Fitting the Welding Effect LFX and LEDs

Once you have tried your LFX module and LEDs you need to decide how and where best to fit them. You can either mount the complete LFX module with LEDs inside the building, or solder wires to the LED pins to extend the distance between them, but make sure you insulate the soldered LED wires if doing this. Unlike traditional filament lamps, LEDs do not get hot so can quite safely be fixed onto the inside of card or plastic buildings using adhesive tape or glue.

We have generally found that the best arc welding effect is usually obtained by hiding the LEDs inside a model building. The original design of this LFX module had only 4 LEDs, so we have added one extra side opening to accommodate a second set of 2 LEDs. A common application for this is a model building, like a workshop or maintenance depot, where the LEDS are small low power lights which must be connected the correct way round to light. The welding duration and time between welds is randomly controlled by the LFX5 for realism.

Connecting to a DC analogue layout
To use the LFX module with DC layouts, you need to supply it with 9-15 Volts DC. Most DC controllers have a DC accessory supply or you could even use a 9 volt battery. Connect the LFX to the supply using the two screw terminals as shown in the diagram (polarity not important) and include a switch to control the effect easily - LFX power LED should light. If it does not light see Troubleshooting below.

Troubleshooting when using a DC system
• If the red power light on the LFX does not come on, check that it is receiving power from a suitable 12 Volt DC supply - the polarity of connection is not important as this is corrected inside the LFX. You can also easily test the LFX by connecting it to a 9 volt PP3 battery - the LED should light correctly, double check the wiring and if necessary reverse the connections of some LED's.
• If some or all of the LED's connected to the LFX fail to light correctly, double check the wiring and if necessary reverse the connections of some LED's.

Connecting to a DC digital layout
Connect the LFX to the nearest DCC track or controller output using wires from the screw terminals shown below - it does not matter which way round the wires are connected.

Troubleshooting when using a DC system
• Check that the power light on the LFX is on - if not and locos run correctly on the track check the connection wires between the LFX, DCC controller and track.
• If you have connected the LFX to track rails test it connected directly to the DCC controller output instead.
• If the LFX power light is on but the LED's connected to your LFX do not switch on or off, check that your DCC controller is in accessory control mode - note that this is completely different to Locomotive address control and will be explained in your controller instructions.
• If some or all of the LED's connected to the LFX fail to light correctly, double check the wiring and if necessary reverse the connections of some LED's.

Connecting to a DCC digital layout
Connect the LFX to the nearest DCC track or controller output using wires from the screw terminals shown below - it does not matter which way round the wires are connected.

Troubleshooting when using a DC system
• Check that the power light on the LFX is on - if not and locos run correctly on the track check the connection wires between the LFX, DCC controller and track.
• If you have connected the LFX to track rails test it connected directly to the DCC controller output instead.
• If the LFX power light is on but the LED's connected to your LFX do not switch on or off, check that your DCC controller is in accessory control mode - note that this is completely different to Locomotive address control and will be explained in your controller instructions.
• If some or all of the LED's connected to the LFX fail to light correctly, double check the wiring and if necessary reverse the connections of some LED's.

CONTROLLING THE EFFECT

You can switch on and off this effect using DCC digital or a conventional switch on a DC layout:

Programming & controlling using DCC
• Choose a DCC address for your LFX (eg 70).
• Set up your controller to control DCC accessories (refer to your controllers instructions) and set your controller to the address you have chosen.
• To program the LFX, touch the 'Learn' button - the connected LED's will flash. Then send a 'direction' command from your DCC controller. The LED's will stop flashing and your LFX is now programmed to this address.
• Switch the LFX lighting effect on or off by setting your DCC controller to the DCC accessory address you chose, then send a 'direction' command from your controller to start and stop the LFX lighting effect (actual terms used for accessory control vary between DCC controllers, so please refer to the instructions)

Address (eg 70) 1 or 2 Switch LFX on or off
Your LFX will retain the address unless you change it. It can have its own unique address or can be synchronised to other DCC accessories by giving them the same address as each other. For example you could set LFX level crossing warning lights to come on automatically when a nearby DCC signal is changed to green. It can also be used on a computer controlled DCC layout - just program and use the LFX in the same way, but use the computer to send addresses & commands instead of a controller.

