



# iConnex Response

## USER MANUAL

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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:  
[www.intellitecmv.com](http://www.intellitecmv.com)

# PRODUCT SPECIFICATION

|                                         |                |
|-----------------------------------------|----------------|
| Input Voltage (Volts DC)                | 12/24V         |
| Max Input Current (A)                   | 60             |
| Standby Current Consumption (mA)        | 35 mA $\pm$ 10 |
| Isolation mode Current Consumption (mA) | < 5mA          |
| IP Rating                               | IP20           |
| Weight (kg)                             | 2.5 kg         |
| Dimensions L x W x D (mm)               | 290 x 178 x 77 |

## INPUTS

|                                    |
|------------------------------------|
| 16x Digital (Pos/Neg Configurable) |
| 2x Voltage Sense (Analog)          |
| 2x Temperature Sensors             |
| 2x Vehicle CAN                     |
| 1x 3rd Party CAN                   |
| 1x LIN                             |
| 1x Intelli CAN                     |

## OUTPUTS

|                                                 |
|-------------------------------------------------|
| 24x Low Power Outputs (2A Max)                  |
| 12x Medium Power Outputs (10A Max)              |
| 4x High Power Outputs (30A Relay Controlled)    |
| 6x Low Current Positive Signal Coil Driver (1A) |
| 6x Low Current Negative Signal Coil Driver (1A) |
| Type D Siren Amplifier (1x 200W or 2x 100W)     |

## CAN BUS - Baud Rates

|               |
|---------------|
| 50 Kbits/s    |
| 83.33 Kbits/s |
| 100 Kbits/s   |
| 125 Kbits/s   |
| 250 Kbits/s   |
| 500 Kbits/s   |
| 666 Kbits/s   |
| 1000 Kbits/s  |

# INSTALLATION

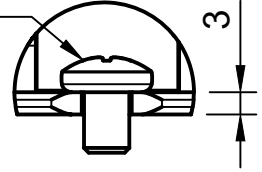
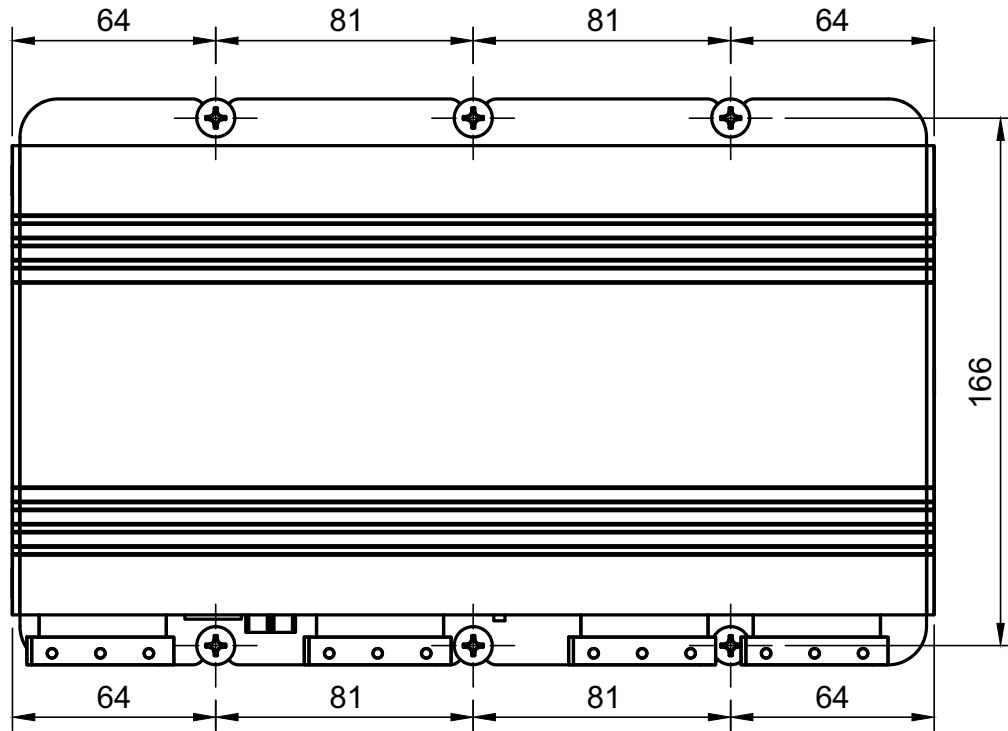
Schematic:  
(mm)



