

Part No. Z1-002-752, IB003981

Jul. 2003

OPERATION MANUAL

REMOTE CONTROLLER
PCR-LA Series

RC03-PCR-LA



Use of Operation Manual

Please read through and understand this Operation Manual before operating the product. After reading, always keep the manual nearby so that you may refer to it as needed. When moving the product to another location, be sure to bring the manual as well.

If you find any incorrectly arranged or missing pages in this manual, they will be replaced. If the manual it gets lost or soiled, a new copy can be provided for a fee. In either case, please contact Kikusui distributor/agent, and provide the “Kikusui Part No.” given on cover.

This manual has been prepared with the utmost care; however, if you have any questions, or note any errors or omissions, please contact Kikusui distributor/agent.

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Both unit specifications and manual contents are subject to change without notice.

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Safety Symbols

For the safe use and safe maintenance of this product, the following symbols are used throughout this manual and on the product. Understand the meanings of the symbols and observe the instructions they indicate (the choice of symbols used depends on the products).



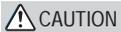
Indicates that a high voltage (over 1 000 V) is used here. Touching the part causes a possibly fatal electric shock. If physical contact is required by your work, start work only after you make sure that no voltage is output here.

DANGER

Indicates an imminently hazardous situation which, if ignored, will result in death or serious injury.



Indicates a potentially hazardous situation which, if ignored, could result in death or serious injury.



Indicates a potentially hazardous situation which, if ignored, may result in damage to the product and other property.



Shows that the act indicated is prohibited.



Is placed before the sign “DANGER,” “WARNING,” or “CAUTION” to emphasize these. When this symbol is marked on the product, see the relevant sections in this manual.



Indicates a protective conductor terminal.



Indicates a chassis (frame) terminal.

Arrangement of this manual

This Operation Manual is made up of the following sections.

Chapter 1 General

Outlines and describes the features of the RC03-PCR-LA Remote Controller.

Chapter 2 Precautions and Preparation for Use

Provides the precautions and preparation information that must be understood for use of the Remote Controller.

Chapter 3 Operation Check

Describes the operation check that must be conducted prior to operation of the Remote Controller.

Chapter 4 Operation Method

Describes the operations of the Remote Controller and the extended functions of the PCR-LA AC power supply.

Chapter 5 Parts Names and Functions

Denotes the names of the switches, indications, and other parts of the RC03-PCR-LA, and describes their functions.

Chapter 6 Maintenance

Describes the maintenance procedures for the RC03-PCR-LA.

Chapter 7 Specifications

Contains a list of the specifications.

Appendix

Contains the Hierarchy of Remote Controller Key Operating Menus, and the Power Line Abnormality Simulation Operation Setting Sheet.

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Outlines and describes the features of the RC03-PCR-LA Remote Controller.

1.1 Outline

This device (RC03-PCR-LA) is a remote controller for the PCR-LA Series AC power supplies. Use of the RC03-PCR-LA with a PCR-LA AC power supply allows power line abnormality simulation.

1.2 Features

A dedicated key is provided for data setting of power line abnormality simulation.

Power line abnormality simulation enables simulation of interruption, fast voltage dip (dip) or fast voltage swell (pop).

The function is used to test switching power supplies or electronics devices.

1.3 Applicable Product Version

This Remote Controller requires the PCR-LA Series AC power supplies equipped with ROM of version 3.0X.

This Operation Manual applies to the RC04-PCR-LA Remote Controllers equipped with ROM of version 1.0X.

When making an inquiry about the product, please provide us with the following information:

- Model name
- ROM version
- Serial number

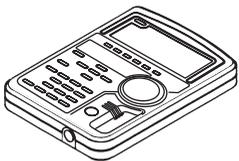
For the procedure for checking the ROM version of the Remote Controller, see “3.2 Operation Check”. For the procedure for checking the ROM version of the PCR-LA Series AC power supply, see the PCR-LA Series AC Power Supply Operation Manual.

Chapter 2 Precautions and Preparation for Use

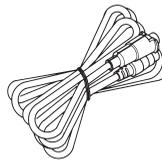
Provides the precautions and preparation information that must be understood for use of the Remote Controller.

2.1 Check at Unpacking

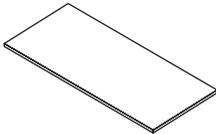
The RC03-PCR-LA Remote Controller was carefully tested and inspected, both mechanically and electrically, before shipment to ensure its normal operation. Check the Remote Controller upon receipt for damage that might have occurred during transportation. Also, check that all items listed below have been provided. If the device appears to be damaged or if any accessory missing, notify Kikusui distributor/agent.



