



Train-Tech

# Model Technology **Made Easy**

For Both Analogue DC and Digital DCC

**NEW**  
2017/18



**NEW!**

**Smart Lights  
Level Crossings  
Automatic Signals  
Route Indicator Signals  
Ground Position Signals**

*Bring your railway to life!*



Layout Link

Signalling

Control

Lighting

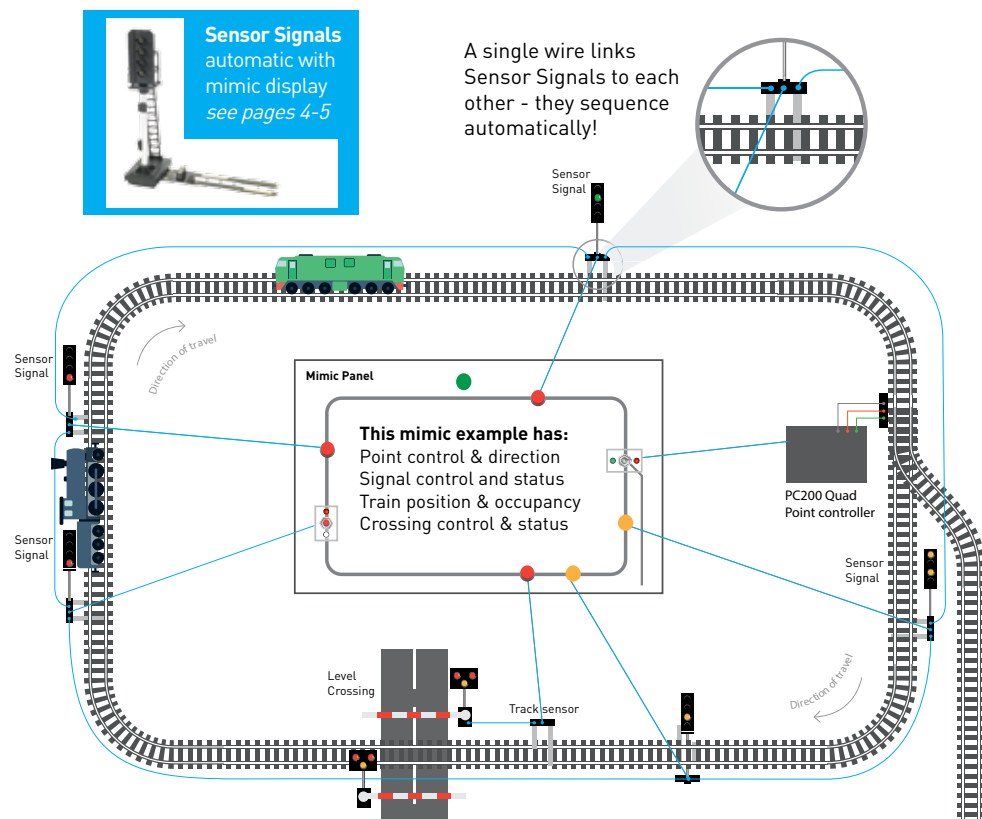
Sound

Accessories

Train-Tech believes that technology should make life better and easier, not more complicated, yet model railway wiring always seems to be complex with even the smallest layout needing lengths of many confusing cables and connectors - until now!



Layout Link is an easy new way of connecting lots of signals, points and accessories together **with just a single wire!** And whether you run regular analogue DC or digital DCC it works just as well. So to link our new automatic sensor signals to each other you just need a single piece of wire plugged between them, and if you like another wire to link them to a mimic panel so that you can see what your signals are doing and where the train is on your layout.



**Mimic Switches & Lights**  
for control & display  
see page 12



**Level Crossings** with  
lights and sounds  
see page 13



**Point control** with  
mimic control & display  
see page 11



## Signal Basics

We are often asked for advice about signalling as it's something many modellers would like to have on their layout yet sometimes do not feel they know enough about. So this is a very basic guide to signals which we hope may help and give you confidence to add some to your layout, although much more can be found online and in many books on the subject.

### • Home and Distant signals

A Home signal is the main signal which locomotives normally have to stop at if they are at Danger (red), whereas a Distant signal is located some distance before the Home and indicates what state the Home signal is - if Home shows Danger the Distant shows Caution.

The purpose of a Distant signal is to give train drivers plenty of time to slow down if the Home signal is at Danger and are usually seen on main lines. There are also signals called Outer Distant which can be seen on many high speed train lines and are installed before a Distant signal to give a driver more notice of the following signals to give them even more time to slow down in time to stop safely if the Home signal ahead is at Danger.

There are two main physical designs of signal in current use;

• **Semaphore signals** consist of mechanical arms which go up and down usually controlled by metal cables run by the side of the track via pulleys to a signal box. There are many variations, but UK outline semaphores mean Danger if horizontal and Clear if they are pointing upwards (upper quadrant) or pointing downwards (lower quadrant). Home signals have a red painted arm and Distant signal arms are yellow.

Semaphores usually have red, green and yellow colour filters behind the side of the moving arm which are lit by a lamp from behind so that their status can be seen at night.

• **Colour Light signals** are made of a number of different colour electrically powered lights (called 'Aspects') which are connected to a signal box or control room by electrical wires. A red light means Danger and green means Clear. Distant signals are signified by a yellow light and there can be one or two yellow lights to show Distant or Outer Distant. There are also ground position signals usually used around stations and yards for shunting etc.

In addition to the main signalling explained above, signals can also have Route Indicators which tell the driver the route he will be going, usually set by points just beyond the indicator. There are many variations of Route Indicators, but the main ones are 'Feathers', which are illuminated bars mounted at angles on top of colour light signals and light up white to show direction of a route, and 'Theatre' displays, illuminated boxes which display numbers or symbols to indicate a drivers route or, for example, the platform number at a station.

### • Automatic Signalling

Much of the real railway's mainlines are now split into block sections and run on automatic signalling, where a signal turns red as soon as a train enters a block and remains red until that train has completely left that block, thereby preventing collisions within that block.

