



BTLC-100 User Manual

Version 3.0



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BARTCO Traffic Equipment Pty. Ltd.

 7 Westside Ave, Port Melbourne, VIC 3207, Australia.

 1300 306 106  service@bartco.com.au  bartco.com.au

Version	Summary	Date	Approved By
2.6	Explained all the features, changed images	05/02/2020	
2.7	Re-formatted as per TSI-SP-062	05/11/2021	Ray Read
2.8	Warranty Terms updated (Rev.3.0)	15/09/2022	Ray Read
2.9	Technical Specifications amended	18/10/2024	Ray Read
3.0	Pedestrian + Document refresh.	9/05/2026	David C

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WARNING: Traffic Light Trailers contain electromechanical actuators to raise and lower the mast. When lowering the mast, a crush hazard exists. Operators should take care to ensure they and other persons are clear of the hazard zones while operating the mast.



WARNING: When raising the mast, a hazard exists with respect to overhead power lines. Operators should assess and mitigate this risk prior to raising the mask.

NOTE: The Traffic Light Mast assemblies are manufactured to be a Serviceable item. BARTCO recommends that they be visually inspected regularly and non-destructive tested at scheduled intervals as necessary to ensure that structural integrity is maintained.

1. Introduction

Thank you for purchasing Bartco portable traffic lights.

This manual covers the operation of the Bartco BTLC100 traffic light controller, BTLR100 radio remote, and pedestrian crossing systems.

Supplemental appendices A through C relate to the physical trailers, deployment, inspection and maintenance.

The BTLC100 has been designed and constructed in accordance with AS 4191 – Australian Standard for Portable Traffic Signal Systems.

Circuitry has been designed to prevent the possibility of a fault which could result in inadvertent double greens. Unauthorised operation of the unit is prevented by means of separate Administrator and Operator passwords.

A copy of our Warranty Terms and Conditions is available at bartco.com.au or by emailing <mailto:service@bartco.com.au>



WARNING:

The Maximum safe towing speed for Portable Traffic Lights is 80 km/h.

2. Technical Specifications

Electrical	
Supply Voltage	11 – 18 Volts DC
Current Consumption	250mA @13 volts (TX and lanterns off)
Max Lantern Drive Current	6 W @ 12 Volts
Minimum Operational time (battery power alone)	7 Days
Cellular	
Supported Technologies	4G Network
UHF Radio Link	
Frequency Bands	915 – 928 MHz (ISM License Free)
Security	56-bit DES encryption
Range	1000 M (Line of Sight)
Channels	7
Physical Controller	
Width	275mm
Height	220mm
Depth	77mm
Weight	2.88 KG

Physical Trailers (Together)

Width	1630mm
Minimum Height	2250mm(Solar Panel) 2650mm(Top of Antenna)
Length	3480mm
Weight (ATM)	1100 KG

Physical Master (Setup Size)

Width	1630mm
Maximum Height	2650mm (Top of the Antenna)
Length	2360mm
Weight (ATM)	550 KG

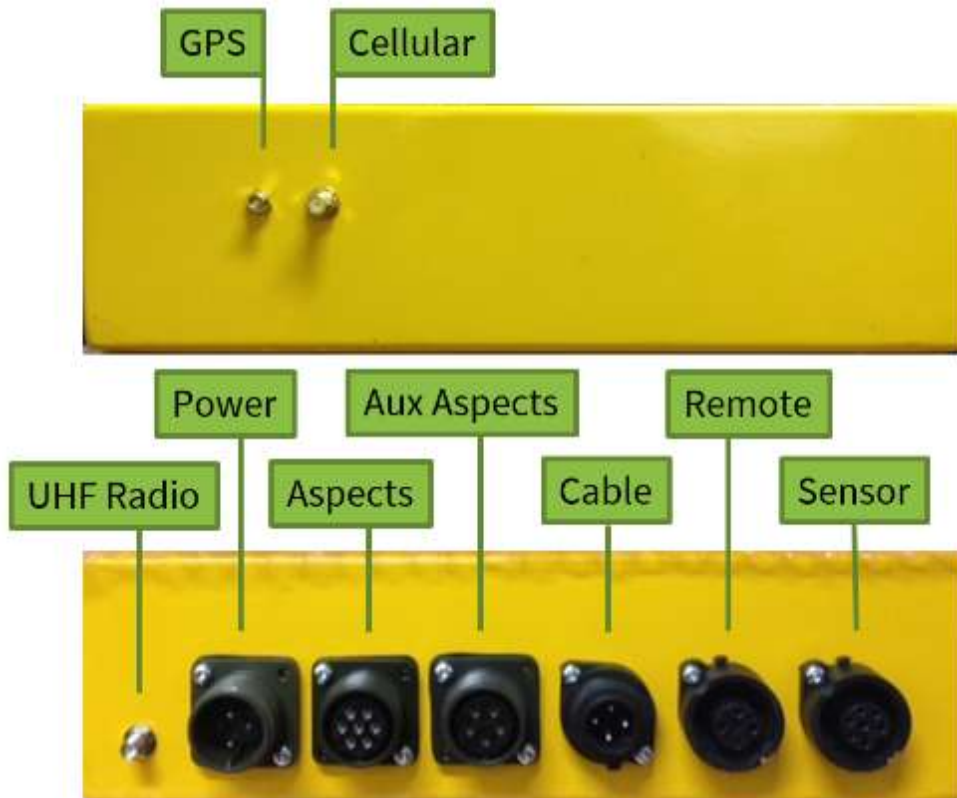
Physical Slave (Setup Size)

Width	1630mm
Maximum Height	2650mm (Top of the Antenna)
Length	2300mm
Weight (ATM)	550

3. Controller Interface



4. External Connections



5. Operational Overview

The BTLC100 requires at least one unit within a group to be designated as a Master. The Masters' role is to issue aspect change commands to all slaves and monitor the overall health of the network.

5.1. Power Up

Slave units that are joined to a network, will listen for the Master to start-up so when the Master is powered up, all slaves on a network will power up as well.

Press the Master ON/OFF button to activate the controller.



Waiting for slave controller(s)...

