# MS1 - Mimic Switch - Toggle type

*CAUTION - ALWAYS SWITCH OFF ALL POWER TO YOUR LAYOUT BEFORE CONNECTING UP THIS OR SIMILAR PRODUCTS!*

The Mimic switch can be connected to many other Layout Link compatible accessories to both control and monitor their operation. Below shows Mimic basics for mounting and wiring but more information will be supplied with the Layout Link accessory being controlled.

## Mimic features

A mimic diagram is a plan of a layout and real life signal boxes use Mimic diagrams to monitor and control the real railway. Mimics can be linked to Layout Link accessories with just one wire and used to show the following on a mimic plan:

### Sensor Signals

A Mimic Light or Switch can be used with a Sensor Signal to display the signal colour, train position & block occupancy. A Mimic Switch can also turn on and off a feather or theatre route indicator or manually override a sensor signal to red.

### Track Sensor

A Mimic Light or Switch can be used with a Track Sensor to display train position & block occupancy if linked with other Track Sensors or Sensor Signals.

### Level Crossing

A Mimic Light or Switch can be used with a LC10 Level Crossing to mimic the amber and flashing LEDs on the crossing. A Mimic Switch can also control the Level crossing switch the light sequence and sounds on and off.

*The Mimic Switch will also work with other future Layout Link products.*

**!! Only connect accessories with all power switched OFF and never let any wires etc touch other components!!**

## Mimic connections and LEDs

Mimics only need three connections, two for power & one to connect to the accessory being controlled. Power can be 12-16 volts smooth DC or DCC but it *must* be connected to the same power supply as the accessory being controlled.



← DC / DCC power
← Mimic control
← DC / DCC power
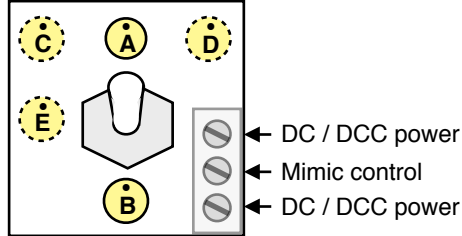
The drawing shows 5 LEDs A-E, although sockets are only fitted for A and B as these are the main LEDs - your accessory instructions will explain functions of these and any other LEDs if applicable. If you wish to fit other LEDs they can either be soldered or fitted in SIL sockets (CON8). Mimics are supplied with a Red/Green Bicolour LED in socket A and a White LED in socket B. The longest wire of each LED should be plugged into the top socket hole marked •. LED wires can be shortened with a pair of wire cutters - if an LED does not light the correct colour (Bi-colour) or light at all try it the opposite way around.

## Drilling Template for a Mimic

Mimics can be mounted into a panel and the following drawing should help you measure and drill holes for the switch and LED(s) which are on a 10mm pitch
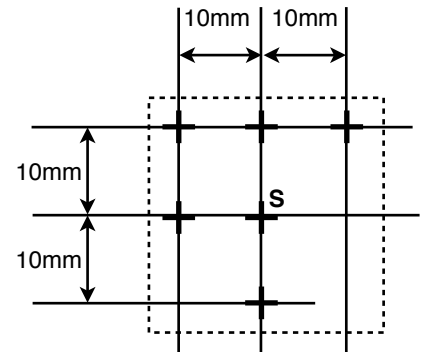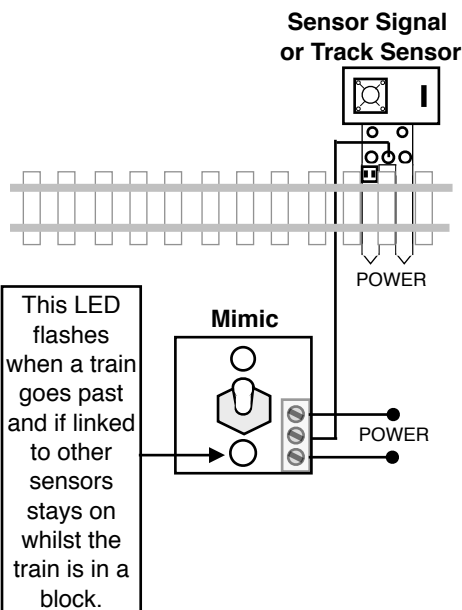


### Hole sizes:

Hole **S** is for the switch and a 7mm clearance hole should be ideal. Note the MS2 Pushbutton is slightly offset.

The remaining holes are for LEDs and should be drilled to suit the ones used. Note that normally only 1 or 2 LEDs are actually fitted so check the instructions for the Layout Link accessory you are controlling before drilling. Mimics are supplied with 3mm diameter LEDs but 5mm and others are available.

