

MBA – 5

P.Berghaus Manual Traffic Lights Operations Manual



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1. INTRODUCTION:

MBA -5 are manually operated lights. There is no radio link between the two signal heads and have to be manually operated using a wireless remote or cabled remote by the user.

The range of the 8-channel hand-held wireless remote control is around 800 m and controls two Signal Heads reliably with built-in feedback. The operator can read the signal status of the traffic lights on the remote control.

When using the wireless remote, the green light can only be changed between the phases using the all-red function and an unauthorized simultaneous lighting up of green is also excluded by the built-in status green monitoring.

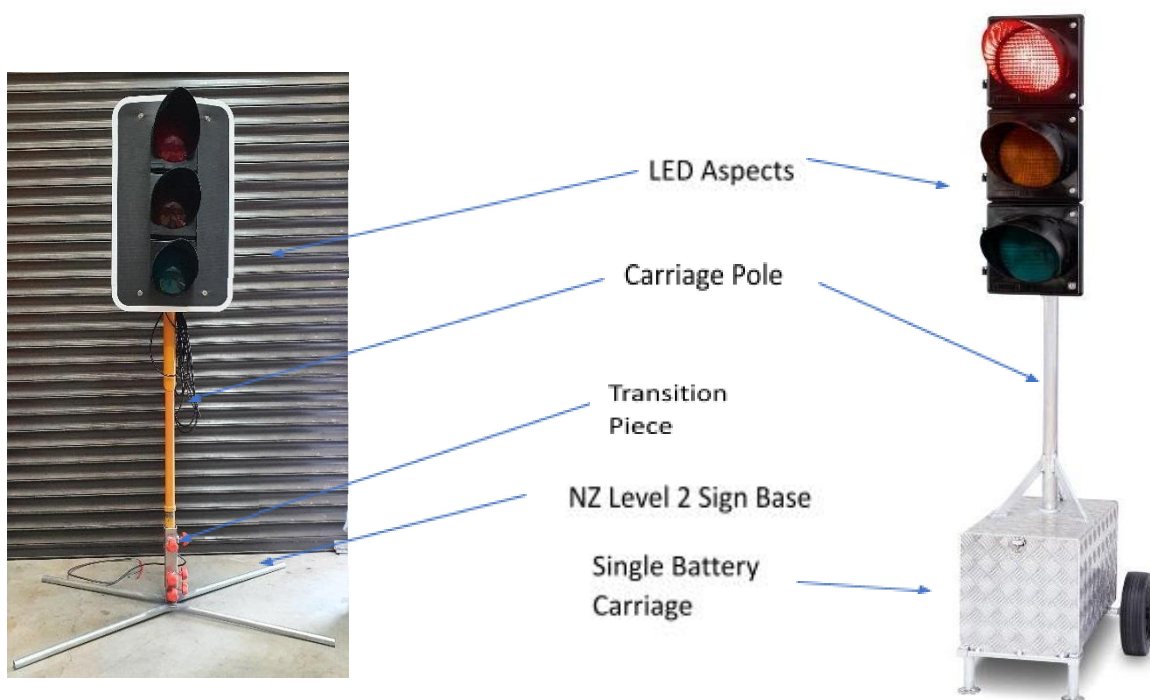
A cabled remote can be used only to operate individual head. This enables the MBA-5 units to be used for varied operations from managing a single carpark access to managing multiple access.

