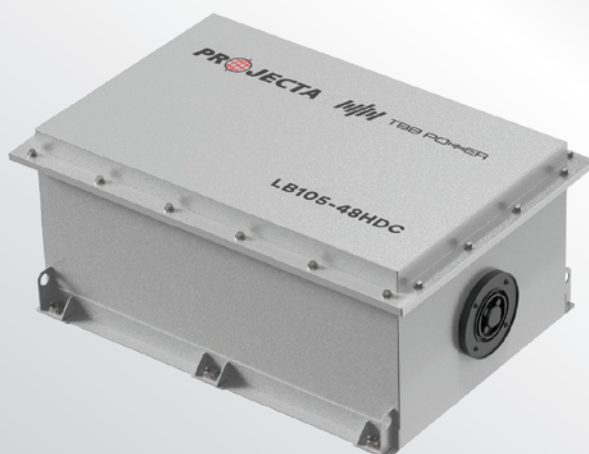




INTELLI-GRID 48V 4000W

HIGH POWERED MANAGEMENT WITH BLUETOOTH® MONITOR



P/No INVCHR4-48V, IGCMD18, LB105-48HDC, IGD-BT7-48

WARNINGS

- High Voltages inside
- The appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children being supervised are not to play with the appliance.
- This device can only charge 48V Lithium batteries from 35~700Ah
- When charging batteries, the batteries must be placed in well-ventilated area when charging.
- This device is not intended to charge non-rechargeable batteries.
- There is no serviceable part inside the screen
- Opening the screen will void the warranty of the product.
- The screen contains lithium coin/button battery which is not serviceable and does not need to be replaced during the whole life of the product.
- This screen is considered as "lower risk" regarding the dangers of the internally fitted button battery.

Please ensure the coin battery is kept OUT OF REACH OF CHILDREN and PETS.

- This includes both new and used batteries.
- Hazardous if swallowed.
- Swallowing can lead to chemical burns, perforation of soft tissue and death.
- Severe burns can occur within 2 hours, if swallowed or placed inside any part of the body.
- **SEEK MEDICAL ATTENTION IMMEDIATELY**, if it is suspected the battery has been swallowed or placed inside any part of the body.

If you suspect your child has ingested a button battery:

- If your child is having any difficulty breathing, call 000 immediately.
- Contact the Poisons Information Centre on 13 11 26 and you will be directed to the nearest hospital or emergency service that can manage the injury.
- Prompt action is critical. Do not wait for symptoms to develop.
- Do not let the child eat or drink until an X-ray is taken. **DO NOT INDUCE VOMITING.**

Safe disposal of coin or button batteries:

Dispose of used batteries properly by putting tape around both sides of the battery, securing them out of reach of children, and taking them to your nearest recycling facility.

SYSTEM INTRODUCTION

The Intelli-Grid 48V system is a 4000W power solution for all your power, lighting and water requirements. This system monitors the status of the tyres and the level of the RV while also tracking the gas cylinders. It is connected to a colour display with Bluetooth®, so you can check and control the system from your phone.

SYSTEM COMPONENTS

- 7" Monitor with App Connectivity (or optional 10" Monitor)
- All in one 4KW inverter/charger, with 1.5KW MPPT, 1.5KW DCDC, 3.3KW AC Charging, Bi-direction converter 12~48V
- 18 outputs master control module, Water Tank Measurement, Bluetooth® class 2, include TPMS, Leveling Sensor
- 105Ah/51.2V (48V) Lithium Battery
- Wireless switches (Optional)
- Up to 4 water tank sensors

KEY FEATURES

INVERTER & GRID POWER

4000W Inverter/Charger with 70Amp charging (3.3kW), grid power booster and AC transfer switch.

LITHIUM BATTERY

An advanced and powerful 105Ah lithium battery perfectly matched to the Intelli-Grid 48V system provides the ultimate power for off-grid requirements.

BLUETOOTH® MONITOR

Bluetooth® 7" colour monitor showing SOC, full control of the RV, water level, lighting, hardware and a suite of statistical information for SOLAR, BATTERY and LOADS.

MULTIPLE CHARGING OPTIONS

30A(1.5kW) DC-DC charging and 30A(1.5kW) MPPT solar charging for charging from vehicle or when sun is shining.

SOLAR CHARGE WAKE UP

When this feature is enabled, the system can wake up and be solar charged automatically as long as the sun is shining even when the system is OFF.

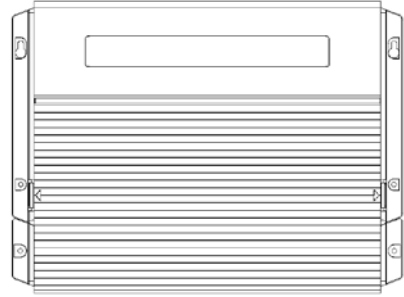
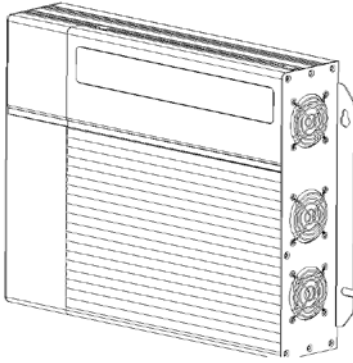
LOW VOLTAGE PROTECTION

Multiple strategies for low voltage protection of service batteries to avoid failure of lithium batteries by over-discharge.

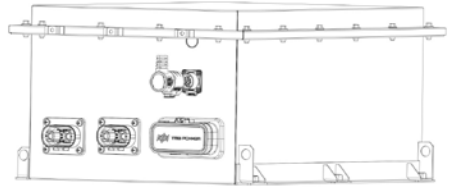
INTELLI-GRID 48V SYSTEM

1. The INTELLI-Grid 48V system is ordered in the following parts

- A. All In One Inverter/Charger
P/No.: INVCHR4-48V
- B. 18 Outputs Master Control Module
P/No.: IGCMD18



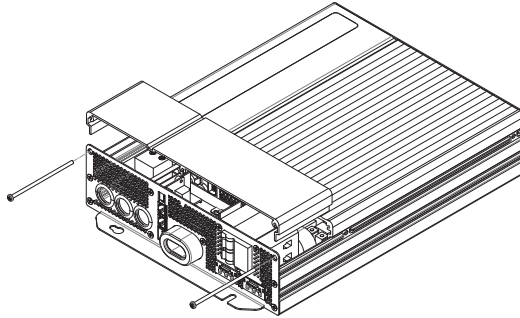
- C. 5kWhr(48V 105Ah)Battery
P/No.: LB105-48HDC



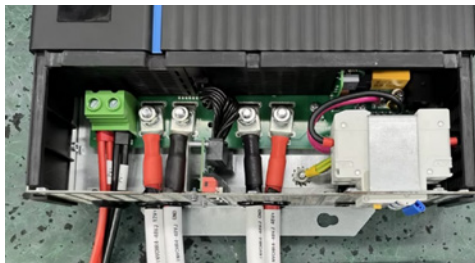
- D. 7" Colour display with 10m lead P/No.: IGD-BT7-48
 - E. Cables to suit battery P/No.: LB-48HDC
Includes: 10m Switch Cable (P/No. LBHDCSW-10)
Remote Battery Switch (P/No.: LBSW)
 - F. Power cables to suit Master Module/Inverter P/No.: IGCMD18-1.5m
 - G. Data/Comm cables to suit above
 - H. Levelling Sensor P/No.: PMLVL
 - I. Tyre Pressure Monitor Sensor P/No.: PMTPMS
2. Mount the Battery, Inverter/ Charger, the Master Control Module into place, 7" Display and the remote battery switch.
- a. Ensure the battery is no further than 3 meters from the
 - i. Inverter / Charger
 - ii. Master Control Module

3. Wire up the Inverter;

- a. Bolt the Orange 50mm² cable to the inverter post inside the cover labelled BAT+ . Remove the 2 screws to open the cover plate of the inverter.

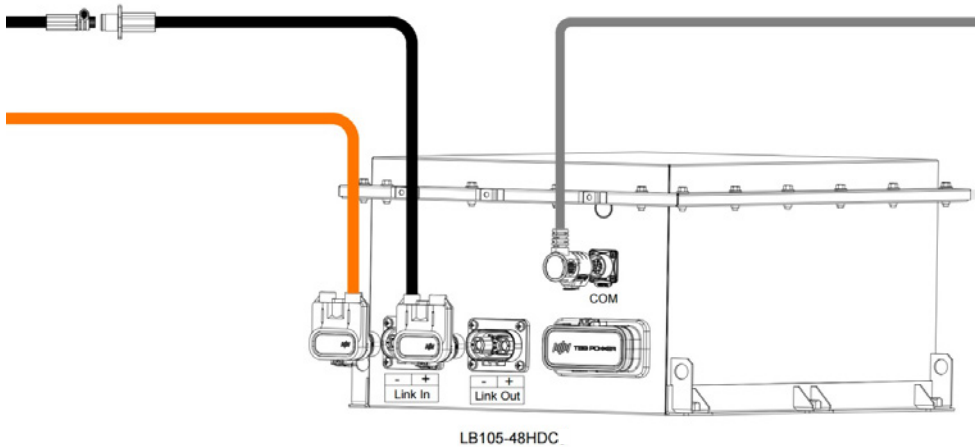


- b. Bolt the Black 50mm² cable to the inverter post inside the cover labelled BAT-
- c. Bolt the Red 50mm² cable to the inverter post inside the cover labelled ALT+
- d. Bolt the Black 50mm² cable to the inverter post inside the cover labelled BAT-
- e. Wire the PV positive cable (6 AWG, 13.3mm²) to the inverter post inside the cover labelled PV+.
- f. Wire the PV negative cable (6 AWG, 13.3mm²) to the inverter post inside the cover labelled PV-.
- g. Connect the Signal Cable from the IGCMD18 to the INVCHR4-48V port labelled COM port
- h. Wire 240VAC mains power input and output from the Inverter/Charger to the installation (Caravan, Shack, Motorhome etc.). Please consult an electrician for 240V AC wiring.
- i. Install the cover plate back and cover with screws

