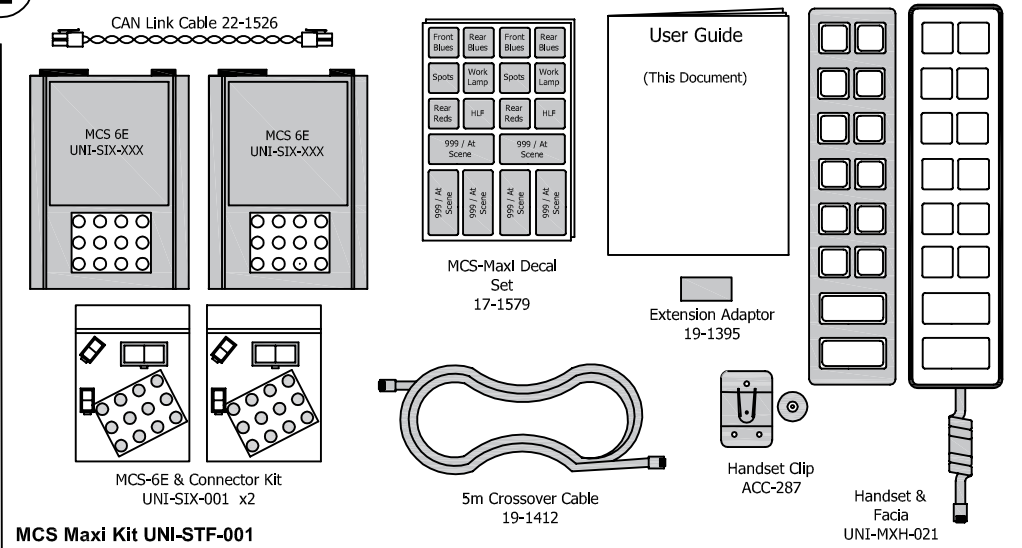


MCS-Maxi Advanced User Guide

1 Contents

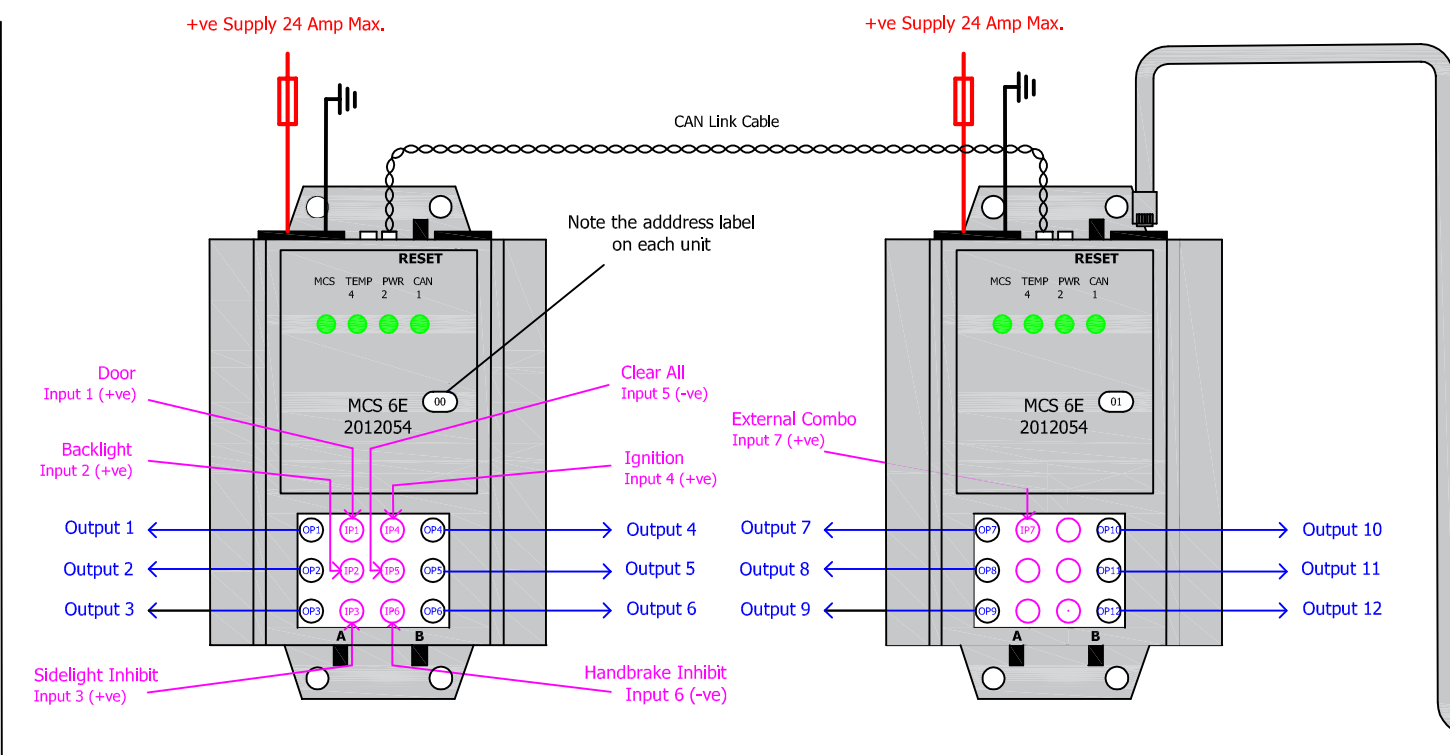


2 Features and Specification

The MCS-Maxi is a cost effective solution for installations that do not require a great deal of sophistication. The MCS-Maxi consists of a 14 way handset and two output modules each consisting of 6 outputs.

- 12 and 24 volt operation
- 24 amps @ 12v maximum current handling per MCS-6E module
- Electronically current limited outputs configurable at 5 or 10Amps. (see Section 5 - Current limits)
- Each button can be configured as momentary or latching with a choice of 8 colours. (see section 4a)
- Each of the twelve smaller buttons operates an associated output. Button 1 activates Output 1, Button 2 activates output 2, etc.
- Each of the large 'Combo' buttons can be configured to activate any combination of the 12 smaller buttons and their associated outputs.
- Ignition input keeps system awake if no outputs active and also wakes system when ignition is turned on.
- Output 3 can be inhibited by a positive input (IP3). Suitable for inhibiting a HLF output when sidelights are on.
