

# ML1 - Mimic Light

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

The Mimic Light can be connected to many other Layout Link compatible accessories to monitor their operation.

Below shows basics for mounting and wiring but more information will be supplied with the Layout Link accessory it is being used with.

## 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. Mimic Lights can be linked to Layout Link accessories using just one wire and used to show the following on a mimic plan:

## Sensor Signals

A Mimic Light can be used with a Sensor Signal to display signal colour, train position & block occupancy.

## Track Sensor

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

## LC10/LCN10 Level Crossings

A Mimic Light will mimic the colours of Level crossings lights

## PC200 Point Controller

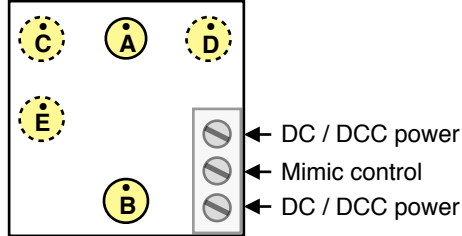
A Mimic Light connected to terminal A of a PC200 will show Point position.

*Mimic Switches & Lights 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

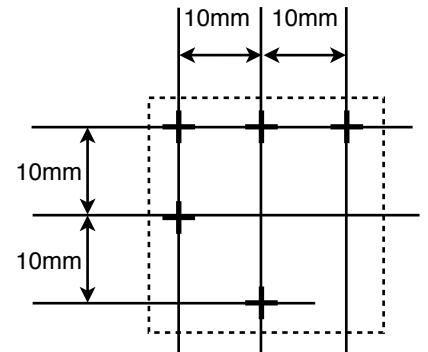
Mimics only need three connections, two for power & one to connect to the accessory being controlled. Power can be 12-16 volts smooth DC or DCC but it *must* be connected to the same power supply as the accessory being controlled.



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 Light

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



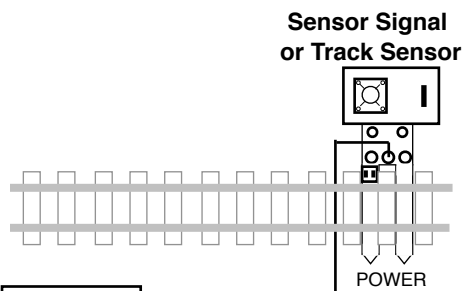
## Hole sizes:

The 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. Unlike Mimic Switches there is no mounting thread for Mimic Lights so we suggest doubled sided sticky pads to hold it in position on the back of a panel.

## 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.



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

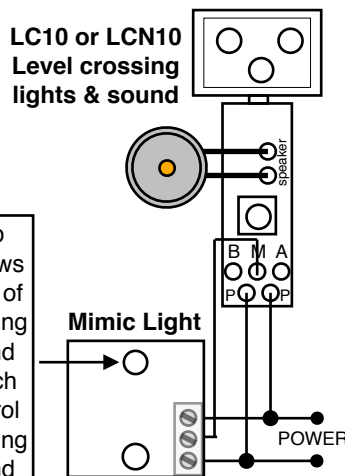
## POWER

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

## Using a Mimic with a Level Crossing

The Mimic Light will 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.



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

## POWER

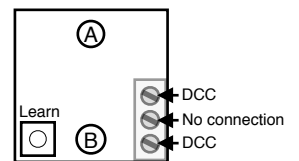
Power both the level crossing and Mimic Light from *same* supply; either DCC from the track or wire to 12-16V DC

## Using a Mimic as a DCC display

As well as controlling Layout Link accessories, Mimic Lights and Switches can also be used as a DCC LED 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)



## 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.