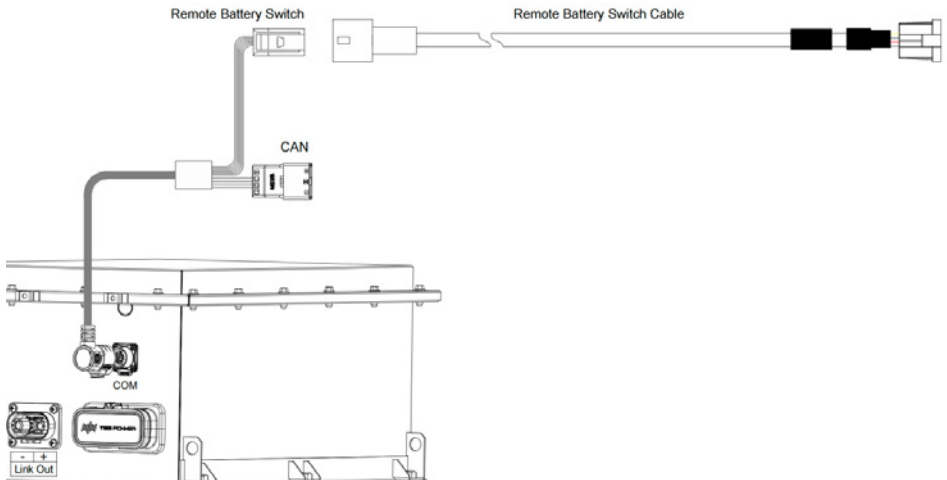


4. Wire up the Battery;

- Orange battery cable from the INVCHR4-48V BAT+ connect to the Link In (Positive terminal) of the battery
- Black battery cable from the INVCHR4-48V BAT – connect to the Link Out(Negative terminal) of the battery



- Connect the battery communication cable to the COM of the battery
- Connect the Remote battery switch cable from the battery communication cables port labelled 'Remote Battery Switch'
- Connect the IGCMD18 communication cable labelled BAT_COM to the battery communication cables port labelled 'CAN'



5. Wire up the Master Module

- a. Connect the positive cable (Marked IGCMD18_BAT+) to the positive terminal.
- b. Connect the negative cable (Marked IGCMD18_BAT-) to the negative terminal.
- c. Connect the COM cable (labelled INVCHR4-48V_COM) between IGCMD18 and INVCHR4-48V. The connection to IGCMD18 is marked 'Combi'.
- d. Connect the 48V Auxiliary Power (labelled 48V Auxiliary Power) between IGCMD18 and INVCHR4-48V. The connection to IGCMD18 is marked 'Dry In'.
- e. Connect Outside TEMP/Inside TEMP lead (connect this as part of the 'Dry In' cabling.
- f. Connect the water sensor. The connection to IGCMD18 is marked 'Water'.
- g. Connect the Slide out / Awning output leads. The connection to IGCMD18 is marked 'Dry Out'.
- h. Connect the display cable to the 7" display and connect the other lead to the IGCMD18 marked 'Display'.
- i. Connect the levelling sensor to the IGCMD18 marked 'Xsensor'.
- j. Connect the Tyre pressure receiver to the IGCMD18 marked 'Xsensor'.

6. Connect the alternator with suitable cabling to the 12V fuse box.

Note: The system's default vehicle charge current is set at 65A. It is recommended to use 4 B&S (20mm²) to support this current due to the normal run length in a caravan system.

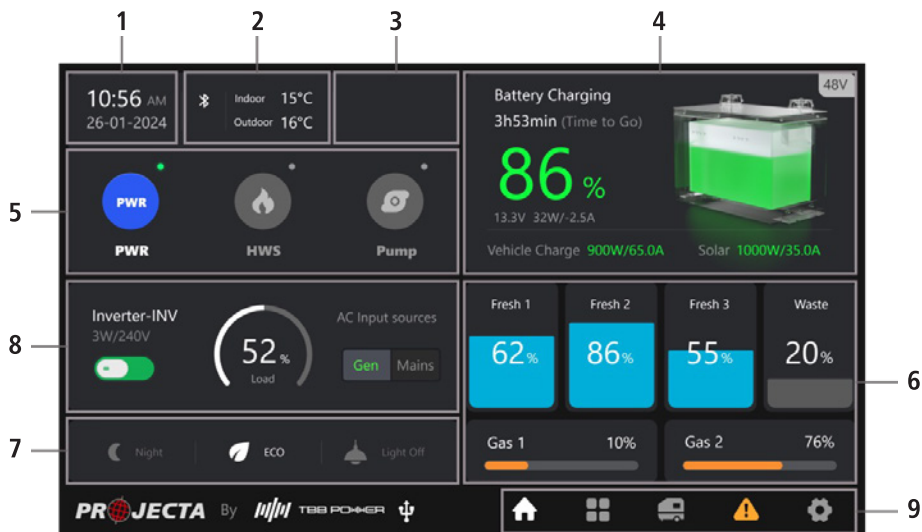
7. Mount outside temperature sensor cable up to 3 metres long

8. Connect the remote battery switch (check it matches the polarity with the switch lead) and turn the system on.

The Intelli-GRID system should start to turn on at this stage.

MONITORING THE 7" COLOUR DISPLAY INTRODUCTION

Home Page



1 Time and date display

2 Indoor/Outdoor temperature and Bluetooth® connection status display area.

a) The blue Bluetooth® icon indicates that the mobile app is connected

3 Displays customer customized icons.

4 Displays Battery/Vehicle Charge/MPPT Charge information.

In this area, the user can see the battery power/Vehicle Charger/MPPT Charger data and status.

It contains the following points:

- a) Check the batteries are charging or discharging
- b) Check the batteries voltage and current
- c) Check the batteries SOC value
- d) Check the time to go or time to full of batteries
- e) Check the Vehicle Charger are charging or discharging
- f) Check the Vehicle charging power and current
- g) Check the MPPT Charger are charging or discharging
- h) Check the MPPT charging power and current

5 Shortcut keys

a) PWR: All DC and AC outputs turned on/off with this key

Only the constant live output of IGCMD18 are retained

b) HWS: Water heater ON/OFF switch

c) Pump: Water pump ON/OFF switch

6 Water Tank Level and Gas display

a) If the fresh water is lower than the warning value, the alarm is triggered

b) If the gray or black water is greater than the warning value, the alarm is triggered

c) Gas level display

Home Page (continued)

7 Scene Mode

- a) ECO mode: System will enter "ECO" Mode automatically after being started. When SOC drops to 15% (it is settable within 10% – 30%), the system shuts down the inverter outputs and the loads with ECO mode enabled, keeping ONLY the load that has not enabled ECO mode loads on. When SOC is back to 20% (or other setting value) + 3% or there is AC grid charging, system exits ECO mode automatically. Customer can also exit the mode manually
- b) Night mode: Designed for a silent environment for customers. It can be activated at the front page of 7" screen. When entering the mode,
 - i. The system will shut down the lights and the back lights of the screens.
 - ii. De-rate the charging current of inverter/charger to reduce the fan noise.
 - c) Light off: This mode is designed for turning off all the lights with one key.

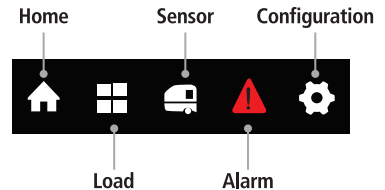
8 Inverter/Charger Display

In this area, the user can check the charging data as follows:

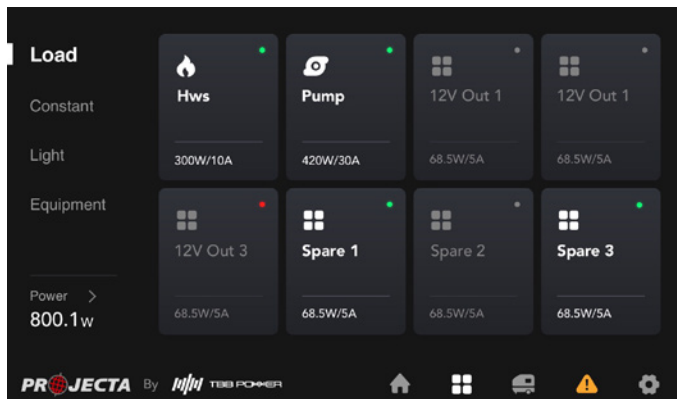
- i. Display output voltage, power and load rate.
- ii. The user can select the AC input source.
"Mains" means the source is grid, "Gen" means it is generator.
- iii. Inverter charger ON/OFF switch

9 Navigation

- a) The icon will turn white when switched to the corresponding page
- b) When the alarm icon is red, it means that one or more alarms exist.
After the alarm is removed, the icon turns to gray

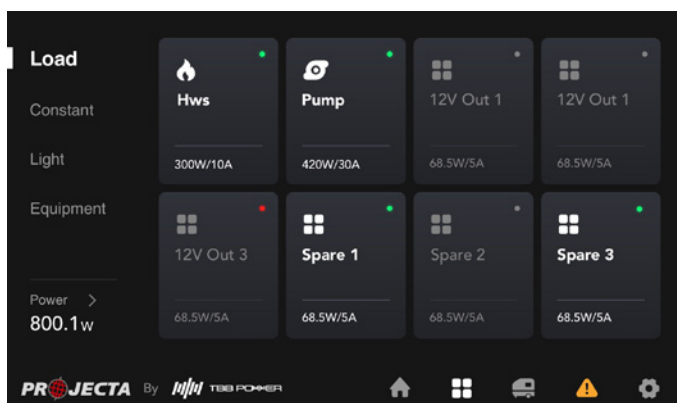


Load Control Page



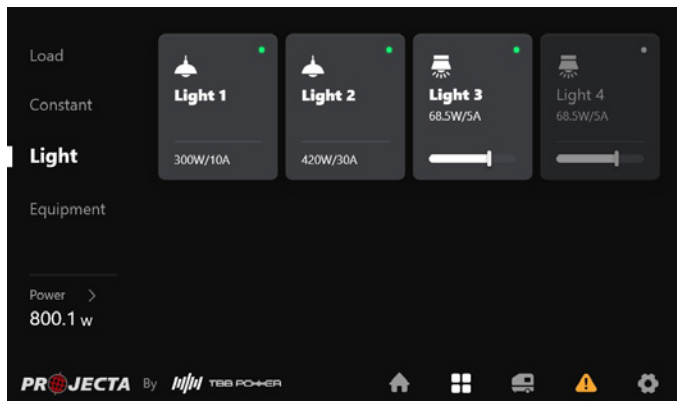
- The load control page displays switchable outputs(except for lighting load) with their functions named. When the load is turned on, the load icon is white with a green dot in the upper right corner. If the load is turned off, the icon turns gray and the green dot disappears.
- Each load area will display the current channel power consumption and current in real-time
- When the load channel triggers faults such as over current/short circuit, the green dot will turn into a red dot. Please check the load and wiring harness at this time, and only restart after troubleshooting
- The real-time total power consumption of all channels is displayed in the left sidebar.