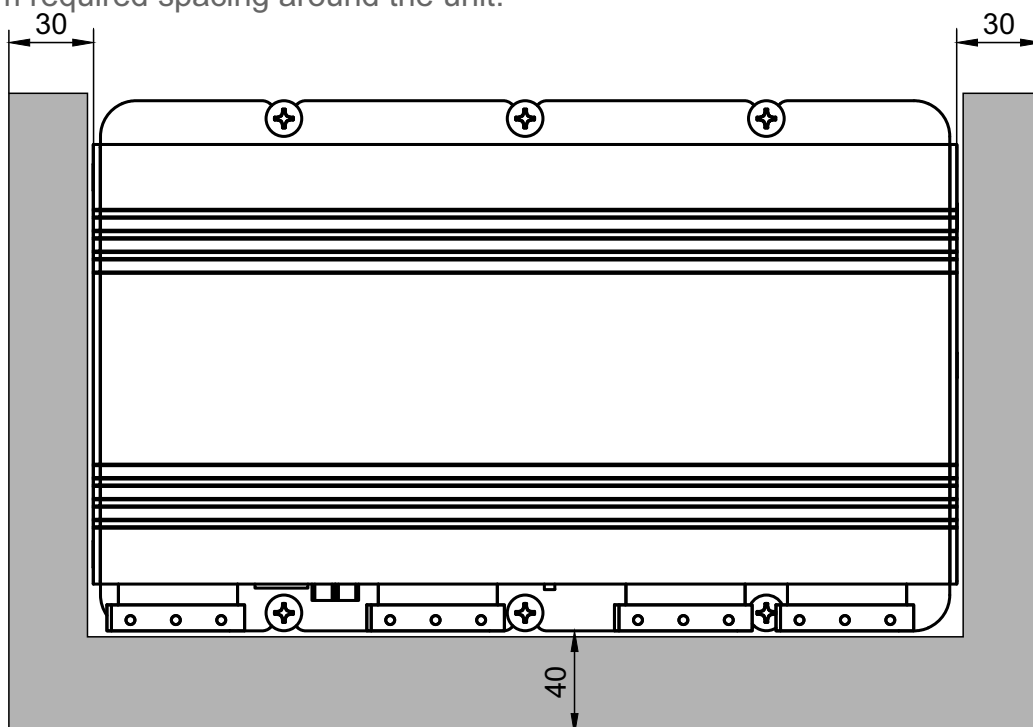
# INSTALLATION

Schematic:  
(mm)  
Mounting

M6 Pan Head Screw  
Advised Torque (9Nm)