NOTE: If this message does not disappear after a few seconds, check the slave and consult the [Trouble Shooting](#) guide.

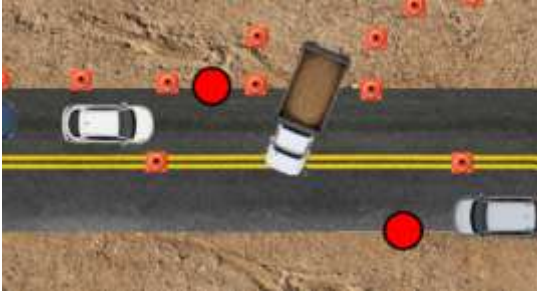
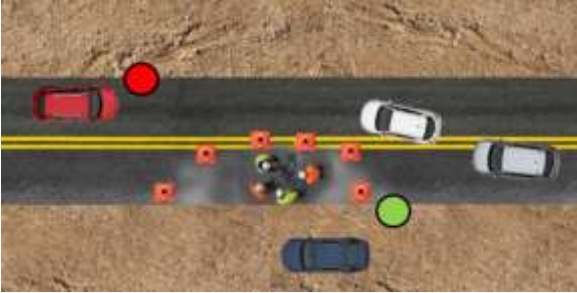
Once the Master has established communication with the slave, user will be presented with the standard main screen as shown below.

[**MASTER**]	ONE WAY	[SLAVE]
=====	FLASH	=====
[FLASH]		[FLASH]
[026/004/005]	003	[010/004/005]

On the left is the Master state, running phase, and phase times.

5.2. Control Types

All Single Master-Single Slave (MS) and Single Master-Multi Slave (MnS) configurations share two common operation modes as detailed in the table below.

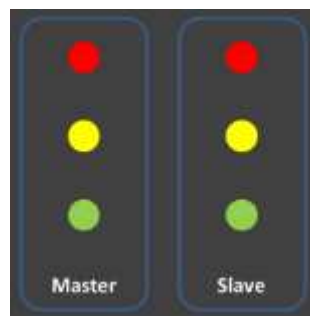
Two Way – Plant Mode	One Way – Shuttle Mode
	
Purpose: To stop traffic in two directions and allow plant vehicles to enter or leave work zones safely.	Purpose: To allow road user to safely share a single lane.
Explanation: In <i>Two Way</i> mode the Master and Slave units mirror one another. When the Master turns Green then the Slave unit also turns Green. Both Master and Slave aspects are normally Green until a demand signal is received. The demand signal can only come from the manual hand controller when the units are	Explanation: In <i>One Way</i> mode the Master and Slave units take turns at being Green. At no time is it possible for the Master and slave to be green simultaneously. The demand signal may come from any of the following control types.

WARNING: Care must be taken to select the correct Operation Mode for the specific work site situation prior to the deployment of units.

5.2.1. Operation Modes

FLASH YELLOW	AUTO	MANUAL	SENSOR
Set all units such as Master and slave lanterns to flashing yellow.	Alternate traffic light sequences between Master and slave units based on the set times.	Prioritizes the traffic flow on one direction over the other using the vehicle detection Radars.	All Operation Modes controlled by operator using the wired or radio (wireless) remote control.
⚠️ Flashing Yellow also used to indicate a fault with traffic lights.	⚠️ Not Available in Two Way mode	⚠️ Not Available in Two Way mode	

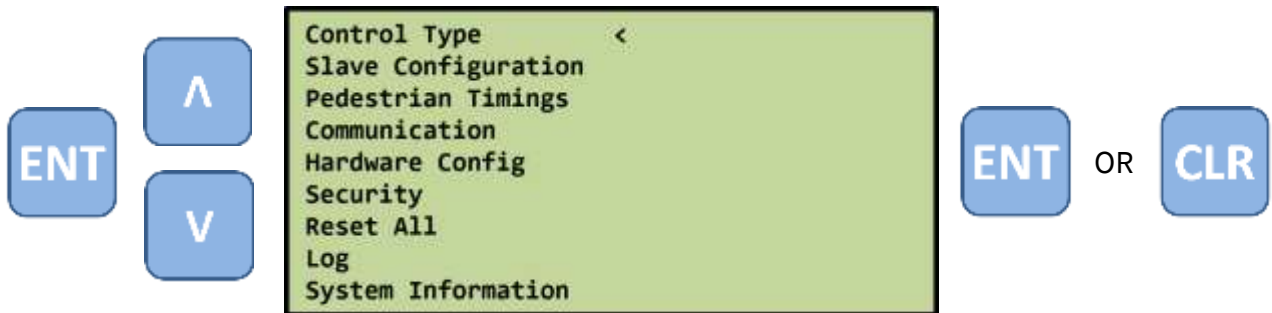
Master Slave Status Indicators



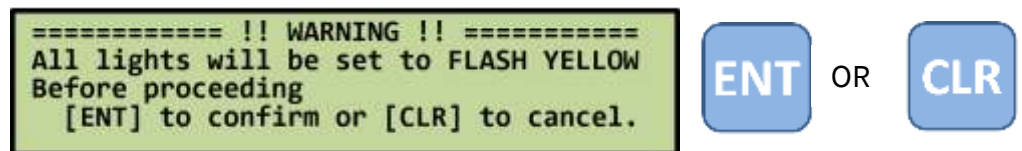
LED indicator lights on each controller interface always represent the physical lantern status of trailers. ⚠️ For multiway the master will show Slave#1 lantern status.

5.2.2. Selecting One Way or Two Way operating modes.

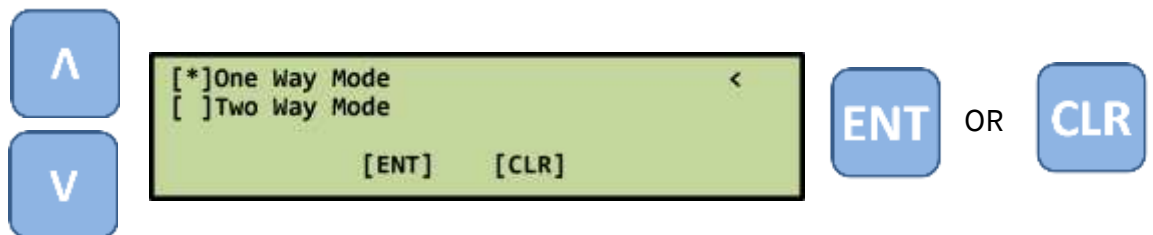
On the Master press ENT to access the main menu, navigate using the up and down keys, press ENT to go in to a sub menu or CLR to return back.



