Track Tester

DC & DCC | O & G Gauge | 00 HO | N Gauge

- Quickly checks track for power faults
- Small & Larger Versions - for N gauge to G gauge!
- Multicolour LED Indicates the DC polarity, or DCC, or a fault

Buffer Lights

WIRE FREE | DC & DCC | O Gauge | 00 HO | N Gauge

- Realistic stop light for any siding - fits most buffer stops
- Simply clips onto track – No wires!
- On DCC both lights are on constantly
- On DC one light is on & varies with speed

DCC Fitted Digital Signals

DCC | WIRE FREE | 00 HO

- Signal with DCC decoder built in - No CV programming
- Easy to fit and use - can just plug direct into track – no wires!
- Wide range available - also available with Feathers and Theatres

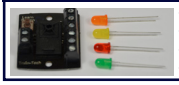
One-Touch DCC™ Point Controllers

DCC | ANY GAUGE

- Control points and uncouplers using DCC
- Work with most solenoid point motors - Built in CDU
- Just connect 2 wires to DCC rails - No CV Programming!
- Easy screw terminals – no soldering

LFX Lighting Effect Controllers

DC & DCC | ANY GAUGE



- Easy way to add lighting effects to your layout
- Wires screw in – no resistors or soldering - LEDs included
- Powered by 9v battery, 8-16V DC or DCC
- On DC the effect is on when powered - On DCC it can be controlled

Level Crossing - Ready Assembled

DC & DCC | 00 HO | N Gauge

- Power from 9-16v DC, DCC or a 9v battery - available in single & pairs
- Light and sound - all connections easy push fit
- Includes 2 x Peco static level crossing barriers
- Can be turned on automatically using a Track Sensor

Traffic Lights - Ready Assembled

DC & DCC | 00 HO

- Power from 9-16v DC, DCC or 9v battery - 2 Wire connection
- Realistic standard UK sequence and timing varies randomly
- Fully assembled - drill hole in baseboard & connect to power

Track Sensor

DC & DCC | 00 HO | N Gauge

- Trigger level crossings and change semaphore signals
- Power from 12-16v smooth DC or DCC
- Can be used to trigger Sound Track, Smart Screen, Relays
- Four outputs for direct connection to LEDs for occupancy, FX

Mimic Switches & Lights

DC & DCC | ANY GAUGE

- Make a mimic panel to control Layout Link items - Single wire to control
- Link to Track Sensors or Sensor Signals and LEDs show occupancy & signal status
- Link to Sensor Signals to manually override and switch route indicators on/off

Smart Lights - Easy to fit Lighting Effects

DC & DCC | ANY GAUGE

- Small - Just 1cm x 1cm x 0.3cm with 2 wires
- Power by 9-16v DC, 9v battery, or direct to DCC which can control some effects
- Just connect and go - no setting up required
- Disco / Emergency / Real Fire / TV / Welding / Random / Programmable

Automatic Tail, Firebox & Loco Lights

DC & DCC | AUTO | WIRE FREE | ANY GAUGE

- No switch - senses motion & turns on!
- Turns off automatically 4 minutes after stopping
- No pickups, wires or soldering - LED just plugs in
- Fit in brake vans, coaches, loco, wagons etc
- Runs for ages on 2032 button battery - LEDs & battery included

Sound for your layout

DC & DCC | AUTO | WIRE FREE | ANY GAUGE

SFX Sound
- Sound capsule with no wires - runs from a battery - built in speaker
- No connections to track so work with both DC & DCC
- Motion activated - switches on when train moves! Real Sounds!
- Tiny - 25mm x 20mm x 12mm - N gauge fitting guide available

Sound Track
- Record your own sounds and play them back on your layout!
- Record 4 tracks upto 35 seconds each - Lock to protect favoutires
- Portable - use with 9v battery to take out & record sounds
- Power from DC or DCC - Use Track Sensors or DCC to trigger sounds

