OLED DIN Switch Panel

USER MANUAL

V2.01 29/01/24

Technical Helpline
+44 (0) 151 482 8970
www.intellitecmv.com

E11 10R-05 11529

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OLED DIN Switch Panel

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The instructions within this booklet (User's Manual) must be read thoroughly before any installation work, testing or general use.
We recommend this booklet is kept in a safe place that can be easily retrieved for any future referral.

Installation must be carried out by competent personnel with adequate knowledge of electrical installations.

All necessary precautions must be taken to ensure this product is fitted correctly, securely and safely into the desired application.

This product must not interfere with road safety or OEM safety systems fitted to the vehicle
All necessary checks must be carried out by installer to ensure this device is used only in the intended application and also does not conflict with any road laws in all countries the vehicle may be driven within.

Intellitec MV Ltd reserves the right to update this document (User's Manual) without notification at any time.

You will find the latest documents for our products on our website:
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PRODUCT
Specification

Intellitec
OLED DIN Switch Panel

Input Voltage (Volts DC)	9-32V
Max Input Current (A)	1.5A
Standby Current Consumption (mA)	50mA
IP Rating of module	Ip20
Weight (g)	112g
Dimensions L x W x D (mm)	185x58x22mm

Inputs

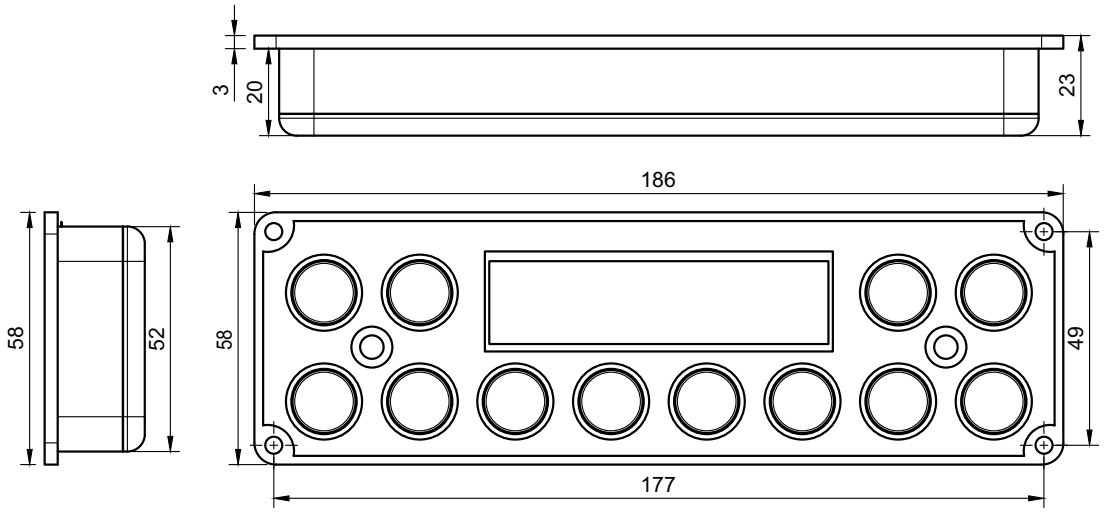
12x Programmable Switches
4x Analogue Inputs
4x Digital High/Low Inputs
2x Light Sensors
2x VE Direct Ports

Outputs

12x Programmable Button Backlights
OLED Display
1x Negative Output
1x Positive Output
Buzzer

INSTALLATION
Dimensions (mm)

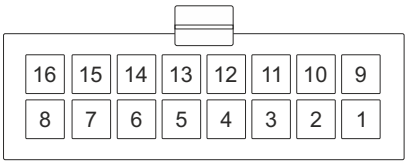
Intellitec
OLED DIN Switch Panel



Connector Plug Wiring

Connector	Description	Manufacturers Part Number
Module Connector	Molex 16-Way Female Housing	46992-1610

Cable Entry View



01. Input 1.
02. Input 2.
03. PMC Blue Loop.
04. ADC Input 1.
05. ADC Input 2.
06. ADC Input 3.
07. CAN Low.
08. Keypad Positive.
09. Input 4.
10. Input 3.
11. PMC Yellow Loop.
12. Switched Positive Output.
13. Switched Negative Output.
14. ADC Input 4.
15. CAN High.
16. Keypad Ground.

iConnex:

When configured to communicate with the iConnex module, the keypad uses 2 keypad IDs and 3 Slave IDs.
To configure the IDs, hold 'Button 1' down during startup.
The Auxiliary slave module may only be configured using firmware.
As there are no audio functions within the OLED DIN switch unit, both the audio and graphical slave modules are configured for graphics.