Constant Page



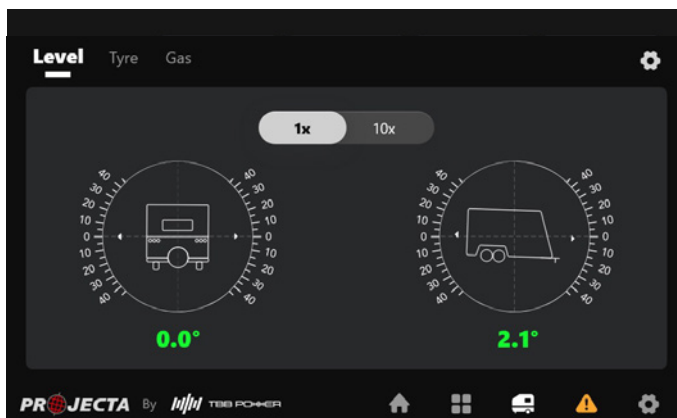
- The constant load (non switchable) is displayed on the "Constant" page, and when the channel is outputting normally, a green dot is displayed.
- When the load channel triggers faults such as over current/short circuit, the green dot will turn into a red dot. Please check the load and wiring harness at this time, and only restart after troubleshooting

Light Load Page



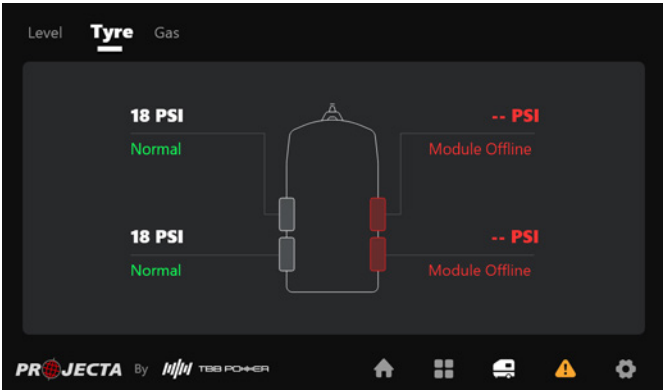
- a) The Light control page shows what light can be turned ON or OFF.
When the light is turned on, the light icon is white with a green dot in the upper right corner. If the light is turned off, the icon turns gray and the green dot disappears.
- b) Each load area will display the current channel power consumption and current in real-time
- c) When the light channel triggers faults such as over current/short circuit, the green dot will turn into a red dot. Please check the light and wiring harness at this time, and only restart after troubleshooting
- d) Lighting circuits are memory retentive: If PWR is switched Off to conserve power, the same lighting selection will come on when PWR is switched ON.

Sensor Page



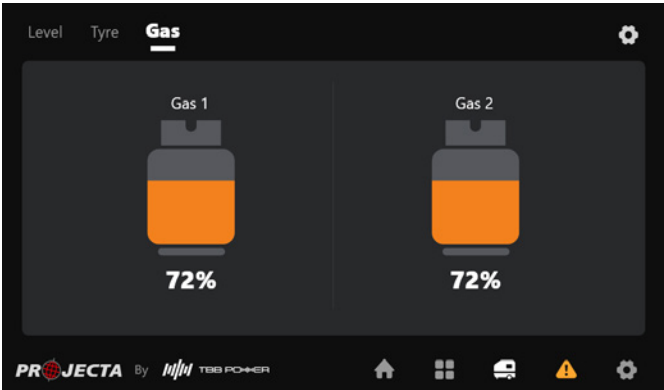
Leveling – Ensures your RV is level when parked

TPMS



Monitors tyre pressure to prevent premature wear with high / low warning setting.

Gas Sensor



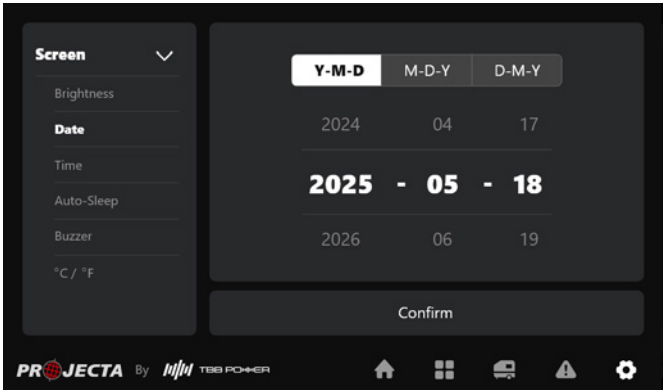
Monitors the level of gas available within the gas cylinders.

Setting Page

The setting menu allows the user to make basic changes to the system, including:

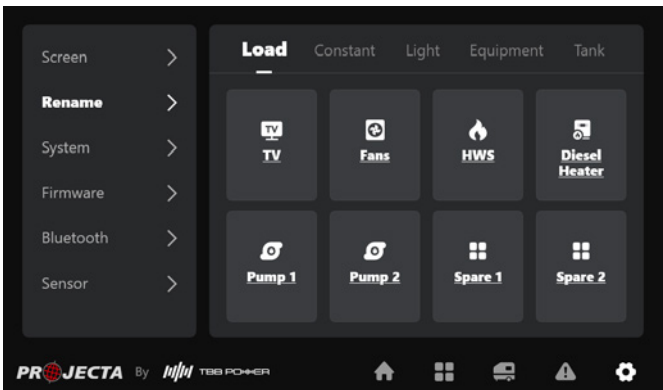
1) Screen setting.

The user can set screen brightness level, time and date, sleep time, buzzer enable, temperature unit selection.

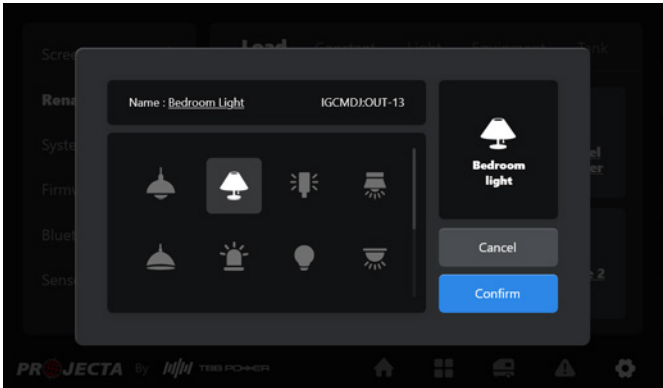


2) Rename

In this page, the load and water tank can be renamed.



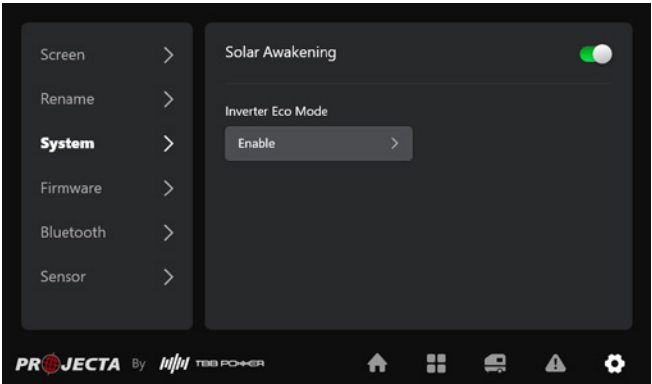
Further, the icon can also be changed when renaming the load.



Setting Page continued

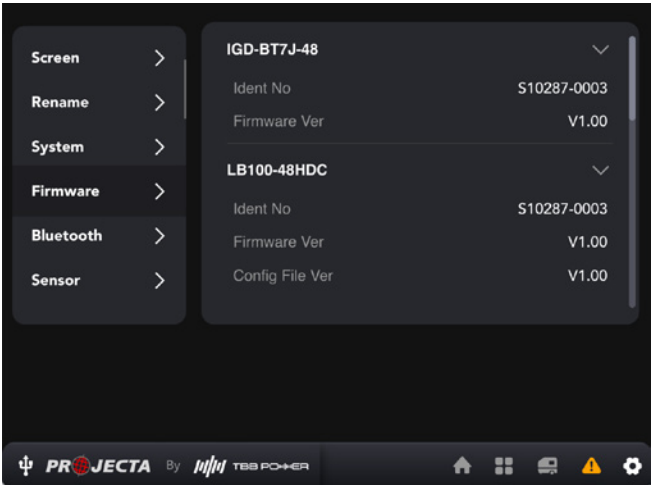
3) System

The user can engage the ‘Solar Automatic Wake Up Function’



4) Firmware.

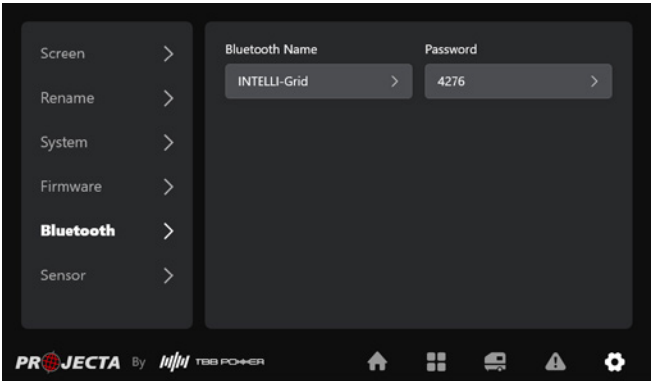
Displays all software revisions of available components



Setting Page continued

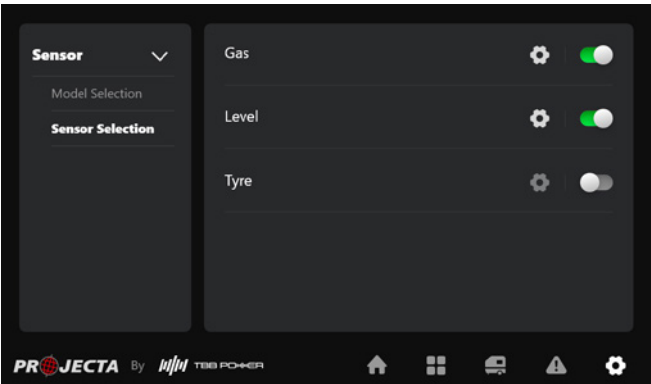
5) Bluetooth®

Set the display screen Bluetooth® name and Bluetooth® pairing password for Intelli-Grid mobile app **connection**



6) Sensor.

Select the RV model icon for Leveling and TPMS sensor display pages



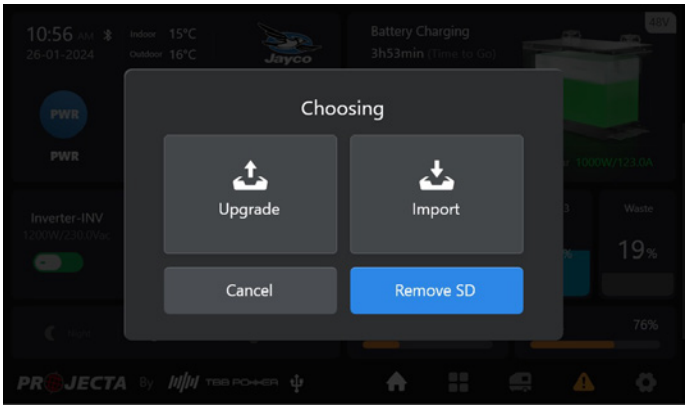
The user can set Gas/TPMS/
Leveling sensor parameters

Update Page

After inserting the USB drive into the back of the display, an update firmware pop-up will automatically appear

‘Upgrade’:Used to select and update firmware for each module

‘Import’:Used to select and update customized logos.