### • Signalling your layout

As you will see on the following pages, Train-Tech designs and manufactures a wide range of Colour Light Signals and controllers for Semaphore signals, including signals controlled by traditional DC with a switch, by Digital DCC and our new Sensor Signals which work completely automatically just like the real thing and free up your time to sit back, run your trains and enjoy your layout watching the signals change as the trains run by....

NEW



DC & DCC

00/H0

## Automatic signalling

Now you can add automatic signalling to your layout in seconds with new Sensor Signals.

An infrared sensor is built into every signal to detect any train so there are no circuit boards etc. Just clip or wire the signal into your track for fully automatic 2, 3 or 4 aspect signalling which works just like the real railway! Best of all they can be powered from both **analogue DC as well as digital DCC** and are Layout Link compatible, so easy to link to other Sensor Signals or Mimic switches for control, signal and train position indication using just a single wire!

**Quick and easy installation** - everything is built into the Sensor Signal!

- **Sensor Signal detects train and changes signal** until the complete train is safely past
- When used alone signal sequences back to green a few seconds after the whole train has past
- When linked to other Sensor Signals they work together for **fully automatic block signalling**!
- **Fully built ready to use signal** with sensor built into the base - no other circuits or wires!
- Automatic feature can be overridden by a Mimic switch or DCC - a Semi Automatic signal.
- Link to a Mimic using one wire to **show signal colour and train position** on the control panel
- **On Analogue DC** - take two wires to a regular 12-16V smooth DC supply
- **On Digital DCC** - just slide in or wire straight to the track for automatic or DCC control
- Feathers & theatre indicators can be controlled by DCC or Mimic switch, and if your layout points are controlled by DCC give the route the same address to light it fully automatically
- Kit of detailing extra's included - ladder, handrail, phone etc

Realistic lights fade between changes

Assembled & tested; Detailing kit included

A comprehensive instruction booklet is included with every Sensor Signal

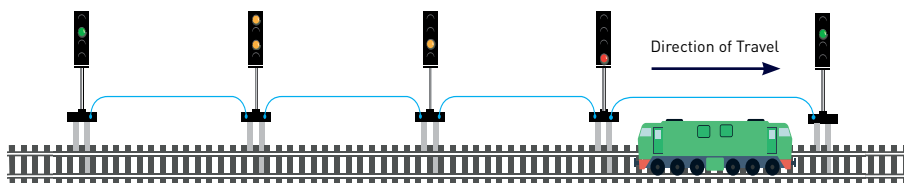
Socket to link to adjacent signals and mimic switch using a single wire

All electronics built into the signal

Slides into track on DCC or connect 2 wires for DCC or DC

Train Sensor

**Sensor signals work exactly like the real railway** where signals automatically turn red when a train enters a block section to prevent other trains from entering the same block and preceding signals automatically change accordingly. All linked using just one wire.



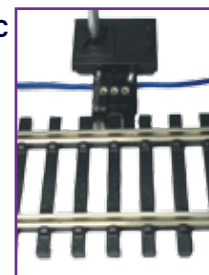
## To Power by DCC

Simply slide the signal into suitable track using the power clip holes.



## To Power by DC or DCC

Cut off the slide-in fingers at the dotted lines and solder 2 wires to the base to power from DCC or a 12-16v smooth DC supply.



## Left and Right Feather Route Indicators



Feathers can be controlled on DC and DCC by using a Mimic Switch or by DCC using any accessory address.

They can be given the same DCC address as a point to light them automatically.

## Theatre Indicator display



Theatres can be controlled by a Mimic Switch or by any DCC accessory address. It can display one user defined number, letter or character easily made on the 5 x 5 matrix by masking unwanted holes. (Note the theatre can only be switched on & off, not changed to show multiple characters)



## NEW! Sensor Signals - Fully Automatic Signals

	<b>SS1</b>	<b>2 Aspect Home</b>	<b>£40</b>
	<b>SS1L</b>	with Left Feather	£50
	<b>SS1R</b>	with Right Feather	£50
	<b>SS1T</b>	with Theatre	£50

	<b>SS2</b>	<b>2 Aspect Distant</b>	<b>£40</b>
	<b>SS2L</b>	with Left Feather	£50
	<b>SS2R</b>	with Right Feather	£50
	<b>SS2T</b>	with Theatre	£50

	<b>SS3</b>	<b>3 Aspect Home Distant</b>	<b>£43</b>
	<b>SS3L</b>	with Left Feather	£53
	<b>SS3R</b>	with Right Feather	£53
	<b>SS3T</b>	with Theatre	£53

	<b>SS4</b>	<b>3 Aspect Distant</b>	<b>£43</b>
	<b>SS4L</b>	with Left Feather	£53
	<b>SS4R</b>	with Right Feather	£53
	<b>SS4T</b>	with Theatre	£53

	<b>SS5</b>	<b>4 Aspect Outer Distant</b>	<b>£45</b>
	<b>SS5L</b>	with Left Feather	£55
	<b>SS5R</b>	with Right Feather	£55
	<b>SS5T</b>	with Theatre	£55

	<b>SS9 Multi 3 Aspect Signal</b>	<b>£53</b>
	<i>Modern multicolour-see page 7</i>	
	<b>SS9L</b> with Left Feather	<b>£63</b>
	<b>SS9R</b> with Right Feather	<b>£63</b>
	<b>SS9T</b> with Theatre	<b>£63</b>

	<b>SS10 Multi 4 Aspect Signal</b>	<b>£55</b>
	<i>Modern multicolour-see page 7</i>	
	<b>SS10L</b> with Left Feather	£65
	<b>SS10R</b> with Right Feather	£65
	<b>SS10T</b> with Theatre	£65

## Automatic Signal Starter packs **Save £15!**

<b>SSP1</b>	<b>£180</b>	<b>SSP2</b>	<b>£172</b>
4 x SS5 Sensor Signals		4 x SS3 Sensor Signals	
1 x MS1 Mimic Switch		1 x MS1 Mimic Switch	
5m x connecting wire		5m x connecting wire	



## Winner of Model Rail Innovation of the Year!

British outline signals with built-in DCC decoders which you can fit & use in literally seconds with our easy

