



samlexpower®

**Remote
Control for
Inverter**

RC-300

**Owner's
Manual**

Please read this
manual **BEFORE**
operating your
RC-300 Remote
Control

SECTION 1 | SAFETY

1.1 Before using this Remote Control, please follow the Safety Instructions given in the Owner's Manual for the associated PST Series Inverters.

SECTION 2 | DESCRIPTION

2.1 RC-300 is a wired Remote Control that is compatible with PST Series Inverters (Please refer to Section 6 - Specifications for the list of inverters).

2.3 It is used to switch ON and switch OFF the inverter from a remote location. It also displays the operational status using LCD display and colored LEDs. It is provided with 25 ft / 7.62 meters of connecting cable set with RJ-50 Modular Plugs (10P10C). The conductors of the cable set have crossed-over (rolled-over) connections on the two RJ-50 plugs.

SECTION 3 | LAYOUT OF CONTROLS, INDICATIONS & DIMENSIONAL DRAWING

3.1 Fig. 1 (page 4) shows the layout of controls and indications and dimensional drawing.

3.2 ON/OFF Control

ON/OFF Push Button (1) is used to switch ON and switch OFF the inverter. Every time the ON/OFF Push Button is pressed, a beep will be heard.

This Remote Control will operate only after the inverter has been first turned ON using the local ON/OFF Switch on the inverter or using external ON/OFF control provided in the inverter.

3.3 LCD Display

LCD screen (3) is used to display the following 6 output parameters in a sequential loop as given below.

The screen changes to show the successive parameter in a sequential manner every time the "Display Push Button" (2) is pressed (Sequence is: Screen1-2-3-4-5-6-1-2-3...)

1. AC output voltage in Volts, V
2. AC output current in Amps, A
3. AC output frequency in Hertz, Hz
4. Active AC output power in Watts, W - The display is limited to a range of 6W - 3500W
5. Apparent Output Power in Volt Amps, VA
6. Power Factor, PF

When the inverter is switched ON using the ON/OFF Push Button (1), the LCD screen displays information as follows:

- It takes 2 to 6 sec for booting / initialization. During this time, all the above 6 parameters will be displayed as "0"
- If the load is > 6W, all the above 6 parameters will be available for display after end of booting / initialization period
- If the AC output power is less than 6W, parameters "AC output current in A", "Active AC output power in Watts, W", "Apparent Output AC Power in Volt Amps, VA" and "Power Factor, PF" will not be displayed (will be displayed as "0"). This is necessary because at power output < 6W, the noise on the output side may be comparable to the low value of the load and the logic may not be able to differentiate noise from load and hence, may display wrong values for these parameters

3.4 Power Saving / Sleep Mode in the LCD Display

To save power, the LCD display will remain ON for 3 minutes from the time the Display Push Button (2) is pressed and will then switch OFF into Sleep Mode. To wake up, press the Display Push Button (2).

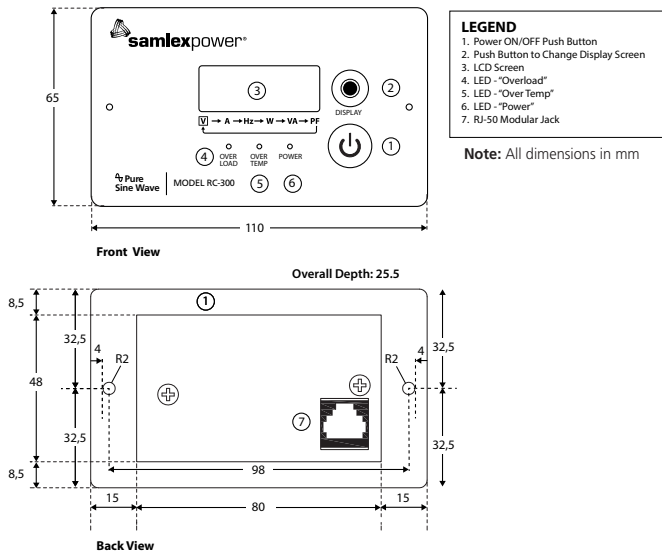


Fig. 1 Remote Control RC-300 - Layout and Dimensional Drawing

3.5 LED Display

The following LED displays are available:

- Green LED (6) marked POWER. This LED will be lighted when the inverter is in ON condition. When the inverter is in OFF condition, this LED will not be lighted. This LED shows that DC input is available to the inverter and that the input section of the inverter is operating normally
- Red LED (4) marked OVER LOAD. When lighted, it indicates that the AC output of the inverter has been shut down due to over load
- Red LED (5) marked OVER TEMP. When lighted, it indicates that the AC output of the inverter has been shut down due to over temperature

