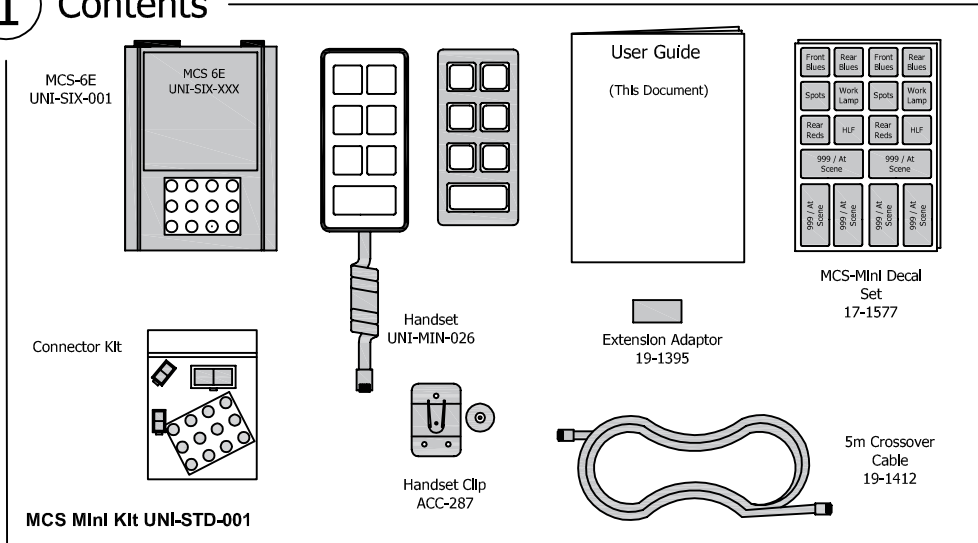


# MCS-Mini Advanced User Guide

## 1 Contents

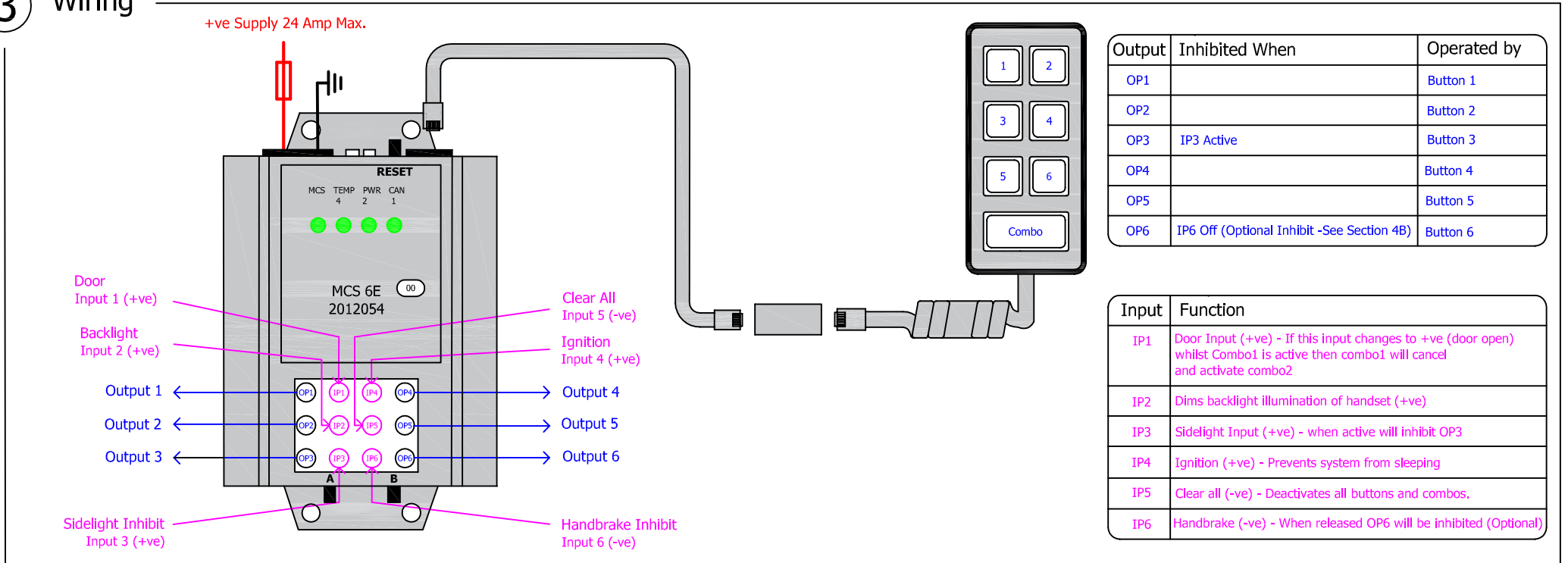


## 2 Features and Specification

The MCS-Mini is a cost effective solution for installations that do not require a great deal of sophistication. The MCS-Mini consists of a 7 way handset and output module consisting of 6 outputs.

- 12 and 24 volt operation
- 24 amps @ 12v maximum current handling
- Each of the six smaller buttons operates an associated output. Button 1 activates Output 1, Button 2 activates output 2, etc.
- Each output can be electronically current limited at 5 or 10 Amps. (see Section 5 - Current limits)
- Output 3 can be inhibited by a positive input (IP3). For example if button 3 is used as Head light Flash then a side light feed on IP3 can inhibit.
- Output 6 can be inhibited if negative input not present. Can be used to inhibit rear reds when handbrake released. (see Section 4B how to activate this feature).
- Ignition input keeps system awake - Otherwise the system will sleep after 60 seconds if no buttons are active.
- The large 'Combo' button can be configured to activate any combination of the 6 smaller button and their associated outputs. This can be a single combination (999--Off) or double combination (999--At Scene--Off).

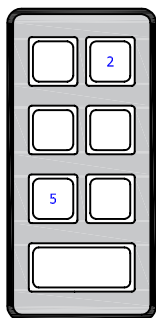
## 3 Wiring



# MCS-Mini Advanced User Guide

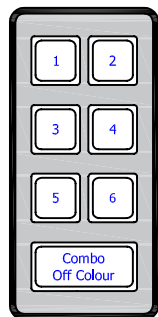
## 4a Configure System

1. Start



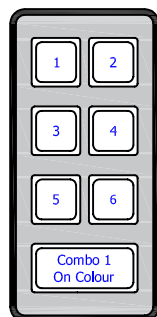
Press and hold buttons 2 and 5 and then power up the device. When the buttons start to flash red and blue release them. This will then take you to page 2.