If the traffic lights are operating in AUTO, MANUAL or SENSOR modes then the user will see the following warning before proceeding. Press ENT to confirm or CLR to cancel.



Use the up and down keys to select the desired mode to toggle between One Way (Shuttle) or Two Way (plant) modes, please refer to the [Control Types](#) section for the behaviour of these modes.



After pressing ENT, to confirm selection, the home screen will be displayed. The new active mode is displayed on the centre of the top line.



The Master and Slave controllers are now in ONE WAY (Shuttle Mode)

5.3. Aspect Times

The timing of each individual aspect can be adjusted to suit local regulations and the speed limit of the road. Aspect times can be accessed by pressing the dedicated MASTER TIME and SAVE TIME buttons.

Access the MASTER and SLAVE phase times

MASTER TIME

```
GREEN MAX <010s> [==== MASTER ====]
GREEN EXT 003s   [</>      Change ]
YELLOW    003s   [ ^/v      Select  ]
RED       005s   [ENT/CLR   ]
```

SLAVE TIME

```
GREEN MAX <010s> [==== SLAVE  ====]
GREEN EXT 003s   [</>      Change ]
YELLOW    003s   [ ^/v      Select  ]
RED       005s   [ENT/CLR   ]
```

Move UP and DOWN to select the parameter and LEFT and RIGHT to change the values. Press ENT when done to confirm the new settings.

Phase Time Parameters.

Green Max	10 - 50 seconds in 4 second increments, then 50 - 160 seconds in 10 second increments Up to a maximum of 160.
Green Extend	3 - 6 seconds. The green may extend up to Green Max dependant on traffic demand detected by the radar.
RED	5 - 30 seconds in 5 second increments, then 30 - 100 seconds in 10 second increments. The minimum all RED time.
YELLOW	3 - 5 seconds

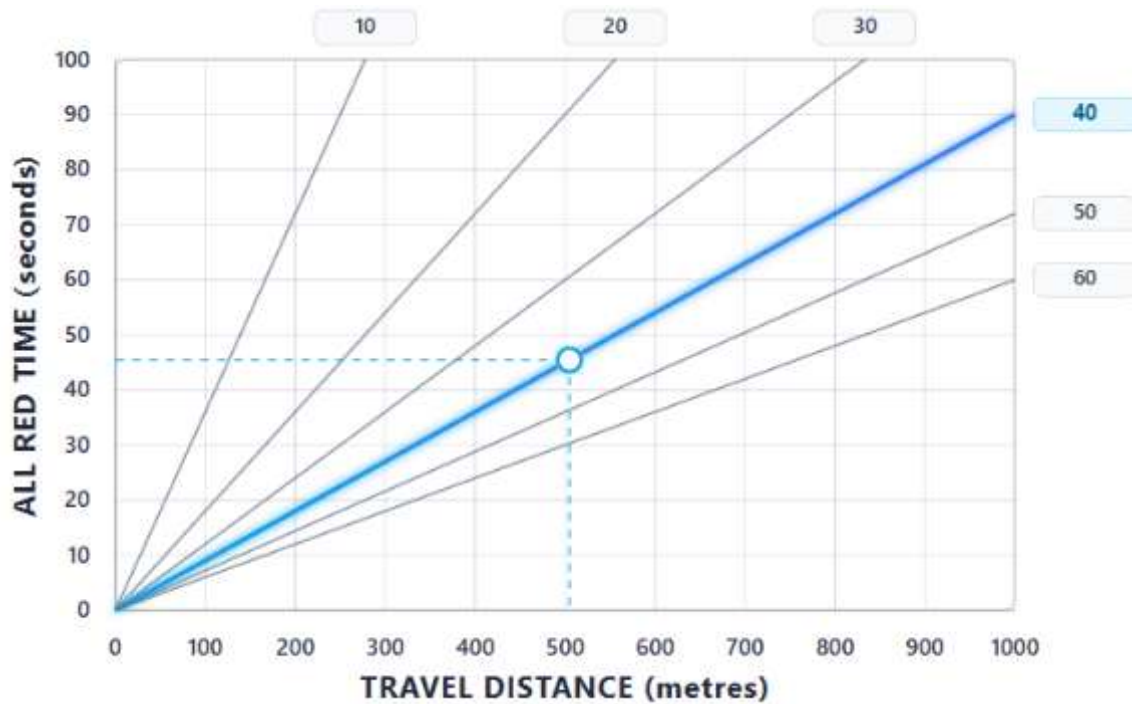
NOTE: The duration of yellow aspect is defined your local roading authority.

5.4. RED TIME GRAPH

The RED time allows for vehicles to traverse and get clear of the works area before changing to the opposite direction, in AUTO mode.

In seconds is given approximately by $T = (3.6 \times D) / V$

This is expressed visually in the following graph



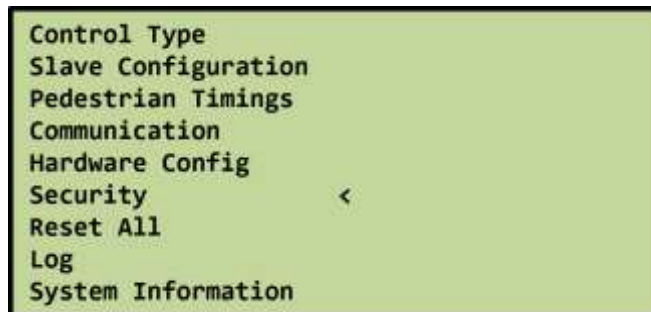
5.5. Security Settings

The BTLC100 has two levels of security to prevent unauthorised personal from operating or altering the configuration.