Graphic Slave Module 1:

Inputs

Input 01	Input 01
Input 02	Input 02
Input 03	Input 03
Input 04	Input 04
Input 05	
Input 06	

Outputs

Output 01	Graphic Warning 01	Output 07	Graphic warning 07
Output 02	Graphic Warning 02	Output 08	Graphic Warning 08
Output 03	Graphic Warning 03	Output 09	Graphic Warning 09
Output 04	Graphic Warning 04	Output 10	Graphic Warning 10
Output 05	Graphic Warning 05	Output 11	Graphic Warning 11
Output 06	Graphic Warning 06	Output 12	Graphic Warning 12

Graphic Slave Module 2:

Inputs

Input 01	
Input 02	
Input 03	Alarm 01
Input 04	Alarm 02
Input 05	Alarm 03
Input 06	Alarm 04

Outputs

Output 01	Graphic Warning 13	Output 07	Graphic warning 19
Output 02	Graphic Warning 14	Output 08	Graphic Warning 20
Output 03	Graphic Warning 15	Output 09	Graphic Warning 21
Output 04	Graphic Warning 16	Output 10	Graphic Warning 22
Output 05	Graphic Warning 17	Output 11	Graphic Warning 23
Output 06	Graphic Warning 18	Output 12	Graphic Warning 24

Auxiliary Module:

Inputs

Input 01	Light Monitor 01
Input 02	Light Monitor 02
Input 03	Button Pressed
Input 04	
Input 05	
Input 06	

Outputs

Output 01		Output 07	Screensaver Refresh
Output 02		Output 08	BackLight
Output 03		Output 09	Dim
Output 04		Output 10	Aux output (POS)
Output 05		Output 11	Aux Output (NEG)
Output 06	BMV Data Screen	Output 12	Buzzer

PMC:

The keypad can also be configured to use PMC channels on both the Blue and Yellow Loop.

Switches

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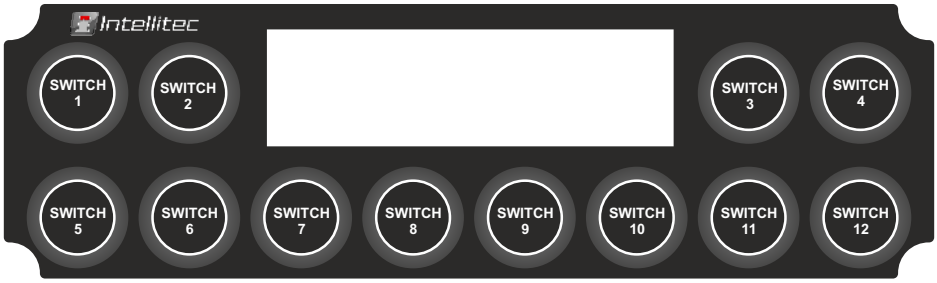
Buttons:

The OLED DIN Switch Panel has 12 Buttons numbered 1 to 12 from the top left to the bottom right.



Button Lighting:

Each button has individual RGB LED lighting which allows for independent colours to be configured.
The brightness of the RGB LEDs can also be configured to both an operational and dimmed level.

Backlighting:

The backlighting colour and brightness can be configured separately to the button lighting.

iConnex Mode:

Aux slave Input 3 triggers while any button is pressed.
Aux slave Output 8 triggers a firmware configured backlight.
Aux slave Output 9 triggers a dimmed brightness.