Statistical Chart Page

You can enter the statistical data chart page by clicking on the BAT/Inverter/Vehicle Charge/Solar area on the homepage

Inverter/Charger



Battery



Statistical Chart Page continued

Vehicle Charger



Solar Charger



Component Specifications

INVCHR4-48V ALL IN ONE 48V 4KW
INVERTER/CHARGER

Has a built-in charger/inverter combination, MPPT solar charger controller, DCDC bi-directional charger and isolation. The all-in-one box design will save the significant installation space.

Perfect for powering the most demanding 240V appliances on the go while operating on or off the grid. An RCD is included to ensure maximum safety for the unit and operator.

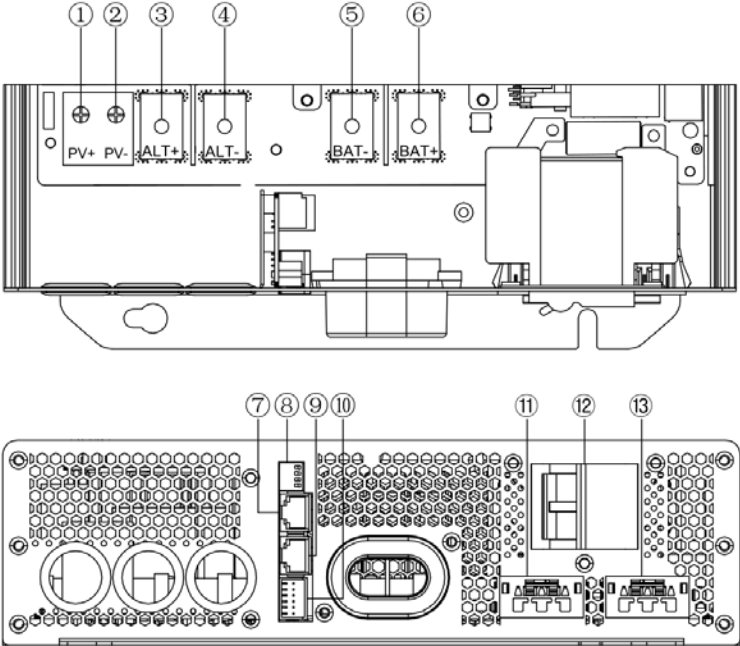
The inverter/charger is fitted with grid power boost which is great if the shore power or generator is weak. Grid power boost will supplement the shore power to ensure all your appliances can run.



SPECIFICATIONS	
Inverter Charger Model	INVCHR4-48V
Nominal Battery Voltage	48V
Input Voltage Range	40~57V
Inverter Power: 'ON' (No Load) / 'OFF'	≤300mA / ≤1mA
Cont. output power @25°C (VA)/ (W)	4.0kVA / 4.0kW
Peak Power (2s)	8.0kW
AC output voltage/frequency	240V±3%, 50Hz±1%
Power factor cosθ	1
Inverter / AC Charger Efficiency	Maximum: 96.5%, Full load: 94.8%
Harmonic distortion (THDV)	≤2%

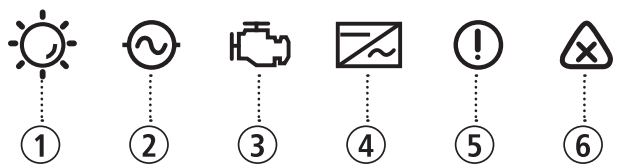
SPECIFICATIONS	
AC IN voltage/frequency	AC 176V~264V, 45~65Hz
Max AC charge current	70A (Note:-70Amp Charging when SOC is 0~80%, & battery temperature is 25~35°C)
Input Power factor	≥0.99
Transfer time	2ms(<15ms in Weak AC source mode)
RCBO Safety Switch	20A/30mA
Bi-directional DC-DC	
The system is on with (No Load)	<1mA@12V
12V Input / Output Current	120A
48V Input / Output Current	30A
DC-DC Power	1500W@12V
Efficiency	Maximum: 95.5%, Full load: 94.8% @12V
MPPT	
PV Input Voltage Range	18~60V (18-50V@25°C)
Max PV Short Circuit Current	60A
Maximum Charge from the PV Panels	1800W
Max Charging Current	30A Solar Voltage <26V charge @20A (1kW); Solar Voltage >26V charge @30A (1.5kW)
Efficiency	Maximum: 97.6%, Full load: 95%
MPPT efficiency	>99.5%
Other	
Dimension	454.5 x 306.2 x 88.1mm
Weight	8.1kg
Cooling	Forced Fan
Noise	≤ 55db
IP Rating	IP20
Altitude	0~5000m (Derating when >2000m)
Operating temperature range	-30°C~65°C Derating when > 30°C
Storage temperature range	-40°C~75°C
Humidity	5%~95% No condensation

Connection Compartment



NO.	SILK-SCREEN	DEFINITION
1	PV+	Solar Panel Positive Port
2	PV-	Solar Panel Negative Port
3	ALT+	ALT Positive Port
4	ALT-	ALT Negative Port
5	BAT-	Backup Battery Negative Port
6	BAT+	Backup Battery Positive Port
7	CAN	CAN Communication Port
8		Dip Switch
9	Display	Display Connection
10	COM	COM Port
11	AC IN	AC Input Port. Connector type: WAGO 770-713 L: live line, PE: ground line, N: zero line
12	RCD	RCD Safety Switch
13	AC OUT	AC Output Port. Connector type: WAGO 770-703 L: live line, PE: ground line, N: zero line

LED Indicators



NO	ICON	COLOUR	FUNCTION
1	 Solar	Green	Off: No solar input Slow flashing: Solar input is detected but MPPT is not working ON: MPPT charger is working
2	 AC in	Green	Off: No AC input Slow flashing: AC input detected but no charging or bypass power supply Fast flashing: AC charger is working ON: Bypass power supply is working
3	 DC/DC	Green	OFF: Alternator is not working. Slow flashing: Alternator input is detected but DC/DC is not working Fast flashing: 48V battery is charging to starter battery or powering the loads. ON: 12V alternator is charging to 48V battery
4	 Inverter	Green	OFF: 48V battery is not detected Slow flashing: 48V battery is connected Fast flashing: Inverter power assist function is working. ON: Inverter is working
5	 Alarm	Yellow	OFF: No alarm Fast flashing: Alarm happens
6	 Fault	Red	OFF: No fault Fast flashing: Fault happens

*Slow flashing is on for 0.5 seconds and off for 1.5 seconds in a loop.

*Fast flashing is on for 0.5 seconds and off for 0.5 seconds in a loop.

Generator Auto Stop/Start

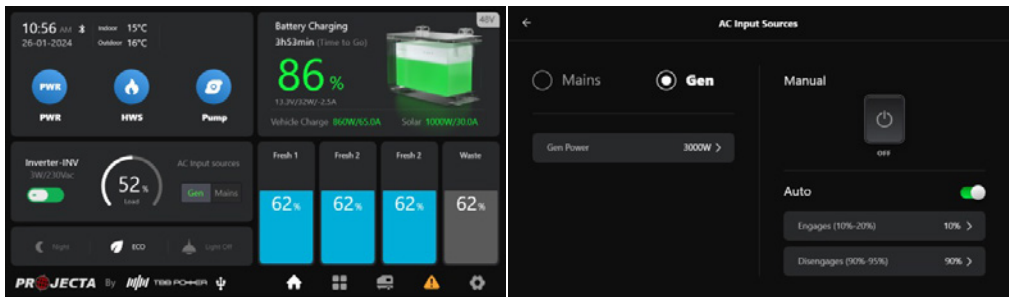
The INTELLI-Grid system can manage the generator by turning it on or off depending on the state of charge of the battery. Even manual start / stop is possible via the screen.

How to wire

INTELLI-Grid runs a simple 2 wire dry contact system. When the relay is closed the generator turns on. when the relay turns off the generator will turn off. The generator will need to have a remote 2 wire start.

Steps:-

1. Wire the generator to IGCMD18 2 using the wire cable labelled 'AGS'.
2. Press the 'Gen' button on the main home page to enable Generator mode.
3. To manually turn on the generator, press the Power symbol under the Manual page.
4. To set it to Auto mode, turn on the slider and set your preferred Engage/Disengage levels.



IGCMD18

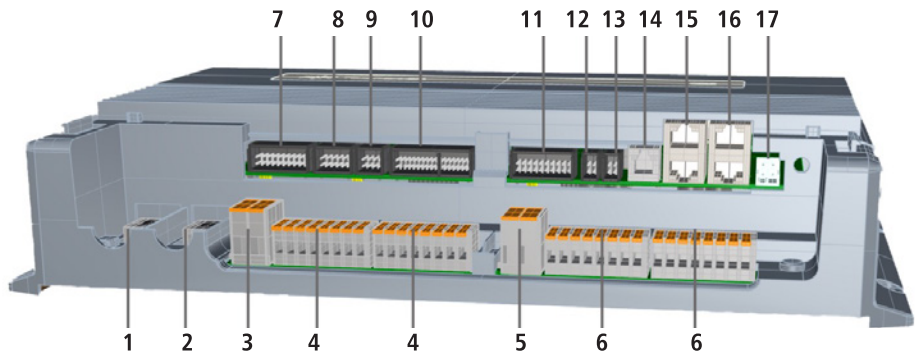
18 OUTPUT MASTER CONTROL MODULE

This is an input and output controller that can provide a constant 12V power supply for power loads, memory retention circuits, and other lighting. It has built-in low-voltage disconnection and inhibit functions for selected outputs. Control communication with external sensors and devices, and turn off power to non essential loads when the battery is low.



