Model Technology Made Easy

For Both Analogue DC and Digital DCC NEW 2019/20

















NEW THIS ISSUE

- Automatic Train Control
- O Gauge Buffer Lights
- Dapol Servo Signal Control
- Modern Flashing Tail Light
- Servo & Relay Controllers
- 0 & G Gauge Track Tester

Train-Tech Signals - Signalling Basics

Signalling

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Train-Tech believes that technology should make life better and easier, not more complicated.....

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.

The products which can be linked using Layout Link are shown with this symbol: 🕒

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....



Winner of Innovation of the Year!



Automatic signalling

Now you can add automatic signalling to your layout in seconds with new 00 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!

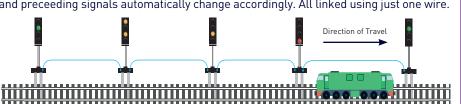
Automatic Train Control using Sensor Signals with the new Relay Controller - page 17

- 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!
- Quick and easy installation everything is built into the Sensor Signal!
- Automatic feature can be overidden 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





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 preceeding 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 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)

Sensor Signals - Fully Automatic Signals



2 Aspect Home £40 £50 SS1L with Left Feather SS1R with Right Feather £50 **SS1T** with Theatre £50



2 Aspect Distant £40 SS2L with Left Feather £50 **SS2R** with Right Feather £50 **SS2T** with Theatre £50



SS3 3 Aspect Home Distant £43 SS3L with Left Feather £53 SS3R with Right Feather £53 **SS3T** with Theatre £53



£43 3 Aspect Distant £53 SS4L with Left Feather **SS4R** with Right Feather £53 **SS4T** with Theatre £53



SS5 4 Aspect Outer Distant £45 SS5L with Left Feather £55 SS5R with Right Feather £55 **SS5T** with Theatre £55



SS9 Multi 3 Aspect Signal £53 Modern multicolour-see page 7 **SS9L** with Left Feather £63 **SS9R** with Right Feather £63 **SS9T** with Theatre £63



SS10 Multi 4 Aspect Signal £55 Modern multicolour-see page 7 SS10L with Left Feather £65 SS10R with Right Feather £65 **SS10T** with Theatre £65

Automatic Signal Starter packs Save £16!

SSP1 £180 SSP2 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

See page 11 for Automatic Signal Controllers - Make existing LED signals Automatic!

DCC Colour Light Signals - easy, just plug in

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 00/H0 Signals 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

MASTER

00/H0

123 Easy Setup - Fitting and setting up the signal







2 Touch together the two

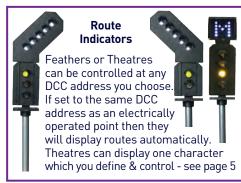


3 Press the controller direction command

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 builtin - just give them the same address as your points and they light automatically when route set!





DCC Colour Light Signals - set up in seconds

DCC fitted Colour Light Signals



2 Aspect Home £26 DS1L with Left Feather £36 **DS1R** with Right Feather £36 **DS1T** with Theatre £36



2 Aspect Distant £26 DS2L with Left Feather £36 **DS2R** with Right Feather £36 **DS2T** with Theatre £36



DS3 3 Aspect Home-Distant £30 DS3L with Left Feather £40 DS3R with Right Feather £40 **DS3T** with Theatre £40



3 Aspect Distant £30 **DS4L** with Left Feather £40 **DS4R** with Right Feather £40 **DS4T** with Theatre £40



DS5 4 Aspect Outer Distant £32 DS5L with Left Feather £42 DS5R with Right Feather £42 **DS5T** with Theatre £42









Dual Head Home DS₆



Dual Head Distant DS7 £38

For Dual Head signals with Feather and Theatre options please contact us

Modern 3 & 4 colour Multi Aspect Signals

Modern railways have multi aspect signals where a single lens can display red. vellow 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.



DS9 Multi 3 Aspect Signal £40 DS9L with Left Feather £50 DS9R with Right Feather £50 **DS9T** with Theatre £50



DS10 Multi 4 Aspect Signal £42 DS10L with Left Feather £52 DS10R with Right Feather £52 **DS10T** 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 - mounting cap supplied. 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.

Head Size









00

00

www.train-tech.com | 01953 457800 Page 6

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.

- 00/H0 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
- Automate using SC100 (see page 11)

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.



SK1 Basic Kit only

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







£15 SK7

2 Aspect Dual Head Home Signal



SK9 3 or 4 Multi Aspect kit £20

£15

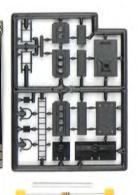


All LEDs fitted

and both head

3 or 4 Multi

00/H0





Signal kit with LED stick, post, details

SK2	2 Aspect Home	£10
SK2L	with Left Feather	£20
SK2R	with Right Feather	£20
SK2T	with Theatre	£20







Aspect signal kit SK9L with Left Feather £30 **SK9R** with Right Feather £30 **SK9T** with Theatre £30

Colour Light Signal Kits - for regular DC switching

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.