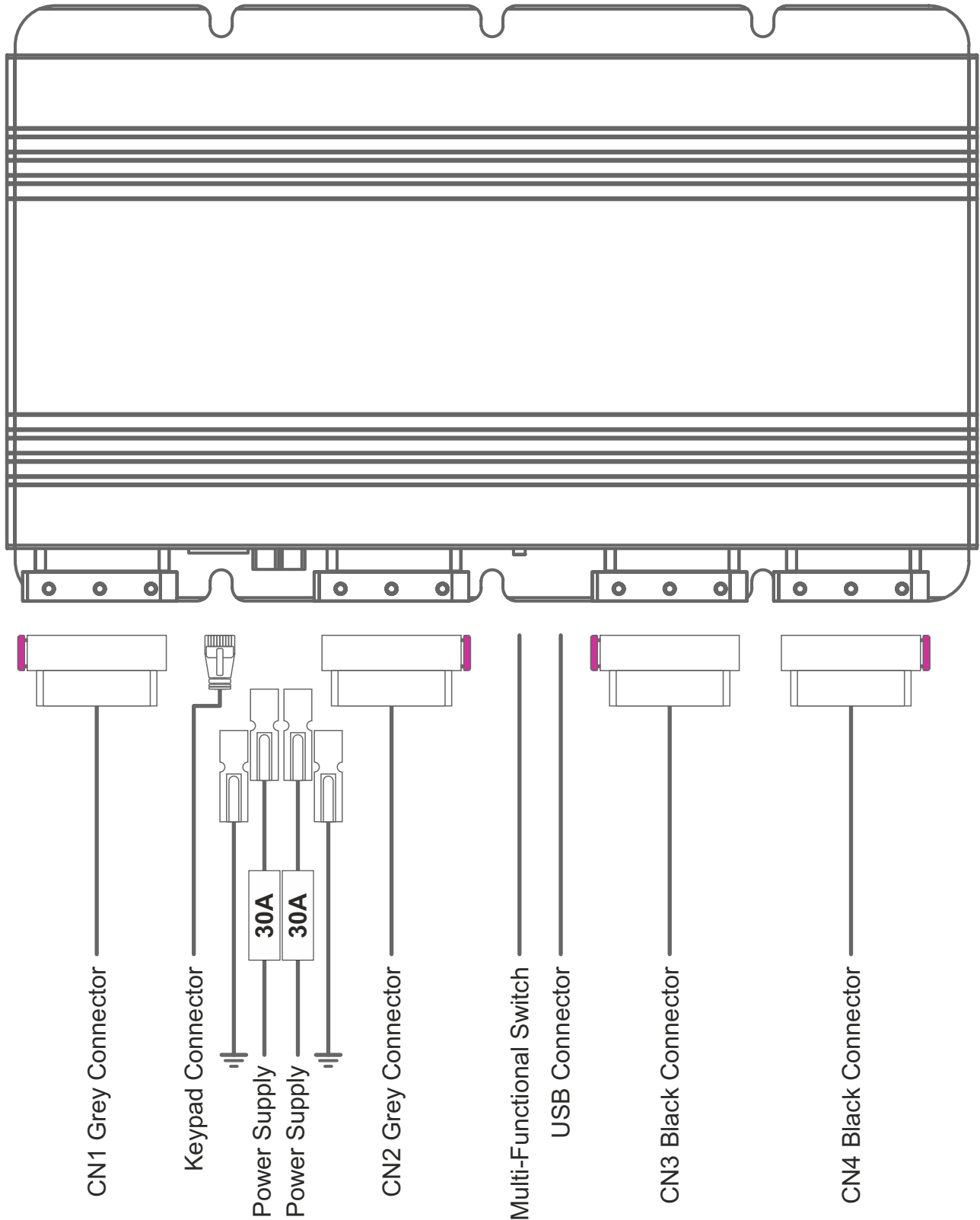


Minimum required spacing around the unit.



# INSTALLATION

Schematic:



# INSTALLATION

## Connector Plug Wiring:

| Connector          | Description                              |
|--------------------|------------------------------------------|
| CN1 Grey Connector | Grey Automotive Connector Housing 24 Way |



### Pin Out

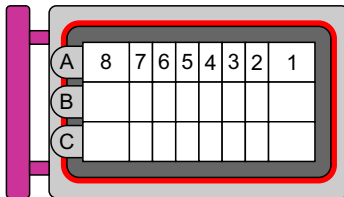
### Description

A1 - FET 10A Output 2  
A2 - VSense 2  
A3 - Telematics Positive 4  
A4 - Telematics Positive 3  
A5 - Telematics Positive 2  
A6 - Telematics Positive 1  
A7 - VSense 1  
A8 - FET 10A Output 1

B1 - FET 10A Output 4  
B2 - Telematics Negative 4  
B3 - Telematics Negative 3  
B4 - Telematics Positive 6  
B5 - Telematics Positive 5  
B6 - Telematics Negative 2  
B7 - Telematics Negative 1  
B8 - FET 10A Output 3

C1 - FET 10A Output 6  
C2 - Telematics Negative 6  
C3 - Keypad VBAT  
C4 - Keypad ICAN High  
C5 - Keypad ICAN Low  
C6 - Keypad Ground  
C7 - Telematics Negative 5  
C8 - FET 10A Output 5

### Cable Entry View



| Connector          | Description                              |
|--------------------|------------------------------------------|
| CN2 Grey Connector | Grey Automotive Connector Housing 24 Way |



### Pin Out

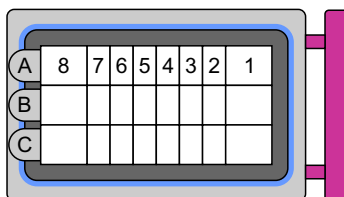
### Description

A1 - FET 10A Output 8  
A2 - Chassis 2 CCAN Low  
A3 - Chassis 2 CCAN High  
A4 - Chassis 1 VCAN Low  
A5 - Chassis 1 VCAN High  
A6 - Lightbar LKAN Low  
A7 - Lightbar LKAN High  
A8 - FET 10A Output 7

B1 - FET 10A Output 10  
B2 - HL Input Siren 10  
B3 - Temperature Data T2/LIN  
B4 - Temperature Ground  
B5 - Temperature Data T1  
B6 - Temperature 5V  
B7 - HL Input 9  
B8 - FET 10A Output 9

C1 - FET 10A Output 12  
C2 - HL Input 16  
C3 - HL Input 15  
C4 - HL Input 14  
C5 - HL Input 13  
C6 - HL Input 12  
C7 - HL Input 11  
C8 - FET 10A Output 11

### Cable Entry View



# INSTALLATION

## Connector Plug Wiring:

| Connector           | Description                               |
|---------------------|-------------------------------------------|
| CN3 Black Connector | Black Automotive Connector Housing 24 Way |



### Pin Out

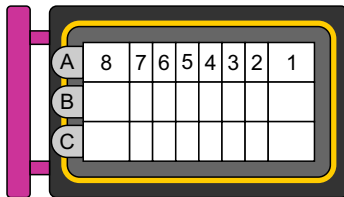
### Description

A1 - Relay 2 87  
 A2 - FET 2A Output 6  
 A3 - FET 2A Output 5  
 A4 - FET 2A Output 4  
 A5 - FET 2A Output 3  
 A6 - FET 2A Output 2  
 A7 - FET 2A Output 1  
 A8 - Relay 1 87

B1 - Relay 2 87a  
 B2 - FET 2A Output 12  
 B3 - FET 2A Output 11  
 B4 - FET 2A Output 10  
 B5 - FET 2A Output 9  
 B6 - FET 2A Output 8  
 B7 - FET 2A Output 7  
 B8 - Relay 1 87a

