



#### SET UP

- 1. Drop Slave unit at location and wind down the stabiliser legs and secure, ensure the unit is level, then uncouple from Master unit. Wind up the mast and turn the unit on by pressing the on/off button inside the box marked 'S'.
- 2. Drop Master unit at location and wind down the stabiliser legs, secure and ensure the unit is level. Set the key switch to the appropriate mode, plug in hand-controller and turn on using the POWER button on hand-controller.
- 3. Determine the mode required. Manual, Vehicle Trigger or Timer, then set the red, amber and green times.



#### **OPERATIONAL MODES**

MAN Manual. Traffic is controlled by pressing red and green buttons on the hand-controller or radio remote controller as desired.

VT Vehicle Trigger. Traffic is controlled by the radar sensors on the lights. Minimum times are displayed on the hand-controller.

**TIMER** Timed Control. Traffic is controlled automatically by a programmed length of time for red, amber and green lights.

## **HOW TO SET TIMES**

- 1. Times should be set up whilst unit is in Flash Yellow mode. Units will be in Flash Yellow mode upon starting or by pressing the "FLASH YELLOW" button. (Times can be changed while running by pressing the enter key then the required time)
- 2. Once in Flash Yellow, press the "CLEAR" button, followed by the desired red time required (up to 100 seconds) then press the "RED TIME" button.
- 3. Then enter the required Master green time required, followed by the "MASTER GREEN" button.
- 4. Then enter the required Slave green time required, followed by the "SLAVE GREEN" button.
- 5. Amber time is either 4 seconds for <80klm per hour or 5 seconds for >80klm per hour. Depending on the speed zone, set the amber time required by entering the seconds and pressing the "YELLOW TIME" button.

## MANUAL TRAFFIC CONTROL

- 1. Always preset minimum times before activating this mode using the "How to Set Times" method.
- 2. After entering the mode, the lights will all go to red (initially). To allow traffic to flow from the Master to the Slave, press the "MASTER GREEN" button. Once the minimum red time has elapsed, the Master unit will turn green.
- 3. To stop traffic, press the "RED TIME" button, and the lights will turn red. You will always need to turn both units red, before allowing the other unit to turn green.
- 4. To allow traffic to flow from the Slave unit, press the "SLAVE GREEN" button.

### HOW TO USE THE RADIO REMOTE

- 1. To turn on a radio remote, press any button briefly. The radio remote will automatically turn off after 30 seconds of inactivity.
- 2. When on, the traffic lights depicted on the radio remote will reflect what is on the actual traffic light units.
- 3. The numeral shown on the display when any button is pushed, is the battery level of the radio remote. 9=full battery/1=flat battery
- 4. To ensure the channel frequency is correct, press and hold the Master green and the Slave green buttons simultaneously for 6 seconds. The current channel will be flashing. To change the channel, up is the Slave green button, down is the Master green button. To select a channel, press the "ALL RED" button.
- 5. If the radio remote cannot communicate with the PTL units, the 3 request lights (above the buttons) will be all lit. Firstly check the antennas are intact on the radio remote and the PTL units, ensure the batteries are charged and the channel is selected correctly.
- 6. Ensure the Master unit hand-controller and key-selection are correct for Manual operation, and follow the Manual Traffic Control instructions as above.



QUICK REFERENCE GUIDE

# **ON-SITE TROUBLESHOOTING**

#### **BATTERIES**

If there have been a few overcast days in succession or if the PTL units have been parked in a shaded area continuously (under trees or buildings) or if the solar panels are dirty, you can expect a low battery warning, **this is normal**. At the first low battery warning, it is recommended to recharge or swap the batteries over. From the first low battery warning, there is approximately 6 hours (up to 24 hours) before a critical warning will be issued. NB. It is similar to a mobile phone, if you only recharge the batteries a little, they won't continue to work for long and eventually the batteries won't recharge to full capacity. If you suffer continued battery shortage, it is recommended to have a second set of batteries to swap over completely to allow a full recharge. Ensure the solar panels are cleaned often.

ERR→SBATLOW	= Slave Battery Low	Lights will continue to work normally
ERR→MBATLOW	<ul> <li>Master Battery Low</li> </ul>	Lights will continue to work normally
ERR→SBATCRIT	= Slave Battery Critical	Lights will enter Flash Yellow mode
ERR→MBATCRIT	<ul> <li>Master Battery Critical</li> </ul>	Lights will enter Flash Yellow mode
ERR→SBATFLAT	<ul> <li>Slave Battery Flat</li> </ul>	Lights will shut down
ERR→MBATFLAT	<ul> <li>Master Battery Flat</li> </ul>	Lights will shut down

### **LAMPS**

When there is a lamp error, the units will enter into Flash Yellow mode.

LAMPERR→SGRN = Slave Green Lamp Error LAMPERR→SYEL = Slave Yellow Lamp Error LAMPERR→SRED = Slave Red Lamp Error

LAMPERR→SAUX = Slave Auxiliary Lamp Error (at the rear of the traffic light head)

LAMPERR→MGRN = Master Green Lamp Error LAMPERR→MYEL = Master Yellow Lamp Error LAMPERR→MRED = Master Red Lamp Error

LAMPERR→MAUX = Master Auxiliary Lamp Error (at the rear of the traffic light head)

Please contact your PTL unit provider for assistance.

## COMMUNICATION

ERR→COMSLAVE

= Communication between the Master and Slave units has been broken for more than 5 seconds continuously and they are now in Flash Yellow.

The lights will try to re-establish communication for 5 minutes once a COMSLAVE error has occurred. If successful, the lights will resume normal operation. The error code will remain on the screen until the clear button is pressed, even when back to normal operation. If the lights remain in Flash Yellow mode, this means the communication between the Master and Slave units has malfunctioned. In this situation:

- a) Check the Master and Slave units are turned ON
- b) Check the Antennas are intact
- c) Ensure the Master and Slave units are on the same frequency channel
- d) Ensure that the units are within 1 kilometre of each other and near line-of-sight
- e) Are there other PTL units in the vicinity that could be using the same frequency channel?

If these components have been checked and you cannot get the units to communicate with each other, please contact your PTL unit provider for assistance.

FOR GENERAL USE & PROGRAMMING HELP CONTACT YOUR PTL UNIT PROVIDER

EMERGENCY FAULT ASSISTANCE CONTACT GIGA SERVICE ON 0438 193 294