

AVR LEDION 08 manual version 1.0

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**AVR**

LEDION08 controller

## Introduction

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The AVR Ledion08 controller allows you to independently control up to 8 Ledion products via one or more driver boxes. You can control colour, dimming and shading (the paleness of the colour). The controller is powered by the Ledion driver box.

## Setting up

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The AVR Ledion08 plugs into the "controller" port on a Ledion driver box using a 4-way RJ11 cable. This cable should not be longer than 20 metres. Turn off the power to the driver box before connecting the controller.

Next you need to set the dip switches on the driver box. The switches should be set to switch 1 on, all the rest off.

Connect the Ledion units to the outputs of the driver box. The units on output numbers 1-8 will be controlled by the 1-8 buttons on the controller.

If you are using two 4-way Ledion driver boxes, on the second box, set switches 1 and 5 on, all the rest off. The outputs on this box will be 5, 6, 7, 8. You need to link the driver boxes using a DMX cable between the 3-pin XLR connectors.

## Using the pre-programmed colours

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Static colours – press **Preset**, then **1-8**. All Ledion units will light up in the colour printed on the button for buttons 1-6, 7 is white and 8 is black.

Stepping colours – press **Mem**, then **1-4**. All Ledion units will step through a selection of colours. 1 is the fastest stepping, 4 is the slowest stepping. You can change the step time, see the "Time" section later in the instructions.

Fading colours – Press **Mem**, then **5-8**. All Ledion units will fade smoothly through a selection of colours. 5 is the fastest fading and 8 is the slowest fading. You can change the step time and fade rate, see later.

## Specifications

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Power supply: 12V dc 100mA (supplied by driver box)

Control: DMX512, 32 channels (RGB + intensity x 8)

Colours: 16.7 million colour combinations

Memories: 8 memories of 8 steps, 8 presets of 1 step

Storage: Non-volatile EEPROM

## Fade

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Press Fade then 1-6 to set the fade rate of the current memory sequence. Fade 1 is stepping, Fade 6 is maximum crossfade. You can also use the 7 (less) and 8 (more) buttons to change the fade rate. Each memory remembers its own fade setting.

You can't set the Fade unless a memory sequence is running (the Mem button will flash).

## Time

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Press Time then 1-6 to set the step time of the current memory sequence. The step times are marked on the buttons. You can adjust the step times in between the times on the buttons by pressing the 7 (less) and 8 (more) buttons. The minimum step time is 0.1 seconds and the maximum time is 60 minutes.

If the current step time is exactly as printed on the button, that button will be lit. If the step time has been adjusted, the button with the nearest time will flash. Each memory remembers its own time setting and you can't set the time unless a memory sequence is running (the Mem button will flash).

## Factory reset

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To reset all presets and memories back to the factory defaults, hold down the Time button for about 20 seconds. Release the button when all the lights flash on the controller. This will erase all user programs.

## Manual control of colours

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- **Selecting which Ledion unit is being controlled**

Press the Chan button, then the 1-8 buttons. If the button is lit, when you make a change to the colour, then that unit number will change. If the button is not lit, that unit number will not change.

If you press Colour, Shade or Dim when no Chan buttons are lit, then all the Chan buttons will be automatically selected.

- **Changing the colour**

Press the Colour button, then one of the 1-6 buttons. The Ledion units selected (with the buttons lit) will change colour. You can finely adjust the colour by pressing or holding down the 7 and 8 buttons.

- **Changing the shade**

Press the Shade button. You can use the 7 and 8 buttons to adjust the shade of the colour on the selected units from fully saturated colours, through pastel shades, to white. Button 1 sets full saturation. Button 6 sets white. Buttons 2-5 set varying pastel shades.

If Shade is set to a pastel colour, the Shade button will flash in Colour mode to tell you that the colours are not full saturation. You can hold down the Shade button or select Shade 1 to get back to full saturation.

- **Dimming the colour**

Press the Dim button. You can use the 7 and 8 buttons to adjust the dimming up and down, or button 1 sets Off and button 6 sets full brightness. Buttons 2-5 set various dimming levels in between.

If Dim is not set to full brightness, the Dim button will flash in Colour mode to tell you that the colours are not full brightness. You can hold down the Dim button or select Dim 6 to get back to full saturation.

The controller does not remember manual settings when the power is turned off. If you want the colour to come back the next time you turn it on, you either need to save it as a preset or a memory sequence.

## Programming your own fixed colours

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You can change the 8 presets to colours of your own:

- Set up the colours you want using the Manual Control section on page 3. You can set each unit to a different colour.
- Hold down the Preset button for about 5 seconds. (the Preset button will start to flash, and any unprogrammed presets will flash. Presets which have been programmed will light constantly)
- Press the number where you want to store the colour setting. The current setting will be stored.
- To recall the colour setting, press Preset then the number you chose.
- The controller will remember the last preset you used and will turn it on again when next powered up.

You can return the presets to the factory preprogrammed values using the "Factory Reset" command, see later.

## Programming your own colour sequences

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You can change the 8 memory sequences to your own programs.

- Hold down the Mem button for about 5 seconds. (The Mem button will start to flash, and any unprogrammed Memories will flash. Memories which have been programmed are lit constantly)
- Press the number where you want to store the sequence. You can overwrite a programmed memory if you want.
- Set up the colours for the start of the sequence using the Manual Control section on page 3.
- Press the Mem button to store the first step.
- Set up the colours for the second step of the sequence
- Press the Mem button to store.
- You can store up to 8 steps by repeating the above. If you want to store less than 8 steps, hold down the Mem button after you've stored your final step.
- If you want to fade between colours, you set this afterwards along with the speed of the sequence using the Fade and Time buttons.
- To show your colour sequence, press Mem then the number of your choice. The active memory will light up.

The controller will remember the last memory you ran, and turn it on again when it is next powered up.