Scenic Sounds
- Background sounds for your layout - built in speaker & volume
- Power from DC or DCC - on DCC sounds can be triggered
- Lineside • Station Steam • Station Modern • Urban • Rural

Signal Kits

DC & DCC | 00 HO

Every kit includes the signal head, aluminium post & base plus detailing kit

- Low cost – adapt to your own design
- Control by switches or signal controller
- LEDs are prefitted to a narrow PCB
- Ground signals - modern & original
- Feather & Theatre kits available
- Signal Head only for gantries etc

SC4 - Signal Controller

5 060325 133345

Signal Controllers

DC & DCC | AUTO | ANY GAUGE

- **DCC Signal Controllers** - Wire in any LED signals to control from DCC accessory address
- **Automatic Signal Controllers** - Make any LED signal kit into an Automatic Signal!
- **Dapol Semaphore Controllers** - Control Dapol Semaphores by DCC or automatically

1119

Automatic Sensor Signals

WIRE FREE | DC & DCC | 00 HO

- Detects train and changes signal automatically to red
- Used own & signal changes back to green after train short time
- Or link to other Sensor Signals for fully automatic block signalling
- Can be used on both DC & DCC - Feather & Theatre versions

Automatic Coach Lighting

DC & DCC | AUTO | WIRE FREE | 00 HO | N Gauge

- Easy to fit - no wiring or switch - senses motion & turns on!
- Turns off automatically - fits most coaches - may be cut down
- No pickups or wires so works on regular DC & DCC
- Traditional warm white or modern cool white
- Also with tail light, sparking, door beeps and door light effects

Servo Controller

DC & DCC | ANY GAUGE

- Controls standard radio control servo from DCC, Track Sensor or Mimic switch
- Ideal for animating Level Crossing barriers / gates, Slow points or signals, Coal hopper
- Easy to wire and set up - connects directly to DCC or 8-16 volts smooth DC supply

Relay Controller

DC & DCC | ANY GAUGE

- Two channel Relay unit which can be controlled by Track Sensor, Sensor Signal or DCC
- Enables remote control of motors, solenoids, lamps etc
- Incorporates two heavy duty relays with changeover contacts rated at 8-24 volts at 3 A

Automatic Train Control

DC & DCC | ANY GAUGE

- Link Sensor Signals to Relay Controller for automatic trains which stop at red lights!
- Can be used on DC or DCC Layouts
- Easy wiring: Sensor Signal link with one wire and Isolated braking section two wires.
- Also supports ABC fitted DCC Loco's for gradual slow down and speed up with sound

Tools, LEDs & Accessories

ANY GAUGE

- We offer a range of LED packs, battery holders, wire, switches & terminals
- Also handy modelling tools including precision cutters, drill bits & spare batteries

Smart Screen

DC & DCC | 00 HO

- Real working animated screen - customise with your messages
- Use DCC to program - then can be run on DC or DCC
- Trigger messages with DCC, swtiches, track sensors or just cycle
- Message can change with direction of train on both DC & DCC
- Display upto 10 different messages - can also show real time clock
- Range of enclosure available - Programming service available
- Small - w 31mm x h 9.5mm x d 4.5mm
- Stationary top line - bottom line automatically scrolls

SEE WWW.TRAIN-TECH.COM OR ASK FOR FREE COLOUR BROCHURE

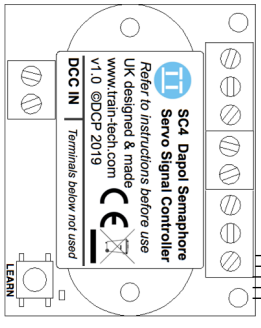
+

Train-Tech

Model Technology Made Easy

SC4 DCC Signal Controller for two Dapol Servo Semaphores (00 or 0)

- Control Dapol Servo type Semaphores by DCC!
- Use standard Dapol signals no modification
- Just 2 wires to nearest DCC track - little wiring
- Easy One-Touch DCC™ - no CV programming!
- No extra power required - regulator built-in