## Use with Sensor Signal/Track Sensor

Mimics can display train position & Block occupancy on Sensor Signals or Track Sensors. Link the centre socket of the Sensor Signal or Track Sensor to the centre terminal of the Mimic as below.
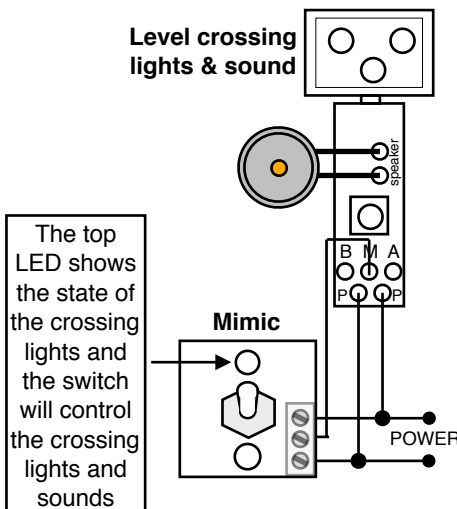
**Sensor Signal or Track Sensor**

This LED flashes when a train goes past and if linked to other sensors stays on whilst the train is in a block.



### POWER

Power both the track sensor and Mimic Switch or Light from *same* supply; either DCC from the track or wire to 12-16V DC

## Using a Mimic with a Level Crossing

The Mimic will control a LC10/LCN10 level crossing and will also mimic the operation of the amber and red LEDs.

Connect centre socket 'M' of the Level Crossing light to the centre terminal of the Mimic and power together.

**Level crossing lights & sound**

The top LED shows the state of the crossing lights and the switch will control the crossing lights and sounds



### POWER

Power both the level crossing and Mimic Switch or Light from *same* supply; either DCC from the track or wire to 12-16V DC

## Using a Mimic as a DCC display

As well as controlling Layout Link accessories, Mimic Switches or Lights can also be used as a DCC decoder and can be set to the same address as a DCC accessory to display their status on a Mimic panel, (eg the point position).

A DCC accessory address has 2 'states'. The Mimic has four LED options to show the state at that address:

- One single colour LED in position A or B which shows on or off
- Two single colour LEDs in position A & B which each show opposing on or off
- One Bi-colour LED in position A or B which shows one colour or the other
- Two Bi-colour LEDs in positions A & B which show opposing colours (eg one shows red the other green, vice versa)



← DCC
← No connection
← DCC
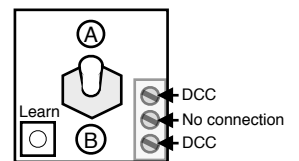
### Setting up address - One Touch DCC

- Set your controller to the same DCC *accessory* address as the accessory you want to mimic (eg a DCC point)
- Press the Learn button on the Mimic
- Send a command from your controller (usually a direction < / > or 1 / 2)

Your Mimic will now respond and show the status of the address you have set.

## Track Tester

*DC & DCC · OO HO · N*

**Only £5**

- 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**

*Track not included*

---

## Buffer Lights

*DC & DCC · WIRE FREE · OO HO · N*

- 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
- On DCC both lights are on constantly
- On DC one light is on & varies with speed

**BL1 OO/HO gauge Buffer Light**
**BL2 N gauge Buffer Light**

*Track and buffer stop not included*

---

## One-Touch DCC™ Digital Signals

*DCC · WIRE FREE · OO HO*

- 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**: Ⓡ Ⓨ Ⓖ
**DS4 Distant**: Ⓨ Ⓖ Ⓨ
**DS5 Outer Distant**: Ⓡ Ⓨ Ⓖ Ⓨ
**DS5HS Outer Dist**: Ⓡ Ⓨ Ⓖ Ⓨ (High Speed mainline)
**DS6 Dual Head Home**: Ⓡ Ⓖ
**DS7 Dual Head Distant**: Ⓨ Ⓖ
**DS8 Stop-Caution**: Red Ⓡ and Yellow Ⓨ

*DS6/7*
*DS1/2*
*Track not included*

---

## One-Touch DCC™ Point Controllers

*DCC · OO HO · N · Z*

- 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**

*PC1*
*PC2*
*Point motor and track not included*

---

## LFX Lighting Effect Controllers

*DC & DCC · ANY GAUGE*
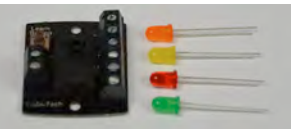
- Easily add lighting effects to your layout
- LEDs screw in – no resistors or soldering
- Powered by 9v battery, 12-16V DC or DCC
- On DC the effect is on when powered
- On DCC the effect can be controlled
- Effects LEDs are included

**LFX1 Level Crossing Barrier**
Lights a sequence of steady amber and then flashing red LEDs as seen at crossings
**LFX2 Home & Shop Lighting**
Randomly controls lights in houses, shops, stations, pubs
**LFX3 Traffic Lights**
Controls one pair of timed traffic lights (TL1 Traffic light kit also available)

**LFX4 Log or Camp Fires**
A realistic fire effect using amber, yellow, red LEDs
**LFX5 Welding effects**
Realistic electric arc welding effects with bright LEDs
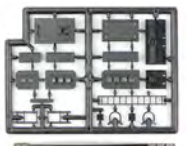**LFX6 Quad LED Lighting Controller (DCC Only)**
Controls 4 sets of LEDs on and off using separate DCC addresses. Directly powers 4 LEDs per output
**LFX7 Flashing effects**
Simulates four flashing effects ; belisha beacons, emergency services, camera flash, lightning, sparks