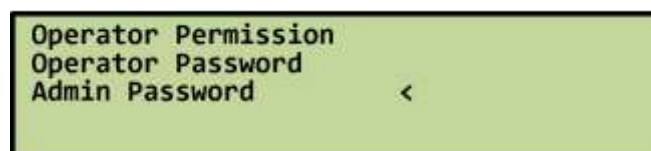
The administrator password is set/required to access the main menu. This prevents operators from altering certain settings.

The operator password can also be set to limit users turning the units on or off, phase time settings and profile loading and saving.

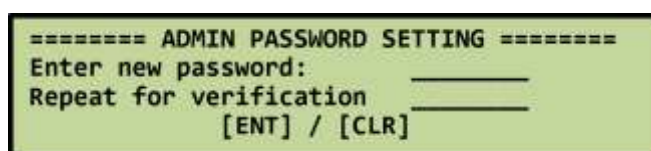
Access the security settings.



Select the option to change the admin password.



Enter the new password using the numeric keys (0 – 9) and press ENT
Repeat the password again to confirm and again press ENT to confirm.



5.6. Permissions

Operator permissions can be any of the following

Password	Requires operator password to access
Unlimited	No password required
Disabled	Feature not accessible even with password.

To modify permissions, from the security menu, select Operator Permissions.

```
Operator Permission  <
Operator Password
Admin Password
```

```
<PROTECT>--- Power ON/OFF  [<> change]
UNLIMIT --- Time setting  [      ]
DISABLE --- Profile Load   [ENT save ]
DISABLE --- Profile Save   [CLR cancel]
```

5.7. Communication Settings

The radio network setup, Master / slave configuration, radio output power and channel selection are configured from the “Communication Settings” menu.

All BTLC100 units are identical and have no fixed Master and Slave configuration - any unit can be a Master or Slave. A radio network is formed between two or more units. Each network must have a Master that issues aspect change commands to all slaves and continuously monitors the health of the network.

5.7.1. Setting up a basic two-unit network

A simple two-unit pairing is the most typical configuration. A single Master unit interacts with a single slave.

On both the Master and Slave units - Navigate to the “Communication” menu

```
Control Type
Slave Configuration
Pedestrian Timings
Communication <
Hardware Config
Security
Reset All
Log
System Information
```

Select Reset Radio Network to erase any existing network settings.

```
Reset Radio Network <
Add Slave Controller
Add Remote Controller
Del Remote Controller
Radio Output Power
```

Press ENT to confirm reset.

```
===== !! WARNING !! =====
All lights will be set to FLASH YELLOW
Before proceeding
[ENT] to confirm or [CLR] to cancel.
```



Remember to complete the above steps on all units you want to join the new network.

Next on each of the SLAVE controllers, select desired radio Channel for the new network. Check the role is set to SLAVE.

```

== Set Radio Channel ===== [^/v Select  ]
Channel:      1                [</> Change ]
Role   : <  SLAVE  >          [ENT Save   ]
Output : [=====]           [CLR Cancel  ]
    
```

The slaves will broadcast their presence and wait for the master.

```

== Join Network on CH-1 =====
[                                     ]
[  Waiting for master ...           ]
[                                     ]
    
```

On the unit that is to be the new MASTER controller, select desired radio Channel for the new network. Change the mode from SLAVE to MASTER.

```

== Set Radio Channel ===== [^/v Select  ]
Channel:      1                [</> Change ]
Role   : <  MASTER  >          [ENT Save   ]
Output : [=====]           [CLR Cancel  ]
    
```

The Master will begin searching for unpaired Slave controllers in the area that are broadcasting on the same Channel.

```

SEARCHING SLAVE #1 on CH-1
[*]A001TLC123                [</> Change ]
                               [ENT Save   ]
                               [CLR Cancel  ]
    
```

As they are discovered they will appear in the list of available units. Select the unit that is to be designated as SLAVE #1 and press ENT.

Repeat this for each of the slaves and exit by pressing CLR when done.

5.7.2. Adding SLAVES to an existing network.

To add an additional slave to an existing network, first Identify the current network channel by accessing the system information page by pressing the down key of any controller in the current network.

On the new SLAVE to be added press ENT to enter the main menu and select Communications

```
Control Type
Slave Configuration
Pedestrian Timings
Communication      <
Hardware Config
Security
Reset All
Log
System Information
```

Select Reset Radio Network to clear any existing network settings.

```
Reset Radio Network      <
Add Slave Controller
Add Remote Controller
Del Remote Controller
Radio Output Power
```

Press to confirm reset.

```
===== !! WARNING !! =====
All lights will be set to FLASH YELLOW
Before proceeding
[ENT] to confirm or [CLR] to cancel.
```

Select desired radio Channel for the new network. Check the role is set to SLAVE.

```
== Set Radio Channel == [^/v Select ]
Channel:      1         [</> Change ]
Role   : < SLAVE >     [ENT Save   ]
Output : [=====]     [CLR Cancel ]
```

The slaves will not broadcast their presence and wait for the master

```

== Join Network on CH-1 =====
[                                     ]
[  Waiting for master ...           ]
[                                     ]

```

Go to the MASTER unit press ENT to enter the main menu and select Communication.

```

Control Type
Slave Configuration
Pedestrian Timings
Communication      <
Hardware Config
Security
Reset All
Log
System Information

```

From the Communications menu select Add Slave Controller

```

Reset Radio Network
Add Slave Controller      <
Add Remote Controller
Del Remote Controller
Radio Output Power

```

The Master will begin searching for unpaired Slave controllers in the area that are broadcasting on the same Channel.

```

SEARCHING SLAVE #2 on CH-1
[*]A001TLC987          [ </> Change ]
                        [ ENT Save   ]
                        [ CLR Cancel ]