3.6 Pinout of RJ-50 Modular Jack

The pinout of the RJ-50 Modular Jack (7) at the back of the RC-300 is given at Fig. 2 below:

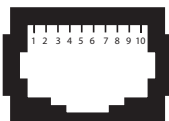


Fig. 2 Remote Control RC-300 - Pinout of Modular Jack RJ-50

The standard numbering system of the pins of a Modular Jack, when looking into the Jack, is from left to right. As the conductors of the cable are cross-connected (rolled-over), the pinouts at the Modular Jack in the inverter will be a mirror image of the pinout of the Modular Jack in the Remote Control as shown in Table 1 below:

TABLE 1 – PIN OUT FOR MODULAR JACKS		
Pinout of Modular Jack on the Remote Control as per Fig 2 (1)	Signal (2)	Pinout of Modular Jack on the inverter (See Note 1) (3)
1	LED "OVER TEMP"	10
2	LED "POWER ON"	9
3	Avcc	8
4	GND	7
5	TOGGLE	6
6	LED - "OVERLOAD"	5
7	Vcc	4
8	LCD - Data (B)	3
9	LCD - Data (A)	2
10	LCD - Ground	1

Note for Table 1:

1. Pin Nos of the Jack on the inverter (Column 3) are mirror image of Pin Nos on the Jack in the Remote (Column 1) due to crossed-over / rolled over connection of conductors.

SECTION 4 | INSTALLATION

- 4.1 Please refer to Fig. 1. The Remote Control can be flush mounted on a wall or a panel by making a suitable cut-out to accommodate the projection in the back.
- 4.2 Please ensure that the inverter is switched OFF before connecting RC-300 to the inverter.
- 4.3 Connect one end of the cable set (without the ferrite core) to the RJ-50 Modular Jack (7) at the back and the Remote and the other end (which includes the ferrite core) to the RJ-50 Modular Jack on the inverter. Ensure that the connection is firm and the tab on the plug securely locks in the jack.

SECTION 5 | OPERATION

NOTE:

This Remote Control will operate only after the inverter has been first switched ON using the local ON/OFF Switch on the inverter or using the external ON/OFF control provided on the inverter.

- 5.1 Switch ON the inverter using the local ON/OFF Switch on the inverter or using external ON/OFF control provided on the inverter. Once the inverter turns ON, the operational status of the inverter will be displayed through the LCD screen (3, Fig 1) and LEDs (4, 5, 6; Fig 1).
- 5.2 See under headings "LCD Display" (Section 3.3 and 3.4) and "LED Display" (Section 3.5) for information on the operating conditions. Please read "Troubleshooting Guide" of the Owner's Manual of the inverter for identifying abnormal conditions indicated by the LEDs.
- 5.3 The output of the inverter can be switched ON/OFF using the ON/OFF Push Button (1, Fig 1).

5.4 No Load Current Draw

As stated above, the ON/OFF Switch on the inverter is required to be in ON condition for the Remote to operate. When the ON/OFF switch on the Remote Control is turned ON, all the circuitry inside the inverter becomes fully alive and the AC output is made available. In this condition, even when no load is being supplied (or, if a load is connected but has been switched OFF), the inverter draws a small amount of current from the batteries to keep the circuitry alive and is ready to deliver the required power on demand. This is called the "idle current" or the "no load current draw". When the inverter is turned OFF using this Remote Control, some control circuitry is still alive in the inverter and will require very small current draw. Hence, when the load is not required to be operated, turn OFF the ON/OFF Switch on the inverter to prevent unnecessary current drain from the battery.

SECTION 6 | SPECIFICATIONS

MODEL NUMBERS OF COMPATIBLE INVERTERS	PST-1500-12, PST-1500-24, PST-1500-48 PST-2000-12, PST-2000-24 PST-3000-12, PST-3000-24 PST-3005-12E, PST-3005-24E
CABLE SET	RJ-50 (10P10C) with crossed-over / rolled-over connections. Length = 25 ft / 7.62 meters. Ferrite core installed at one end (inverter end) of the cable set.
OPERATING TEMPERATURE RANGE	0 to 40°C / 32°F to 104°F
DIMENSIONS (L X W X D)	110 x 65 x 24.7 mm / 4.33 x 2.56 x 0.97 in
Weight (Without cable / with cable)	85 g / 256 g; 0.04 lb / 0.12 lb

NOTE: Specifications are subject to change without notice