### One Touch DCC™ technology - No CV programming!

- Ready to use Signal with the DCC Decoder in the base
- Can clip directly into the track - No wiring!
- Unique One Touch DCC™ setting up - No CV programming!
- LED's fade between changes - just like the real thing
- Kit of detailing extra's also included - ladders, rails, phone etc
- Can be synchronised to other points & signals changing



DCC

OO/HO



## 1 2 3 Easy Setup - Fitting and setting up the signal



1 Slide signal into the track power clip holes



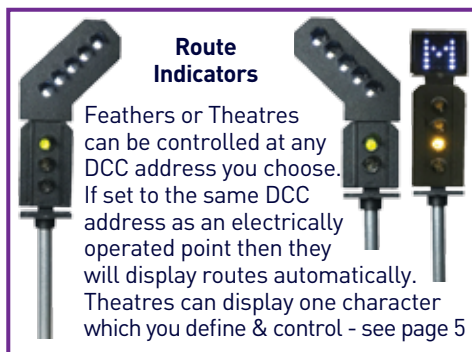
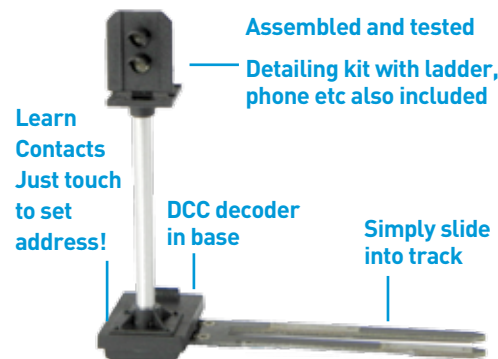
2 Touch together the two learn contacts



3 Press the controller direction command

Signals can either clip directly into Hornby or Bachmann type track (like a power clip) or you can remove the clip and connect to any track or controller with just 2 wires. Our new design is modelled on real signals and all of our products are designed and made in the UK. They can be controlled by any DCC controller or PC DCC system which can control accessories and take seconds to set up! Just choose an accessory address, touch the two hidden learn contacts then send an accessory command from your controller. Thats it, set up and ready to go!

**New** Feather and Theatre Route indicators now available on any signal with extra decoder built-in - just give them the same address as your points and they light automatically when route set!



NEW

## DCC fitted Colour Light Signals

	<b>DS1 2 Aspect Home</b>	<b>£26</b>
	<b>DS1L</b> with Left Feather	£36
	<b>DS1R</b> with Right Feather	£36
	<b>DS1T</b> with Theatre	£36

	<b>DS2 2 Aspect Distant</b>	<b>£26</b>
	<b>DS2L</b> with Left Feather	£36
	<b>DS2R</b> with Right Feather	£36
	<b>DS2T</b> with Theatre	£36

	<b>DS3 3 Aspect Home-Distant</b>	<b>£30</b>
	<b>DS3L</b> with Left Feather	£40
	<b>DS3R</b> with Right Feather	£40
	<b>DS3T</b> with Theatre	£40

	<b>DS4 3 Aspect Distant</b>	<b>£30</b>
	<b>DS4L</b> with Left Feather	£40
	<b>DS4R</b> with Right Feather	£40
	<b>DS4T</b> with Theatre	£40

	<b>DS5 4 Aspect Outer Distant</b>	<b>£32</b>
	<b>DS5L</b> with Left Feather	£42
	<b>DS5R</b> with Right Feather	£42
	<b>DS5T</b> with Theatre	£42

	<b>DS5HS</b> £34		<b>DS8</b> £28
4 Aspect O/Distant inc High Speed Flashing		2 Aspect Caution Shunting Signal	

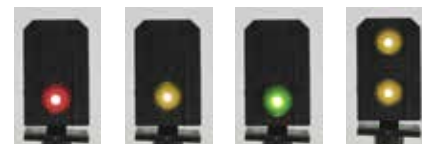
	<b>Dual Head Home</b>	<b>DS6</b>	<b>£38</b>
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	<b>Dual Head Distant</b>	<b>DS7</b>	<b>£38</b>
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For Dual Head signals with Feather and Theatre options please contact us

## NEW! Modern 3 & 4 colour Multi Aspect Signals

Modern railways have multi aspect signals where a single lens can display red, yellow or green and a 4 aspect dual lens version which can also display double yellows:



Train-Tech offers both types as DCC fitted and like all other DCC signals easy to control using a DCC address of your choice.

	<b>DS9 Multi 3 Aspect Signal</b>	<b>£40</b>
	<b>DS9L</b> with Left Feather	£50
	<b>DS9R</b> with Right Feather	£50
	<b>DS9T</b> with Theatre	£50

	<b>DS10 Multi 4 Aspect Signal</b>	<b>£42</b>
	<b>DS10L</b> with Left Feather	£52
	<b>DS10R</b> with Right Feather	£52
	<b>DS10T</b> with Theatre	£52

## Ground Position Shunt Signals

Ground position signals are mainly used to control shunting movements in sidings or station. Because they are small we have fitted the electronics underneath so that the signal head can be mounted realistically close to the surface using a single hole. They can be easily controlled by DCC, Mimic switch or by Track Sensor for automatic control. Both red/white and yellow/white variations are available.



	<b>GS1 Signal</b>	<b>£35</b>
White & Red		



	<b>GS2 Signal</b>	<b>£35</b>
White & Yellow		



NEW

DC & DCC

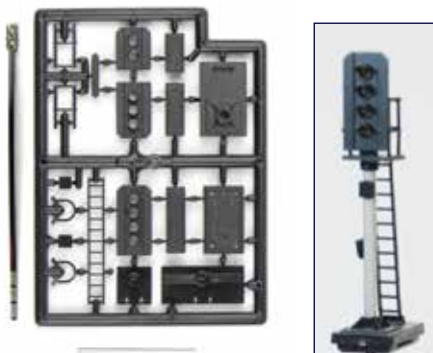
OO/HO

A range of self assembly signal kits which can be controlled by DC using standard switches or DCC using a Train-Tech or other DCC decoder.