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).







TK1 £12 Theatre add-on Kit Includes Theatre LED panel, base plate, hood/ screen and a resistor.



Signal Heads kits are ideal for mounting onto signal gantries or your own signal posts. LEDs are prefitted on a compact board which fits in the head which you wire to a decoder, switch or automatic signal controller (see p11). A Feather or Theatre can also be fitted. Kit includes LED board, head casing, fine wire, resistors. Note fine soldering is required.





SH2 2 Aspect Home (R•G) 12 x 10 x 5 mm £12 £12 **SH3** 2 Aspect Distant (Y•G) 12 x 10 x 5 mm SH4 3 Aspect Home Distant (R•Y•G) 16 x 10 x 5 mm £13 **SH5** 3 Aspect Distant (Y•G•Y) 16 x 10 x 5 mm £13 4 Aspect Outer Distant (R•Y•G•Y) 20x10x5mm £14

£16

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 / GK2 Original & Modern Red Ground Signal kit

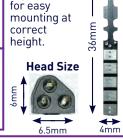




GK3 / GK4 Original & Modern Yellow Ground Signal kit £16



Includes a panel with vellow and white LEDs prefitted as shown, casing and resistor. It can be wired to show modern or original colours. Full wiring instructions included.



A mounting

cap is included

www.train-tech.com | 01953 457800













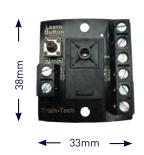
£30

Colour Light Signal Controllers

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

- Control colour light LED signals by DCC
- One Touch DCC™ button No programming!
- Screw terminals for wires no soldering
- Connect directly to the signal LEDs resistors are built in
- Simple 2 wire connection to track or controller output
- Can synchronise to other Signals & Points

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



SC1 Dual 2 aspect signal controller

Controls two x 2 aspect LED colour light signals from DCC. Resistors are built into the module so that the signal LEDs can be connected directly to the SC module.

Compatible with:

- Train-Tech SK2, SK3, SK7 and SK8 2 aspect signals
- Train-Tech SH2 and SH3 2 aspect signal head only

Also compatible with other makes of 2 aspect LED signals.



SC2 3 or 4 aspect or 2 aspect + route signal controller £17

Controls one 3 aspect signal, one 4 aspect signal, or one 2 aspect+route LED light signal.

Compatible with:

- Train-Tech SK4, SK5, SK6, SK9 multi aspect signals
- Train-Tech Signal head only SH4, SH5, SH6.
- Train-Tech 2 aspect signals with feathers and theatres: SK2R, SK2L, SK2T and SK3R, SK3L and SK3T SH2 or SH3 Signal head fitted with Feather or Theatre

Also compatible with other manufacturers LED route signals.



Signal with a feather connected to an SC2

Automatic Colour Light Signal Controller

SC100 Automatic Colour Light signal controller

The Automatic Colour Light Signal controller is based on our Sensor Signal technology and enables standard LED colour light signals to be wired and controlled automatically. It will operate 2, 3 or 4 aspect colour light signals and also includes an output to control a feather or theatre route indicator using a Mimic switch or DCC.

- Control standard LED colour light signals automatically
- 2, 3 and 4 aspect plus feather / theatre route output
- Link to other automatic signals for block working
- Manual override facility using Mimic Switch or DCC
- Slides directly into some 00 track when used on DCC
- Or remove tabs and wire to 12-16V smooth DC or DCC



The SC100 is ideal for converting existing LED colour signals to automatic operation, signal gantries (Signal Head only page 9), remotely located signals and controlling continental or other non Train-Tech designed signals. Like Sensor Signals, the Automatic Signal Controller can be used on its own or linked to other controllers or Sensor Signals using just one wire to enable fully automatic Block Signalling. The output connection terminals are designed for soldering to the signal wires.

N Gauge Although primarily designed for 00/H0 gauge, it can be located next to N gauge track and connect to N gauge signals - see lower pic page 13.



Gaugemaster N gauge signal GM270 controlled automatically by an SC100

N Gauge Signals

Although Train-Tech do not manufacture N gauge signals, we offer the Gaugemaster range.

They can be controlled from DCC by connecting them to the SC1 & SC2 DCC signal controllers (opposite). They can also be made fully automatic by using the SC100 block signal controller above.

These signals can also be used on regular 12v DC with switches and come with prefitted wires and a resistor.

