



HTL INDUSTRIAL TRAFFIC LIGHTS

Model: 100, 200 & 300mm (High Flux)

Operation & Maintenance Manual



Version 1.0

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Release / Change	Version	Release Date
Initial Release	1.0	November 2024

Safety Instructions



WARNING: Ensure all safety instructions have been followed prior to servicing.



WARNING: Ensure that no items fall onto the lanes below at any time.



CAUTION: When the door/cover of the equipment is opened, please ensure it is fixed before performing next procedure. After finishing maintenance, ensure the door/cover is locked.



CAUTION: The LEDs on LED Module of the equipment are ESD (Electro-Static Discharge) sensitive. Take necessary precautions to prevent damage to the LED.

1. Health and Safety

All personnel involved in carrying out the work must be aware of any site working regulations and required certification.

Before taking any installation or maintenance action, service personal must follow the above safe working practices:

- Only allow sufficiently experienced personnel to do maintenance.
- Provide sufficient illumination for the job, especially during non-daylight hours.
- Wear personal protective gear when working near or with energized parts.
- Use insulated tools and equipment when working near or with energized parts.
- Take measures to avoid inadvertent contact of conductive materials or equipment with energized parts of the Traffic Light

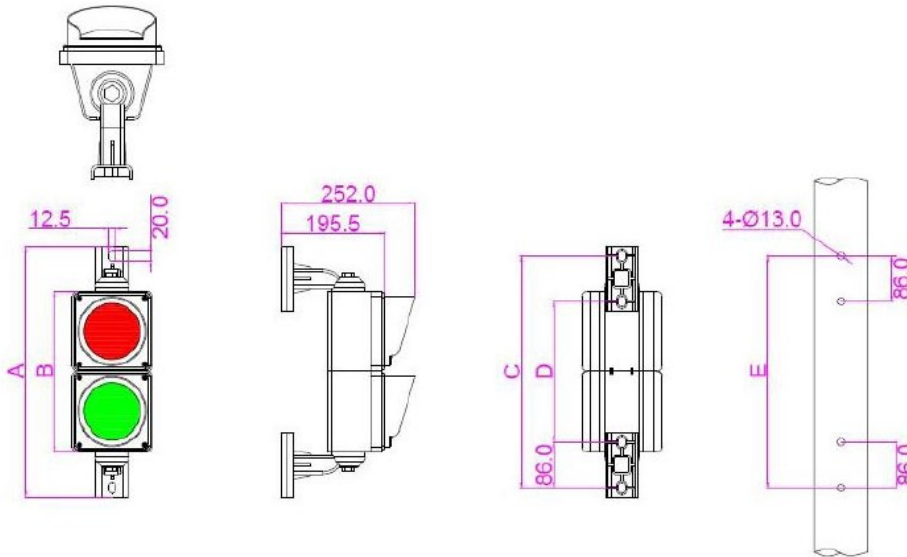
WARNING

The Traffic Light is a 12 VDC device. Harding Traffic cannot guarantee that mains power may not have been introduced as part of the installation e.g. 230VAC: 12VDC Power Supply.

Service Personal must ensure that the system is suitably isolated before working on the Traffic Light.

2. General Overview

2.1. Light Specifications 100mm



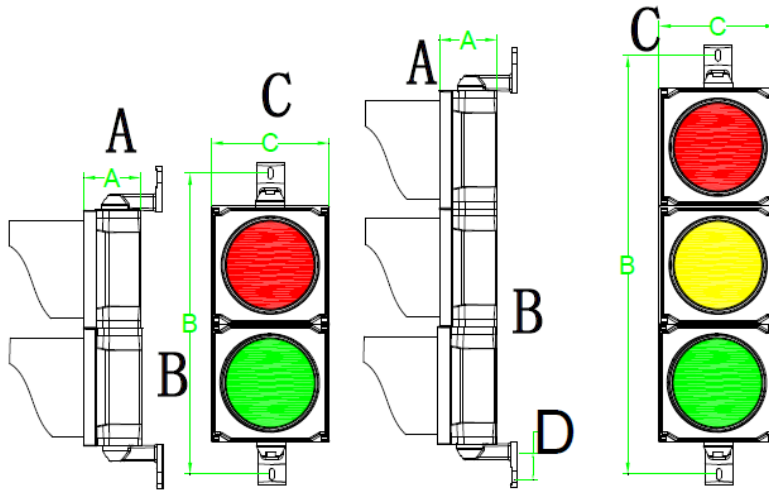
100mm Traffic Light – C-Bracket

DRAWING LOCATION	1 LIGHT ASPECT	2 LIGHT ASPECT	3 LIGHT ASPECT
A	319mm	469mm	619mm
B	150mm	300mm	450mm
C	285mm	435mm	585mm
D	113mm	263mm	413mm
E	285mm	435mm	585mm