- Output 6 can be inhibited by negative input 6. Ideal for inhibiting rear reds when handbrake not applied. (see advanced step to activate this feature).

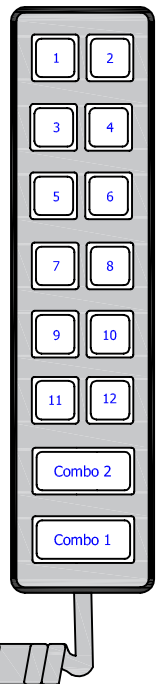
3 Wiring



Output	Inhibited When	Operated by
OP1		Button 1
OP2		Button 2
OP3	IP3 Active	Button 3
OP4		Button 4
OP5		Button 5
OP6	IP6 Off **	Button 6
OP7		Button 7
OP8		Button 8
OP9		Combo 1
OP10		Combo 2
OP11	IP3 Active **	Button 3 **
OP12		Sys Awake / ANY button pressed **

**Optional See Section 4b

Input	Function
IP1	Door Input (+ve) - If this input changes to +ve (door open) whilst Combo1 is active then combo1 will cancel and activate combo2
IP2	Dims backlight illumination of handset (+ve)
IP3	Sidelight Input (+ve) - when active will inhibit OP3
IP4	Ignition (+ve) - Prevents system from sleeping
IP5	Clear all (-ve) - Deactivates all buttons and combos.
IP6	Handbrake - When released OP6 will be inhibited**
IP7	Each pulse - Activates Combo 1

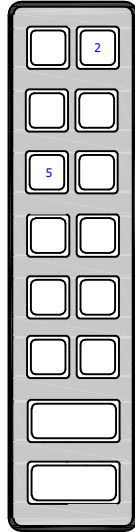


MCS-Maxi Advanced User Guide

4a

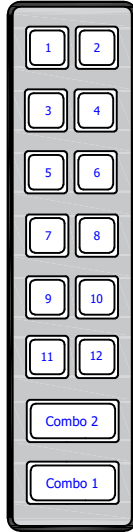
Configure System

1. Start



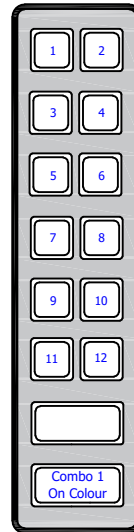
Press and hold buttons 2 and 5 and then power up the device. When the buttons start to flash red and blue release them. This will then take you to page 2.