C1 - Relay 2 30  
 C2 - Speaker Aux -  
 C3 - HL Input 4  
 C4 - HL Input 3  
 C5 - HL Input 2 - (Neg Wake)  
 C6 - HL Input 1 - (Pos Wake)  
 C7 - Speaker Aux +  
 C8 - Relay 1 30

Cable Entry View



| Connector           | Description                               |
|---------------------|-------------------------------------------|
| CN4 Black Connector | Black Automotive Connector Housing 24 Way |



### Pin Out

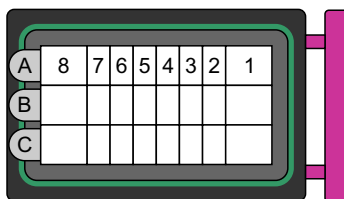
### Description

A1 - Relay 4 87  
 A2 - FET 2A Output 18  
 A3 - FET 2A Output 17  
 A4 - FET 2A Output 16  
 A5 - FET 2A Output 15  
 A6 - FET 2A Output 14  
 A7 - FET 2A Output 13  
 A8 - Relay 3 87

B1 - Relay 4 87a  
 B2 - FET 2A Output 24  
 B3 - FET 2A Output 23  
 B4 - FET 2A Output 22  
 B5 - FET 2A Output 21  
 B6 - FET 2A Output 20  
 B7 - FET 2A Output 19  
 B8 - Relay 3 87a

C1 - Relay 4 30  
 C2 - Speaker Siren -  
 C3 - HL Input 8  
 C4 - HL Input 7  
 C5 - HL Input 6  
 C6 - HL Input 5  
 C7 - Speaker Siren +  
 C8 - Relay 3 30

Cable Entry View



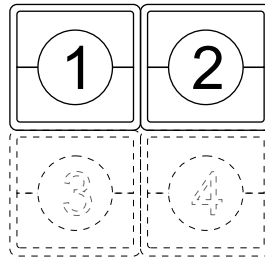
# INSTALLATION

## Connector Plug Wiring:

| Connector       | Description                              |
|-----------------|------------------------------------------|
| Power Connector | Red Anderson Powerpole Connector Housing |



Cable Entry View

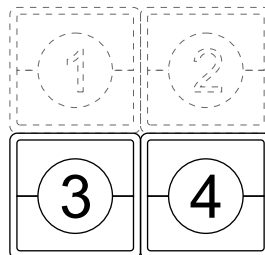


- 1 - + DC (Positive 30 Amp max)
- 2 - + DC (Positive 30 Amp max)
- 3 - Ground
- 4 - Ground

| Connector       | Description                                |
|-----------------|--------------------------------------------|
| Power Connector | Black Anderson Powerpole Connector Housing |



Cable Entry View

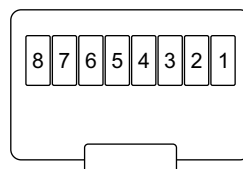


- 1 - + DC (Positive 30 Amp max)
- 2 - + DC (Positive 30 Amp max)
- 3 - Ground
- 4 - Ground

| Connector        | Description           |
|------------------|-----------------------|
| Keypad Connector | CAT 5 Straight - RJ45 |