Please Note

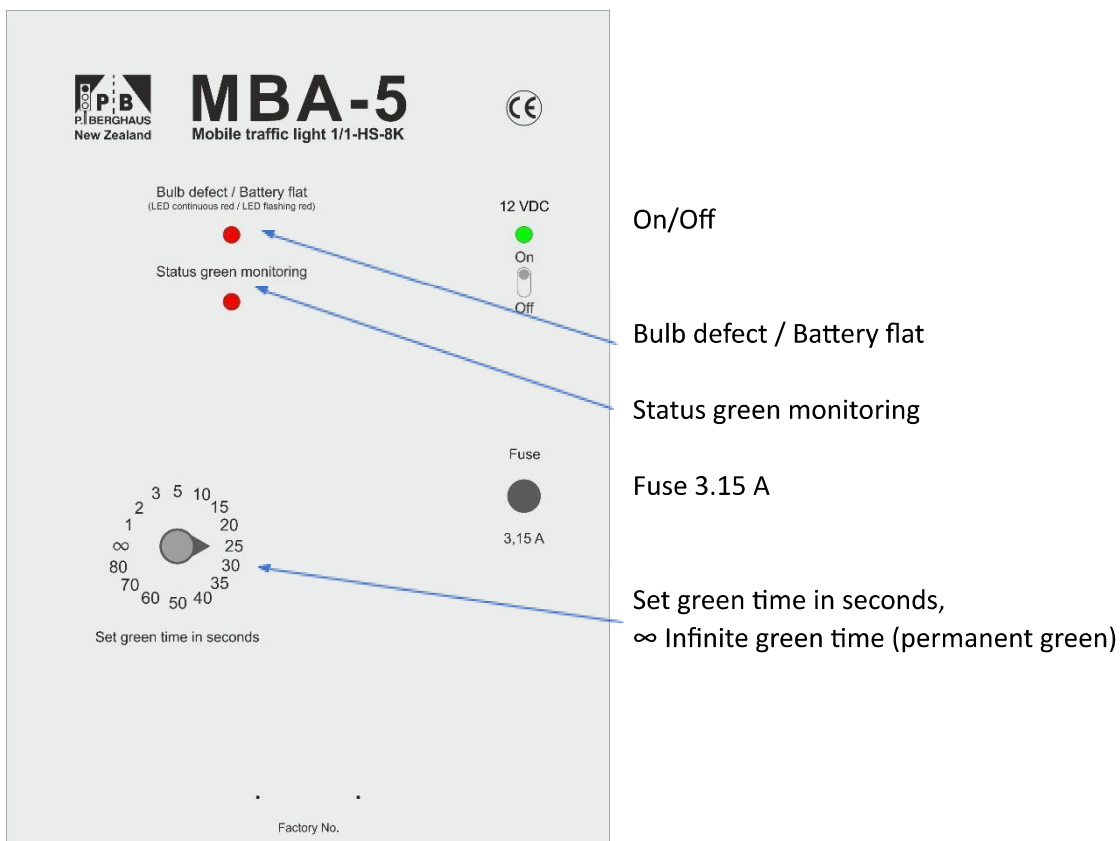
If the lights are being operated by a single individual, please ensure for Safety reasons that the operator is able to see both the Signal heads. If both signal heads are not visible, the Lights have to be operated individually with a wireless remotes or the wired remotes.

ASSEMBLY:

MBA-5 lights are able to be mounted on Single battery carriage or on New Zealand Level 2 sign bases using a transition piece.



CONTROL PANEL:



STARTING UP THE LIGHTS

1. Connect at least one 12 V battery on each traffic light. Ensure correct polarity - red to positive, blue to negative. In case of undervoltage below 10.5 volts, the Battery flat LED flashes on the control panel - connect a charged battery.

2. Green time can be set in two ways:

- Full manual control of the Green: Set the dial to ∞.
- Set the desired green time in seconds on each traffic light, according to the incoming traffic. After this green time has elapsed, the signal transmitter switches to red automatically via the yellow. During operation, the green time can be adjusted without any problems.

If you want to change from infinite green time ∞ to a set green time during operation, the corresponding signal transmitter must first be briefly switched off and on again.

