OPERATING INSTRUCTIONS FOR RADIOLIGHT / RADIOLIGHT MULTIPHASE TRAFFIC SIGNALS

SET UP AND PREPARATION

Insert all the signal head poles into the sleeve on the battery box - So that it faces away from the box (if necessary)

Connect all the batteries using the **grey** Anderson connectors

Ensure that you connect each battery lead connector to a controller power lead connector

If the "battery conflict" **RED LED** illuminates, the **grey** clamps must be disconnected from the batteries **IMMEDIATELY**.

When the batteries are all correctly connected, the "battery" **GREEN LED** will illuminate on the controller. Connect the **Harting lead** from the signal head into the controller.

Set the signals out at the required positions on the site or road

Choose a level, even and firm surface

SET THE SIGNAL CONTROLLER

All SRL controllers act as MASTERS or SIGNALS, you need to set up all the SIGNALS first. To do this you need to set the signal to Signal No. 2

GO TO CONTROLLER:

Using the On/Off button switch one of the signals on and using the **Signal No./Layout** button set the Signal No. 2 using + & - buttons and so on. Press the yellow ENTER button.

You have now set your signals to SIGNALS

CHOOSE A RADIO CHANNEL

Select a channel for the lights to communicate on using the channel up/channel down buttons

If the indicator light is flashing it means that channel is already busy so select another channel

When the indicator light is **consistently off y**ou can be sure that channel is clear to use

YOU CANNOT PROCEED UNTIL YOU ARE CONFIDENT OF A CLEAR CHANNEL

Make a note of the channel number you have selected. Repeat this process for setting Signal No. 3 and Signal No. 4 (or more - up to 20) if required

SET THE MASTER CONTROLLER

Now go to another signal and using the **On/Off button**, switch it on. and using the **Signal No./Layout button s**et the signal number to **Signal No.1**

Press the yellow ENTER button.

You have now set this signal to a **MASTER**.

Set the channel to communicate on all signals using **channel up/channel down buttons** to the same channel number as the **SIGNALS** (**signal nos 2 to 8**). **ANY FURTHER PROGRAMMING IS DONE AT THE MASTER.**

LAYOUT

Look at TYPE OF LAYOUT opposite.

Decide which layout you require.

Using the **Signal No./Layout** button, press it twice to **set the system layout**. Using **+ & - buttons** select the layout you require

Press the yellow ENTER button

The system will now work automatically.

VEHICLE ACTUATION OR FIXED TIME OPERATION

Press Times/VA button twice,
Select YES using + & - buttons Press the yellow ENTER button

If **VA YES** is displayed, the signals are operating with the help of the detector, in **VEHICLE ACTUATION MODE**

If **VA NO** is displayed, the signals are operating without the help of the detector, in **FIXED TIME MODE**

SETTING RED AND GREEN TIMES

REMEMBER THAT PHASE NUMBER IS NOT THE SAME AS SIGNAL NUMBER

EACH **PHASE** CAN HAVE MORE THAN ONE **SIGNAL**SEE **TYPE OF LAYOUT** DIAGRAM FOR GUIDANCE

Read the **RED** duration times from **Table 1**:

LENGTH (METRES)

uphill approach

ALL PROGRAMMING IS DONE AT THE MASTER CONTROLLER i.e. Signal No. 1.

SETTING RED TIMES

ALL RED TIME (SECS) | S | 10 | 15 | 20 | 25 | 30 |

On steep gradients, the **RED** duration times may need to be increased for the

Measure the length of the road works between the **WAIT HERE** signs:

At the MASTER (Signal No. 1), press Times/VA button ONCE
Set the GREEN and RED times as per the layout you have chosen
Adjust the duration times by pressing the + and - buttons as follows:

SETTING GREEN TIMES

Read the **GREEN** duration times from

Table 2:

LENGTH (METRES) 0 30 75 (35 (95 300 GREEN TIME (SECS) 35 (40 (45 (50)

On steep gradients, the **RED** duration times may need to be increased for the **uphill approach**

Once you are satisfied with the **RED** and **GREEN** timings for each phase; **Press the yellow ENTER button.**

0 50 100 150 200 250 300

It is important to watch the traffic to ensure your settings are appropriate for the site/road and adjust as necessary.

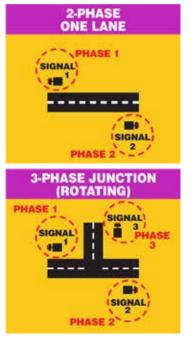
When you are **confident** that the signals are **cycling correctly**, you should **press the ALL RED button**

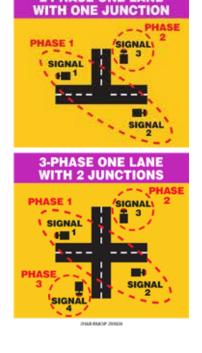
Hold signals on **ALL RED** whilst you turn each signal facing the traffic.

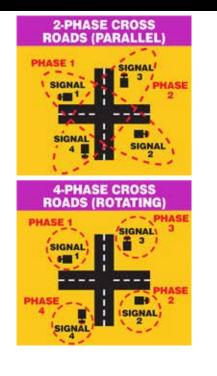
On completion of this, press the **ALL RED** button again. The small LED light will go out and the lights will cycle automatically.

TYPES OF LAYOUT

2-PHASE ONE LANE







TO OPERATE IN MANUAL/ALL RED MODE

ALL PROGRAMMING IS DONE AT THE MASTER CONTROLLER

i.e. Signal No. 1

Press "MANUAL" button

The green LED will illuminate on the "MANUAL" button

The signals will now operate in MANUAL mode and the display will show the current state:

Table 3

SIG	T.	2		MRN	
025	REI	RED	GR1	RED	GR2

Or:

Table 4

SIG	- 1	5	3	4	GR3	MRN	GRY
025	RE)	GRN	RED	RED	GRI	RED	GR2

Press PH1 button for all GREEN signal(s) on phase 1

Press PH2 button for **all GREEN** signal(s) on phase 2

Press PH3 button for **all GREEN** signal(s) on phase 3 (if appropriate)

Press PH4 button for **all GREEN** signal(s) on phase 4 (if appropriate)

This will be up to 8 phases including peds

Press **All RED button** for **All RED** condition at all phases

To resume **AUTOMATIC** mode of operation, press the **MANUAL** pad

The green LED on the MANUAL pad will now go off

The signals will operate in **AUTOMATIC** mode

CHECKING THE SYSTEM IS WORKING CORRECTLY

If you press the display button again it will show the voltage of the batteries.

Once the system is set up you can test the **VA** is working by waving your hand towards the front of the detector motioning straight forward at it.

Check the screen on **Signal No. 1 (MASTER)** and you should see on the display a little star (*) next to the signal you are testing, the first star means a demand is getting put in and the second star means it is waiting for its turn and has had a demand

If you have any warning lights or a failure connection displayed on **Signal No. 1** once it is all set up, double check again, all of the above, making sure it is correct.

If you are still unable to get the system up and working and clear the faults, contact us for **24/7 support** from one of our nationwide depots.

Find out your nearest depot by visiting our website:

www.srl.co.uk