Cable Entry View

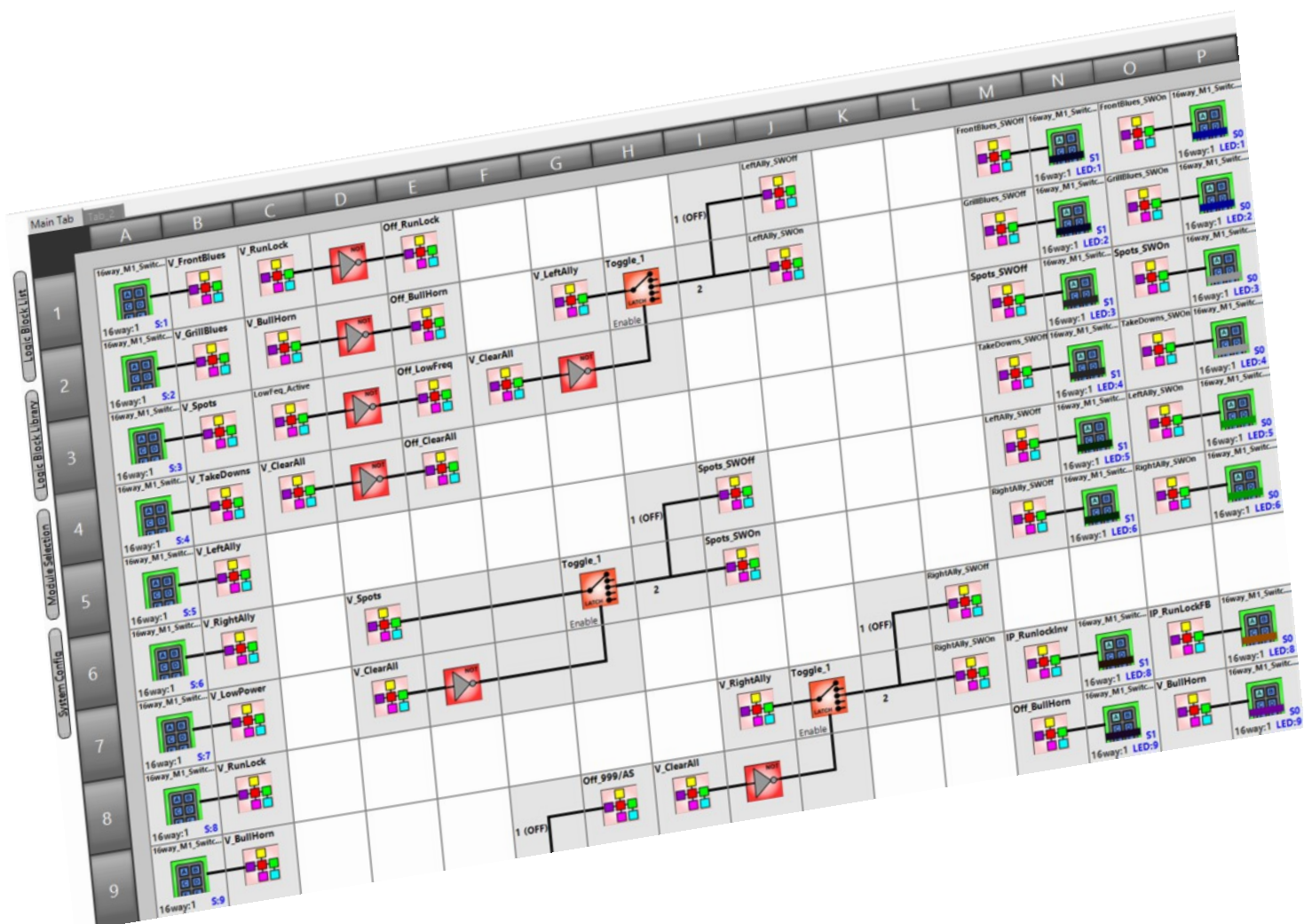


- 1 - Ground
- 2 - Engine Wake Neg
- 3 - Engine Wake Pos
- 4 - Keypad Positive
- 5 - ICAN Hi
- 6 - ICAN Lo
- 7 - Mic
- 8 - PA - IN

# ICONNEX GUI

## iConnex Response

The iConnex Response and Patrol Keypads can be programmed via the iConnex GUI software package. The iConnec GUI is the utility to write and upload programs to the module. To Download the GUI please visit: [www.intellitemvcom/pages/downloads](http://www.intellitemvcom/pages/downloads)



*iConnex GUI Software  
Available as a free of  
charge download*

# ICONNEX GUI

## Connecting the Response to the GUI

Use the USB on the front of the module to connect to the GUI.  
Ensure the iConnex Response module is powered when connecting to the GUI.



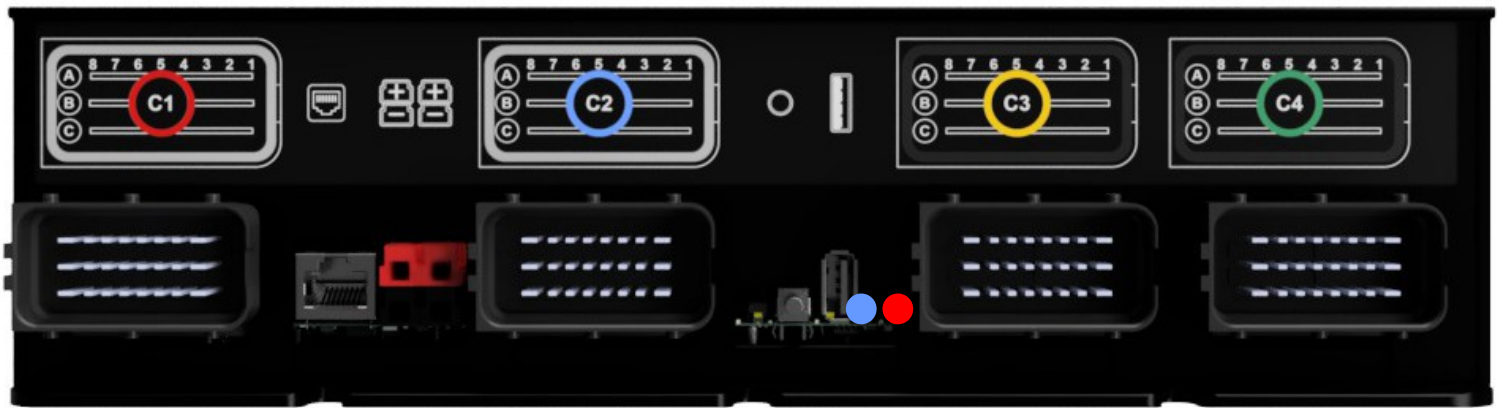
**BLUE** is a Data status LED

When the blue LED is ON, that signifies there is a connection to the GUI.

