

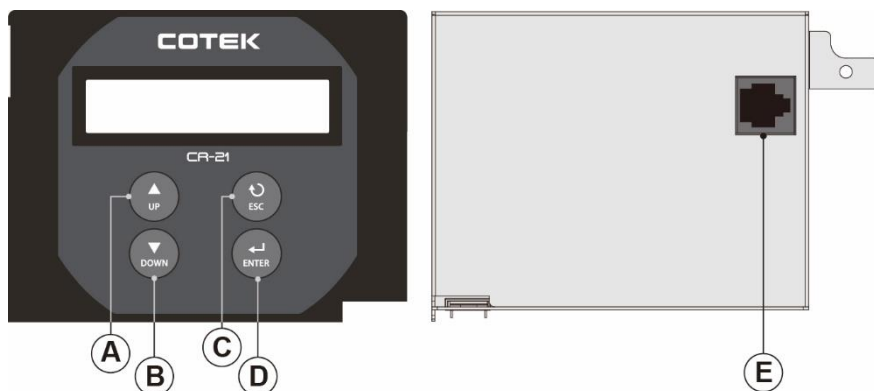


User Guide For CR-21 PLUS Remote Control

1. Introduction

1-1. System

The remote is designed to easily and quickly connect to the Cotech SR-1600 Plus. The LCD display is used for setting up the inverter, as well as displaying current status or fault messages. Pressing buttons allows you to select a menu item or to save a setting, once it is displayed on the LCD screen.

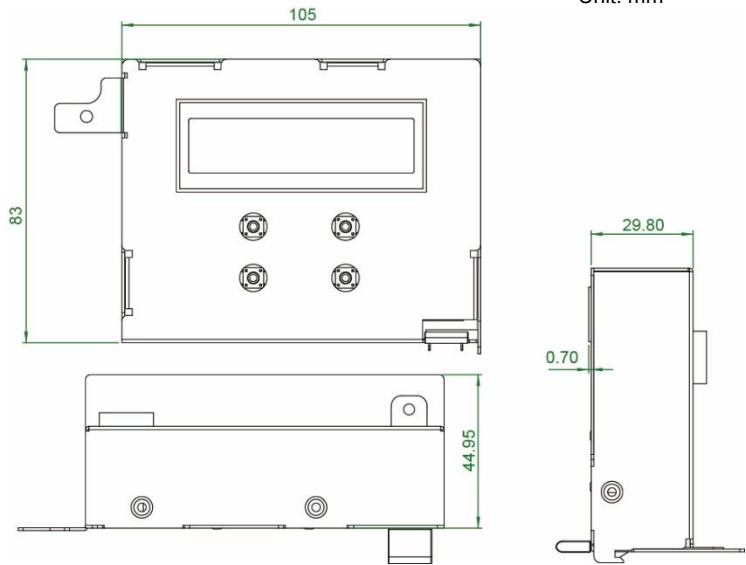


Front and rear Panel introduction

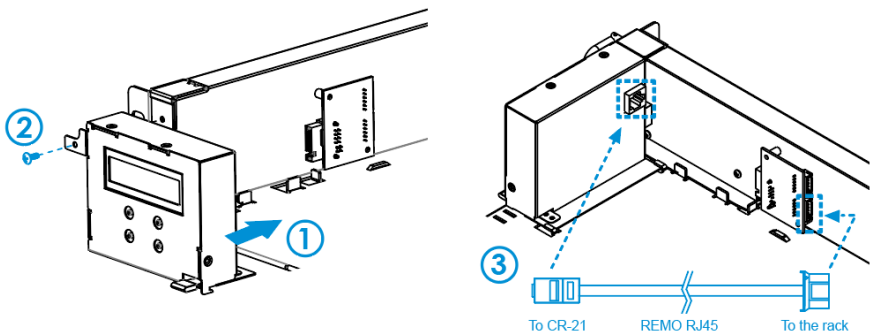
	Description	Function
A	UP	Scroll up
B	DOWN	Scroll down
C	ESC	Go back to previous page.
D	ENTER	Enter next page and save setting value
E	RJ-45 port	Connect to the Inverter