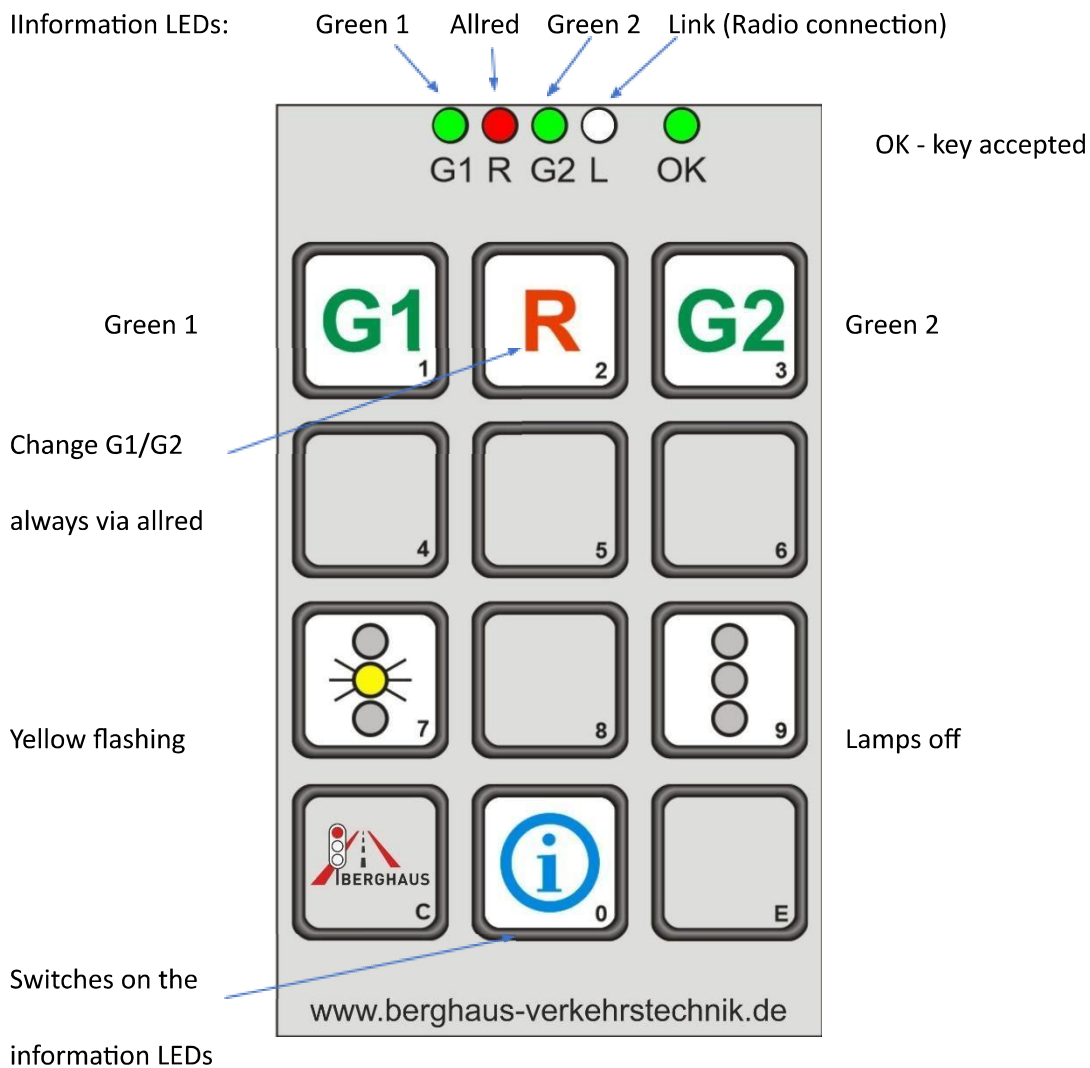
3. Once the desired green mode is set, switch on the traffic lights at the On/Off toggle switch. The traffic lights start with the switch-on programme from yellow flashing to all-red and Rest on all-red.

SHUT DOWN SEQUENCE

It is recommended the operator goes to ALL RED position and then use the “Lamps OFF” function on the wireless Remote or the ON/Off switch on control panel when using the wired remote.

2. OPERATION USING WIRELESS REMOTE CONTROL:

Information LEDs:



Example:

- Press the desired key, e.g. G1, from AllRed.
- Confirmation tone (1 x beep) occurs.
- LED OK flashes green on request.
- LED L lights up - radio connection to the traffic light is established.
- The LED for the selected signal image G1 flashes.
- Confirmation tone (1 x beep) is emitted and LED G1 lights up continuously.
- The traffic light now displays the desired signal pattern.
- Information LEDs switch off.

With key i, the signal image currently displayed at the traffic lights can be displayed with the information LEDs on the remote control.