When the blue LED is OFF, that signifies there is no connection to the GUI.

**RED** is an Error LED

When the red LED is ON, that signifies there is a programming error.



# DIAGNOSTIC LED

The module has a red, blue and green LED for diagnostic use.

**BLUE** is the Chassis CAN 1 status LED

When the blue LED is ON, that signifies there is CAN traffic.

When the blue LED is OFF, that signifies there is no CAN traffic being received

**GREEN** is the Intelli CAN status LED

When the green LED is ON, that signifies the module has power.

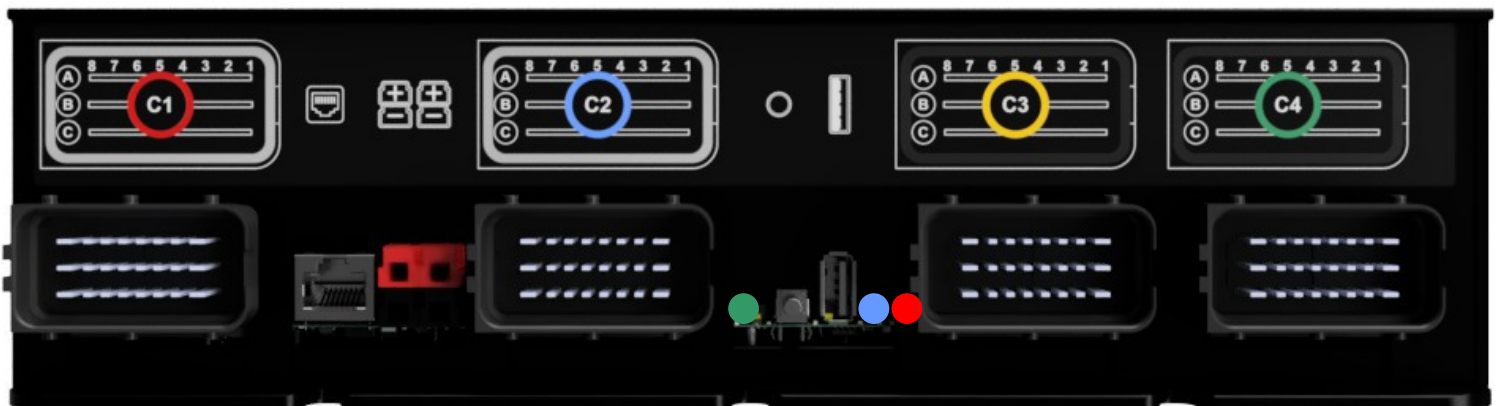
When the green LED is OFF, that signifies the module has no power.

**RED** is an Error LED

When the red LED is ON, that signifies there is an error.

Using the iConnex GUI the error log can be used to identify the errors.

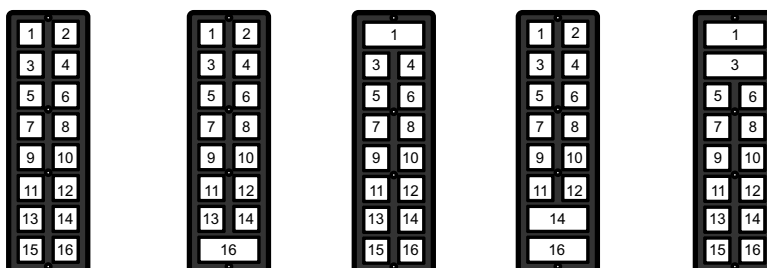
Once the error logs are clear the red LED will go OFF.



# KEYPAD

## iConnex Response Patrol Keypads

### Type 16 Patrol Keypads



|               |                                                                               |
|---------------|-------------------------------------------------------------------------------|
| ICX-SW16B     | Type 16 Patrol Keypad - Bottom Cable Mount 8x2 Buttons                        |
| ICX-SW16T     | Type 16 Patrol Keypad - Top Cable Mount 8x2 Buttons                           |
| ICX-SW16B-15B | Type 16 Patrol Keypad - Bottom Cable Mount 7x2 + 1x Bottom Quick Fire Button  |
| ICX-SW16T-15B | Type 16 Patrol Keypad - Top Cable Mount 7x2 + 1x Bottom Quick Fire Button     |
| ICX-SW16B-15T | Type 16 Patrol Keypad - Bottom Cable Mount 7x1 + 1x Top Quick Fire Button     |
| ICX-SW16B-15B | Type 16 Patrol Keypad - Top Cable Mount 7x2 + 1x Top Quick Fire Button        |
| ICX-SW16B-14B | Type 16 Patrol Keypad - Bottom Cable Mount 6x2 + 2x Bottom Quick Fire Buttons |
| ICX-SW16T-14B | Type 16 Patrol Keypad - Top Cable Mount 6x2 + 2x Bottom Quick Fire Buttons    |
| ICX-SW16B-14T | Type 16 Patrol Keypad - Bottom Cable Mount 6x2 + 2x Top Quick Fire Buttons    |
| ICX-SW16T-14T | Type 16 Patrol Keypad - Top Cable Mount 6x2 + 2x Top Quick Fire Buttons       |