GM270 2 Aspect N Gauge Signal GM275 3 Aspect N Gauge Signal

£20*

£19*

Gaugemaster N gauge signal GM275 controlled automatically by an SC100











Dapol Original Semaphore Signals - 00 & N

SC3 Dual Dapol Original Semaphore signal DCC controller £35

The SC3 is designed to specifically control and power one or two Dapol original N or OO gauge semaphore signals. It incorporates two DCC decoders so that each signal has its own DCC address. The SC3 also provides a stable regulated supply from the DCC bus and signals connect directly using existing yellow control and power wires with no modifications or extra power supply required.



£40

SC300 Dual Dapol Original signal control with Automation

Like the SC3, the SC300 provides stable power and DCC control of 2 Dapol semaphore signals directly from a DCC track or bus. Additionally the SC300 also has inputs for Track Sensors 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.



NEW Dapol Servo Semaphore Signals - 00 Bracket signals and 0 gauge

SC4 Dual Dapol Servo Semaphore signal DCC controller £40

The SC4 is specifically designed to power and control the new Dapol Servo controlled signals which have three wire inputs for each signal. An SC4 can control two servo signals or a twin head servo signal and each can be assigned a DCC accessory address and run independently or together in Home-Distant pairs. It also incorporates a regulated power supply to provide a stable safe voltage for the signals from the standard DCC track supply. Easy and guick to connect, use and setup using One-Touch DCC.



NEW!

NEW SC400 Dual Dapol Servo signal control plus Automation

The SC400 provides all of the regulated power supply and DCC control features of the SC4, plus two additional inputs for ST10 Track Sensors so that Dapol Servo Semaphore Signals can be controlled automatically by the passing of trains! Signals can also be controlled remotely using Mimic switches on a panel. Both Track Sensors and Mimic switches are linked to the SC400 using just a single wire with the Layout Link System, making wiring neat and simple. The SC400 with Track Sensor and Mimic Switches can be used on both DCC and DC layouts.

Track Sensor PLUS

The Track sensor incorporates an infrared sensor which detects a train passing over it and controls products in the Layout Link Family. It also has additional outputs for direct connection to LEDs & other non-Layout Link items.



Track Sensor PLUS

A Track sensor is located next to the track and features a built in infrared sensor which senses a train passing and easily links to and controls a range of Layout Link products using just a single wire which plugs in - no soldering required

Track Sensors can control:

- Trigger the LC10 Level Crossing lights and sounds when a Train approaches (page 25)
- Control Dapol Semaphore signals automatically using SC300/400 controllers (page 12)
- Control a Ground Position shunt signal to change as the train passes sensor (page 7)
- Link to Mimic Switch/Light to show trains passing, location (ideal for hidden tracks)
- Link to a Sensor Signal to change the following block section (like a dummy signal)
- Trigger sounds on the Sound Track (p26) or messages on the Smart Screen (p20)

Track Sensor + features:

The Track Sensor Plus features additional solder terminal outputs to link directly to devices such as LEDs, microcomputers (eg Raspberry Pi, Arduino) etc. Outputs can also be boosted to control motors, solenoids etc using a Relay Controller (see page 16). Note that Track Sensor can be powered from DCC or 12-16v smooth DC The 4 outputs function as follows:

- Output stays on as train passes over sensor Output pulses as train passes over
- Random flashes as train passes like sparking Turns on then off between alternate trains

Track Sensor+ complete with LED and instructions

£25

Note ST1 Track sensor has been superceded by ST10 which does all ST1 functions + more

To Power by DCC

Simply slide the Track Sensor into the power clip slots which are included in some types of 00 track.



To Power by DC or DCC

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



Using Track Sensors with N guage

Although Track Sensors are primarily designed for 00/H0 gauge track, they can also be located next to N track to operate accessories such as the LCN10 N gauge Level Crossing, Sound Track, Mimic panel etc.









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.

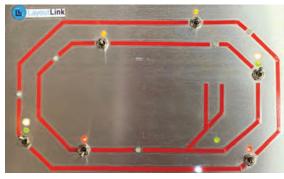
You can even see where trains are by linking to Sensor Signals or Track Sensors around your layout - just like the real thing!

Wiring is very easy thanks to Layout Link, so there is just a single wire going between a Mimic and a Sensor or accessory. 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.



MS1 Mimic with Toggle Switch



Example of a Mimic Panel using MS1 & ML1

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 SC300/400; 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	£15

MS2 Mimic with Push Button with 2 plug in LEDs and instructions £15

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 £14

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.





h 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!



PC2 Quad One-Touch DCC™ Point controller Controls 4 points



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

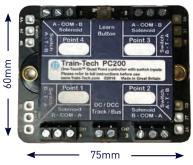
Like the PC2, this module includes a built-in CDU and controls 4 solenoid point motors by DCC, setting up instantly using One Touch DCC.