```

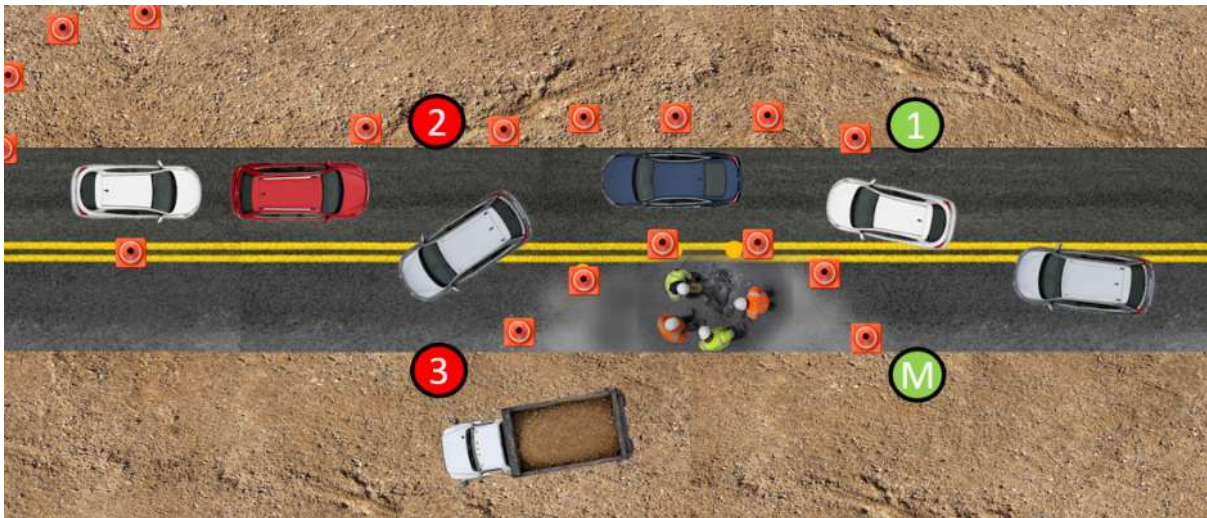
As they are discovered they will appear in the list of available units. Select the unit that is to be designated as SLAVE #2 and press ENT.

Repeat this process to add SLAVES #3 and #4 as needed.

5.7.3. Multiway & Slave Configuration.

BTLC100 offers a unique method to deploy and control up to three slave units with a single Master. Various models are available to provide maximum flexibility in both three and four way operations.

In this example the network consists of the MASTER (M) and 3 SLAVES. Slave 1 is set to mirror the MASTER, while Slave 3 is set to AUTO, that in turn is mirrored by Slave 3



Three- and four-way operation is best thought of as an extension to the standard two-way (Master/slave) operation as described previously in the [Controller Types](#) section.



In NSW Multi-way operation may require [Transport for NSW](#)  approval.

From the main menu of the Master controller select Slave Configuration and press ENT

```
Control Type
Slave Configuration <
Pedestrian Timings
Communication
Hardware Config
Security
Reset All
Log
System Information
```

User will receive a warning when the lights go into FLASH YELLOW mode. This will apply to all TLCs in the network.

```
===== !! WARNING !! =====
All lights will be set to FLASH YELLOW
Before proceeding
[ENT] to confirm or [CLR] to cancel.
```

Use the up and down arrows to select the SLAVE to be configured, and press ENT

```
===== SLAVE CONFIG ===== [▲/▼ Select ]
S-1: A001TLC123                < [ENT Select ]
S-2: A001TLC987                [CLR Cancel ]
S-3:
```

Use the up and down keys to select Lanterns, then left and right keys to scroll through the options. Press ENT to save when done.

```

SLAVE #1 CONFIG      [▲/▼ Select  ]
Lanterns: <Auto Mode> [◀/▶ Option ]
Pedestrian: ON       [ENT Save   ]
                     [CLR Cancel  ]
    
```



Pedestrian Lanterns, if equipped, may also be manually disabled or enabled here.

Lantern options

Auto Mode	When the Master is operating in Auto or Sensor mode, all units will turn GREEN on a round-robin basis. If the Master is in Manual operation, then the local Slave will remain disabled on RED.
Manual Mode	If the Master is operating in Auto or Sensor mode, Master and Slave #1 will take turns on a round-robin basis and the local Slave will have its turn when there is demand signal.
Mirror Master	This option will turn the local Slave unit to operate the same as the Master
Mirror Slave	This option will turn the local Slave unit to operate the same as the Slave#1

5.7.4. Radio Output Power

The units UHF output power can be adjusted to suit the operating environment. Setting a lower power level, will increase the running time of the traffic lights but may reduce the distance between the units spaced on the work site.

```

===== Radio Output Power Setting =====
                        [=====]
[◀/▶ Change] [ENT save] [CLR cancel]
    
```

6. Pedestrian Add-on

First, ensure you have established a radio network between at least two PTL controllers, From the main menu select Hardware Config see [Setting up a basic two-unit network](#)

The PTL network must be configured in Two Way/Plant Mode. Conceptually the pedestrians are like plant equipment entering the roadway where traffic will be stopped in both directions. Unlike the regular plant crossing mode pedestrians create the demand by pushing a button, and then the process of crossing, and going back to all green is automated. See [Selecting One Way or Two Way operating modes](#).

6.1. Initial configuration

From the main menu of each PTL controller fitted with the Pedestrian Add-on press ENT to enter the main menu and select Hardware Config.

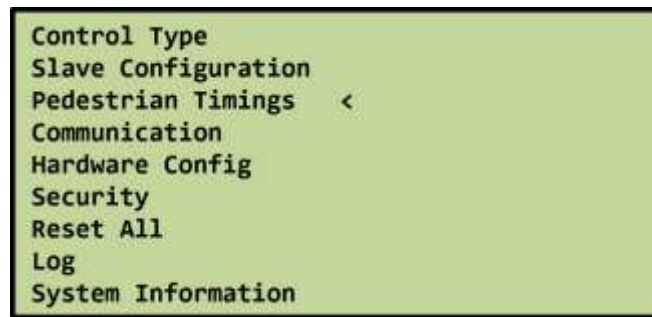
```
Control Type
Slave Configuration
Pedestrian Timings
Communication
Hardware Config      <
Security
Reset All
Log
System Information
```

Press down and change the Expansion HW option from RADAR to PED, and press ENT to save.