### Type 10 Patrol Keypads

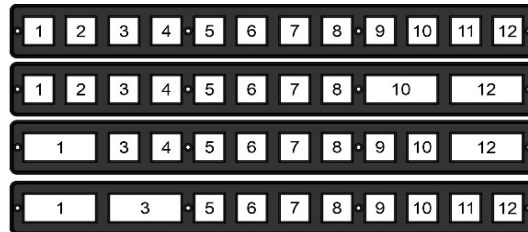


|               |                                                                               |
|---------------|-------------------------------------------------------------------------------|
| ICX-SW10B     | Type 10 Patrol Keypad - Bottom Cable Mount 5x2 Buttons                        |
| ICX-SW10T     | Type 10 Patrol Keypad - Top Cable Mount 5x2 Buttons                           |
| ICX-SW10B-09B | Type 10 Patrol Keypad - Bottom Cable Mount 4x2 + 1x Bottom Quick Fire Button  |
| ICX-SW10T-09B | Type 10 Patrol Keypad - Top Cable Mount 4x2 + 1x Bottom Quick Fire Button     |
| ICX-SW10B-09T | Type 10 Patrol Keypad - Bottom Cable Mount 4x2 + 1x Top Quick Fire Button     |
| ICX-SW10T-09T | Type 10 Patrol Keypad - Top Cable Mount 4x2 + 1x Top Quick Fire Button        |
| ICX-SW10B-08B | Type 10 Patrol Keypad - Bottom Cable Mount 3x2 + 2x Bottom Quick Fire Buttons |
| ICX-SW10T-08B | Type 10 Patrol Keypad - Top Cable Mount 3x2 + 2x Bottom Quick Fire Buttons    |
| ICX-SW10B-08T | Type 10 Patrol Keypad - Bottom Cable Mount 3x2 + 2x Top Quick Fire Buttons    |
| ICX-SW10T-08T | Type 10 Patrol Keypad - Top Cable Mount 3x2 + 2x Top Quick Fire Buttons       |

# KEYPAD

## iConnex Response Patrol Keypads

### Type 12 Patrol Keypads



|                |                                                                                                         |
|----------------|---------------------------------------------------------------------------------------------------------|
| ICX-SW12R      | Type 12 Patrol Keypad - Right Cable Mount 12x1 Buttons Inline                                           |
| ICX-SW12R-10R  | Type 12 Patrol Keypad - Right Cable Mount 10x1 + 2x Right Quick Fire Buttons                            |
| ICX-SW12R-10L  | Type 12 Patrol Keypad - Right Cable Mount 10x1 + 2x Left Quick Fire Buttons                             |
| ICX-SW12R-10RL | Type 12 Patrol Keypad - Right Cable Mount 10x1 + 1x Left Quick Fire Button + 1x Right Quick Fire Button |