Here G1 stands for green 1, R for all-red, G2 for green, L for connection and OK for the fact that the button press on the radio remote control has been accepted.

OPERATIONAL SEQUENCE:

The signal heads can be operated individually or for one-way traffic. The default position after the start up sequence is All-red.

Every change from Green 1 to Green 2 must be made via all-red.

Situation 1: Green Times are selected on the signal heads

If you have selected a green time in seconds, the signal heads automatically change to red via Yellow after this set green time has elapsed. The sequence of pressing the buttons will be as follows:

All-red -> green 1 (expiry after time) -> all-red -> green 2 (expiry after time) -> all-red

Situation 2: Green time is set to manual (∞)

If one side is set to infinite green time ∞ , this side shows green permanently. A green for the other side can only be done via all-red.

Both sides can also be set to infinite green time ∞ .

All-red -> green 1 (∞) -> switch manually to all-red -> green 2 (∞) -> switch manually to all-red.

A request for all-red, yellow flashing or lamps off can be made from any signal pattern.

UNDERSTANDING THE ERRORS:

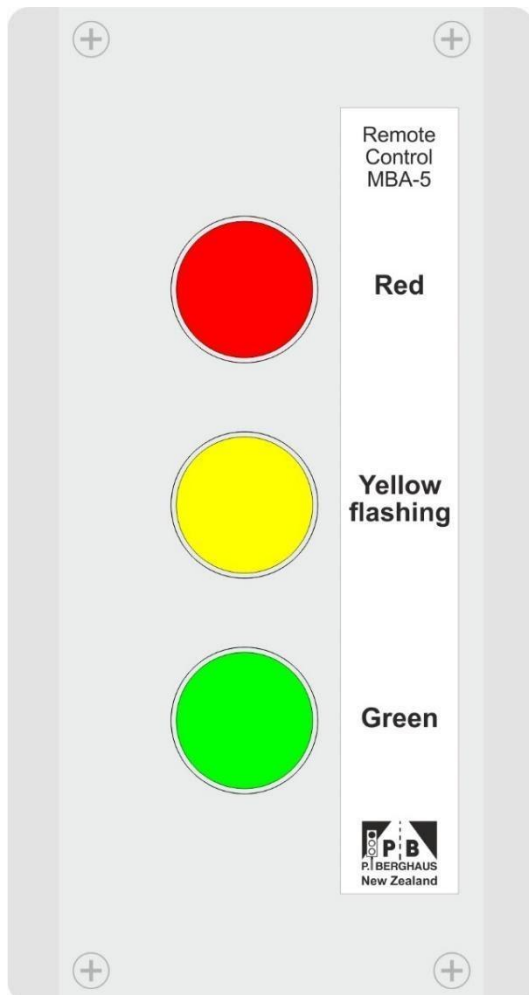
When an Error tone (4 x beep) occurs - please always observe information LEDs!

1. *Error tone and L as well as G1 or G2 light up permanently:*
Direct selection of G1 or G2 not possible - first go via All Red.
2. *Error tone and R flashing:*
You can only change from lamps off and from yellow flashing via All Red.
Direct selection of G1 or G2 not possible - first go via Allred.
3. *Error tone and L flashes:*
Traffic light not accessible via radio. Info LEDs indicate current signal status.

3. OPERATION USING CABLE REMOTE CONTROL:

When the cable remote control is plugged in, the radio control is switched off immediately. A previously set signal pattern is retained.

The signal head can only be controlled individually using the cable remote control. There is no communication in between the signal head, hence it can be used to control multiple accesses as required.



The function selected on the button lights up:

Red

Yellow flashing

Green

OPERATIONAL SEQUENCE:

The signal heads can be operated individually only. The default position after the start up sequence is **ALL-red**. Press Green for Green phase on that signal head.

Situation 1: Green Times are selected on the signal head

If you have selected a green time in seconds, the signal heads automatically changes to red via Yellow after this set green time has elapsed.

Situation 2: Green time is set to manual (∞)

If one side is set to infinite green time ∞ , this side shows green permanently. Press the RED button to go Red on that signal Head.