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 14.

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.



£45

Control and Automation

















Servo Controller

The Servo Controller connects directly to most low power analogue radio control type servos. Servos are versatile low cost control actuators which are ideal for animating layouts:

- Level crossing barriers or gates
- Slow point actuator
- Coal or grain tipper
- Semaphore signal actuator

SV1 makes it easy to control a servo in a number of different ways

• Train passing a Track Sensor moves the servo to defined positions

• Mimic Switch moves the servo to defined positions

• DCC Controller in loco mode - controls servo using the speed control

• DCC Controller in accessory mode - moves the servo to defined positions

The Servo Controller incorporates controller, decoder and power supply circuit and can be powered directly from 12-16V smooth DC or from the standard DCC track supply. The small SV1 has a 3 pin Servo connector to enable a standard servo to be plugged in, plus screw terminals to connect to DC or DCC power, Track Sensor and Mimic Switch.

NEW! SV1 NEW! SVP1

Servo Controller for DC or DCC systems with instruction booklet **Servo Starter Pack** with Servo controller and a basic 9g micro servo £30

— 50mm —→

LC10 crossina

liahts with SV1

and servo

£35

Relay Controller

This is a twin channel Relay controller which can switch high power loads using control signals from Track Sensors, Mimic Switches, Sensor Signals or DCC accessory commands. Example applications include:

- Start a coal loading conveyor when the train is in position
- Remote control of models from the DCC controller
- Activate a turntable when a train passes a Track Sensor
- Boost Track Sensor outputs to control motors, solenoids, lamps etc.
- Automatic Train Control see opposite page

The RL1 works on analogue or digital layouts and is powered directly by DCC or 12-16 Volts smooth DC. When on digital the relays can also be controlled by DCC accessory addresses which are easily set up using One-Touch DCC. Relays are a great way to switch on and off relatively high power devices such as motors and solenoids because they act like a switch contact and so are safely electrically isolated from other signals. The Relay Controller incorporates two separate relays, each with single pole changeover contacts which can switch up to 3 amps at 24 volts AC or DC, so can be used to control DC or AC models, including battery models, Faller kits, etc.



Twin Channel Relay Controller for DC or DCC with instruction booklet £40

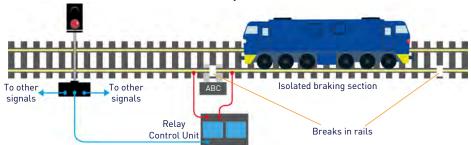
Track Sensor (see page 13 for full details)

£25

Automatic Train Control using the Relay Controller

Our Sensor Signal system provides completely automatic block signalling, but although the signal turns red to warn another train against entering the same block, until now there has been nothing to actually stop another train other than your careful driving.... But now you can link a Sensor Signal to the Relay Controller and this will stop a train entering a block if the the signal is red, and automatically start it again when the signal turns green or yellow! This means you can have two or more trains running around a layout (you controlling one if you wish) and they will just follow each other at safe distances obeying signals and never collide, all automatically!

The system will work with standard DC or DCC layouts, but you will need to make an isolated braking section so that the train can be controlled before the signal, with each side of the rail break connected to the Relay Controller with two wires:



As the picture shows, wiring is straightforward with just one wire linking the Sensor Signal to the RL1, and you can link lots of signals together using just one wire and make extra isolated braking sections to build multiple fully automated block sections.

About ABC braking...

DC trains and some DCC trains will just stop in the isolated section, but if you are DCC and your locos are 'chipped' with decoders which incorporates ABC or Assymetrical braking control (eg ESU, Zimo etc) you can fit an ABC diode module in the rail break, then these will slowly come to a halt and gradually speed up again once signal clears, complete with slow down brakes and speed up sounds if it is a sound fitted ABC loco! Please note that if the ABC Diode module is fitted, non-ABC fitted locos will not stop automatically in the isolated sections, just controlled from the DCC controller.

Automatic Train Control - what do you need

Each RL1 Relay controller has two relays, so can link to two Sensor Signals and control two isolated braking sections of track. You can also fit an ABC Diode module to each isolated braking section if running DCC trains which are fitted with ABC modules, see ABC braking section above. You will need to cut the rails to make isolated sections and may find insulated fishplates useful to keep the rails aligned. (eg Peco SL11)

NEW RL1 Twin Channel Relay controller for DC or DCC with instruction booklet £40 NEW] ABC1 Diode modules enable DCC ABC fitted trains to slow down/speed up: Pack of 2 £20 See the Train-Tech website and YouTube channel for more information

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 22mm x11mm



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/AL4 fits some N gauge using smaller BAT2 12mm battery & cutting the battery holder - smaller battery supplied on request & details documented in instructions.