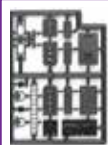
- Self assembly Colour Light Signal kits
- Each kit includes a base, ladder, metal post and detailing kit with hand rails, phone etc
- **Low cost** – adapt to your own design
- LEDs prefitted and tested - no wires!
- Control by switches or DCC using SC1/SC2

All signal kits (excluding SK1) include resistors and LEDs pre-fitted to a long narrow PCB to go through the baseboard - just solder or wrap signal control wires to the LED strip.

The metal post is push fit and the other parts can be added using regular poly model glue.



Signal kit with LED stick, post, details



**SK1 Basic Kit only** £6

Plastic kit and metal post only.  
(No LEDs or resistors)



**SK2 2 Aspect Home** £10

- SK2L** with Left Feather £20
- SK2R** with Right Feather £20
- SK2T** with Theatre £20



**SK3 2 Aspect Distant** £10

- SK3L** with Left Feather £20
- SK3R** with Right Feather £20
- SK3T** with Theatre £20



**SK4 3 Aspect Home Distant** £11

- SK4L** with Left Feather £21
- SK4R** with Right Feather £21
- SK4T** with Theatre £21



**SK5 3 Aspect Distant** £11

- SK5L** with Left Feather £21
- SK5R** with Right Feather £21
- SK5T** with Theatre £21



**SK6 4 Aspect Outer Distant** £12

- SK6L** with Left Feather £22
- SK6R** with Right Feather £22
- SK6T** with Theatre £22



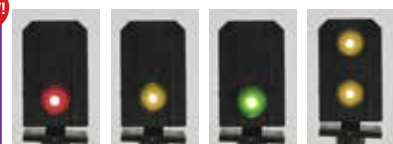
**SK7** £15

**2 Aspect Dual Head Home Signal**



**SK8** £15

**2 Aspect Dual Head Distant Signal**



- 3 or 4 Multi Aspect signal kit  
All LEDs fitted and both head covers included
- SK9 3 or 4 Multi Aspect kit** £20
  - SK9L** with Left Feather £30
  - SK9R** with Right Feather £30
  - SK9T** with Theatre £30

For Dual Head signals with Feather and Theatre options please contact Train-Tech

NEW!

## Signal kits with Feather and Theatre Indicator

Signal kits are now available fitted with left / right feathers and theatre indicators as shown on the previous page and also available as add-on kits for existing signals as below.



**Left and Right Feathers**

To indicate a direction or route.



**Theatre Indicator**

It can display one user defined number, letter or character easily made on the 5 x 5 matrix by masking unwanted holes. It can only be switched on and off, not changed to show other characters.



NEW!

**Theatres and Feathers** are also available separately to fit onto other makes of signals and can be controlled by a switch with DC or by a DCC decoder (2 solder connections).

**LK1 Left Feather add-on Kit** £12

Includes Left Feather LED panel, front & back casing and a resistor



**RK1 Right Feather add-on Kit** £12

Includes Right Feather LED panel, front & back casing and a resistor



**TK1 Theatre add-on Kit** £12

Includes Theatre LED panel, base plate, hood/screen and a resistor.



NEW!

**Ground Position signal kits** are easily mounted through a hole in the baseboard and can be controlled either by a standard switch using DC or by DCC using a DCC decoder.

**GK1 Modern Red Ground Signal kit** £16

Includes a panel with red and white LEDs prefitted as shown, casing and resistor.



**GK2 Original Red Ground Signal kit** £16

Includes a panel with red and white LEDs prefitted as shown, casing and resistor.



**GK3 Modern Yellow Ground Signal kit** £16

Includes a panel with yellow & white LEDs prefitted as shown, casing and resistor.



**GK4 Original Yellow Ground Signal kit** £16

Includes a panel with yellow & white LEDs prefitted as shown, casing and resistor.





## DCC Signal Controllers

NEW



DCC

ANY GAUGE

These Signal Controllers make it easy to control signals made by Train-Tech & other manufacturers using DCC.

- **Control LED & Semaphore signals by DCC**
- One Touch DCC™ button - No programming!
- Screw terminals for wires - **no soldering**
- Simple 2 wire connection to track or controller output
- Can synchronise to other Signals & Points

Just connect the signal and connect the DCC terminals of the signal controller to the nearest track. Choose an address, press the One-Touch button and send a command from your DCC controller. Thats it, all set up!

### Colour Light Signal Controllers

#### SC1 Dual 2 aspect signal controller

£17

Controls Two x 2 aspect LED colour light signals. Compatible with Train-Tech SK2, SK3, SK7, SK8 & other makes of LED signals.

#### SC2 3-4 aspect or 2 aspect + route signal controller

£17

Controls One 3 aspect or One 4 aspect or One 2 aspect+route LED light signal. Compatible with Train-Tech SK4, SK5, SK6 multi aspect signals and the new range of signal kits with Feather and Theatre indicators: SK2R, SK2L, SK2T and SK3R, SK3L and SK3T. Also compatible with other manufacturers LED route signals.

One Touch button for quick setup



Screw terminals for easy connections



### Dapol Semaphore Signal Controllers

#### SC3 Dual Dapol Semaphore signal DCC controller

£35

The SC3 controls one or two Dapol N or OO gauge semaphore signals and each signal has its own DCC address. The SC3 provides a regulated supply and signals connect directly using existing wires & no modifications or power supply is required.

NEW!

#### SC300 Dual Dapol controller with Automatic Semaphore control £40

Like the SC3, the SC300 provides stable power and DCC control of 2 Dapol semaphore signals directly from a DCC track or bus. But the SC300 also has inputs for the new Track Sensors (page 12) allowing Semaphore signals to operate automatically as Trains are detected on the track! The SC300 is also Layout Link compatible and may be linked to Mimic Switches and Mimic Lights so that Dapol Semaphore signals can be both controlled and monitored from a Mimic panel. As well as controlling the signals using DCC, the SC300, Track sensor and Mimic switch can be used on analogue DC as well as digital DCC layouts.

Signal with a feather connected to an SC2



## DCC Point Controllers

NEW



DCC

ANY GAUGE

Easy to fit and use controllers which simply connect to your track and points to enable control from your DCC controller or computer.

- **Control points & uncouplers using DCC**
- One Touch DCC™ - **No programming!**
- Just connect 2 wires to nearby DCC rails
- Easy screw terminals - **no soldering!**
- Use standard solenoid point motors
- Built in powerful CDU for efficient operation.