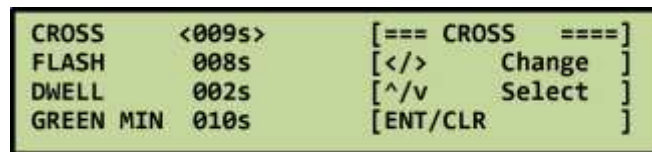
```
===== Hardware Config ===== [▲/▼ Select ]
Aux Lanterns:      OFF           [ENT Save   ]
Expansion HW:  <  PED  >         [CLR Cancel ]
```

This procedure only needs to be performed once, and tells the BTLC-100 controller what hardware is expected on the sensor port.

Return to the main menu and select Pedestrian Timings.



Set the require Pedestrian phase times appropriately for the works area.



Pedestrian Crossing Timings



CROSS

Pedestrians may cross on this signal.



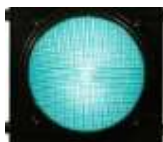
FLASH

The Flash or Clearance time is the period where pedestrians should not start crossing.



DWELL

How long after the FLASH phase to wait before giving the GREEN phase to the waiting motorists.



GREEN MIN

The minimum traffic to flow before allowing a pedestrian demand to trigger the CROSS phase.

The total cross time = CROSS + FLASH. Further guidance as to crossing clearance times can be found in Austroads Guide to Traffic Management Part 9 [Section G.5.2](#) , and generally recommends assuming a walk speed of 1.0 to 1.2m/s.

7. Radio Remote Controller (BTLR-100)

BARTCO's radio remote controller allows a wireless manual operation of portable traffic lights up to 300m in line of site from the configured Master controller.

This section will describe the setup and operating procedures.

7.1. Discovery Mode

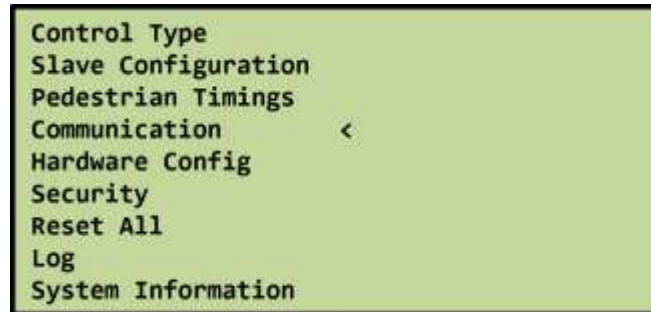
Connect the BTLR-100 to an established PTL network.



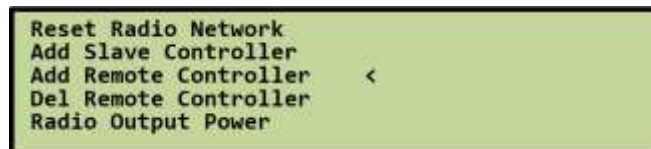
To place the BTLR-100 remote controller into discovery mode, hold both green buttons down while turning the power ON.

7.2. Pairing with a TLC network

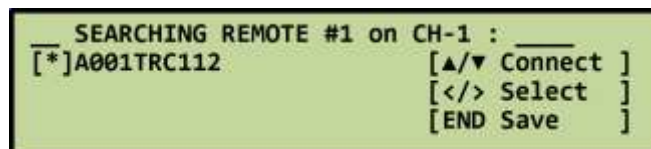
On the Master Traffic Light Controller press ENT, and select Communication from the menu.



Then select Add Remote Controller.



Select the serial number on the list corresponding to the BTLR-100



Press the END key to confirm and finalise the pairing procedure.

7.3. Remote controller operation

Either the wireless BTLR-100 or the standard wired remote controllers work in the same way.

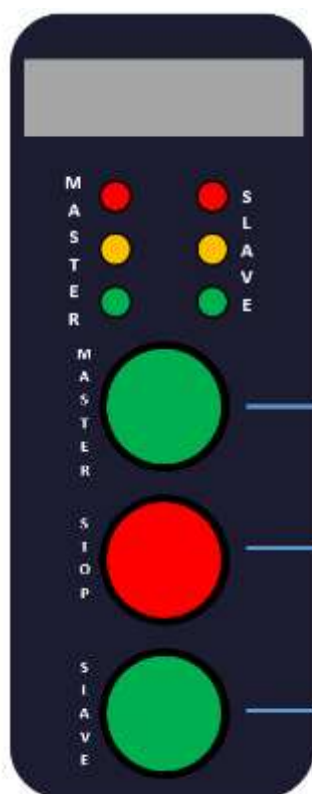
MANUAL

Remote controller operation is only available when the traffic lights are set to operate on Manual mode operation.

After placing the network into MANUAL mode, all the lights will go RED after completing the minimum Flash Yellow time.

The Wired remote / Radio remote will operate differently depending on the type of Manual mode operation.

7.3.1. One Way – Shuttle Mode



If Master GREEN button is pushed then the Master trailer Green aspect will turn ON (After completing the set RED interval)

Note: If the Slave trailer GREEN phase is running when the Master Green button is activated, then it has to wait until the Slave trailer GREEN time, Yellow time and RED times are fulfilled.

If STOP button is pushed then the Master and Slave trailers RED aspects will turn ON (After completing the set GREEN max & Yellow time intervals)

Note: If the Master/Slave trailer GREEN phase is running when the STOP button is activated, then it has to wait until the Master/Slave trailer GREEN time, Yellow times are fulfilled.