See page 30 for spare batteries, extra LEDs and other accessories.

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







3 Fit roof - LED lights two small holes for LED plug in LED & battery when wagon moves!



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



Flashing Tail light Modern image - with 2 lantern shape LEDs



Flickering Tail / Fire Flame effect with both firebox & lantern LEDs



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



AL4 NEW! Modern Flashing Tail Authentic 'Dorman' type - 2 flashes per sec

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



AL21 Flashing + Constant Suits modern coaches with flashing tail light



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



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



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

Automatic Coach Lighting for coaches & multiple units







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 and may be cut down
- 00/H0 gauge is 220mm long, trimable to 75mm • N gauge is 100mm long, trimable down to 55mm





p 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 simulates traditional oil lamps or bulbs; Cool is like modern flourescent or LED

Lighting strip function	าร	Cool	White N	Warm 00	White 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	-	-	-
Faulty flickering tube	£25	CL31	-	CL32	-

BAT1 - Pack of 3 spare batteries for 00 / H0 Lights	£3
BAT2 - Pack of 3 spare batteries for N / 009 Lights	£4

00 Gauge: Cool White Packs CL100 - 2 x CL1. 1 x CL21 £58 **CL110** - 2 x CL23 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

Multipacks - Saves 10%!

N Gauge: Warm White Pack CN200 - 2 x CN2, 1 x CN22 £58

CL51* - London Transport Museum S Stock 1 Car lighting strip (for 00)	£20
CL150* - LTM S Stock 4 Car lighting set - including spark effect & door tones (for 00)	£89



Winner of Innovation of the Year!



Smart Screen is a real working animated screen in miniature which you can customise with your own messages to really bring your layout to life! The small display module has everything built inside so you only need to connect 2 wires to DC or DCC power to make it come alive. The Smart Screen can display multiple screens which can be triggered by a range of different inputs including switches, DCC commands and even Track Sensors which can be used to show a different screen as a train passes over it.... 'Platform 1: MyTown'......

Small and easy

Everything is contained in the Smart Screen so no complicated wiring or circuit boards - just connect 2 wires to a power source and go!



9.5mm – 31mm –

Bring your station Alive!

Mounting a Smart Screen on a platform or in a station can add a lot of realism. You can change the displays at the touch of a button, or if you fit one or two Track Sensors next to your tracks it can show appropriate messages for trains arriving or departing completely automatically! You can even display a real time clock on the screen if you wish! And if your layout is DCC you can automatically display different screens for the various routes your points are set to as trains leave the station...... the possibilities are almost endless!



Animated displays just like the real thing

Sometimes you may want to display several words or list the various stations your train is stopping at, but they wouldn't normally fit on the screen. However Smart Screen is able to display long messages by scrolling them along the screen automatically.... just like the real thing! The scrolling bottom line can have over 130 characters and you can store and display up to 10 different message screens!

All aboard!

As well as mounting your Smart Screen on the Station you can also fit it inside a train! You can just connect it to a regular DC power feed to light it up, or if you are running your locomotives on DCC the Smart Screen has a built-in digital decoder which can be set to monitor the train direction and display a different destinations or messages automatically depending on its direction of travel!





Setting up your own message screens

Smart Screens come preloaded with a demo display, but you can fully customise your own messages and screens. Although once set up the screen can be powered from DCC or DC, you need to use a DCC controller to set up your own screens and inputs. This is fully explained in the instructions, but if you do not have access to a DCC controller to set it up Train Tech or your dealer for details of their Smart Screen programming service.



Not just for trains....

Scan to Watch Video

Displays are now part of everyday life, so Smart Screens can be used on your layout in places other than trains and stations. They can help bring roads to life with changing screens and if you have a Faller Car system or similar you can automate the screens using magnetic reed switches under the road. You could also fit them in buses or bus stops, or use them in a Stadium to make vour dream team scores come true!



Controlling and powering your Smart Screen Smart Screens can either be powered directly from 8-16 volts smooth DC or from DCC. Different display screens can be set to be controlled by a number of different types of inputs or commands:

- 1 or 2 Track Sensors to show different screens
- 1 or 2 switches, eg button, reed switch
- DCC Accessory eg point or signal control
- DCC Loco by direction or Function buttons Check out the video online!