One, two or Twin head Dapol Servo type signals connect directly to this module which safely powers and controls them from DCC

www.Train-Tech.com

See our website, your local model shop or contact us for a free colour brochure
Train-Tech, Gaugemaster House, Gaugemaster Way, Ford Road, Arundel, BN18 0BN
Telephone 01903 884321 • email train-tech@gaugemaster.co.uk

SC4 - Signal Controller for one, two or twin head Dapol Servo type Semaphore Signals in 00 or 0

CAUTION - ALWAYS SWITCH OFF POWER TO YOUR LAYOUT BEFORE CONNECTING THIS CONTROLLER

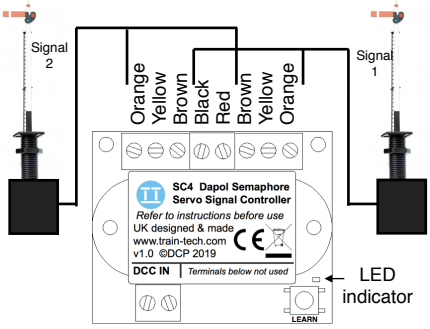
This Signal Controller incorporates a DCC decoder to enable it to be wired directly to the track and be operated by any controller or computer DCC system which is able to control DCC accessories. Please read these instructions before connecting or fitting your controller.

1 CONNECTIONS

The SC4 Signal Controller is designed specifically to power & control one or two or twin head Dapol **Servo** type Semaphore signals.
Switch off ALL power before connecting up!

Connecting your signal to the SC4

Each Dapol Servo Semaphore signal comes with red & black wires for power and a 3 wire plug-in wired toggle switch for control. To be able to connect to the SC4 you either need to disconnect the switches and use those wires to connect (extending the wires if necessary), or use Dapol extension cables to make the connections. The wires are colour coded orange, yellow, brown and shown on the label and below. If using 2 signals on one controller, fit pairs of red and black power wires into the terminals.
Warning Please note it i*s extremely important* to only connect the signal switch inputs to the specific signal terminals of the SC4 which has been specially designed to control these signals: you may damage the signal and invalidate the warranty if you connect them incorrectly.



DCC terminals

Connect the 2 terminals marked DCC IN to nearby rails or the DCC controller output - any polarity.

2 SETTING SIGNAL ADDRESSES

The SC4 can control 1 or 2 signals and you need to assign a DCC accessory address for each one. In our example we will use address 60 for signal 1 and address 65 for signal 2.

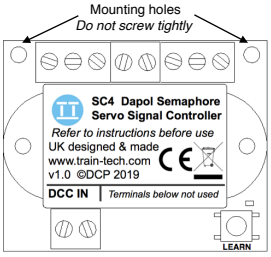
• Switch DCC power on - the SC4 LED will light

• Set up your controller to control DCC *accessories* (refer to controllers instructions), then set your controller to the DCC accessory address you choose for Signal 1 (eg 60).

• To set up Signal 1, press the 'Learn button' *once* - the SC4 LED will start single flashing. Press either a ◀ or ▶ 'direction' command from your controller (or 1 or 2) to set the address. The LED will stop flashing and Signal 1 is now set to the address you chose and will change using the direction control. If signal is in the opposite position than you want just repeat.

To setup Signal 2, set your controller to the address you want to give signal 2 (eg 65), press the Learn button *twice* and the SC4 LED will start double flashing. Then repeat as above, pressing your controllers direction control to set that address into the SC4 for Signal 2. If it is in opposite position than you want then repeat.

CAUTION
Do not mount SC4 on a metal surface or allow any contacts on the back to touch any other connections or metal or permanent damage to SC4 and/ or signals may result.