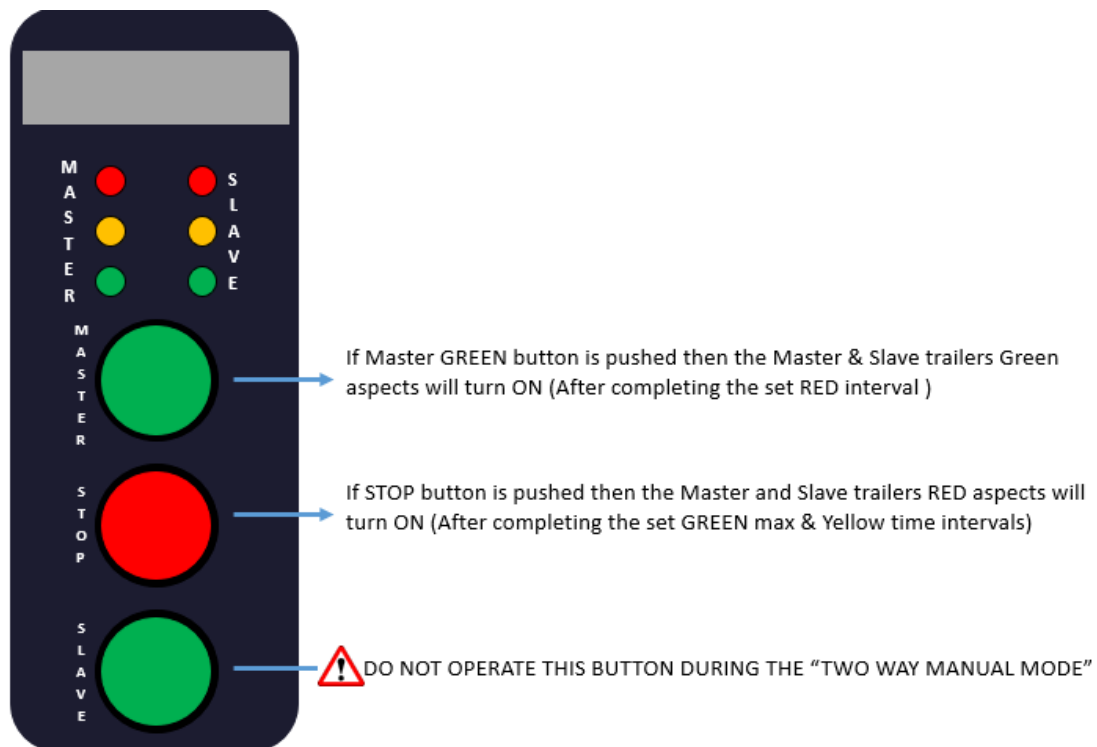
If Slave GREEN button is pushed then the Slave trailer GREEN aspect will turn ON (After completing the set RED interval)

Note: If the Master trailer GREEN phase is running when the Slave Green button is activated, then it has to wait until the Master trailer GREEN time, Yellow time and RED times are fulfilled.



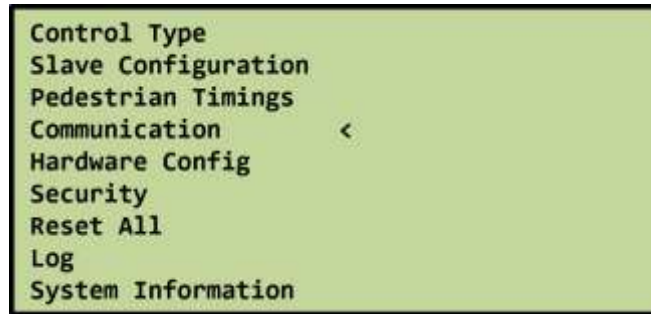
BARTCO BTLC100 Traffic lights doesn't require user to push the STOP button during the phase changes between Master & Slave trailers.

7.3.2. Two Way – Plant Mode

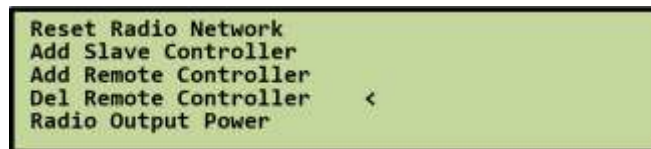


7.4. Un-Pairing with a TLC network

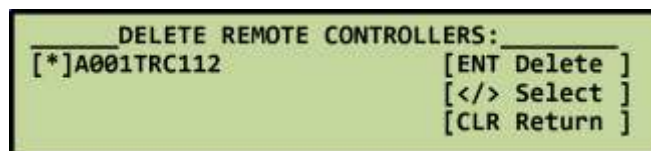
From the Master controller Navigate to the “Communication” menu



Select “Del Remote Controller”



The Master will now list all the currently paired remote controllers. select the remote controller that is to be removed and press ENT to confirm.



BARTCO BTLC100 Portable Traffic lights support up to 4 BTLR-100 radio remote controllers at once.

8. Trouble Shooting

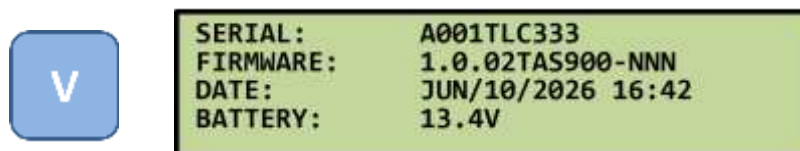
For all Technical queries please don't hesitate to contact a BARTCO Service team member.

8.1. The Master or Slave will not turn on.

If the battery voltage is low, then the LCD display may not turn ON when pressed. In this case, press the DOWN key to access the System Information.



Press the DOWN key one more time to access the second System Information page.



The current battery voltage is shown on the last line.

8.2. Flashing Amber

When a fault occurs, the traffic lights are designed to enter Flashing Yellow mode, and is the standard advice for road users to proceed with caution. This is a normal behaviour and is designed to prevent the traffic lights from displaying incorrect information to road users.

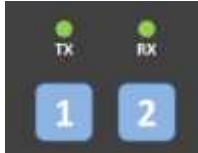
The primary fault conditions are:

- 1) low voltage
- 2) communication failure
- 3) lantern fault

Once wiring and battery voltages have been checked the fault may be cleared by selecting any of the operating modes. MANUAL, AUTO, or SENSOR.



For Communication Failure, check that the antenna is not damaged, and the antenna cable connections are secured well.



The Rx LED light on the controller will start flashing once the communication with the Slave controller / any remote device is established.



Check the surrounding environment and try reducing the distance between the two units if the problem persists.

8.3. Intermittent Flashing Amber

Intermittent Flashing amber can be a result of weak signal strength between master and slave trailers.

Make sure the trailers are in line of sight.

Check the RF levels between each unit by pushing the down button on each controller interface twice. As shown below



```
SERIAL:    A001TLC333
FIRMWARE:  1.0.02TAS900-NNN
DATE:      JUN/10/2026 16:42
BATTERY:   13.4V
```



Information on the above page is not dynamic. It is refreshed when you exit by pressing CLR and DOWN again or cycling through the pages.