2. Colour



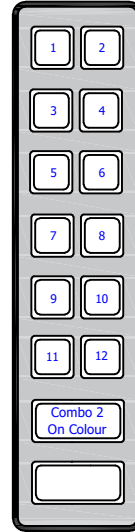
Press any button to change its colour. There are 8 available colours. When you are finished, press and hold the button that is flashing to save the settings and move to the next page.

3. Combo 1



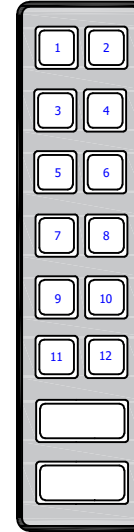
Press any smaller button to add it to Combo Group 1. Buttons illuminated green will be part of the combo. When you are finished, press and hold the button that is flashing to move to the next page.

4. Combo 2



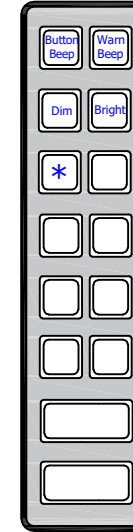
Press any smaller button to add it to Combo Group 2. When you are finished, press and hold the button that is flashing to move to the next page.

5. Latching



Press any illuminated button to switch between latching (red) and momentary (white) mode. When you are finished, press and hold the button that is flashing to move to the next page.

6. Option 1



Button Beep: When active (green) buttons will beep when pressed.
Warn Beep: When active (green) the handset will beep every five seconds if any button is selected.
Dim / Bright: Select the backlight brightness.

You have now completed the basic handset configuration.

If wish to access the advanced functions in step7 (Section 4b), press and hold the * button whilst holding it, press and hold the flashing button until the page changes.

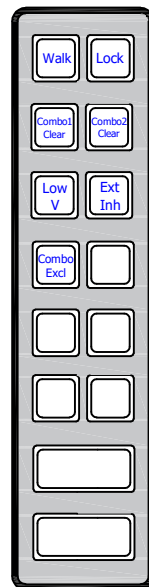
Otherwise pressing and holding the flashing button will save setting and return you back to step 2 (Colour).

Once you have saved settings you may exit the configuration mode and return to normal handset operation by cycling power to the device.

4b

Advanced Configuration

7. Option 2



To access the advanced configuration please see section 4a

Walk: Enables the walk test. Press and hold the large Combo to activate the walk test when in normal mode

Lock: Enables keypad lock. Press and hold the Large Combo button to lock/unlock the keypad in normal mode.

Combo1 Clear: This will clear all buttons before activating Combo1

Combo2 Clear: This will clear all buttons before activating Combo2. If Combo 2 is not required, do not enable this option.

Ext(ernal) Inh(hibit): When enabled, output 6 will only activate when button 6 is pressed AND input 6 is grounded.

Low V(oltage): If enabled and the supply drops below 11.5v the outputs will be inhibited and the handset will go into low power mode.

Combo Excl: Enabling this option inhibits both Combo buttons being active at the same time.

Once configured, press and hold the flashing button to save and return to page 2 (colour).

5

Set Current Limits

Each output of the MCS-6E module has an electronic current limit. This can be set to 5 or 10 Amps as using the following procedure:

- Press and hold button 'B' for approximately 5 seconds, until the red LED on OP1 turns on. (either flashing or steady) Release button 'B'.
- Pressing button 'A' will cycle between 5A limit (flashing) and 10A (steady on).
- Pressing button 'B' will then cycle to the next output.
- cycle through the outputs, selecting the current limit as required. Once you are finished change settings, reset the device by pressing the reset button, or cycling the power.

6

Set Address / Fault Finding

The software address of each module is pre-set as denoted by the sticker on each unit marked 00 or 01. If you purchase or use a replacement module that is not configured as required it can be set manually as follows:

- Press and hold button 'B' for approximately 5 seconds, until the red LED on OP1 turns on. (either flashing or steady) do not let go of the button! continue holding for another 5 seconds. The 4 status LEDs will turn on, either flashing or steady.
- Press button 'A' to change the address. If an LED is flashing, the number above is ignored. Add the number of all the LEDs that are 'Steady On' and this will then become the address of the module. Example: If LED1 is steady, LED 2 is flashing and LED 4 is steady on, then add 1 and 4: the address of this module is 5)
- Press button 'B' to save the address, then cycle the power.

Diagnosis LEDs

CAN	Flashing indicates communication with the handset.
TEMP	Indicates over temperature error.
PWR	Illuminates when supply voltage present / system awake.
MCS	Illuminates when acting as an expansion unit for the MCS32 control system.