1-2. Mechanical Drawings

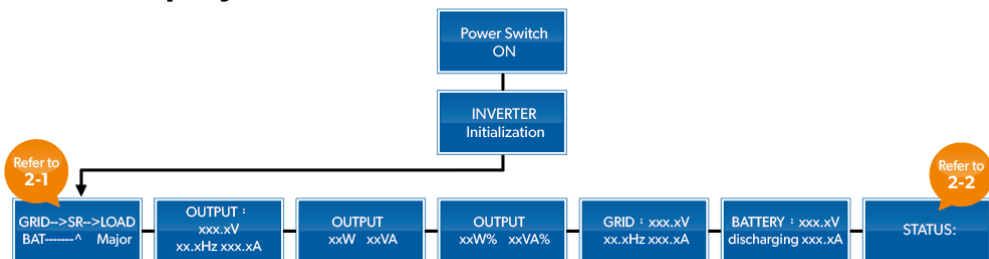
Unit: mm



1-3. Hardware Installation

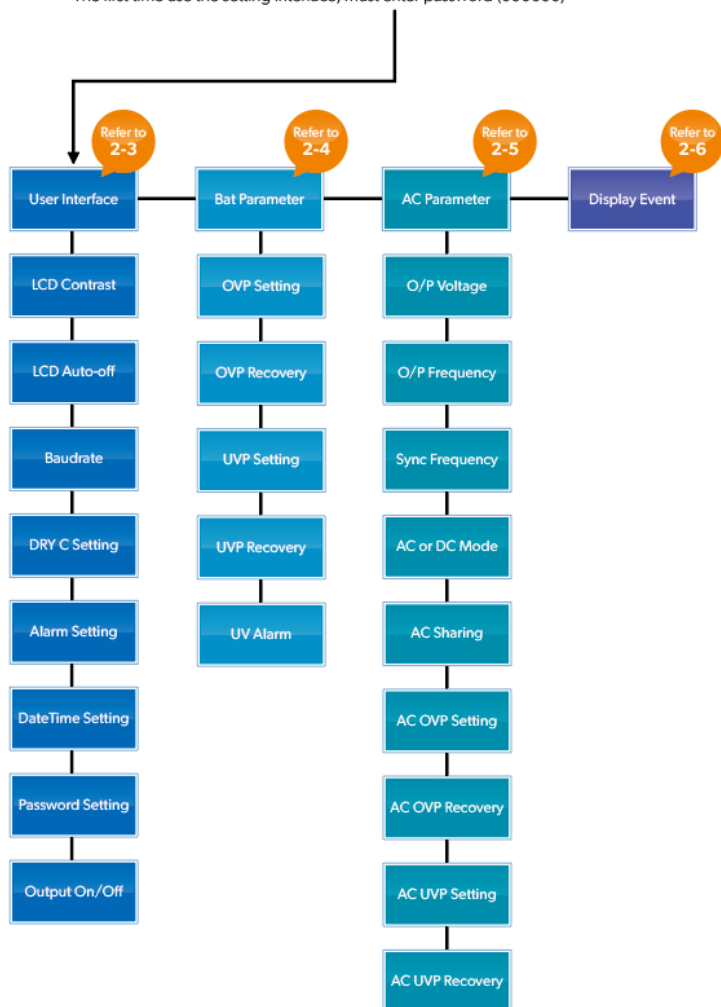


2. Display tree

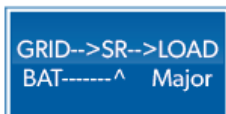


Enter into System Setup by "press  for 3 seconds"

*The first time use the setting interface, must enter password (000000)



2-1 GRID-->SR-->LOAD BAT-----^ Major



The connection status and Alarm type.

For the description of alarm type, (Major / Minor Alarm) please refer to Alarm List in the “SR-1600 Plus User Manual.”

2-2 STATUS :



STATUS	Possible Cause
Normal	The system is operating within normal parameters
Machine Abnormal	Internal Parallel Fault or Module Failure detected
Grid Abnormal	AC source failure
Fan Fault	Cooling Fan is not operating
BAT. Low	Under DC voltage protection
BAT. High	Over DC voltage protection
Over Load	System load exceeded the rated capacity for more than 15 seconds
Redundancy Fault	A redundant module has been removed or a module failure has occurred
Over Temperature	Temperature is too high
BAT. Low Alarm	Under DC voltage Alarm
BAT. High Alarm	Over DC voltage Alarm
Over Load Alarm	System load has exceeded the rated capacity (Immediate Warning)
Major Relay On	Major fault relay output (Pins 12-13) is energized (High)
Minor Relay On	Minor fault relay output (Pins 13-14) is energized (High)
Remote OFF	System turned OFF via external dry contact signal (Pin1 & Pin2)