Shown with standard point motor & track - not supplied

**Easy to fit:** Screw terminals connect just 3 wires to any standard point motor (eg Peco, Hornby etc) and 2 wires to the nearest rails or DCC bus.

**Easy to use:** Choose an accessory address, press the One-Touch button then send an accessory command from your DCC controller or PC. Thats it, you are ready to go!

**Synchronise Points and Signals easily:** As well as controlling each point individually you can easily synchronise to other Signals and Points by using the same address for everything you want to sync, so that routes can be set with correct signalling using just a single command!

PC1

£18

**Single One-Touch DCC™ Point controller**  
Controls 1 point



PC2

£40

**Quad One-Touch DCC™ Point controller**  
Controls 4 points



NEW!

#### PC200 Quad One-Touch DCC Point controller with manual override switch control and multiple Route Store

£45

Like the PC2, this module includes a built-in CDU and controls 4 solenoid point motors by DCC, setting up instantly using One Touch DCC.

##### Manual Control

In addition to control by DCC, the PC200 also has 4 switch inputs for manually controlling each of the 4 points. You can either use regular switches such as toggles, or you can also connect the new Mimic switch to both control and display the Points position on your own control panel - see Mimic products on page 12.

##### Route Store

As well as the 4 main DCC addresses, the PC200 can also save multiple routes; By setting an extra address you can control groups of points using a single command, allowing easy setting of routes.



**Mimic Switches and Lights** enable you to make a mimic panel to monitor and control other Layout Link products such as Signals, Points and Level Crossings. You can even see where trains are by linking to Sensor Signals or Track Sensors around your layout - just like the real thing! Wiring is very easy thanks to Layout Link, so there is just a single wire going between a Mimic and a Sensor or accessory (see diagram on page 2)

Multicolour LEDs are supplied with both Mimic Switches and Mimic Lights which can show signal colour as well as occupancy on your mimic panel. LEDs just plug into the LED sockets. In addition to the 2 LEDs supplied you can also add 3 others to display various extra functions.

## Mimic Switches

Mimic switches feature a switch, 2 LED sockets and a Layout Link connector. You can use a Mimic Switch to:

- Manually control a point on the PC200; LEDs mimic the point position
- Manually control Sensor Signal red + route; LEDs show Signal colour and Train location
- Manually control a Semaphore signal with the SC300; LEDs mimic the signal position
- Control an LC10/LCN10 Level Crossing; LED mimics the colours of the barrier lights
- Manually control a GS Ground Position Signal; LED mimics signal colour

**MS1 Mimic with Toggle switch with 2 plug in LEDs and instructions £14**

**MS2 Mimic with Push Button with 2 plug in LEDs and instructions £14**



## Mimic Lights

Mimic Lights are very similar to Mimic Switches except they have no switch and just display the status or position of Layout Link accessories. Mimic Lights also have a DCC decoder built in and can be set to display the status of *any* type of DCC accessory! You can use a Mimic Light to:

- Mimic Signal colour & show Train location (occupancy) when connected to Sensor Signals
- Mimic the point position from a PC200 or any other make of DCC point decoder
- Show the position and movement of a Train over a Track Sensor or Sensor Signal
- Show Signal colour or Semaphore status of DCC signals
- Mimic the colours of the barrier lights

**ML1 Mimic Light with 2 plug in LEDs and instructions £12**

**The Track sensor** incorporates an infrared sensor which detects a train going over it and the output can be used to control and show occupancy to other products in the Layout Link Family.

## Track Sensor

The Track sensor is similar to a Sensor Signal except that it has no signal head. It can wire or clip into OO track in the same way, work on both DCC and DC layouts and has the same sockets to connect it to other Layout Link products. Although it only clips into OO track it can also be located close to N track to operate accessories such as LCN10 Level Crossing & display occupancy etc.

- Control Semaphore signals automatically using SC300 controller (see page 10)
- Trigger the LC10 Level Crossing lights and sounds when a Train approaches
- Link to a Mimic Switch or Mimic Light to show trains passing and occupancy
- Control a Ground Position shunt signal automatically (see page 7)
- Link to a Sensor Signal to change the following block section signal status

**ST1 Track Sensor with instructions £20**



## Level Crossing lights & sounds with barriers and fence - N and OO/HO models



These are N and OO scale models of UK style level crossings which are preassembled with lights and sound and come complete with Peco™ static level crossing barriers and fence as shown in the photo. They are easy to fit requiring just a 10mm diameter hole drilled in your baseboard and the model is held in place by a special flush Mounting Cap (included).

Electrically these are very easy to wire up as all connections are by push fit single core wires. They can be powered by any 9-16V DC supply, DCC or a 9 volt battery.

### Manual or Automatic control

The level crossing lights and sounds can be controlled in a number of ways:

- 1) A switch connected between the power supply and the level crossing.
- 2) Controlled completely automatically by a Track Sensor via Layout Link (page 12)
- 3) Switched by a Mimic Switch connected via Layout Link (page 12)
- 4) If layout is DCC via your controller which is easily set up using a DCC address

**LC10 Level Crossing barrier set with lights and sound for OO/HO - Single £25**

**LC10P Level Crossing barrier set with lights and sound for OO/HO - Pair £45**

**LCN10 Level Crossing barrier set with lights and sound for N gauge - Single £25**

**LCN10P Level Crossing barrier set with lights and sound for N gauge - Pair £45**



## Traffic Light - fully assembled - just connect power and it works!



This working traffic light comes assembled ready to fit. Just drill a hole, push it in and connect 2 wires to 9-16 Volts DC, DCC or a 9 volt battery. It lights in the standard UK sequence and timing between changes is random to add realism over a layout. Add a line of white paint around the traffic light head for that finishing touch. A really quick and easy way to add extra interest and lights to your layout in seconds!