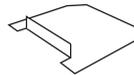
Remote controller (1)



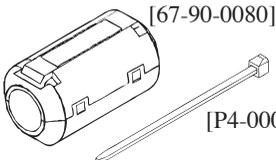
Remote controller cable (1 pc.)
[85-50-0140]



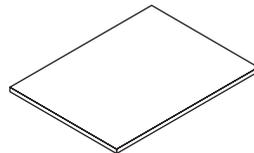
Magnet sheet (1 sheet)
[R7-000-001]



Connector cover (1)
[Q1-300-006]



Split cores (with stopper bands) (2pcs.)
[67-90-0080] [P4-000-551]



Operation Manual (1 copy)
[Z1-002-752]

Fig.2-1 Items Contained in the Package

2.2 Handling Precautions

- Do not drop the remote controller or subject it to other impact.
- Do not place the remote controller where it could be exposed to water or other liquid.
- Do not use or store the remote controller in direct sunlight.
- Do not use or store the remote controller in an area susceptible to rapid temperature changes.
- When the remote controller is used with the provided magnet sheet, which attaches to the back of the remote controller, never place the remote controller near magnetic-susceptible items, such as floppy disks and credit cards.

2.3 Combination with Other Options

PCR-LA Series AC power supplies are provided with a variety of options in addition to the RC03-PCR-LA Remote Controller. Note that this Remote Controller cannot be used simultaneously with another option.

2.4 Connecting the Remote Controller Cable

⚠ CAUTION • Before connecting the controller cable, always turn OFF the PCR-LA AC power supply POWER switch. When removing the cable, first turn the POWER switch of the PCR-LA power supply OFF.

NOTE • When turning ON the PCR-LA AC power supply POWER switch, the PCR-LA AC power supply identifies the Remote Controller that is connected. Therefore, before turning ON the PCR-LA AC power supply POWER switch, connect the Remote Controller to the PCR-LA AC power supply.

1. Connect the controller cable connector with a protection cover to one of the two connectors (see Fig. 2-2) in the remote controller. Exercise care that the orientation of the connector is correct.
2. Insert the protection cover, cover the connector and turn the cover clockwise to fix it securely.
3. Connect the other connector of the remote cable to the TO REMOTE CONTROLLER connector on the front of the PCR-LA power supply. In this case, align the cable connector such that it is oriented with that of the connector on the front panel.

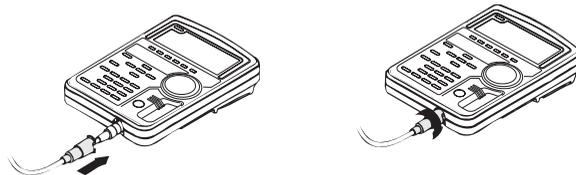


Fig.2-2 Connecting the Remote Controller Cable

2.5 Installation of the Split Cores

1. Unlock the core and open it.
2. Close the core so that the cable is not caught in it.
3. As shown in Fig. 2-3, tie up the cable with the accompanying stopper band. Keep the distance between the plug and the core below 100 mm.

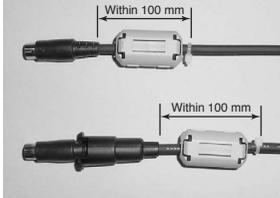


Fig.2-3 Location of Split Core Installation

2.6 Installation of the Connector Cover

Install the connector cover of the 8P mini plug connector which is not used.

Installation

1. As shown in Fig. 2-4, insert the accompanying connector cover from the lower part of the connector.
2. Insert the cover till it is locked.



Fig.2-4 Connector Cover Installation

Removal

1. As shown in Fig. 2-5, unlock the connector cover with tweezers.
2. Slowly pulled down the connector cover.



Fig.2-5 Connector Cover Removal

2.7 Moving Precautions

- **Before moving the PCR-LA AC power supply, always disconnect the controller cable.**

Moving a PCR-LA AC power supply with this device connected may place unreasonable stress on the remote controller cable or cause the remote controller to fall.

- **When the magnet sheet is used, do not move a PCR-LA AC power supply with the remote controller attached to the side of the equipment.**

Vibration during movement may cause the remote controller to fall.

- **When moving the equipment, follow the instructions given in the PCR-LA AC Power Supply Operation Manual.**

2.8 How to Use the Magnet Sheet

The Remote Controller has a magnet sheet that can be attached to the back of the remote controller. This allows the remote controller to be placed on the side panel of the PCR-LA AC power supply or other steel surface.

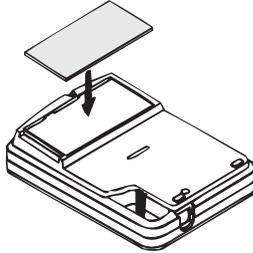


Fig.2-6 Attaching the Magnet Sheet

CAUTION • When the provided magnet sheet is on the back of the remote controller, never place the remote controller near magnetic-susceptible items, such as floppy disks and credit cards.