# ACCESSORIES

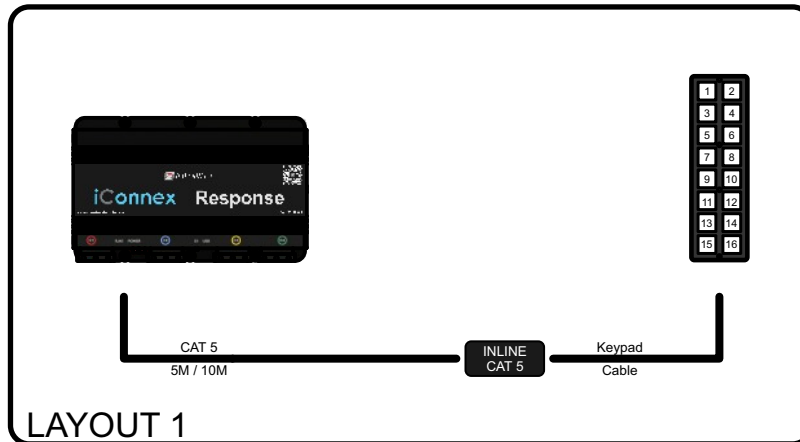
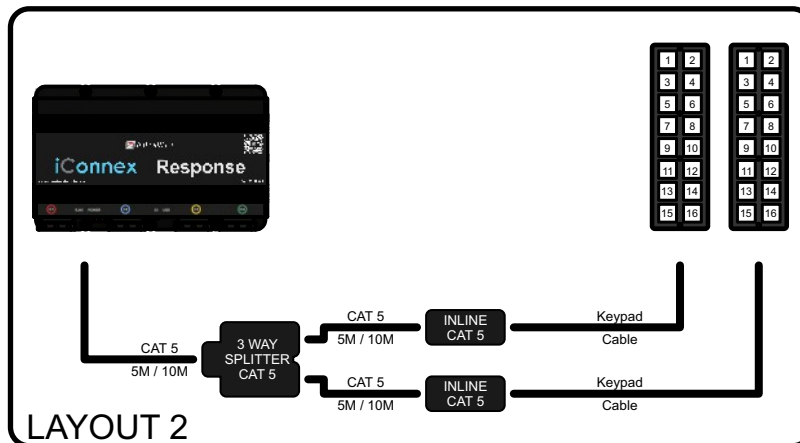
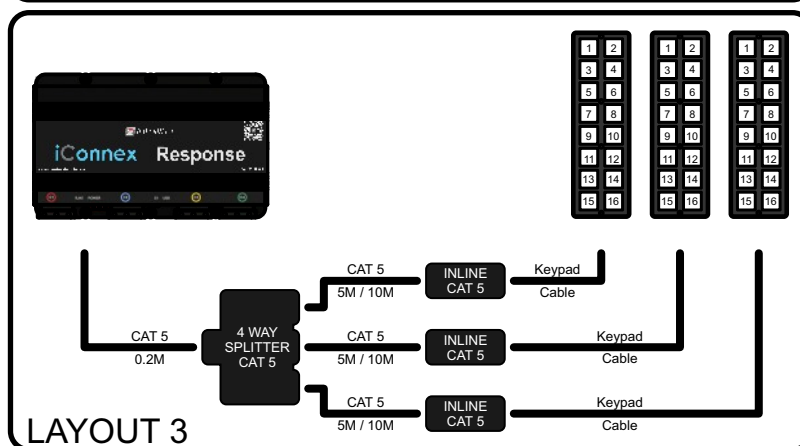
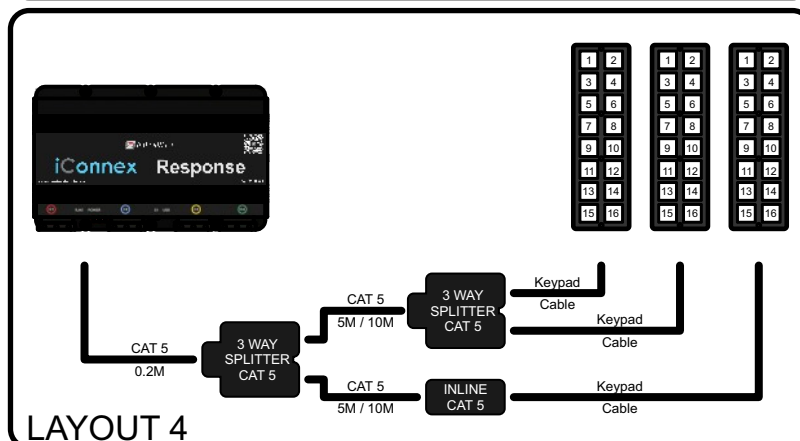
iConnex Response Optional Accessories



| Part Number          | Description                                                      |
|----------------------|------------------------------------------------------------------|
| ICX-R-FIT (Standard) | iConnex Response Fitting Kit                                     |
| ICX-R-LOOM           | iConnex Response Installation Wiring Loom                        |
| CAB0006              | CAT5 0.2M                                                        |
| CAB0001              | CAT5 5M                                                          |
| CAB0007              | CAT5 10m                                                         |
| CON0074              | Inline CAT5 Connector                                            |
| ICX-R-YSC            | 3-Way CAT5 Connector                                             |
| ICX-R-YSC-4          | 4-Way CAT5 Connector                                             |
| CON0071              | APTIV Automotive Connector Housing Grey Recepticle 24 Ways       |
| CON0070              | APTIV Automotive Connector Housing Black Recepticle 24 Ways      |
| CON0072              | APTIV Connector Accessory Violet Locking Cam 24 Ways             |
| CRIMP0001            | Sicma-3 Plus Female 1.5mm Crimp (211CC2S1160P)                   |
| CRIMP0002            | Sicma-3 Series Female 2.8mm Crimp (211CC3S2160)                  |
| PP45 RED             | Anderson Powerpole Red Connector Housing                         |
| PP45 BLACK           | Anderson Powerpole Black Connector Housing                       |
| CRIMP0000            | Anderson Power HD Connector Crimp for 6mm Cable                  |
| CRIMP0003            | Anderson Power Heavy Duty Connector Low Detent Crimp PP30 #12-16 |

## SUGGESTED HANDSET LAYOUTS

iConnex Response Suggested Multiple Handset Layouts



# NOTES