**TL10 Traffic Light - OO/HO - one single working + one non-lit dummy £25**

**TL10P Traffic Light - OO/HO - pack of 2 working traffic lights £45**



### Extra LED Packs for LFX & general use (includes resistors)

**LED1 - Level Crossing subminiature LEDs - 3 extra sets (3 x amber 6 x red) £6**

**LED2 - 10 Assorted 5mm diameter LEDs (2 x red/green/yellow/orange/white) £6**

**LED3 - Traffic Light subminiature LEDs - 3 extra sets (3 x red/yellow/green) £6**

**LED4 - Fire effect LEDs - 2 extra sets (2 x red/amber/yellow) £6**

**LED5 - Welding effect LEDs - 2 extra sets (2 x white/red) £6**

**LED7 - Ultrabright LED set for LFX7 effects (2 x blue/orange/white) £6**

**LED10 - 10 Assorted colour subminiature LEDs (4 x red 2 x yellow/green/orange) £6**

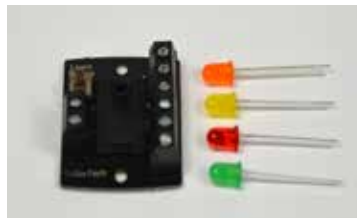
**LEDCLIP1 - Pack of 5 LED clips with wire - no soldering - LEDs just push in! £6**

For more LEDs and accessories see Page 19



The LFX controllers simulate a range of lighting effects which help to bring your layout to life! They are all really easy to connect and use and LEDs for effects are included.

- Easy screw terminals for all connections - no soldering
- Connect LEDs directly - no resistors needed
- Power by 9V battery, 9-16V DC or control using DCC
- LEDs included - just add to your models (not included)



## LFX1 Level Crossing Barrier Lights £15 LFX1S Barrier Lights PLUS sound! £20

Lights a sequence of amber then alternate flashing red lights.

Two red and an amber LED are included and these can be fitted into



a suitable level crossing barrier model such as the Peco LK51.

An additional set of 9 LEDs are also available which enables working lights to be installed on all sides of the level crossing (see pack **LED1 £6**)

LFX1S also features a sound generator producing the realistic sounds of a modern level crossing from the speaker included.

## LFX2 Home & Shop Lighting £15

Randomly switches upto 4 sets of LEDs to light model houses rooms, shops, stations, pubs, etc, etc. 4 mixed colour LEDs supplied.

Extra LED set **LED2 £6**



## LFX3 Traffic Light controller £15

Automatic timed traffic lights - can be used with another LFX3 to run an alternate junction.

Extra LED set **LED3 £6**

**TL1** - Traffic lights kit- this requires glueing & soldering (pair) £10



## LFX4 BBQ, Log, or camp fires £15

Very realistic fire effect using amber, red and yellow LEDs. Can be used to make a model of a fire or project a fire effect inside a building

Extra LED set **LED4 £6**



## LFX5 Welding Effects £15

Realistic welding effect using ultrabright white and red LEDs which simulate arc welding and cooling. Includes 1 set of LEDs.

Extra LED set **LED5 £6**



## LFX6 Quad LED Lighting controller £17

Unlike others this LFX is DCC only & controls 4 sets of LEDs on & off using DCC addresses you choose or synced with signals, points etc.

Extra LED set **LED2 £6**



## LFX7 Flashing Effects £15

Simulates four flashing effects used on a layout; belisha beacons, emergency services, camera flashes, lightning, sparks, arcing.

Extra LED set **LED7 £6**



Smart Lights are a new kind of light which you can easily fit inside buildings, trains, vehicles or other parts of your layout which light up your models with the lighting effects of your choice! Each Smart Light is only 1cm square and just 2 wires connect it to almost any low voltage supply. If you have a digital layout you can control it using a simple DCC accessory command (even if it is on board a moving train!), although it is just as easy to power from a 12V DC power pack or a 9 volt battery!

- Small 1 x 1 x 0.3cm - fits in or under most models including N
- Just 2 wires! Power by standard 9 -16V DC or a 9 volt battery
- Or power by DCC which can also control some effects
- Just connect and go - no setting up required
- Fitted with Self adhesive pad for easy mounting

See the effects on [www.youtube.com/traintech](http://www.youtube.com/traintech)



Actual Size!

## SL10 £15 Party - Disco Lights

Mixtures of lighting colours and flashes to simulate a party or disco in a house, night club or pub etc



## SL20 £15 Random Lighting

Randomly turns on and off simulating the lights in an office, house or street etc. Adds life to a scene!



## SL30 £15 Emergency Vehicle

Realistic flashing blue (or blue/red) light which can be fitted under the roof light of a model vehicle



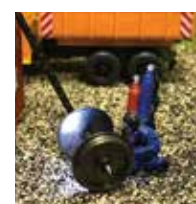
## SL40 £15 Real Fire Effect

Flickering shades of amber and yellow flames mixed with the red embers of a real fire



## SL50 £15 Arc Welding Effect

Bright white arc flashes followed by a slowly dimming red glow from the weld cooling down



## SL60 £15 Television Simulator

Fits inside a model house or shop and lights just like a TV with multiple colours and flickering.



## SL100 Custom Smart Light £15

You can set this Smart Light to show your choice of colour, brightness and effect using a DCC controller in accessory control mode. Although it must be set up using DCC, once set up it can be powered by either 9-16v battery / DC or DCC. It has 3 main customisable functions:

- **Colour** - Choose from 14 different colours or an automatic colour cycle
- **Effect** - Choose from 8 different effects including constant, flashing, flickering, fading.
- **Brightness** - Choose from 9 different brightness levels from 10% to 100%

Set and change an unlimited number of times - it remembers the effect until you change it!

See all the effects on the Train-Tech YouTube channel - [www.Youtube.com/TrainTech](http://www.Youtube.com/TrainTech)



## Automatic Coach Lighting for coaches & multiple units

DC & DCC

00/HO

N/009

### Instant easy lighting for any coach - DC or digital

- Easy to fit in seconds - **No wiring!**
- No switch - **turns on automatically** as train moves
- No pickups so **works on both regular DC or DCC**
- Traditional warm white or modern cool white
- Also with tail light, sparks or door lights effects!
- Lights stay bright and constant with **no flickering**
- Fit most coaches & multiples but may be cut down
- 00/HO gauge is 220mm long and N is 100mm long
- **NEW Multipacks now available** - saves 10%!



