User Guide For CR-16 Remote Control

1. Features

- Battery bank voltage display
- Output power display
- Error condition indicator（High Battery, Low Battery, Over Temperature, Over Load conditions）
- Action condition indicator（INV, GRID, POWER SAVING, CHARGING STATUS）
- Connection failure notification

2. Specification

- Input Voltage : 10.5 ~ 66 Vdc
- Operating Temperature Range : 0 ~ 40 ℃
- Storage Temperature Range : - 30 ℃ ~ 70 ℃
- Stand-By Current Draw : < 80mA
- Applicable Models : SP series – 700 / 1000 / 1500 / 2000 / 3000 / 4000
  SL series – 2000 / 3000

* Note：Grid LED is only functional when connecting SP series with TR-40.

3. Introduction

3-1. Front Panel Introduction

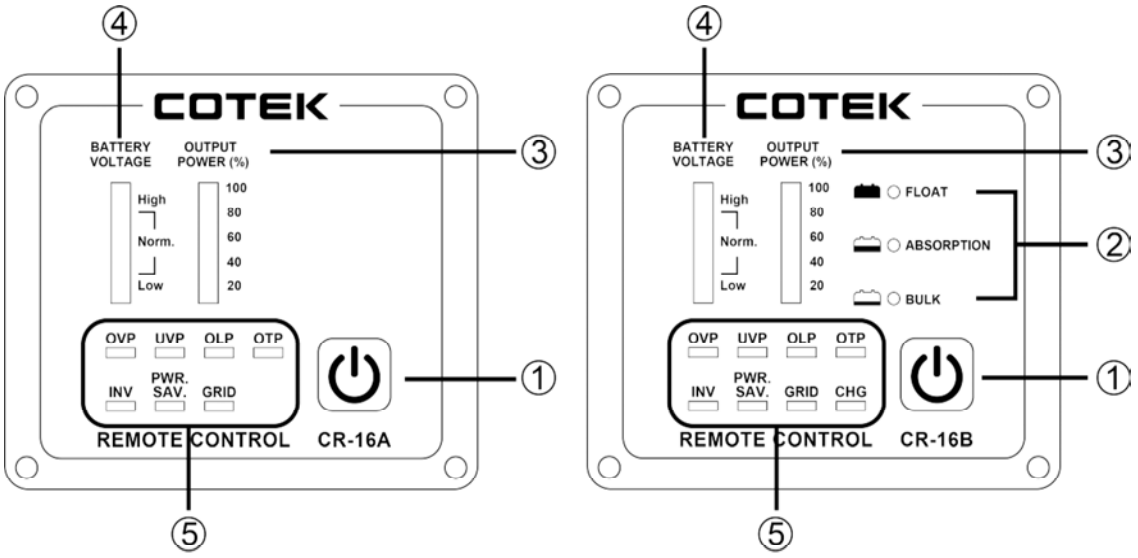


Fig.1 Front Panel Introduction

①	Power ON/OFF Button	④	Battery voltage indicator
②	Charging Status LED	⑤	Other Indicators
③	Output power indicator		

① Power ON/OFF Button：
Power ON/OFF button is to turn the inverter on or off.

② Charging Status LED (BULK / ABSORPTION / FLOAT) shows the charging status: (Only applicable to SL series)

- BULK: When the battery is in low voltage status, the battery is charged at constant current by maximum charge current.
- ABSORPTION: When the battery is near fully charged, the battery keeps charging by constant voltage mode.
- FLOAT: When the battery is fully charged, this state maintains the battery at 100% charge without overcharging or damaging the battery.
  Please refer to the detail information in SL series user manual accordingly.

③ Output power indicator：

Output power indicator shows the power draw from the power inverter by the load. Ideally, the output power indicator should remain in the green & orange area of the bar chart.
If the output power indicator is up to the red area, the OLP LED will flash and the inverter will shut down.

④ Battery voltage indicator：

Battery voltage indicator will move up and down as the battery voltage changes. Ideally, the voltage should remain in the green area of the bar chart. If the voltage goes into the red area at the top and bottom of the bar chart, inverter may shut down.

⑤ Other Indicators：

- OVP (Over voltage protection indicator)：
  It indicates that the power inverter shuts down because its input voltage is above limit voltage.
- UVP (Under voltage protection indicator)：
  The under voltage indicator is to indicate the inverter shut down due to under voltage protection.
- OLP (Overload protection indicator)：
  The overload indicator is to indicate the inverter shut down due to short circuit or overload protection.
- OTP (Over temperature protection indicator)：
  The over temp indicator is to indicate the inverter shut down due to over temperature protection. Once the inverter cools down, the indicator will turn off automatically.
- INV. indicator：
  The INV. indicator is to indicate the inverter is ready.
- PWR.SAV. Indicator：Power saving functions are described below：

LED	Meaning	Inverter Output
Solid	Ready	ON
Flashing	Active	OFF
Off	Inactive	

- GRID indicator：
  The GRID indicator is to indicate the AC Grid is connected to inverter.
  (For SP series: Only functional when connecting SP Series with TR-40)
- CHG indicator：
  The CHG indicator is to indicate the battery charging status (Only applicable to SL series).