SPECIFICATIONS		
Model		IGCMD18
INPUT	Working Voltage	10-16V
	Rated Voltage	12VDC
	Rated Current	100A
OUTPUT	18 Channels	2 x 30A (On/Off Output): Channel 1-2
		8 x 15A (On/Off Output): Channel 3 - 10
		8 x 15A (PWM dimming): Channel 11 - 18
Dry Contact	10 Channels	2A / each channel
Input detective channels	On-Off input	8
	Temperature Sampling	4
COMM Port	CAN	2 (non-isolated CAN)
	CAN	1 (RVC connector)
	RS485	2 (non-isolated RS485)
	Bluetooth®	1
	LIN	1
Protection Function	RF	1
	Input Over Current Protection	Yes
	Under Voltage	Yes
	Output Over Current Protection	Yes
	Short Circuit Protection	Yes
Water Sensor	Over Temperature Protection	Yes
	Capacitive (optional)	1
RJ45 Connector	Conductive (i.e. P/n:PMWS200)	4
	With Power	2
	Without Power	2
Other	Power consumption	≤7mA
	Weight	2.8Kg
	Dimension	382 x 295 x 76mm
	Auxiliary Power Supply	+12V or +48V
	Storage Temperature Range	-40°C ~ 85°C
	Operating Temperature Range	-20°C ~ 60°C
	IP Class	IP2X

Connection Compartment



No.	TERMINAL DEFINITION	POLARITY	NOTE
1	BAT-	Negative Power Input	
2	BAT+	Positive Power Input	
3	Negative Connector	30A output negative connector	
4	Negative Connector	15A output negative connector	
5	Positive Connector	30A output positive connector	
6	Positive Connector	15A output positive connector	
7	Dry In	Sampling interface	4-way temperature sampling; 2-way input dry contact 4-way output dry contact 1-way ignition signal output
8	Combine	Inverter Communication interface	
9	BMS	Lithium battery communication interface	
10	Water	Water level interface	Support 4-channel Conductive water level sensor; 8-channel Capacitive
11	Dry Out	Dry contact interface	
12	Display 1	Display interface	L10/L7 screen power supply
13	Display 2	Display interface	CAN_Mon/485_DTU communication, wake-up signal
14	LIN	Communication interface	Lin Communication
15	IOT	4G module interface	4G module power supply CAN_User/485_User communication
16	Xensor	Sensor interface	Provide power and communication to LEVEL and TPMS
17	RV_C	Communication interface	CAN_User

LED INDICATORS

No	COLOUR	FUNCTION
1	RED	ON: Fault happens
2	GREEN	Fast Flashing (100ms): Device initialization Flashing (1s): Working normally Flashing (2s): Charging only Mode Slow Flashing (5s):The device enters sleep mode

PMTTPMS

TYRE PRESSURE MONITORING SYSTEM MODULE

The Tyre Pressure Monitoring System (TPMS) monitors the RVs tyre pressure before and during the journey.



SPECIFICATIONS	
Part No	Sensor: PMTPMS-S x 4 (one for each tyre)
Part No	Receiver: PMTPMS-R
Input	6-24V
Working Current	30mA
Working Temperature	-40°C ~ 85°C
Humidity	< 95%
Receiving Frequency	433.910Mhz
Wired Communication	RS485
Weight	150g
Part No	Sender * 4 -PMTTPMS-S
Working Voltage	2.2 ~ 3.6V
Battery Type	CR1632
Transmitted Current	< 5mA
Transmitted Power	< 5dbm
Transmitted Frequency	433.910Mhz
Pressure Range	14.5~203PSI
Accuracy	± 3.63 PSI
Working Temperature	-20°C ~ 70°C
Weight	13.8g



WARNING

This product contains a Lithium coin cell battery. Please ensure the coin battery is kept **OUT OF REACH OF CHILDREN**. This includes both new and used batteries. Hazardous if swallowed. The battery can cause severe or fatal injuries in 2 hours or less if it is swallowed or placed inside any part of the body. If a coin battery is swallowed or placed inside any part of the body: **SEEK MEDICAL ATTENTION IMMEDIATELY**. See instructions.

PMLVL

LEVELLING SENSOR

Level the RV with the levelling sensor which can be monitored via the phone app.

Calibration

To calibrate the level sensor, the RV needs to be level in both forward and back and side to side. Once level, go to the Setting Page, select Level Sensor and press Calibrate. This will zero the sensor.



SPECIFICATIONS	
Part No	PMLVL
Working Voltage	9 ~ 16V
Working Current	30mA
Working Temperature	-40°C ~ 85°C
IP Rating	IP20
Accuracy	± 2°

INSTRUCTIONS ON HOW TO PAIR THE GAS SENSORS

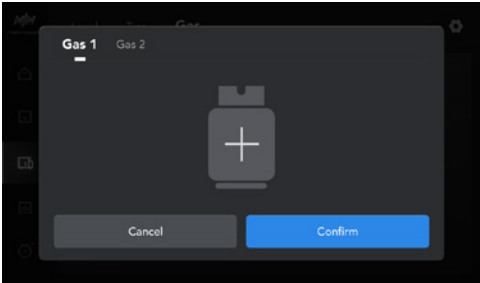
Ensure you are using the LCI Lippert Bottle check Bluetooth Gas Gauge.

Enable the GAS Feature.

Go to the GAS Sensor Page.

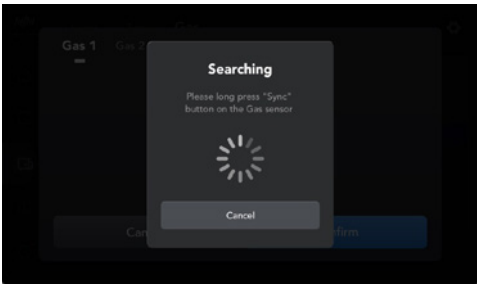
Press the Setting button "small cog" in the top right hand corner

Click on the gas cylinder icon to enter the sensor pairing state



Pairing the Sensors.
Long press the "SYNC" button on the gas sensor until a value is displayed on the GAS.

Repeat the process to pair second gas sensor.



LED BLUETOOTH® MONITORS

The colour displays, enable complete control of the RV or commercial application. The smart, intuitive design provides all the vital information at the press of a button.

IGD-BT7-48

7" COLOUR BLUETOOTH® MONITOR



IGD-BT10-48

10" COLOUR BLUETOOTH® MONITOR



SPECIFICATIONS	
Part No	IGD-BT7-48
Working voltage	12~48VDC
Working Current	350mA (Screen ON) 200mA (Screen OFF)
Communication	RS485 CAN Bluetooth® 5.0
Screen	7" touch screen,IPS
Resolution	1024px × 600 px
TF Card	Support up to 32GB
Storage temperature	-30°C ~ 80°C
Operating temperature	-10°C ~70°C
Altitude	5000m
Protection category	IP20
Weight	200g
Cooling	Natural cooling
Dimensions	180mm x 115mm x 35mm

SPECIFICATIONS	
Part No	IGD-BT10-48
Working voltage	12~48VDC
Working Current	500mA (Screen ON) 230mA (Screen OFF)
Communication	RS485 CAN Bluetooth® 5.0
Screen	10" touch screen,IPS
Resolution	1024px × 600px
TF Card	Support up to 32GB
Storage temperature	-30°C ~ 80°C
Operating temperature	-10°C ~60°C
Altitude	5000m
Protection category	IP20
Weight	1.16kg
Cooling	Natural cooling
Dimensions	276mm x 170mm x 43mm



WARNING

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BATTERIES

LB105-48HDC

48V HIGH DISCHARGE 105AH LITHIUM BATTERY

The LB105-48HDC boasts an astonishing 105Ah capacity and a market leading 100A(5.1kW) discharge capability making it ideal to partner with high current drawing appliances such as 4000W inverters.



SPECIFICATIONS

Part No.	LB105-48HDC
Nominal Capacity	105Ah
Nominal Power	5.37kWh
Nominal Voltage	51.2VDC
Charging Voltage	56.8VDC
Maximum Charging Current	100A
Continuous Discharge Current	100A
Maximum Discharging Current	150A
Built In Fuse	Yes
Operating Temperature	2°C ~ 63°C (Charging)
	-30°C ~63°C (Discharging)
Operating Humidity	10% ~ 90% RH
Weight (Kg)	47kg
Ip Class	IP67 & IP69K
Vent Kit	Support
Side Installation	Support
Recycle Life	3000 (0.5C charging) (0.5C discharging) DOD 100% @25°C
Dimensions	540mm x 360mm x 230mm

PMWSW4

Wireless switches make it easy to install additional switches if required. i.e. additional bedroom switch is easy as 2 screws for installation.



SPECIFICATIONS	
Part No.	PMWSW4
Rated Voltage	5V
Battery Type	2 x CR2032
Communication	RF 433Mhz
Effective Range	Outdoor 30m, Indoor 15m
IP Rating	IP20
Working Temperature	-20°C~ 60°C
Mounting	Surface
Weight	40g



WARNING

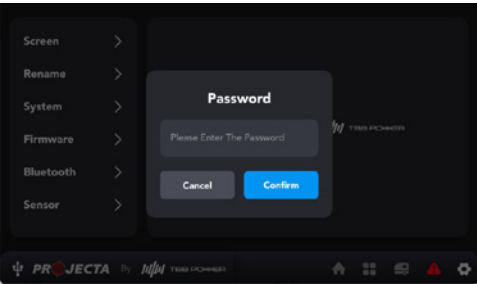
This product contains a Lithium coin cell battery. Please ensure the coin battery is kept **OUT OF REACH OF CHILDREN**. This includes both new and used batteries. Hazardous if swallowed. The battery can cause severe or fatal injuries in 2 hours or less if it is swallowed or placed inside any part of the body. If a coin battery is swallowed or placed inside any part of the body: **SEEK MEDICAL ATTENTION IMMEDIATELY**. See instructions.

PROGRAMMING THE WIRELESS SWITCHES P/No.: PMWSW4

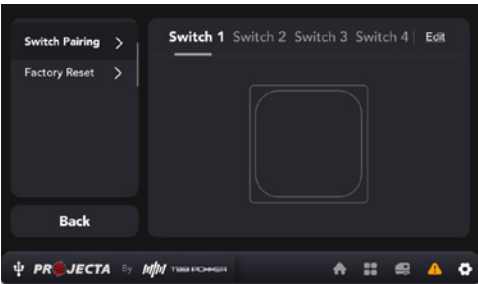
1. Turn on the INTELLI-Grid screen.
2. Go to the home page press the setting button in the bottom right hand corner.
3. Go to the bottom of the left menu selection, click on the logo five times



Enter the password 1000.



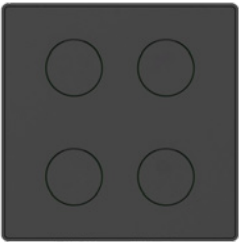
4. Press 'Switch Pairing' on the screen then press 'Edit' on the far right of the screen.