2.2. Performance Specifications 100mm:

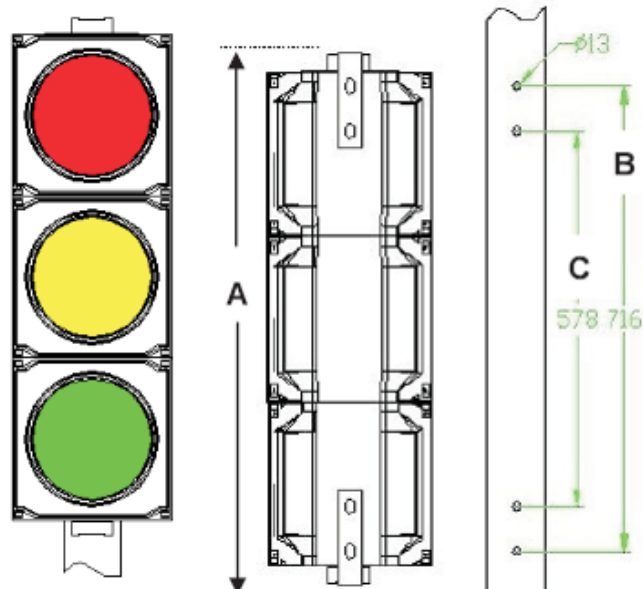
Module Size:	100mm
Colours Available:	RED, AMBER, GREEN
LEDs (pcs):	1
Luminance (cd):	>100
Module shape:	Round
Power consumption (W):	<5
Typical Dominant Wavelength(mm):	Red (625nm), Amber (590nm), Green (502nm)
Housing material:	PC (UV-stabilized polycarbonate)
Cover Shape:	Tinted Cobweb Lens
Voltage (V):	12-24V DC or 110-220V AC
Operating temperature °C:	- 40°C~+ 70 °C
Insulation resistance:	≥2M
Total harmonic distortion:	<20%
IP Rate:	IP65

2.3. Light Specifications 200mm



200mm Traffic Light – C-Bracket

DRAWING LOCATION	1 LIGHT ASPECT	2 LIGHT ASPECT	3 LIGHT ASPECT
A	124mm	124mm	124mm
B	407mm	661mm	915mm
C	254mm	254mm	254mm
D	50mm	50mm	50mm



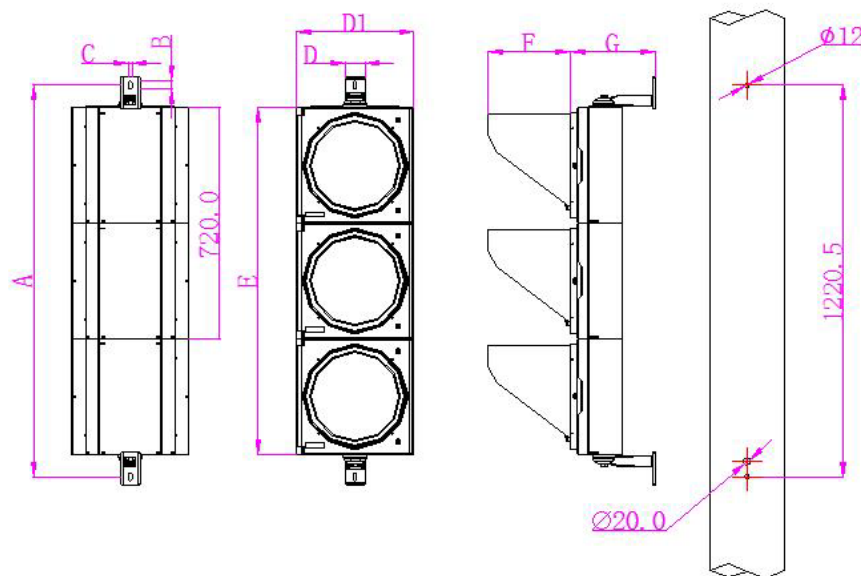
200mm Traffic Light – L-Bracket

DRAWING LOCATION	1 LIGHT ASPECT	2 LIGHT ASPECT	3 LIGHT ASPECT
A	314mm	564mm	814mm
B	216mm	466mm	716mm
C	78mm	328mm	578mm