---

## Self Assembly Colour Light Signal Kits

*DC & DCC · OO HO*

Every kit includes the signal head, aluminium post and base plus detailing kit inc ladder, handrails

- Low cost – adapt to your own design
- Control by switches or a signal controller
- LEDs are prefitted to a narrow PCB

**General purpose signal kit - no LEDs:**
**SK1 Basic kit** 2/3/4 aspect & dual heads
**Signal kits with LEDs and resistors**
**SK2 Home** 2 aspect kit Red Ⓡ Green Ⓖ
**SK3 Distant** 2 aspect kit Ⓨ Ⓖ
**SK4 Home Distant** 3 aspect kit Ⓡ Ⓨ Ⓖ
**SK5 Distant** 3 aspect kit Ⓨ Ⓖ Ⓨ
**SK6 Outer Distant** 4 aspect Ⓡ Ⓨ Ⓖ Ⓨ
**SK7 Dual head Home** 2 aspect Ⓡ Ⓖ
**SK8 Dual head Distant** 2 aspect Ⓨ Ⓖ

---

## One-Touch DCC™ Signal Controllers

*DCC · ANY GAUGE*

- Control LED & Semaphore signals by DCC
- Easy to set up & use –No CV programming!
- Easy screw terminals – no soldering
- Can sync to other points & signals

**SC1  Dual 2 aspect colour light signals controller**
Controls one or two 2 aspect colour light signals.
**SC2  3 or 4 aspect or 2 aspect + route signal control**
Controls one 3 aspect or one 4 aspect or one 2 aspect + route.
**SC3  Dual Dapol OO/N Sempahore signal controller**
Controls one or two standard OO or N Dapol motorised semaphore signals by DCC. Signals connect direct to the SC3 - no modifications or power supply needed.

*SC2*
*SC3*
*Signals not included*

0314

---

## Automatic Coach Lighting

*DC & DCC · Auto · WIRE FREE · OO HO*

- Easy to fit in seconds - no wiring!
- No switch - senses motion & turns on!
- Turns off automatically 4 minutes after stopping
- No pickups **so works on regular DC & DCC**
- Traditional warm white or modern cool white
- Also with tail light, sparks or door light effect
- Lights stay bright & constant with no flickering
- Fits most OO/HO coaches and maybe cut down

*Rolling stock not included*

**Coach Lighting Strips (including LEDs and battery):**
**CL1 :** Cool white for modern coaches with fluorescent or LED lighting
**CL2 :** Warm white for traditional coaches simulating oil lamps or bulbs
**CL21 :** Cool white plus modern flashing lantern LED tail light
**CL22 :** Warm white plus flickering flame lantern LED tail light
**CL23 :** Cool white plus bright electric spark arc effect LEDs
**CL24 :** Cool white plus amber door lights which light after train stops

---

## Automatic Tail, Firebox & Loco Lights

*DC & DCC · Auto · WIRE FREE · ANY GAUGE*

- No switch - senses motion & turns on!
- Turns off automatically 4 minutes after stop
- No pickup, wires or soldering - LED plugs in
- Fit in brake vans, coaches, loco, wagons etc
- Runs for ages on small button battery

Fits in N scale upwards

| Single output modules: | Dual output modules: |
|---|---|
| **AL1 Flashing Tail light** | **AL21 Flashing + constant** |
| **AL2 Flame Tail / Firebox** | **AL22 Flame + constant** |
| **AL3 Constant lighting** | **AL23 Sparkarc + constant** |
| *LEDs & battery included* | **AL24 Doors open + constant** |

*Rolling stock not included*

---

## SFX Sounds for Trains

*WIRE FREE · DC & DCC · Auto*

- Easy low cost sound that works on *any* railway
- **Easy to fit in seconds** - no connections
- No switch - senses motion & turns on!
- No pickups **so works on regular DC & DCC**
- Self contained - built in speaker & battery
- Tiny capsule: 25mm x 20mm x 12mm approx
- Fit capsule into loco, tender, wagon, coach...
- **Real recorded sounds** - Steam & Diesel etc

**Each Capsule is supplied with battery, sound tube & fitting guide**

**SFX10: Steam Locomotive**
**SFX20: Diesel Locomotive**
**SFX30: Electric Power Locomotive**
**SFX50: Diesel Multiple Unit**
**SFX60: Electric Multiple Unit**
**SFX70: Shunting**
**SFX80: Passenger Coaches**

See our website for more info & to hear the sounds

*SEE WWW.TRAIN-TECH.COM OR CONTACT DCP FOR FREE COLOUR BROCHURE*

---

## Train-Tech
### Model Technology Made Easy

### MS1 Mimic Switch - Toggle type

- Layout Link Multi-function Switch & Light unit
- Sensor Signal: Override & Route control
- Sensor Signal: Signal colour & train occupancy
- Level Crossing control and lights display
- Train occupancy display for the Track Sensor

## www.Train-Tech.com

See our website, your local model shop or contact us for a free colour brochure
DCP Microdevelopments, Bryon Court, Bow Street, Great Ellingham, NR17 1JB, UK
Telephone  01953 457800 • email  sales@dcpmicro.com • www.dcpexpress.com