

# Intelligent Control Box

## Model: *ICB*

### ► INDEX :

- |                   |                           |
|-------------------|---------------------------|
| I. Introduction   | IV. ICB Information Panel |
| II. Contents      | V. Operating Instructions |
| III. Installation | VI. Warning               |

### I. Introduction :

- The Intelligent Control Box (ICB) is COMEUP latest product, designed to allow adjustment of a winch's maximum pulling power.
- A built-in, adjustable current limiter detects the motor amp draw and will interrupt the power if the current exceeds the current limit point (CLP). The CLP can be adjusted using the Current Regulator (sold separately). Regarding CLP setup process, please refer to Current Regulator user manual.
- An embedded information panel provides vehicle battery, winch cable in/out operation, winch over heating and overload information.

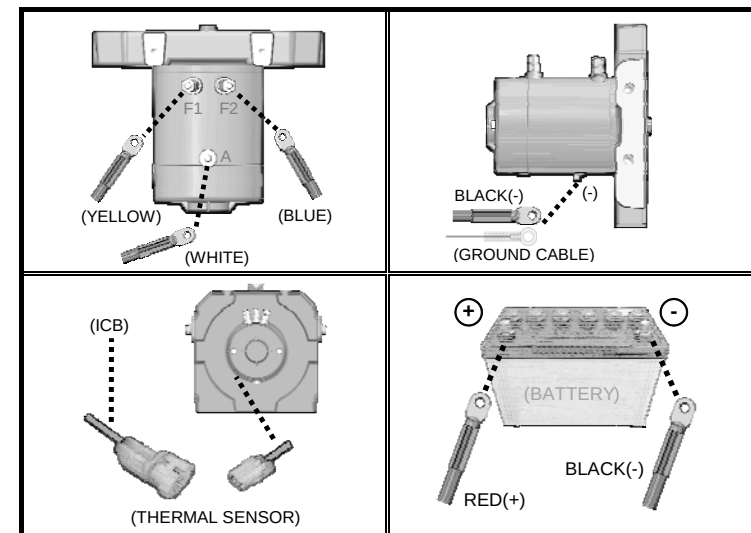
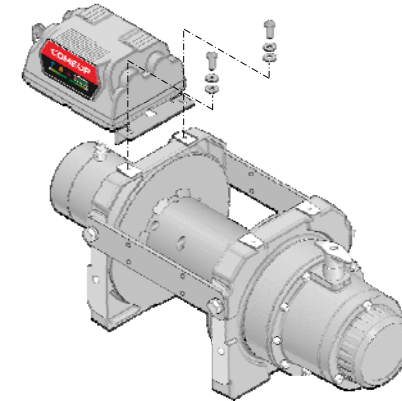
### II. Contents :

- Intelligent Control Box
- Handheld Remote



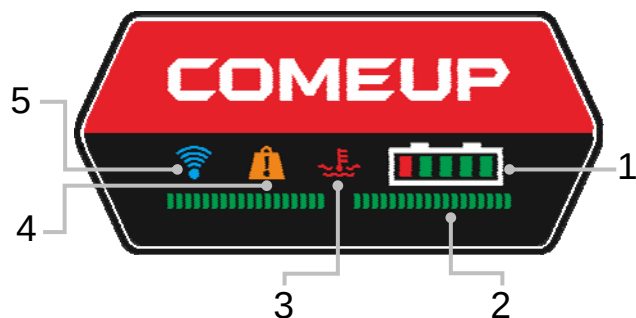
### III. Installations :

- Connect power cables F1, F2, and A to the motor terminal studs, guided by the color markings.
- Connect power cable B(-) and ground cable to the stud located on the bottom of the motor.
- Connect the thermal sensor cable to both the control box and the motor.
- Mount ICB unit on the motor support rack bracket.
- Connect power cables A(+) and B(-) to battery terminals.



#### IV. ICB Information Panel :

- Information Panel :



#### V. Operating Instructions :

| Item | Icom | Features                      | Instructions                                                                                                                   |                                                                                                                                                                                                       |
|------|------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    |      | Vehicle Battery Monitor       |                                                                                                                                | ● Battery voltage above 12V.                                                                                                                                                                          |
|      |      |                               |                                                                                                                                | ● Battery voltage between 11V and 12V.                                                                                                                                                                |
|      |      |                               |                                                                                                                                | ● Battery voltage between 10V and 11V.                                                                                                                                                                |
|      |      |                               |                                                                                                                                | ● Battery voltage between 9V and 10V.                                                                                                                                                                 |
|      |      |                               |                                                                                                                                | ● Battery voltage between 8V and 9V.                                                                                                                                                                  |
|      |      |                               |                                                                                                                                | ● When battery voltage is lower than 8V, the red light begins blinking and the buzzer alarms.                                                                                                         |
| 2    |      | Winch Operation Indicator     |                                                                                                                                | ● During winch cable-in operation, the winch operation indicator bar scrolls outside-in.                                                                                                              |
|      |      |                               |                                                                                                                                | ● During winch cable-out operation, the winch operation indicator bar scrolls inside-out.                                                                                                             |
| 3    |      | Overheat Indicator            |                                                                                                                                | ● When the thermal sensor detects winch motor overheating (over 100 degrees Celsius), Overheat indicator blinks with buzzer alarm.                                                                    |
|      |      |                               |                                                                                                                                | ● The winch operation indicator turns red when the winch is operated.                                                                                                                                 |
| 4    |      | Overload Indicator            |                                                                                                                                | ● When the ICB detects winch overload, Overload protection mode is automatically activated, the Overload Indicator blinks for 30 seconds, the buzzer alarm sounds for the first 5 and last 5 seconds. |
|      |      |                               |                                                                                                                                | ● During Overload protection mode, Cable-in operation is disabled, Cable-out operation remains functional.                                                                                            |
|      |      |                               |                                                                                                                                | ● After 30 seconds of automatic Overload protection mode, the Overload icon will turn off and the winch will return to normal operation mode.                                                         |
| 5    |      | Wireless Connection Indicator | <ul style="list-style-type: none"> <li>● The Indicator blinks for 10 seconds.</li> <li>● Pairing within 10 seconds.</li> </ul> |                                                                                                                                                                                                       |

#### VI. Warning :

- Unplug the wired remote control after use to prevent battery power consumption and accidental damage to the remote or winch.
- To use the wireless transmitter, the wired remote control must be connected.
- To prevent electrical component damage, disconnect the control box from the power source during internal inspection or repair.
- To prevent damage, do not connect other USB devices to USB port on ICB unit.
- To prevent damage, do not connect the Current Regulator to any USB devices other than the ICB unit.



##### ► Wireless Receiver & Transmitter Operation

This wireless remote control device complies with CE mark, FCC and Industry Canada (IC) rules.

##### CE Mark Warning

- This is a Class B product, in a domestic environment, this product may cause radio interference, In which case the user may be required to take adequate measures.

##### FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

##### CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

##### RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.