5. Press the + symbol on the screen.



6. Follow the screen prompts which will mean you will need to press one of the buttons on the 4 position switch.



WATER TANK PROBE

For Intelli-Grid system, a maximum of 4 probes can be monitored

Note: Always check the probe required for the water tank before purchase. There are 2 probe styles

PMWS200

- Side installation
- Suitable for water tank
- Depth >200mm

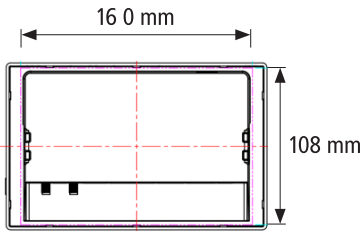
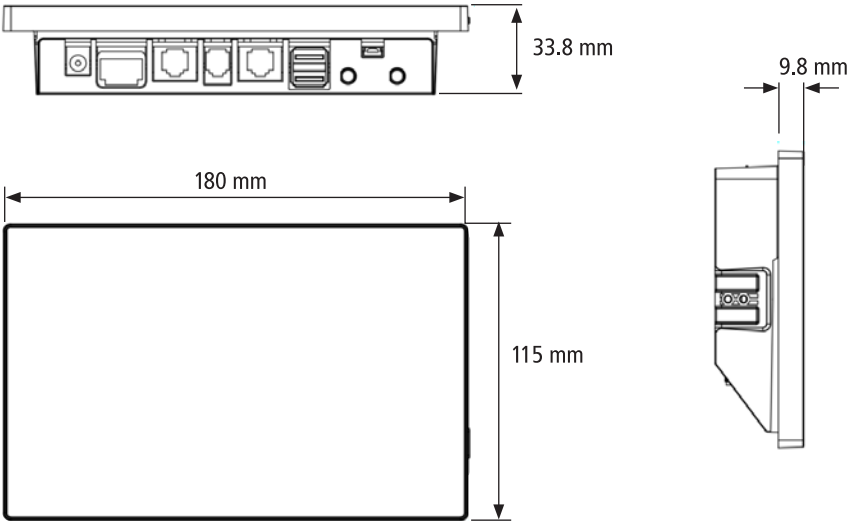
PMWS400