£90

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Smart Screen OLED display modules - power from DCC or 8-16V smooth DC or 9V battery

Smart Screen - Single pack including wire and instruction booklet SD1 £50

Smart Screen - Twin pack including wire and instruction booklet SD2

Smart Screen Starter Pack Control messages automatically from trains passing - save £15! Smart screen starter pack with Smart Screen, Track Sensor & SE2 Enclosure £70

NEW Smart Screen housings These are 3D high resolution printed in black, but may be repainted

SE1 Smart Screen enclosure - mount or hang screen in various locations - Pack of 2 **£10**

SE2 Smart Screen enclosure on square mounting post; Right hanging (see picture left) £10

SE3 Smart Screen enclosure on square mounting post; Left hanging for platforms etc £10

SE4 Smart Screen enclosure on round mounting post - Right hanging for platforms etc £10

NEW) SE5 Smart Screen enclosure on round mounting post - Left hanging for platforms etc £10

NEW) SE6 Double-sided enclosure on round mounting post - houses two Smart Screens back to back £10

www.train-tech.com | 01953 457800 www.train-tech.com | 01953 457800 Page 20

DCC GAUGE

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 smooth DC power pack or a 9 volt battery!

- 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
- Small 1 x 1 x 0.3cm fits in or under most models including N See the effects on www.youtube.com/traintech

How does it work?

Smart Lights incorporate a unique Train-Tech microchip to control a multicolour LED which can light up any colour or mixture of colours, rather like pixels in a modern TV. The chip contains special software to reproduce all kinds of effects!



Actual Size!

Idea... Fitting a SL30 Emergency Vehicle Smart Light into an Oxford Police Car



Disassemble the car and carefully drill a hole in the roof underneath the blue light bar.



If the car is metal, insulate interior with insulating tape to prevent short circuits.



Use Blutack to hold the Smart Light under light bar & to prevent light bleed.



Drill a small hole in the car base and feed the wires through before reassembling.

Tip...Use the self adhesive pad to easily fix the Smart Light into any building!

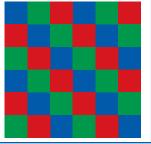


Page 22



Idea... Lets make a BBQ! Mount a Fire effect Smart Light under the top of a pencil rubber casing filled with some cotton wool

Tip... For SL10 disco. print some bold colours to make the floor look like its movina!



SL10 Party / Disco Lights

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

See flooring tip on opposite page.





SL20 £15 Random Lighting

This Smart Light randomly turns on and off simulating the lights in an office, house, station. outbuildings and streets etc. Adds life to a scene!





SL30 £15 **Emergency Vehicle**

Realistic multi flashing blue or blue and red light which can be fitted under the roof light of a model emergency vehicle. See car fitting guide on opposite page.





SL40 £15 Real Fire Effect

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

Adds life to a scene! See BBQ tip on opposite page.





SL50 £15 **Arc Welding Effect**

Bright white arc welding flashes followed by a slowly dimming red glow from the weld cooling down. Ideal to bring a shed or industrial scene to life!





SL60 £15 **Television Simulator**

Fits inside a model house or shop and lights just like a television with multiple colours and flickering. Add this Smart Light and some people to bring interiors to life!





Scan to Watch the Video

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

Watch

- Effect Choose from 8 different effects inc. constant, flash, flicker, fade.
- Brightness Choose from 9 different brightness levels from 10% to 100%





Scan to Watch the Video

www.train-tech.com | 01953 457800

DCC

GAUGE

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.

LFX4 BBQ, Log, or camp fires

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



LFX5 Welding Effects

Extra LED set **LED4 £6**

Realistic welding effect using ultrabright white and red LEDs which simulate arc welding and cooling. Includes 1 set of LEDs. Extra I FD set LED5 £6



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



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**



LFX3 Traffic Light controller

Automatic timed traffic lights - use two LFX3's on DCC to run an alternate junction. Extra LED set LED3 £6 TL1 - Traffic lights kit-



£15

LFX7 Flashing Effects

Simulates four flashing effects used on a layout; belisha beacons, emergency services, camera flashs, lightning, sparks, arcing. Extra LED set LED7 £6



See all the effects on the Train-Tech YouTube channel - www.Youtube.com/TrainTech

Level Crossing & Traffic Lights - ready assembed





Level Crossing lights & sounds with barriers and fence - N and 00/H0 models



These are N and 00 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:

- A switch connected between the power supply and the level crossing.
- Controlled completely automatically by a Track Sensor via Layout Link (page 13)
- Switched by a Mimic Switch connected via Layout Link (page 14)
- If layout is DCC via your controller which is easily set up using a DCC address
- Animate barriers using Servo Controller SV1 (page 16)

LC10 Level Crossing barrier set with lights and sound for 00/HO - Single LC10P Level Crossing barrier set with lights and sound for 00/HO - Pair LCN10 Level Crossing barrier set with lights and sound for N gauge - Single LCN10P Level Crossing barrier set with lights and sound for N gauge - Pair

£25

£45 £25 £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 guick and easy way to add extra interest and lights to your layout in seconds!