The CL21 Coach & Tail light at night

### 1 2 3 Easy to fit - fitting a coach lighting strip



1 Remove the roof



2 Fit Lighting strip



3 Replace the roof

Each lighting strip is completely self contained with a built-in long life battery and five efficient LED lamps which realistically light any coach! There is no need for a switch as the strip incorporates a small sensor which detects when the train moves and turns on the lights automatically. The lights stay on whilst the train is in motion, then after it stops keeps them on for a few minutes before turning them off so that temporary stops at stations or signals leaves the coach lit. Easy to fit in seconds - no wiring!

As well as the standard Lighting strips there are also dual function versions with an additional effect which also work automatically and come complete with LEDs for the extra effect and which plug straight into the coach lighting strip so no wires or soldering!

**Warm white simulate traditional bulbs or oil lamps; Cool white simulate modern fluorescent**

Lighting strip functions	Cool White		Warm White	
	00	N	00	N
Standard Light strip £20	CL1	CN1	CL2	CN2
Flashing Tail Light £25	CL21	CN21	CL26	CN26
Flickering Tail Light £25	CL27	CN27	CL22	CN22
Spark-arc Effect £25	CL23	-	CL28	-
Amber Door Lights £25	CL24	-	CL29	-
Constant Tail Light £25	CL25	-	CL30	-
Door Tones £25	CL34	-	-	-

### NEW Multipacks - save 10%!

#### 00 Gauge: Cool White Packs

CL100 - 2 x CL1, 1 x CL21 £58

CL110 - 2 x CL23 £45

CL120 - 1 x CL24, 1 x CL34 £45

#### 00 Gauge: Warm White Packs

CL200 - 2 x CL2, 1 x CL22 £58

CL210 - 2 x CL28 £45

#### N Gauge: Cool White Pack

CN100 - 2 x CN1, 1 x CN21 £58

#### N Gauge: Warm White Pack

CN200 - 2 x CN2, 1 x CN22 £58

BAT1 - Pack of 3 spare batteries for 00 / HO Lights £3

BAT2 - Pack of 3 spare batteries for N / 009 Lights £4

- NEW!** CL51\* - London Transport Museum S Stock 1 Car lighting strip £20
- CL150\* - LTM S Stock 4 Car lighting set - including spark effect & door tones £89

## AL Automatic Lighting Effects for Trains

DC & DCC

ANY GAUGE

### Easy to fit lighting effects for rolling stock & locos

- Tiny module fits most brake vans, coaches, locos, etc
- No switch - senses motion & turns on lighting automatically
- No wires or soldering - LED & battery just clip in
- Fits many gauges from N: module is 13mm x 11mm + battery



These small modules incorporate a motion sensor which detects movement of the train and automatically turns on lighting. Various effects from constant light for coaches and headlights, modern flashing tail lights and flickering flame effect for steam firebox or oil lantern tail light which flickers more as the train bumps over the track, just like the real thing! Dual output AL's feature both constant lighting output plus a second effect such as electric sparks & amber door lights.

**N GAUGE** - AL1 / AL2 / AL3 fits some N gauge stock using smaller BAT2 12mm battery & cutting the battery holder - smaller battery supplied on request and details documented in instructions.

See page 19 for spare batteries, extra LEDs and other accessories.

### 1 2 3 Easy to fit - fitting an AL into a brake van



1 Remove roof and drill two small holes for LED



2 Fit module inside and plug in LED and battery



3 Refit roof - LED lights when brake van moves!

**Single function AL modules** all include LEDs, long life 20mm battery and fitting guide



**AL1** £15  
**Flashing Tail light**  
Modern image - with 2 lantern shape LEDs



**AL2** £15  
**Flickering Tail / Fire**  
Flame effect with both firebox & lantern LEDs



**AL3** £15  
**Constant Lighting**  
For coach, head or cab lighting, includes LEDs



**Standard AL Module**  
Trimmed down for N

**Dual function AL modules** all include LEDs, long life 20mm battery and fitting guide



**AL21** £20  
**Flashing + Constant**  
Suits modern coaches with flashing tail light



**AL22** £20  
**Flickering + Constant**  
Ideal for a coach with oil type tail lanterns



**AL23** £20  
**Spark-arc + Constant**  
Ideal overhead or rail electrics EMUs eg 2BIL



**AL24** £20  
**Amber door + Constant**  
Multiple or coach with auto amber door lights

ANY  
GAUGE

DC &  
DCC

## Easy low cost sound which works on any railway

- **Easy to fit in seconds** - no connections or switches!
- No pickups or wiring so **works on analogue DC & DCC**
- Self contained capsule - built-in speaker & battery
- **Tiny capsule:** 25mm x 20mm x 12mm approx.
- **Real recorded sounds** from real trains
- Fit capsule into a loco, tender, wagon, coach....
- N Gauge fitting guide free online or on request
- **NEW PLUS VERSION** includes facilities for adjusting volume and fitting an external speaker and battery

Many modellers like the extra realism which sound can bring to a layout but until now it has been an expensive and complicated feature to add and usually requiring DCC, extra wiring and quite a lot of space.

SFX needs none of this and works in almost ANY train!

We have developed a tiny sound capsule which brings rich real railway sounds from your favourite train! The SFX is completely self contained with a built in speaker and battery which needs no pickups or connections of any kind and so is both easy to fit and works on any train system, including analogue DC or digital DCC.



Small enough to fit most locos



including Diesel, Steam or electric



Or fit into tender, wagon or coach

### How does it work?

At the heart of each SFX is a microchip containing the real recorded train sounds and a small motion sensor which detects what the train is doing and replays the most appropriate sounds through the tiny loudspeaker. The motion sensor also turns power on and off automatically so that battery life is preserved and there is no need for any switch.