2. Colour



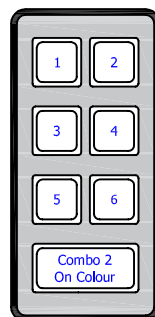
Press any button to change its colour. There are 8 available colours. When you are finished, press and hold the button that is flashing to save the settings and move to the next page.

3. Combo 1



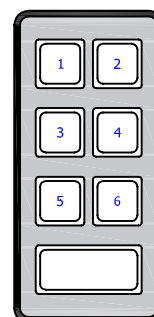
Pressing any smaller button will add it to Combo Group 1. Buttons illuminated green will be part of the combo. When you are finished, press and hold the button that is flashing to move to the next page.

4. Combo 2



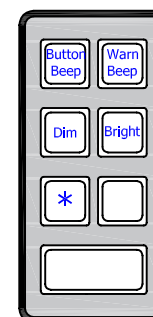
Press any smaller button to add it to Combo Group 2. When you are finished, press and hold the button that is flashing to move to the next page. If Combo 2 is not required do not select any smaller buttons.

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

To access the advanced configuration please see section 4a

**Walk:** Enables the walk test. When enabled pressing and holding 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

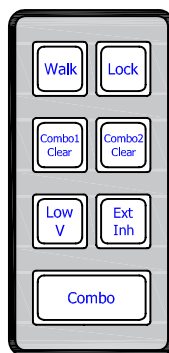
**Combo2 Clear:** This will clear all buttons before activating Combo2. If Combo 2 is not required, do not enable this option.

**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 an the supply drops below 11.5v the outputs will be inhibited and the handset will go into low power mode.

**Active:** When enabled output 12 is active when ANY button is active

7. Option 2



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 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 all 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.

### Diagnositc 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.