Learn Button

3 CONTROLLING THE SIGNALS

Control the signals by setting your controller to the DCC *accessory* address of the signal and sending a ◀ or ▶ 'direction' command from your controller to change the signal position (actual commands vary between controllers and manufacturers so refer to its instructions)

In our example
Address (60) ◀ or ▶ = Signal 1 Up or Down
Address (65) ◀ or ▶ = Signal 2 Up or Down
The SC4 LED flickers once or twice as you send a command to show which signal changes

Each signal can be controlled independently with its own unique address or can be easily synchronised to other DCC signals or points etc by giving them the same address as each other.

For example you could program a Distant Signal with the same address as a Home signal, then the Distant will automatically follow the same position of the following Home signal.
Or you could set a signal to automatically show Stop when a point is set against a train going towards it! Again all that you need to do is set the Signal to the same DCC accessory address as the point controller address.
Synchronising addresses is especially easy to do with Train-Tech One Touch DCC™ Point and Signal controllers because all you need to do is press the Learn buttons of all of the Signal and Point Controllers you want to sync and then send the address command - all will then be linked and respond together on that address.

Tip
Remember that whichever ◀ or ▶ command you use when you set the signal address dictates the command which will set the signal to that position and the SC4 will remember it. If you want to change it just repeat the process in step (2).

Troubleshooting

• Step 2 above is the 'One Touch' DCC stage which programs your chosen signal address into the controller, so if things are not working as they should check the following:

• Check that the SC4 Indicator LED is lit - if not and DCC locos etc run correctly check all the connections between your DCC Controller and the SC4. Note that the SC4 should be connected to the standard DCC track output (not a programming track output).

• If the SC4 LED is lit but does not flicker when you send a command, check that your DCC controller is in *Accessory* addressing mode - note that these are completely different to Locomotive addresses and should be explained in your controller instructions. If not check that your controller will control DCC accessories - most do but some of the low cost starter controllers such as the Bachmann E-Z command and Prodigy Express models will not.

• Do not connect anything to the 4 PCB silver pads next to the DCC input terminals - they are not used on this model (they are used on the SC400 which has extra inputs for track sensors and mimic switches).

• If the signal does not operate and the lights behind the semaphore are not lit, check that you have connected the black and red wires into the terminal blocks correctly - they are quite fine wires.

• Wires can be extended and joined if necessary, but we recommend a maximum length of 4 metres between the signal and the SC4 controller.

• Note that the SC4 allows sufficient time for the semaphore signal to move through its full distance before allowing it to change again, so if you notice a delay between rapid signal changes this is intentional to ensure reliability and is quite normal.

• When Dapol Servo Semaphore signals are first powered up they reset their arms to Stop, but the after a couple of seconds the SC4 will automatically return them to the position they were in before they were switched off.

Location board labels

You can give your signal a location number which is the same as the DCC address you have programmed into your signal controller and which will make the signal much easier to identify and operate.

The legends printed below can be cut out and fitted to your signal.

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100
AD CA DA ES EN GE GY MY PN NW
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100
AD CA DA ES EN GE GY MY PN NW
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ

DCC control

DCC is a system which transmits both power and digital commands down 2 wires or rails to control and power locomotives and accessories.
At Train-Tech we believe that DCC technology should make life easier to build, program and use model railways, so we have designed a range of DCC Signals, Controllers and accessories which all connect using 2 wires and are all programmed using just one touch.
The SC4 can connect directly to the nearest DCC track to minimise wires - it takes both its commands and power from the rails.

Other useful tips and information

If you intend to fit lots of different DCC accessories and lights etc around your layout you may find it is better to install a 'bus-bar' system instead of using the track to carry the load for everything.

A bus-bar can made simply of 2 thick wires which you distribute around the underside of your baseboard - thick solid copper wires stripped from some surplus heavy mains cable can be ideal.

Further information

Train-Tech publish a comprehensive catalogue which is free on request.

www.train-tech.com

train-tech@gaugemaster.co.uk

 Document Ref D779760/2G