8.4. LCD Brightness adjustment

If the display on the Master /Slave LCD is not visible, then use the right and left arrows to adjust the brightness while on the main screen.

To decrease the brightness, press the left arrow 

To increase the brightness, press the right arrow 

8.5. Lights stuck on GREEN phase

If the Master or the Slave stuck on GREEN light and doesn't follow the times, then please power cycle all the units in the network.

Power cycle can be done as described below.

-  Push ON/OFF button and turn off the lights.
-  Locate the fuses that supply power to the controllers or unplug the power source to the controllers. To double check that the power has been lost, push the ON/OFF button on the controller if there is no beep or light on the LCD screen then the user has successfully disconnected the power.
-  Leave the unit powered down for 3 minutes.
-  Repeat the above process on all the other units in the network.



All units must be powered down together, do not power cycle one unit and move on to the next one.

Appendix A: General Setup Guide

Slave - Rear trailer section

1. Remove the lantern covers, and disconnect the rear taillight plug from each trailer section. Keep the Master trailer connected to the towing vehicle at this stage.
2. Remove the pin located on the Master, (front trailer's) draw bar.
3. Carefully slide out the rear trailer away from the Master trailer (whilst still being connected to each other) to create a slight distance between the slave & Master trailer.
4. Lower the front and rear stabiliser legs on the slave trailer in preparation for adjustment, then completely remove the slave trailer from the Master trailer.
5. Move the trailer into its ideal fixed position.
6. Adjust the stabiliser legs for secure fixture to the ground and ensure that the trailer is secured correctly without movement whatsoever.
7. Connect the radio aerial to its fitting, located on the top lantern mounting bracket.
8. Carefully raise up/down as required the traffic signal mast to the desired height using the up/down electronic actuator switch.
9. Ensure the traffic signal lanterns are aimed correctly by taking note of the following,
10. Vertical Alignment (By use of the levelling jacks)
11. Horizontal Alignment (By positioning and securely affixing the trailer)

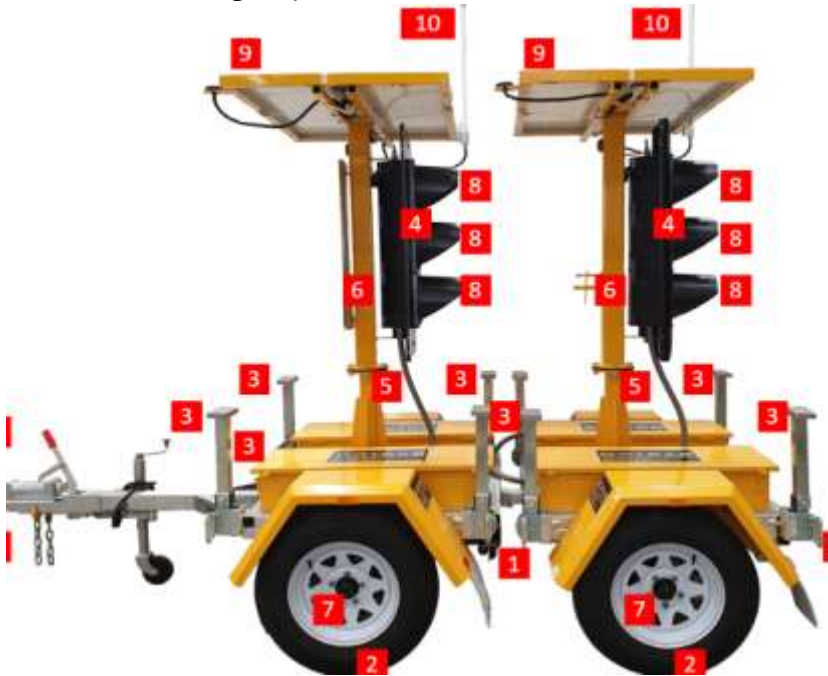
Master - Front trailer section

1. When towed into the desired position, lower the stabilizer legs, uncouple the Master trailer using the jockey wheel to raise the trailers hitch up from the tow coupling. Once disconnected and the trailer is stable, the trailers chains and plug can be disconnected.
2. Carefully remove the Master trailer from towing vehicle.
3. Follow steps 5 to 8 as above.
4. Switch on the Master unit

If any assistance required, please contact BARTCO Technical Support department on 1300 306 106 and select option 2 for Service.

Appendix B: General Inspection & Maintenance Addendum

Ensure that the following Inspections and scheduled Maintenance is always adhered to.



1. Check the trailers taillights for correct operation before towing.
2. Check all tyre pressures as per the VIN plate and examine tyres for excessive wear and damage before towing.
3. Inspect all moving parts, joints and locking pins for excess wear, for correct adjustments, installation and for vandalism and/or damage before towing the trailers (Master and Slave units) or raising the traffic signals.
4. Check that traffic signal lantern doors are securely fastened.
5. Check that mast bolts, and nuts are secure.
6. Ensure that traffic signal lanterns are fully lowered when in the travelling position.
7. Under normal operating conditions re-pack and adjust the wheel bearings annually.
8. Clean all traffic signal lantern reflectors and inside and outside surfaces of the lenses with a soft cloth at regular periods, not exceeding three months.
9. Clean Solar panels with water when they are covered with dirt or other elements.
10. Check the overhead height signs and make sure to have enough room for Antennas.

Appendix C: Inspection Guide

The following Inspection Guide Only for General Usage (*Increase according to the rate of usage*)

Up to a Maximum of 3 Month Intervals

- Visual Inspection around the Masts Base, Gusset Sections and the External Walls of the Mast to check for any fatigue cracking or signs of breakage.

The First 5 Years of Service Life, then at Every 2 Year Intervals thereafter

- Non-Destructive Testing (eddy current test) of the Mast Assembly to verify its structural integrity.
- Contact BARTCO for a list of companies that can perform this inspection.
- If the mast post /frame is bent or has visible cracks, the trailer must not be used until a new BARTCO replacement mast is purchased and fitted.

Please contact BARTCO to order the new replacement mast assemblies.