- Side installation
- Suitable for water tank
- Depth <400mm

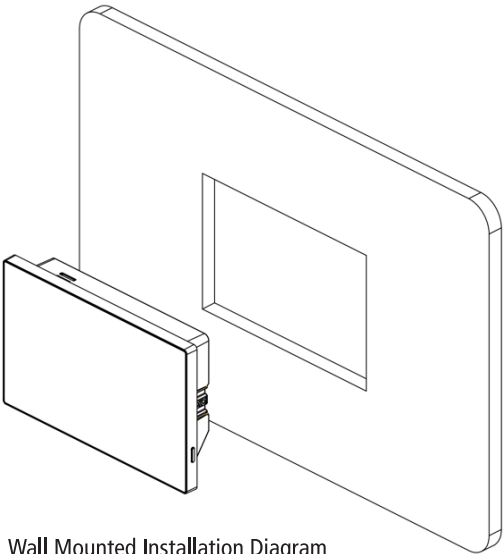


STRUCTURE AND INSTALLATION

Monitor



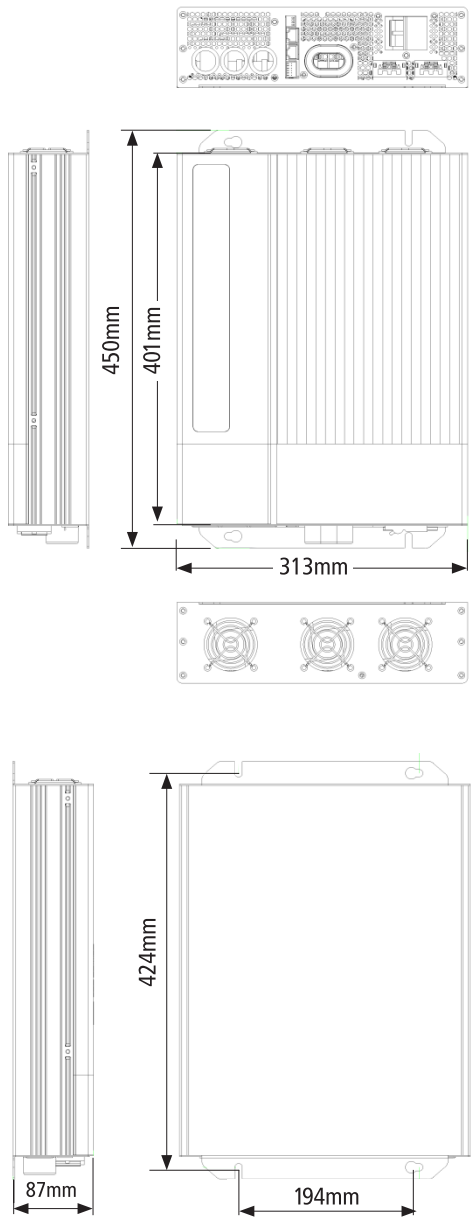
Mounting Dimension



Wall Mounted Installation Diagram

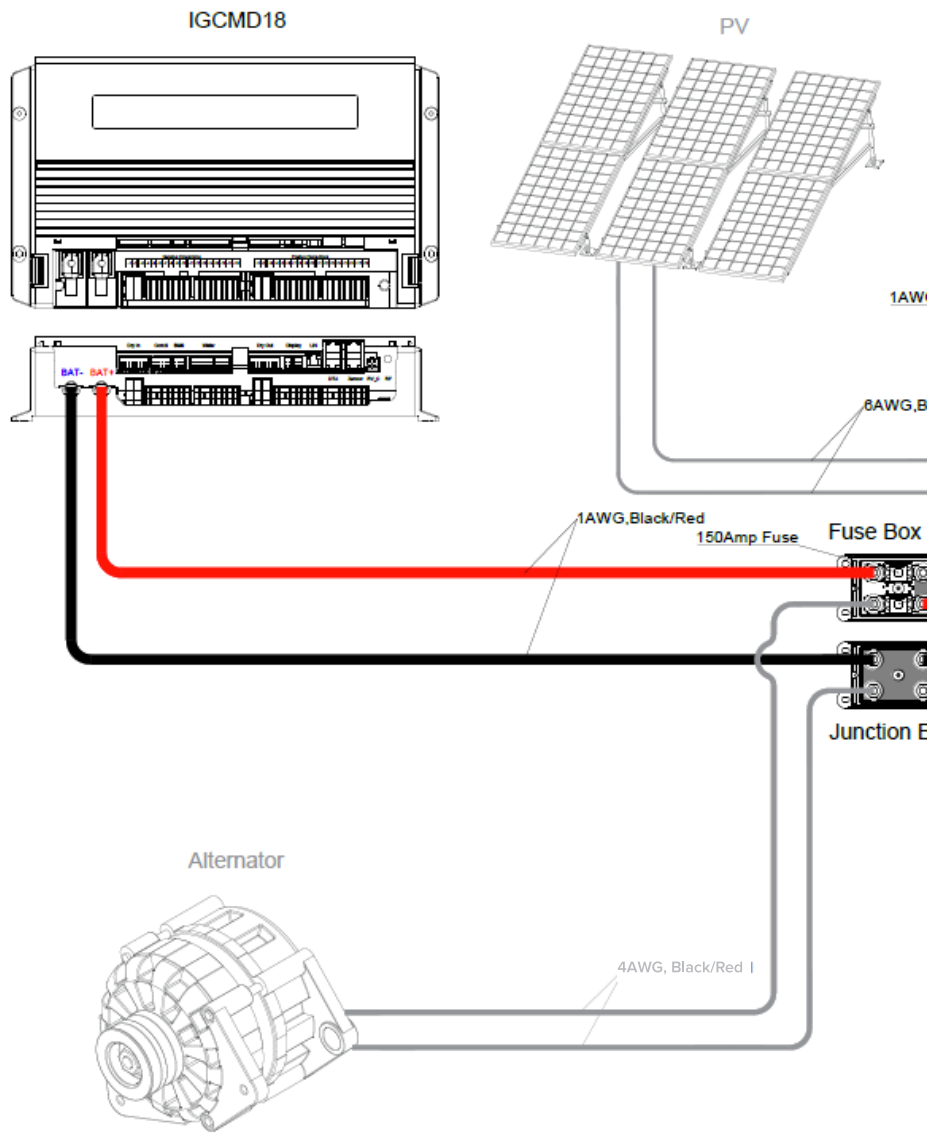
INVCHR4-48V

A. Dimension

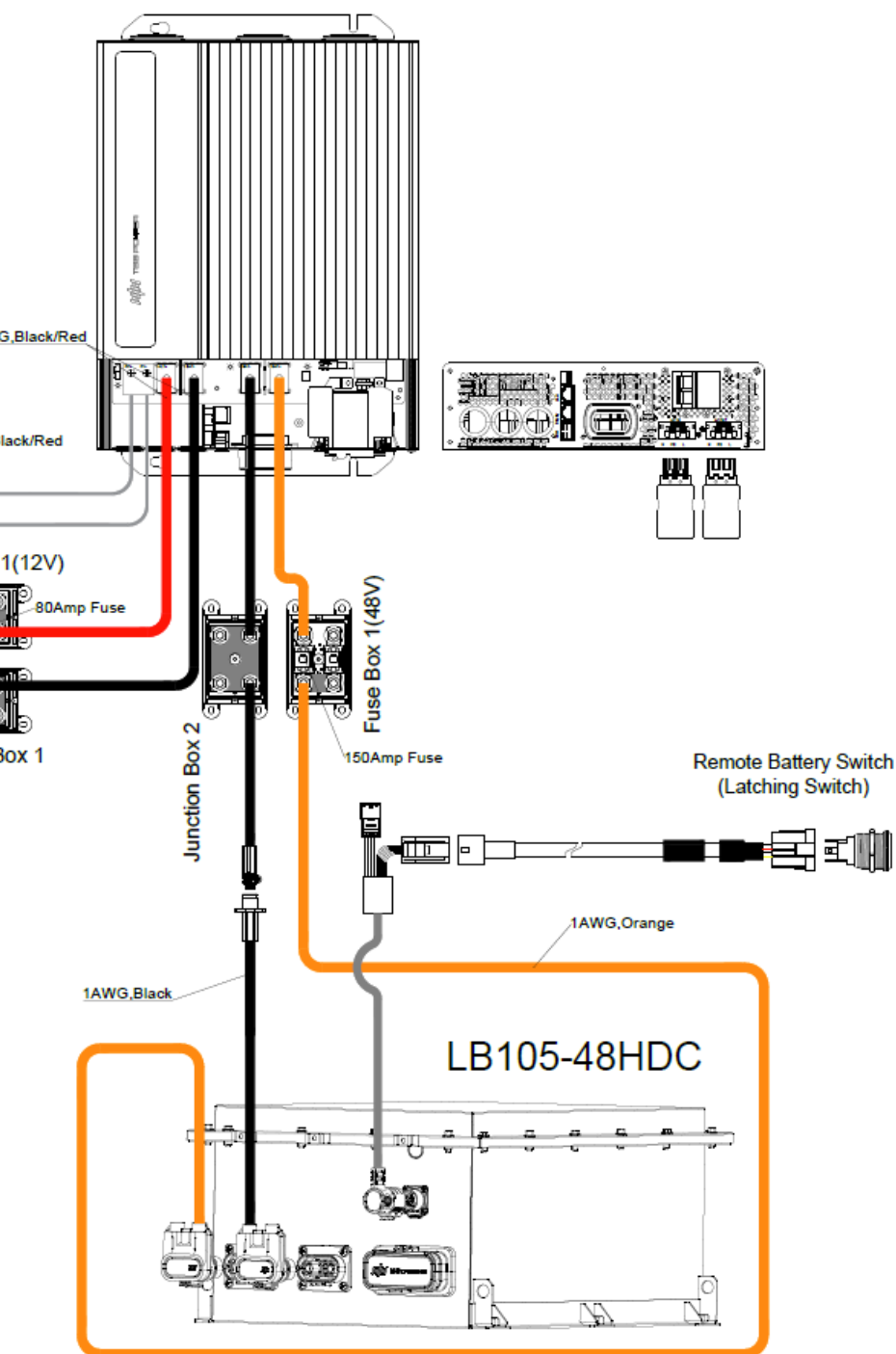


INVCHR4-48V

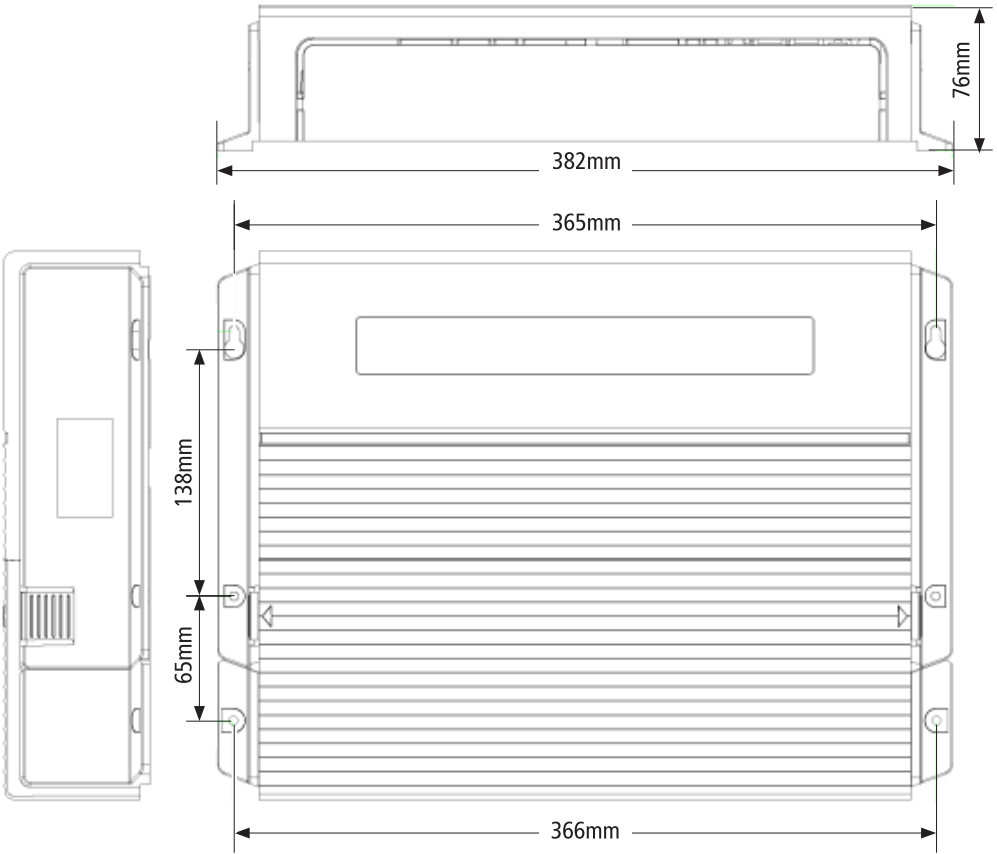
B. Wiring Diagram

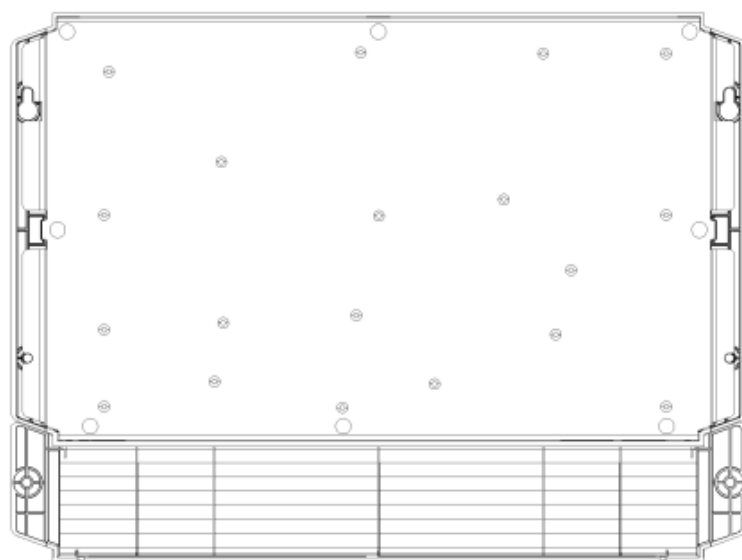
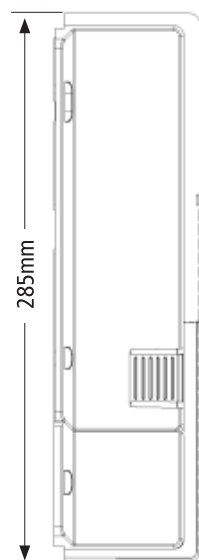


