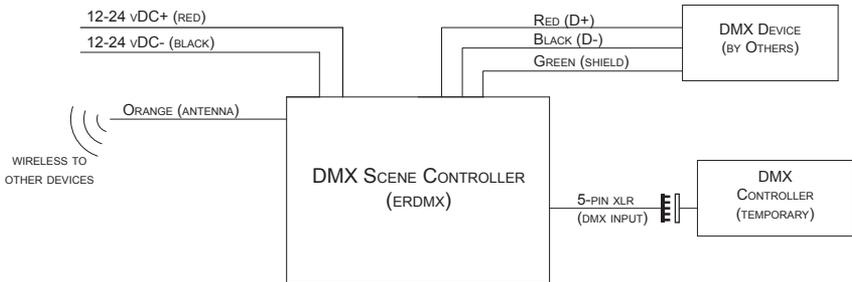
Review these instructions completely before installing the controller.

1. Locate the circuit breaker panel and turn off the power to the circuit.
2. Remove all face plates and other hardware from the junction box so you can access to the wiring compartment.
3. The controller is mounted to the exterior of the junction box or panel with the ½" (13mm) threaded nipple.
4. The ERDMX controller is provided with a wire harness that serves 12 - 24VDC power requirements. Refer to the wiring diagram below to connect power to the controller.
  - a: Connect the black wire to the incoming negative AC or DC

**Follow all local code requirements for terminating wiring. Notice the harness wires on the controller unit are pre-stripped for your installation convenience.**

power.

b: Connect the red wire to the incoming positive AC or DC power



5. Connect the DMX output wiring.

a: Using the included solder splices, connect the DMX wiring harness as follows:

- D- to black
- D+ to red
- Shield/drain to green
- The controller has an orange or blue external antenna. Do not cut, cap or connect this wire.

6. Replace the junction box faceplate.

7. Restore power to the circuit.

## Linking Wireless Dual Switches

The process of linking an Echoflex Dual Switch to a DMX Scene Controller also determines which of the DMX scenes each button on the station will recall.

**NOTE: You cannot program more than four scenes to any one Dual Switch station.**

Step 1: Perform a “Clear” function.

a: Press the Clear button on the DMX Scene Controller until the “CLEAR” LED lights momentarily, and then goes out indicating that a clear has been performed.

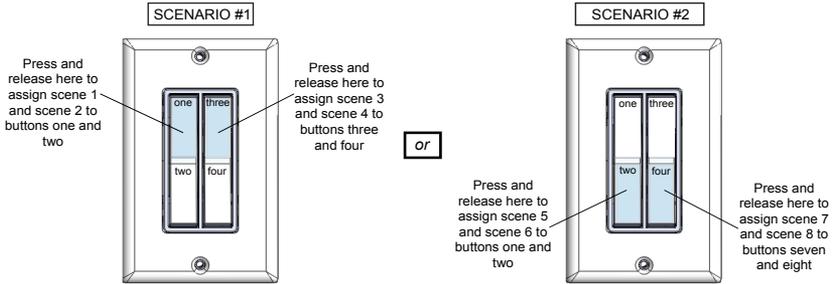
Step 2: Link a station to the controller.

a: Press and hold the DMX Scene Controller Learn button until the “LEARN” LED

lights to indicate the controller is in “Learn Mode”.

b: Press and release the station toggle switch based on the graphic below that will determine which scenes the DMX controller will recall.

The LEARN LED will go out acknowledging a successful Link operation.



### Switch / Scenario One

- Press and release the top left button toggle of the dual switch to link scenes one and two to the left toggle switch on the station.
- Press and release the top right button on the toggle station to link scenes three and four to the right toggle switch on the station.

### Switch / Scenario Two

- Press and release the bottom left button on the toggle station to link scenes five and six to the left toggle switch on the station.
- Press and release the bottom right button on the toggle station to link scenes seven and eight to the right toggle switch on the station.