Switches	Keypad ID	
1-6	Keypad 1	Switches 1-6
7-12	Keypad 2	Switches 1-6

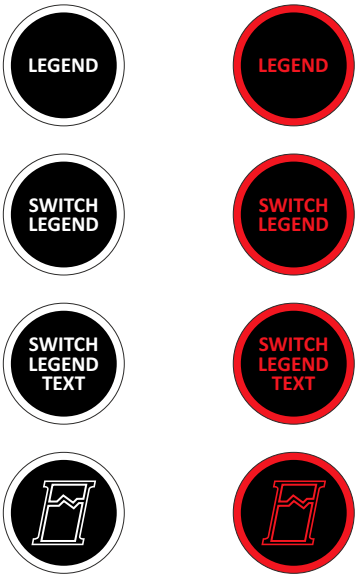
PMC Mode:

PMC Channels can be assigned to each button to trigger while pressed.

Legends:

The button legends can be customised with both text and icons.

LED Off: LED On:



Avalable Colours

Mode	Avalable Colours
iConnex	Amber Blue Cyan Green Red White
PMC	RGB

Start Up Screen:

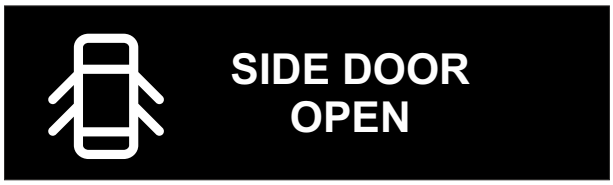
The OLED display will show a logo during start up, this can be set to a customer specific logo.

Messages:

The OLED display can show messages up to 3 lines of text and an icon, these messages can be configured with a priority and a display time.
Only messages with the highest priority will show. If there are multiple messages of the same priority, they will cycle for a configured cycle time per message.

Message icon examples

Display message examples



Screensaver:

The OLED display will display a screen saver after a set time of inactivity (Default 30 minuets).
After the set time the screensaver will activate turning of the display.
Any new messages or button presses will refresh the inactivity timer.
The screensaver timer can also be reset through an iConnex output or PMC channel, to allow for certain conditions (such as ignition) to keep the display on.

iConnex Mode:

The iConnex module can be configured to trigger different messages and also refresh the screensaver timer.

PMC Mode:

PMC channels can be configured to trigger different messages and also refresh the screensaver timer.

Digital Inputs:

There are 4 digital inputs, configurable to be either active high or an active low.
iConnex Mode: The Graphical slave inputs 1-4 are triggered by inputs 1-4.
PMC Mode: The inputs will trigger the respective configured PMC channels.

Analogue Inputs:

There are 4 analogue ADC voltage inputs. These can be used to monitor voltages and trigger alarms.

BMV Inputs:

There are 2 VE Direct ports located on the rear of the unit for communication with 2 BMVs.
Main battery - Voltage.
Main Battery - State of charge.
Auxiliary Battery - Voltage

Light Monitors:

There are 2 light sensors mounted either side of the unit.
Using the reading from only the left, only the right or an average of both,
2 separate light monitor alarms can be set.

Each alarm can be configured such that when the input reading is within the set range the alarm is active.
Each alarm can be configured such that when the input reading is outside the set range the alarm is active.

Battery Alarms:

There are 4 separate battery alarms that can be configured to trigger from:
An ADC input
A BMV Voltage
A BMV State of charge.

Each alarm can be configured such that when the input reading is within the set range the alarm is active.
Each alarm can be configured such that when the input reading is outside the set range the alarm is active.

iConnex Mode: iConnex Audio slave inputs 3-6 are triggered by alarms 1-4.

PMC Mode: Each alarm can be configured to trigger a PMC channel.

Buzzer:

A PCB Mounted buzzer can be configured to sound during either an active alarm or button press (timed). The buzzer can also be sounded using either auxiliary output 12 or a configured PMC Channel

Switched Outputs

Positive Output:

There is a low power switched positive pin (Pin 12) located on the rear of the OLED DIN, this can be used for a positive signal output.

Negative Output:

There is a low power switched negative pin (Pin 13) located on the rear of the OLED DIN, this can be used for a negative signal output.

Output Configuration:

The switched outputs can be triggered via:
iConnex Module output (Mode dependant).
PMC Channel (Mode dependant).
Button Press (Constant).
Button Press (Timed).
Voltage threshold from the ADC Input.
State of charge from the 2 BMVs.
Voltage threshold from Main or Auxiliary battery from the 2 BMVs.