INVCHR4-48V

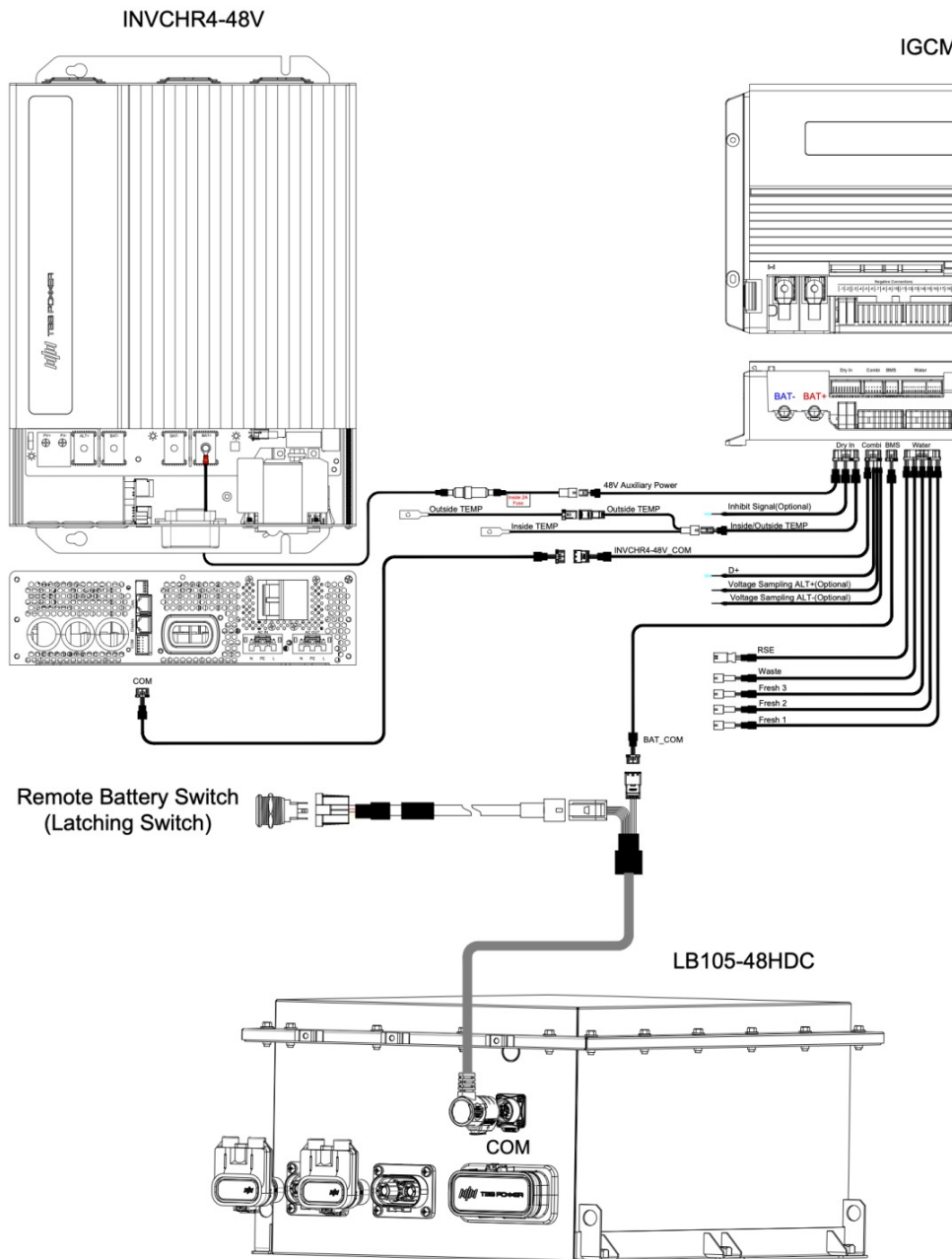


IGCMD18
Dimensions

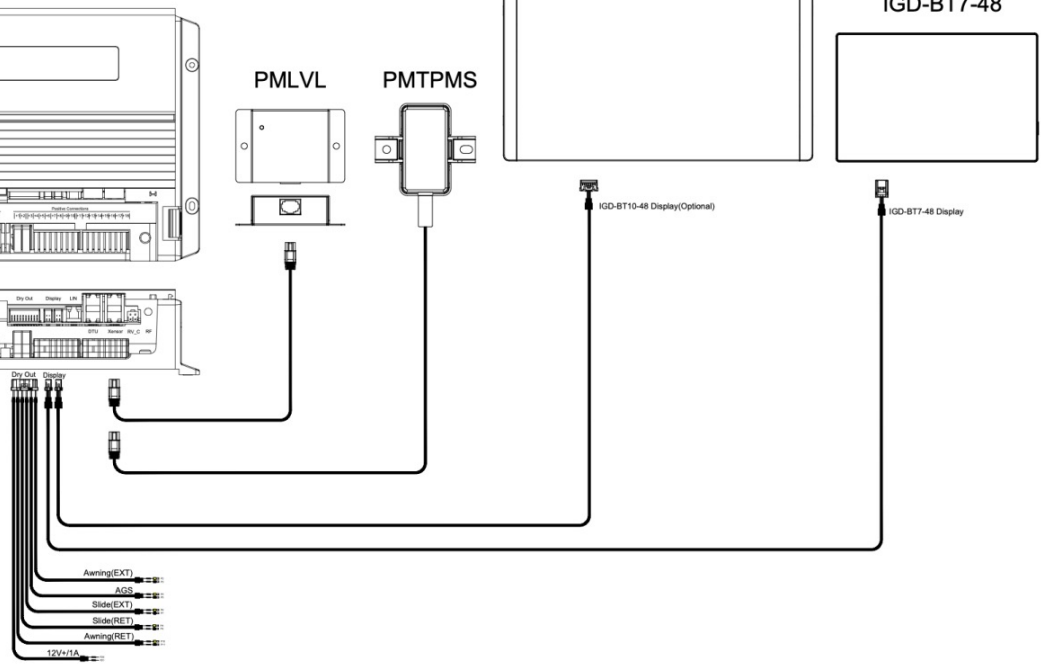




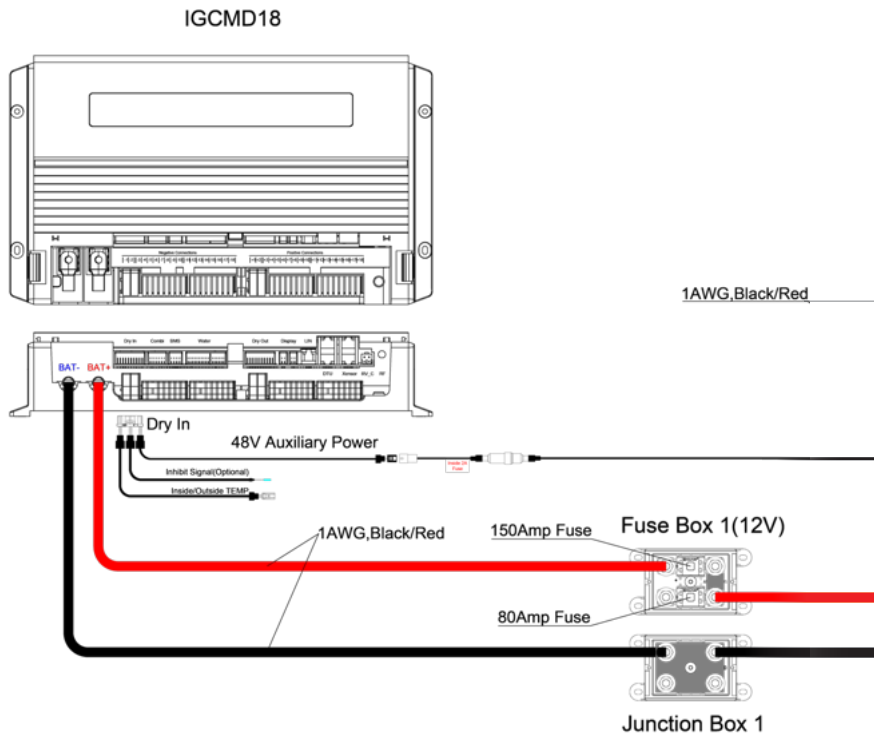
QUICK-START WIRING GUIDE (Signal Cable)



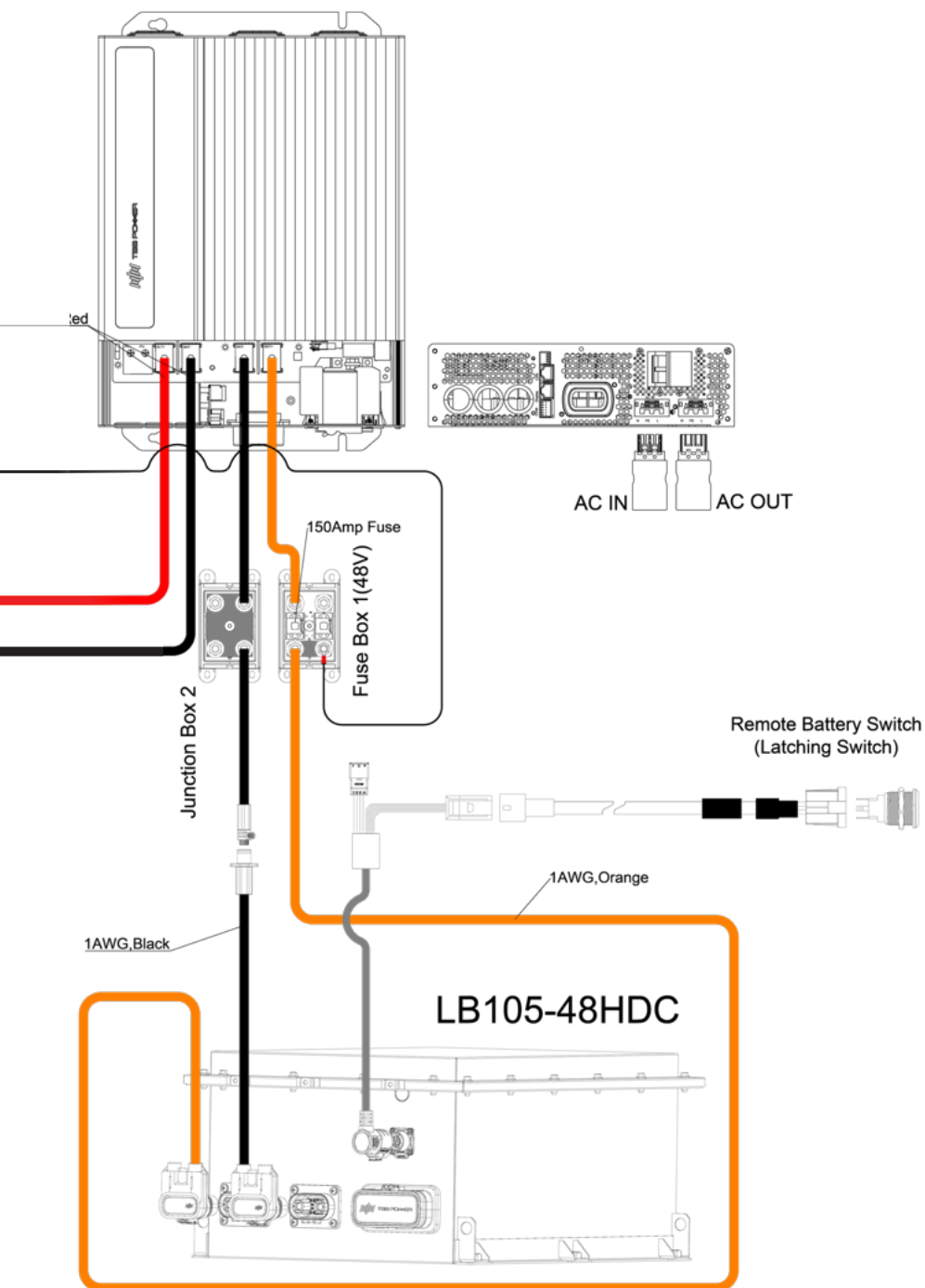
ID18



QUICK-START WIRING GUIDE (Signal Cable)

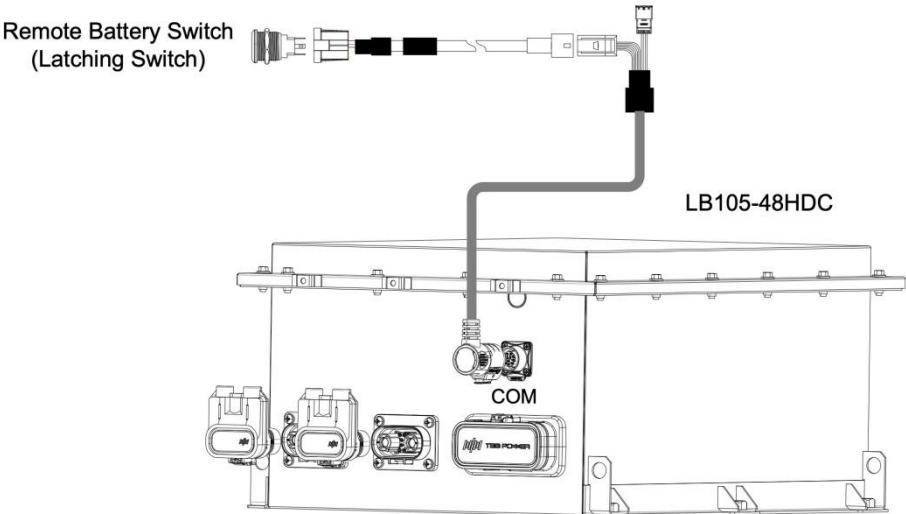


INVCHR4-48V



LB105-48HDC

A. Layout and Cable



Cyber Security Compliance Information

This product contains Bluetooth® functionality that connects with mobile phones or other smart devices.

To view the "Statement of Compliance" with the Cyber Security (Security Standards for Smart Devices) Rules 2025, scan the QR code below:



NOTES

WARRANTY STATEMENT

Applicable only to product sold in Australia

Brown & Watson International Pty Ltd of 1500 Ferntree Gully Road, Knoxfield, Vic., telephone (03) 9730 6000, fax (03) 9730 6050, warrants that all products described in its current catalogue (save and except for all bulbs and lenses whether made of glass or some other substance) will under normal use and service be free of failures in material and workmanship for a period of five (5) year (unless this period has been extended as indicated elsewhere) from the date of the original purchase by the consumer as marked on the invoice. This warranty does not cover ordinary wear and tear, abuse, alteration of products or damage caused by the consumer. Projecta solar panels are covered by a 1 year warranty for materials and workmanship and a 20 year warranty for at least 80% power output.

To make a warranty claim the consumer must deliver the product at their cost to the original place of purchase or to any other place which may be nominated by either BWI or the retailer from where the product was bought in order that a warranty assessment may be performed. The consumer must also deliver the original invoice evidencing the date and place of purchase together with an explanation in writing as to the nature of the claim.

In the event that the claim is determined to be for a minor failure of the product then BWI reserves the right to repair or replace it at its discretion. In the event that a major failure is determined the consumer will be entitled to a replacement or a refund as well as compensation for any other reasonably foreseeable loss or damage.

This warranty is in addition to any other rights or remedies that the consumer may have under State or Federal legislation.

IMPORTANT NOTE

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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