Controlling using DC
If you have fitted a switch, simply switch it on or off to switch on or off the LFX lighting effect.
One-Touch DCC™ Digital Signals

- Signal with DCC decoder built into base
- Can just plug direct into track – no wires!
- Easy to fit and use – No CV programming!
- Can sync to other signals & points
DS1 Home: Red and Green
DS2 Distant: Yellow and Green
DS3 Home Distant: Red and Green
DS4 Distant: Red and Green
DS5 Outer Distant: Yellow and Green
DS5W5 Outer Distant: Red and Green [High Speed mainline]
DS6 Dual Head Home: Red and Yellow
DS7 Dual Head Distant: Red and Yellow
DS8 Stop-Caution: Red and Yellow

One-Touch DCC™ Point Controllers

- Control points and uncouplers using DCC
- Easy to use – No CV programming!
- Work with most solenoid point motors
- Just connect 2 wires to nearby DCC rails
- Easy screw terminals – no soldering
- Built in CDU for efficient operation
- Can sync to other points and signals
PC1 DCC Single Point Controller
PC2 DCC Quad Points Controller
Point motor and track not included

Buffer Lights

- Add realistic stop light to any siding
- Simply clips onto track – No wires!
- Fits next to most buffer stops & kits
- Or at platform end or free standing
- Low cost, easy to fit and use
- On DCC both lights are on constantly
- On DC one light is on & varies with speed
- Helps bring your layout to life!
BL1 OO/HO gauge Buffer Light
BL2 N gauge Buffer Light

Automatic Tail, Firebox, Loco & Coach Lights

- No switch - senses motion & turns on!
- Turns off automatically 4 minutes after stop
- No pickup, wires or soldering - LED plugins in
- Fits in brake vans, coaches, loco, wagons etc
- Runs for ages on small button battery
Single output modules:
- AL1 Flashing Tail light
- AL2 Flame Tail / Firebox
- AL3 Constant lighting
- AL4 Doors open + constant
Dual output modules:
- AL1 Flashing Tail light & AL2 Flame Tail / Firebox
- AL3 Constant lighting & AL4 Doors open + constant

LFX Lighting Effect Controllers

- Add lighting effects to your layout
- LEDs screw in – no resistors or soldering
- Powered by either 12-16V DC or DCC:
- On DC the effect is on when powered
- On DCC the effect can be controlled
LFX2 Home & Shop Lighting
Randomly controls lights in houses, shops, stations, pubs, LFX3 Traffic Lights
Controls one pair of timed traffic lights. (Tip: You can adapt one of our Signal kits to make traffic lights)
LFX4 Log or Camp Fires
Controls amber, yellow, red LEDs for a realistic fire effect
LFX5 Welding effects
Realistic electric arc welding effects with bright LEDs
LFX6 Quad LED Lighting Controller
Controls 4 sets of LEDs on and off using separate DCC addresses. Directly powers 4 LEDs per output (DCC only)

LFX1 shown with supplied LEDs fitted to a Peco barrier kit - not included
LFX1 Level Crossing Barrier
Controls Amber and Red LED's as seen at level crossings. Can power up to 4 sets of steady amber and flashing red LEDs

LFX4 Log or Camp Fires

Track Tester

- Quickly tests track for power faults
- Low cost and easy to use
- Works on N, TT, OO or HO Track
- Indicates the DC polarity, or DCC, or a fault
- Small enough to check point frogs
TT1 Track Tester

Data

<table>
<thead>
<tr>
<th>AL1 Flashing Tail light</th>
<th>AL2 Flame Tail / Firebox</th>
<th>AL3 Constant lighting</th>
<th>AL4 Doors open + constant</th>
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LFX5 Arc Welding effects

Lighting Effect Controller

- Realistic arc welding + red hot then cooling effect
- Project on walls of factories, workshops, sheds...
- Fit under locos in maintenance depots etc
- 2 ultra-bright LEDs included - others can be used
- Easy to use - LEDs fit directly with no resistors
- Works on both DC and DCC systems
- On DC, the random effects are on when powered
- On DCC, the random effects are under command

Self Assembly Colour Light Signal Kits

- Every kit includes the head, post and base plus detailing kit inc ladder, handrails, etc
- Aluminium ‘post’ included with each kit
- Low cost – adapt to your own design
- Control by switches or a signal controller
General purpose signal kits:
SK1 Basic kit 2/3/4 aspect & heads - no LEDs
SK2 Home 2 aspect kit with Red and Green LEDs
SK3 Distant 2 aspect kit with Red and Green LEDs
SK4 Home Distant 3 aspect kit with Red and Green LEDs
SK5 Distant 3 aspect kit with Red and Green LEDs
SK6 Outer Distant 4 aspect with Red and Green LEDs
SK7 Dual head Home 2 aspect with Red and Green LEDs
SK8 Dual head Distant 2 aspect with Red and Green LEDs

The LEDs are pre-fitted onto a long narrow PCB stick to pass through your baseboard. Just attach your signal control wires to PCB

Train-Tech Model Technology Made Easy

www.Train-Tech.com

See our website, your local model shop or contact us for a free colour brochure
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