### SFX PLUS Sound capsules - all supplied with battery, sound tube and fitting guide

SFX10+	Steam Express locomotive - incl chuffs, steam, fireman coaling, whistles	£45
SFX20+	Diesel locomotive - including tickover, turbo, air, horn etc with coasting	£45
<i>The following SFX PLUS Sound capsules are future releases - check web for latest</i>		
SFX11+	Steam Freight locomotive as SFX10 but slower heavy goods or shunting	£45
SFX21+	Diesel locomotive - as SFX20 but continuous after speed up - no coasting	£45
SFX30+	Electric power locomotive - including motor whine, horn, etc	£45
SFX50+	Diesel Multiple unit - including tickover, guard buzzer, gear changes, horn	£45
SFX60+	Electric Multiple unit - including tickover, motor whine, horn, etc	£45
SFX70+	Goods freight sounds - including couplings, wheel squeels, buffers	£45
SFX80+	Passenger coaches - including couplings, doors, squeels, guard	£45

BAT1 Pack of 3 spare batteries for SFX sound, coach lighting & AL products £3

**Hear the sounds and get updates on the latest releases at [www.train-tech.com](http://www.train-tech.com) or call**

NEW

ANY  
GAUGE

## Batteries, Connectors and Wire

BAT1 - Pack of 3 CR2032 batteries for AL / CL / SFX	£3
BAT2 - Pack of 3 CR1225 batteries for AL / CN	£4
CON1 - 9v PP3 Battery clips pack of 2	£1*
CON2 - AA Battery box for 2 x AA's with switch	£2*
CON3 - AA Battery box for 2 x AA's without switch	£1*
CON4 - Single AAA Battery holders - pack of 2	£1*
CON5 - 1KΩ Resistors - pack of 50	£1*
CON6 - 3 Way PCB mount terminal blocks-pack of 4	£1*
CON7 - 2 Way PCB mount terminal blocks-pack of 4	£1*
CON8 - 2 Way PCB single inline sockets (SIL) pack 4	£1*
CON9 - 5cm 8Ωohm speaker for SFX in larger gauges	£3*
LEDClip1 - 5 Wired LED clips, no soldering, just push in!	£5
SM1 - Converts 8-12V rough DC or AC to smooth DC	£4*
TS1 - Double pole 2 position toggle switches pk of 2	£3
TS2 - Double pole 3 position centre off toggle switches x2	£4
WP1 - Fine wire 3x2m single strand, 2m 24swg tinned wire	£6
WP2 - 5 x 5m 1/0.6mm assorted colours solid core wire	£5*
WP3 - 100m reel 1/0.6mm grey solid wire for signals etc	£10*



## Tools and Accessories

CUT1 - Precision cutters for model making and fine wires	£5*
DRILL1 - Miniature drill bits 2 x 1.0mm. and 1 x 0.8, 1.2, 1.8mm	£6
DRILL2 - 10mm drill bit for drilling holes for mounting caps	£3*
DRILL3 - 2.8mm drill bit for drilling hole for TL10 Traffic Light	£1*
CAP1 - 10mm mounting cap supplied with level crossing etc - pk 4	£2
DRIVER1 - Flat head mini terminal screwdrivers - pack of 2	£1*
METER1 - Digital meter tests volts, amps, resistance, diodes	£10*



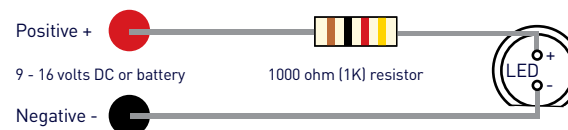
## LED Packs

LED11 - Warm white LEDs, resistors & 60cm 24swg tinned wire x6	£6
LED12 - Cool white LEDs, resistors & 60cm 24swg tinned wire x6	£6
LED13 - Mixed Headlight, Firebox, Lantern & coach LEDs - x6	£6
LED14 - Pack of 10 x 3mm red LEDs (ideal for mimic)	£6
LED15 - Pack of 10 x 3mm green LEDs (ideal for mimic)	£6
LED16 - Pack of 10 x 3mm white LEDs (ideal for mimic)	£6
LED17 - Pack of 10 x 3mm yellow LEDs (ideal for mimic)	£6
LED18 - Pack of 3 x 3mm red/green 2 wire bi-colour LEDs	£6
LED19 - Pack of 3 x 3mm red/white 2 wire bi colour LEDs	£6

For more LEDs see page 13



### Train-Tech Tip - How to connect an LED



### For more detailed product information see [www.dcpexpress.com](http://www.dcpexpress.com)

- We are unable to send batteries outside of UK
- Items marked \* are not available to trade



## Track Tester

DC & DCC

00/HO

N/009

- Quickly tests track for power faults
- Colour shows DCC, DC polarity or fault
- Easy to use
- **Low cost**
- Tests 00, HO, N TT, or 009 Gauge track
- Checks point frogs

£5



**TT1 Track Tester**

**£5**

## Buffer Lights

DC & DCC

00/HO

N/009

Buffer stop lights which simply clip into the track either in front or behind your buffer stop. No wiring - lights instantly!

- **Add realistic stop light to any siding**
- **Low cost and easy to fit in seconds**
- Simply clip into the track – **No wires!**
- Fits next to most buffer stops & kits
- Or use free standing – platform end
- On DCC both LEDs light constantly
- On DC 1 LED lights when track is on
- **Helps bring your layout to life!**

### **BL1 00/HO gauge Buffer Light**

BL1	Single buffer light	£5
BL1x10	10 Pack buffer lights	£45

### **BL2 N/009 gauge Buffer Light**

BL2	Single buffer light	£5
BL2x10	10 Pack buffer lights	£45

£5



*Track and buffer stop not included*



## Where to see or buy Train-Tech products:

- Buy online direct from us at [www.dcpexpress.com](http://www.dcpexpress.com)
- Call 01953 457800, order by post or visit DCP below
- Model shops throughout the UK and worldwide
- UK trade dealer enquiries to Gaugemaster
- Items marked \* are not available to the trade
- International, OEM or design enquiries to DCP
- £4 UK First Class Post per order - overseas postage on [dcpexpress.com](http://dcpexpress.com)
- Cheques payable to DCP Microdevelopments - minimum £30 for cheques
- We are not permitted to include any batteries outside the UK
- See video's of many of our products at [www.Youtube.com/TrainTech](http://www.Youtube.com/TrainTech)



T: **01953 457800** E: [sales@dcpmicro.com](mailto:sales@dcpmicro.com) W: [www.dcpexpress.com](http://www.dcpexpress.com)

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**Train-Tech products are designed & manufactured in Great Britain by DCP**