3-2. Rear Panel Introduction

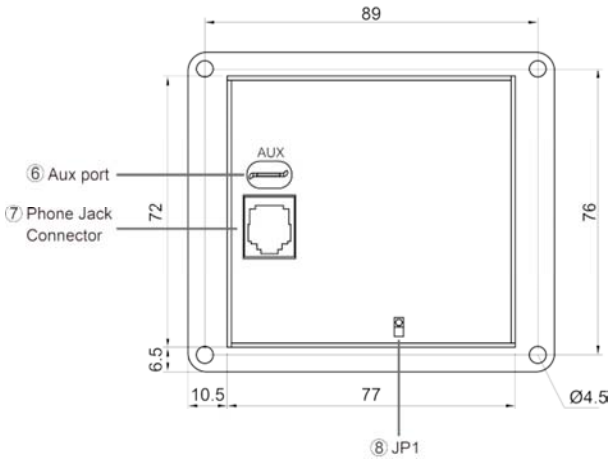


Fig.2 Rear Panel Introduction

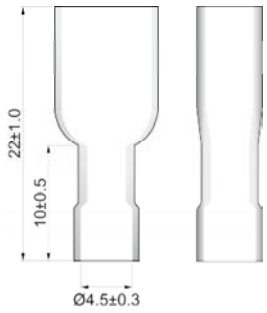


Fig.3 Aux Connector

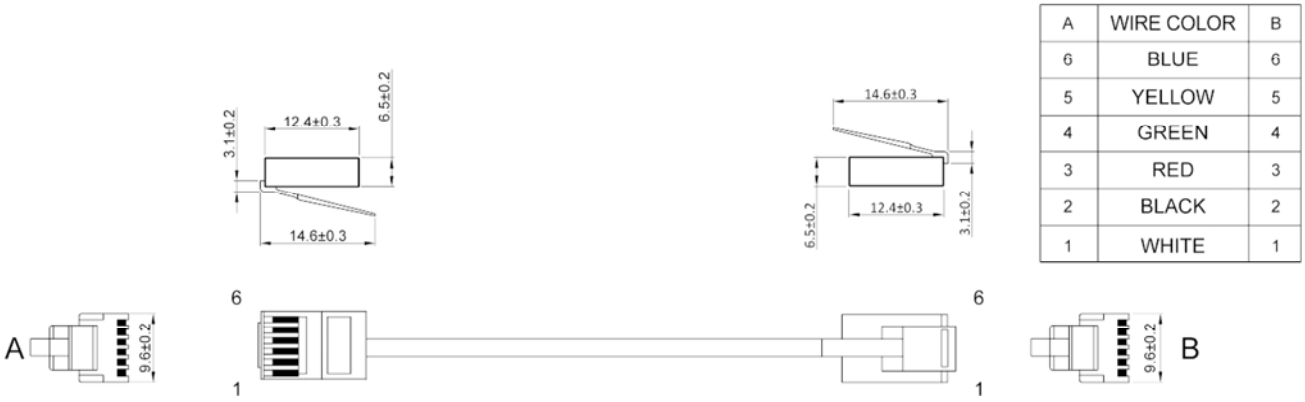
⑥ Aux port：

The connector (Fig.3) connected to AUX wire (AWG 14 or 16) must connected with 12V / 0.5A fuse.

- Ignition Lockout function – The ignition lockout function is to turn OFF the Inverter when the auxiliary input wiring is connected to the ACC with 12 Volts.
- Return Override Function – The Return Override Function is to turn ON the inverter when the auxiliary input wiring is connected to the reversed gear shift with 12 Volts.

⑦ Phone Jack Connector：

1. Before connection, please make sure to switch the inverter to REMO position. (For SP series) (Fig.4)
2. Connect the RJ-11 cable between CR-16 remote and the inverter.



A	WIRE COLOR	B
6	BLUE	6
5	YELLOW	5
4	GREEN	4
3	RED	3
2	BLACK	2
1	WHITE	1

Fig.4 Phone Jack Connector

WARNING!
DO NOT use standard telephone cable.

⑧ JP1：The JP1 is to set either Return Override Function or Ignition lockout function.

- JP1 jumper “Short” - Return Override Function

  Return Override Function – The Return Override Function is to turn ON the inverter when the auxiliary input wiring is connected to the reversed gear shift with 12 Volts.

- JP1 jumper “Open” – Ignition Lockout Function

  Ignition Lockout function – The ignition lockout function is to turn OFF the inverter when the auxiliary input wiring is connected to the ACC with 12 Volts.

- The connector which is connected to AUX power must use with 12V / 0.5A fuse.

Trigged signal AUX	JP1	Inverter Status
1	Open	OFF
0	Open	ON
1	Short	ON
0	Short	OFF

Note：default mode is Open.



Fig.5 SP series remote position

COTEK

No.33, Sec. 2, Renhe Rd., Daxi Dist., Taoyuan City 33548, Taiwan
Phone：+886-3-3891999 FAX：+886-3-3802333
http：// www.cotek.com.tw
2015.10._A0