**NOTE: You must re-enter “Learn Mode” after linking each toggle switch.**

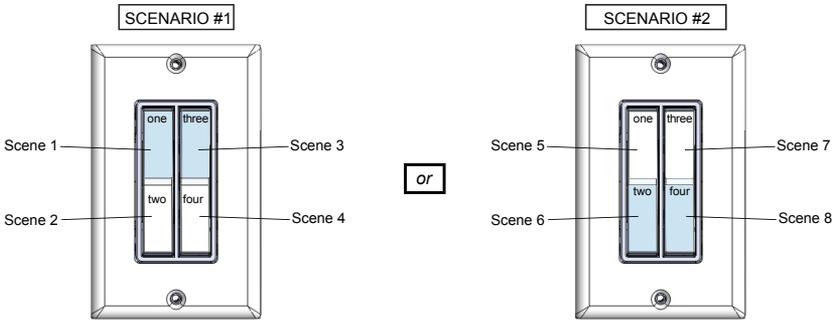
**CAUTION: DO NOT** link both the top and the bottom of the same toggle switch on the dual switch as this will cause the DMX Scene Controller to malfunction. If you have mistakenly done this, you must clear the controller of all stations and begin the process of linking again. Reference Step 1 for instruction:

If this is the very first time linking switches to the DMX Scene controller, the scenes will be preset to the factory default values. All 48 DMX channels will be set to the same level, with scene 1 being the brightest and scene 8 being the dimmest.

User defined scenes can be recorded to the DMX Scene Controller using the DMX snapshot mode.

## Scene Recall

Scene recall is dependent on how you have linked your dual switches as described in the graphic below and in the previous section: Linking Wireless Dual Switches.



## Snapshot DMX Scenes to the Controller

When switches have been linked to the controller and the scenes assigned, the DMX Scene Controller provides the ability to record (snapshot) user defined scenes and store them in the controller to be recalled by the linked stations.

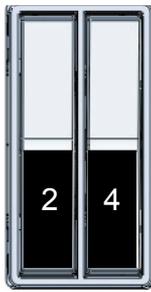
### Snapshot a Scene

To accomplish a DMX snapshot, you will need a DMX control source, like a lighting console, that is temporarily connected to the DMX input of the DMX Scene Controller. In addition, you will need access to the linked dual switches.

Step 1: Place the controller in DMX Snapshot Mode by following the sequence below.



step 1.a



step 1.b



step 1.c

- a: Press and release buttons 1 and 3 (at the same time) on the linked Dual Switch.
- b: Press and release buttons 2 and 4 (at the same time), twice.
- c: Press and release buttons 1 and 3 (at the same time).

The Status LED on the DMX Scene Controller will stop flashing and the current DMX output will stop. This indicates that the controller is now in DMX Snapshot Mode.

**NOTE: If you have any issues entering snapshot mode, press any toggle on the switch one time, then restart the above sequence.**

### Step

- 2: Connect your DMX control source to the 5-pin DMX input connector on the DMX Scene Controller. When DMX is active on the input, the DMX “Status LED” will flash at a fast rate that is in concert with traffic on the DMX bus.
- Step 3: Output the desired DMX levels from the DMX control source. When the DMX Scene Controller is in Snapshot mode, the DMX levels will pass through to the DMX output; meaning you should see the lighting levels change in live output.
- Step 4: Snapshot the current “live output” by pressing the toggle switch on the dual switch you wish to store the scene to.
- Step 5: Repeat steps 3 and 4 for each scene you wish to snapshot.
- Step 6: Disconnect the DMX control cable between the control source and the DMX Scene Controller. The “Status LED” will stop flashing.



step 7.a



step 7.b



step 7.c

Step 7: Return to Scene Recall Mode.

- a: Press and release buttons 1 and 3 (at the same time) on the linked Dual Switch
- b: Press and release buttons 2 and 4 (at the same time), twice.
- c: Press and release buttons 1 and 3 (at the same time). The “Status LED” will begin to flash once every two seconds to indicate normal scene recall operation.

**NOTE: The DMX Scene controller is either transmitting stored DMX levels or receiving input with pass-through for the recording process. In “Scene Recall Mode”, any DMX input that is connected to the controller will be ignored. Connecting DMX to the controller input while not in “Snapshot Mode” may result in inconsistent operation of the DMX Scene Controller.**

## Playback DMX Scenes from the Controller

Playback of stored scenes is accomplished by simply pressing the switch on a linked Dual Switch Station for the scene you want to recall. All scenes will be recalled using a pre-programmed two second fade time.

Pressing the switch again for the currently active scene will fade all levels to 0% using a preprogrammed two second fade.

## Regulatory Statements

### FCC Part 15.231

Contains FCC ID: SZV-TCM320U

The enclosed device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (i.) this device may not cause harmful interference and
- (ii.) this device must accept any interference received, including interference that may cause undesired operation.

### IC RSS-210

Contains IC: 5713A-TCM320U



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Document 8DC-5353 | Rev 2.1 | 8189M21-5353 Rev B



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