TL10 Traffic Light - 00/H0 - one single working + one non-lit dummy £25 TL10P Traffic Light - 00/HO - pack of 2 working traffic lights £45



Extra LED Packs for LFX & general use (each pack includes resistors for use on 12V)

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/orang	je) £6
LEDCLIP1 - Pack of 5 LED clips with wire - no soldering - LEDs just push in!	£8

For more LEDs and accessories see Page 30



Scan to Watch the Video

£69

Bring your own favourite real life sounds to your layout!

Sound Track is an easy to use portable sound recorder which enables you to record your own sounds, bring back and replay automatically on your layout!

It has 4 separate sound tracks, each of which can be replayed either by a controller command, touch of a button, or triggered by a Track Sensor when a Train reaches a particular place.

So now you can have your favourite locomotives whistle played at the Whistle sign, or your own station announcement played automatically when the train comes into the station!



Make the sounds your own

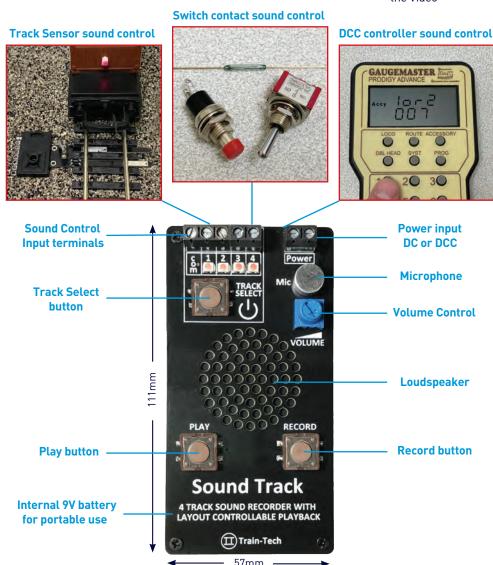
Most model sound systems can only playback preset sounds which someone else has recorded, the majority of which can only be controlled by DCC.

Sound Track enables you to record your own sounds and is really easy to use, with just three buttons to select the track, record and playback. It can be battery powered for recording and playing back sounds on location, then brought back to your layout, connected up and your sounds controlled either by switches, sensors or DCC commands. Sound Track can be used on battery, DC or DCC and stores your recordings indefinately until you decide to re-record. It can also play two tracks at once, so for example you could have the continuous background sound of a station, then a platform announcement coming over as your train comes into the station!



- Records sound tracks using the built-in microphone
- Replays sound tracks from the built in loudspeaker
- 4 sound track stores, each can be upto 35 seconds long
- Lock feature to protect valuable sound tracks
- Capable of playing up to two sounds at the same time
- One track can be continuous looped for background sounds
- 4 screw terminal for connecting switches or Track Sensors
- Powered by DCC, 9-16V smooth DC or internal 9 volt battery
- Portable size 11.1 x 5.7 x 3 cm

Easy to connect and operate....



SR1 Sound Track sound recorder and player, with instruction booklet

A regular 9 volt PP3 type alkaline battery is required for portable operation - not supplied

- 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
- Now 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

J. 7	an supplied min zation, souther take and mining gains	
SFX10+	Steam Express locomotive - incl chuffs, steam, fireman coaling, whistles	£45
SFX20+	Diesel locomotive - including tickover, turbo, air, horn etc with coasting	£45
The follo	wing SFX PLUS Sound capsules are future releases - check web for latest	
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 undates on the latest releases at www.train-tech.com.or	call

Scenic Sounds for any layout

GAUGEMAST





Scenic Sounds Modules bring life to any layout

Sound can really bring a layout to life and these new modules make it so easy; just connect two wires to the nearest power source, hide the module and turn on.

- Compact sound module with built in loudspeaker
- Real natural sounds specially recorded for these modules
- Easy connections just two screw terminals for power supply
- Power from 8-16 volts smooth DC for natural random sounds
- Or power from DCC for controlling sounds by DCC or random
- Fits inside a model or under the baseboard
- Built in adjustable volume control

GM780 Lineside

Sounds include

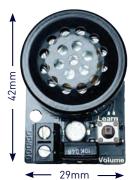
Point throws

Signal rodding

Semaphore clunks

Trackside sounds

• Joint British development between Gaugemaster and Train-Tech



GM782 Station - Modern

Sounds include Sounds

- Guards Whistle
- Slamming doors
- Steam loco pulling out

GM781 Station - Steam

Station Bell

Sounds include

- Door closing beeps
- Guards whistle
- Trains pulling out
- General station noise

GM783 Urban

Sounds include

- Roadworks
- Aeroplane flying over

GM784 Rural Scenic Sounds module

- Slow moving traffic
- General City noise

GM784 Rural

Sounds include

- Animal noises
- Church bell chimes
- Birdsong
- General country noise

When powered by DC: Modules play an

appropriate background sound with individual sounds played in randomly.