2-3 User Interface

User Interface

Setting Menu	Description	SETT<value>
User Interface	Sets the LCD screen contrast 0~100%	0~100 (Default : 50)
LCD Auto-off	Sets the LCD screen backlight auto off timer 0~120 seconds	0~120 (Default : 120)
Baudrate	RS-485 Baud rate	1200, 2400, 4800, 9600, 19200 (Default : 4800)
DRY C Setting	Dry contact C setting for Major or Minor alarm	Major, Minor, Disable
Alarm Setting	Buzzer Alarm Setting	Normal, Mute, One time (Silent warning for current status)
DateTime Setting	Date & Time Setting	Date : yyyy-mm-dd, Time : hh-mm-ss
Password Setting	Password Setting	000000~999999 (Default : 000000)
Output On/Off	Turn on/off the output	On or Off

2-4 Battery Parameter



Setting Menu	Description	SETT<value>
A blue rectangular button with a thin white border and the text "OVP Setting" in white.	Setting the Over Voltage Protection (OVP) Point	24V: 30~34 VDC (Default: 34 VDC) 48V: 60~68 VDC (Default: 68 VDC)
A blue rectangular button with a thin white border and the text "OVP Recovery" in white.	Setting Over Voltage Auto-recovery Point	24V: 26~30 VDC (Default: 28 VDC) 48V: 52~60 VDC (Default: 56 VDC)
A blue rectangular button with a thin white border and the text "UVP Setting" in white.	Setting Under Voltage Protection (UVP) Point	24V: 18~25 VDC (Default: 18 VDC) 48V: 36~50 VDC (Default: 36 VDC)
A blue rectangular button with a thin white border and the text "UVP Recovery" in white.	Setting Under Voltage Auto-recovery Point	24V: 23~27 VDC (Default: 25 VDC) 48V: 46~54 VDC (Default: 50 VDC)
A blue rectangular button with a thin white border and the text "UV Alarm" in white.	Setting the Under-Voltage (UV) Alarm Point	24V: 19~26 VDC (Default: 21 VDC) 48V: 38~52 VDC (Default: 42 VDC)

2-5 AC Parameter



Setting Menu	Description	SETT<value>
	Setting the AC output voltage	1xx Model: 97~127 VAC 2xx Model: 194~254 VAC
	Setting the AC output frequency	50 or 60 Hz
	Setting AC output frequency tolerance range	0 Hz~3 Hz
	Setting AC mode or DC mode has priority	AC mode, DC mode
	Setting the AC power ratio; for example: a setting of 10% represents AC 10% and DC 90%. *The AC input power must be higher than 300W after assigning DC and AC ratio.	10, 20, 30, 40, 50, 60, 70, 80, 90, 100% Default: 100 (Disable)
	Setting AC Over Voltage Protection (OVP)	1xx Model: 127.5~132.5 VAC (Default : 130 VAC) 2xx Model: 255~260 VAC (Default: 260 VAC)
	Setting AC Over Voltage Auto-recovery Point	1xx Model: 120~127 VAC (Default: 125 VAC) 2xx Model: 250~254 VAC (Default: 250 VAC)
	Setting AC Under Voltage Protection (UVP) Point	1xx Model: 75~90 VAC (Default: 90 VAC) 2xx Model: 150~180 VAC (Default: 180 VAC)
	Setting AC Under Voltage Auto-recovery Point	1xx Model: 90.5~100 VAC (Default: 95 VAC) 2xx Model: 181~200 VAC (Default: 190 VAC)

*1xx Model = 100V, 110V, 115V or 120V, 2xx Model = 200V, 220V, 230V or 240V

2-6 Display Event

Display Event

XXX (index) code:XXX (please refer to Error code List)
YY-MMDD-HH-MM-SS (Event time)

Model	Setting value range	Model	Setting value range
002	Output off	020	Under DC voltage protection recovery
003	Output on	021	Under DC voltage protection
004	AC share off	022	Overload alarm recovery
005	AC share on	023	Overload alarm
006	AC mode off	024	Overload protection recovery
007	AC mode on	025	Overload protection
008	DC mode off	026	Fan normal
009	DC mode on	027	Fan failure
010	Grid Volt normal	028	Over temperature protection recovery
011	Grid Volt abnormal	029	Over temperature protection
012	Freq normal	030	The Machine was working
013	Freq abnormal	031	Component failed
014	Over DC voltage alarm recovery	032	IC Power voltage normal
015	Over DC voltage alarm	033	IC Power voltage abnormal
016	Over DC voltage protection recovery	034	Insert the module
017	Over DC voltage protection	035	Remove the module
018	Under DC voltage alarm recovery	036	Redundancy_OK
019	Under DC voltage alarm	037	Redundancy_lost

Error code list

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