2.4. Performance Specifications 200mm:

Module Size:	200mm
Colours Available:	RED, AMBER, GREEN
LEDs (pcs):	5
Luminance (cd):	800
Module shape:	Round
Power consumption (W):	<6
Typical Dominant Wavelength(mm):	Red (625nm), Amber (590nm), Green (505nm)
Housing material:	PC (UV-stabilized polycarbonate)
Cover Shape:	Tinted Lens
Voltage (V):	12-24V DC or 110-220V AC
Operating temperature °C:	- 40°C~+ 60 °C
Insulation resistance:	≥2M
Total harmonic distortion:	<20%
IP Rate:	IP65

2.5. Light Specifications 300mm



300mm Traffic Light – C-Bracket

DRAWING LOCATION	1 LIGHT ASPECT	2 LIGHT ASPECT	3 LIGHT ASPECT
A	501.5mm	860.5mm	124mm
B	24mm	24mm	24mm
C	10mm	10mm	10mm
D	60mm	60mm	60mm
D1	366mm	366mm	366mm
E	360mm	720mm	1080mm
F	256mm	256mm	256mm
G	268mm	268mm	268mm

2.6. Performance Specifications 300mm:

Module Size:	300mm
Colours Available:	RED, AMBER, GREEN
LEDs (pcs):	3
Luminance (cd):	>400
Module shape:	Round
Power consumption (W):	<9
Typical Dominant Wavelength(mm):	Red (625nm), Amber (590nm), Green (505nm)
Housing material:	PC (UV-stabilized polycarbonate)
Cover Shape:	Tinted Lens
Voltage (V):	12-24V DC or 110-220V AC
Operating temperature °C:	- 40°C~+ 70 °C
Insulation resistance:	≥2M
Total harmonic distortion:	<20%
IP Rate:	IP65

3. Maintenance Guide

3.1. Preventative Maintenance

To ensure the continued optimal performance and longevity of your Traffic Light in challenging environments, regular preventive maintenance is recommended. By following these guidelines, you can mitigate potential issues and extend the lifespan of your product:

Cleaning Schedule: Establish a routine cleaning schedule based on the local conditions and usage. While the standard recommendation is maintenance every six months, consider more frequent cleaning if the environment is particularly harsh.

Record Keeping: Maintain a record of maintenance activities, including dates, procedures performed, and observations made. This documentation can help track the product's health and guide future maintenance decisions.

Professional Inspection: Periodically, consider engaging professional technicians to conduct a thorough inspection of the Traffic Light. Their expertise can identify potential issues that might not be apparent during routine maintenance.

Faults	Action
Check for marks, scratches, dirt, or cracks	Use an appropriate cleaning solution to remove any visible marks or dirt.

3.3. Sign Maintenance

Because of its ability to withstand extremely harsh environments, the Traffic Light requires minimal maintenance. However, regular maintenance can help prolong the product's lifespan and ensure optimal display performance.

The suggested maintenance interval is every six months, although this duration can be adapted based on the local conditions.

Maintenance tool:

- Gentle non-woven fabric or a soft brush
 - Neutral cleaning solution (non-abrasive)
- Basic maintenance equipment

Recommended Maintenance Procedure

- 1) Moisten a cloth with the cleaning solution, then use it to gently wipe away dust from the surface. Rinse the surface with water afterwards.

4. Troubleshooting

Item	Description	Solution
<p>Signs not operating</p>	<p>Sign is not powering on</p>	<ul style="list-style-type: none"> • Verify the integrity of all wiring and connectors.

In all other cases, please contact Harding Traffic on 0800 427 346 or at service@hardingtraffic.co.nz