When powered by DCC:

Modules can play randomly as above, or individual sounds can be played on command by DCC; eg Point throw played as a point changes, signal rodding etc

Scenic Sounds modules - power directly from DCC or 8-16V smooth DC

GM780	Lineside Scenic Sounds module	£30*
GM781	Station (Steam) Scenic Sounds module	£30*
GM782	Station (Modern) Scenic Sounds module	£30*
GM783	Urban Scenic Sounds module	£30*



Scan to hear Sound Samples

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 - 1K 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 8 ohm speaker for SFX in larger gauges	£3*	
9	CON10 -CR2032 battery holders as used on Coach Lights x 3	£3*	
	LEDClip1 - 5 Wired LED clips, no soldering, just push in!	£8	_



CON7





SM1 - Converts 8-12V rough DC or AC to smooth DC £6* TS1 - Double pole 2 position toggle switches pk of 2 £4 TS2 - Double pole 3 position centre off toggle switches x2 £5 WP1 - Fine wire 3x 2m single strand, 2m 24swg tinned wire £7

WP2 - 5 x 5m 1/0.6mm assorted colours solid core wire £6* WP3 -100m reel 1/0.6mm grey solid wire for signals etc £12*

Tools and Accessories

CUT1 - Precision cutters for model making and fine wires	£6*
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	£12*



LED Packs

NEW!

LEDT - Level Crossing subminiature LEDS - 3 extra sets (3 x amber 6 x red)	Ł6
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 - Pack of 10 Subminiature LEDS (4 x red, 2 x yellow/green/orange)	£6
LED11 - Pack of 6 Warm white LEDs, resistors & 60cm 24swg tinned wire	£6
LED12 - Pack of 6 Cool white LEDs, resistors & 60cm 24swg tinned wire	£6
LED13 - Pack of 6 Mixed Headlight, Firebox, Lantern & coach LEDs	£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
LED20 - Pack of 10 x 3mm warm white 12v LEDs-prefitted with resistor & 20cm wires	£6
LED21 - Pack of 10 x 3mm cool white 12v LEDs-prefitted with resistor & 20cm wires	£6

Track Testers

- Testers for N to G gauge
- Quickly check for faults
- For DC and DCC
- Easy to use
- Low cost
- Checks point frogs
- Improved design



TT1+ on 00 track

- Very easy to use just place tester on track and watch the LED:
- Multicolour LED shows DCC (orange), DC polarity (red or green), or power faults
- Improved Plus design now features tough resin sealed circuitry for extended life
- Two Sizes: Classic Track Tester for N to 00 and intervening gauges
 Large Multi-Gauge for 00 to G and intervening gauges

NEW! TT1+ Track Tester Plus for N / 009 / TT/ H0 /00 and intervening gauges
NEW! TT10+ Multi-Gauge Track Tester for 00 / 0 / G and intervening gauges

£6 £10

Buffer Lights

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

- Adds realistic stop light to any siding
- Low cost and easy to fit in seconds
- Simply clip into the track No wires!
- Fits in front or behind most buffer stops
- Or use free standing at platform end etc
- On DCC both LEDs light constantly
- On DC one LED lights when track is powered

BL1 00/H0 gauge Buffer Light

BL1 Single 00/H0 gauge buffer light £6
BL1x10 10 Pack 00/H0 buffer lights (1 free) £54

BL2 N/009 gauge Buffer Light

BL2 Single N/009 gauge buffer light £6 **BL2x10** 10 Pack N/009 buffer lights (1 free) £54

NEW! BL3 O gauge Buffer Light

BL3 Single O gauge buffer light £10
BL3x10 10 Pack O buffer lights (1 free) £90









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- Buy direct from us online at www.dcpexpress.com
- Our Sales and Support phone line is open 1pm to 4pm every weekday
- Call 01953 457800, order by post, or come to see us
- Model shops throughout the UK and worldwide
- Items marked * are not available to the trade
- UK trade dealer enquiries to Gaugemaster
- International, OEM or design enquiries to DCP
- £4 UK First Class Post per order overseas postage on dcpexpress.com
- Cheques payable to DCP Microdevelopments minimum £25 cheque value
- We regret we are not permitted to ship any batteries outside of the UK
- See video's of many of our products at www.Youtube.com/TrainTech

T: **01953 457800** E: sales@dcpmicro.com W: www.dcpexpress.com
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