2.9 Quick Reference Card

The remote controller has a quick reference card that briefly describes keys and simulation waveforms. This card is useful when using the memory and simulation functions.

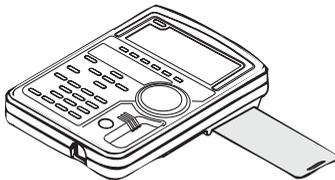


Fig.2-7 Quick Reference Card

Describes the operation check that must be conducted prior to operation of the Remote Controller.

After connecting the Remote Controller by the steps described in Chapter 2, check the Initial Setup Status and make an operation check. Always make an operation check as described in this chapter, if you have installed a new Remote Controller or changed its location, if the operator changes, or if the Remote Controller has not been used for a long time.

Before operating this device, read through the PCR-LA AC Power Supply Operation Manual and gain an understanding of the basic operations of the AC power supply.

3.1 Checking the Initial Setup Status

The condition in which a PCR-LA AC power supply and this device are simultaneously purchased and power is fed for the first time (factory shipment status) is called Initial Setup Status.

The main setting in the Initial Setup Status are as follows:

- OUTPUT OFF
- RANGE 100 V
- AC/DC AC
- Frequency 50.00 Hz
- Voltage 0.0 V
- Display mode Voltmeter

If the Remote Controller is not in the Initial Setup Status, use the reset function to activate the Initial Setup Status. Reset can be performed either on the PCR-LA AC power supply or via the Remote Controller. To perform a reset on the PCR-LA AC power supply, see instructions in the PCR-LA AC Power Supply Operation Manual.

Note that performing a reset cancels all settings made thus far and activates the Initial Setup Status.

DESCRIPTION**• Home Position**

The status in effect immediately after the POWER switch is turned ON is called the Home Position (regardless of OUTPUT ON/OFF). To return to the Home Position from another mode, press the ESC key.

• ENTER Wait

This is the condition in which the ENTER key has not yet been pressed to initiate the operations performed thus far. In this condition, the ENTER LED on the Remote Controller blinks. To cancel a operation before pressing the ENTER key, press the ESC key.

ENTER Wait for this device has the same meaning as the ENT Wait of the PCR-LA AC power supplies.

3.2 Operation Check

⚠ CAUTION • Remote Controller operation must be checked after the operation check of the PCR-LA AC power supply has been completed.

Operation Check Procedure

The following describes how to make an operation check from the Initial Setup Status.

1. Turn the PCR-LA AC power supply POWER switch ON.

The Remote Controller's display unit shows the ROM version for a few seconds.



Fig.3-1 ROM Version Display

After a few seconds, the Home Position appears.

2. Press the V key to select the voltage setting mode.

This causes both the V and SET LEDs to light up.

3. Turn the rotary encoder to confirm that the voltage varies.

This completes the operation check.

This operation check does not check all functions. However, if the operation check has been complete, the main functions operate correctly.

Describes the operations of the Remote Controller and the extended functions of the PCR-LA AC power supply.

4.1 Basic Operation of the Remote Controller

Remote controller operation is designed to be as much as possible the same as that of the PCR-LA AC power supply control panel. However, part of the operation and operation of new functions provided by the Remote Controller differ from that of the PCR-LA power supply control panel.

4.2 Functions in Common with the PCR-LA AC Power Supply

This section discusses the functions common to the Remote Controller and the PCR-LA AC power supply control panel. The following functions are the same key operation as that of the PCR-LA AC power supply control panel. For details about operation, refer to the PCR-LA AC Power Supply Operation Manual.

Table 4-1 Functions Whose Key Operation is the Same as That of the PCR-LA AC Power Supply

Functions	Key operation
OUTPUT ON/OFF	OUTPUT key
Key-lock function	KEYLOCK (SHIFT, 4)
Output voltage range change	RANGE (SHIFT, 7)
Output mode change	AC/DC (SHIFT, 8)
Digit function*	+/- (SHIFT, .)

* The Remote Controller makes the selected digit brighter than the other digits.

Voltage Setting Function

To enter the voltage setting mode, press the V key in the Home Position.

Frequency Setting Function

To enter the frequency setting mode, press the F key in the Home Position.

Switching the Voltage Display Mode

To switch the voltage display mode on the Remote Controller, press the Vrms/Vset (SHIFT, V) key in the Home Position.

Change to the Current Display Mode

To enter the current measurement mode, press the I key in the Home Position.

Memory Function

The RC03-PCR-LA Remote Controller allows read only operation. Data in memory addresses 0 to 9 can be read by following the same procedure as that performed with the PCR-LA power supply. To write data into the memory, perform operations from the PCR-LA power supply control panel or through the GPIB or RS-232C interface.

Memory Read Procedure

Select the same output voltage mode (AC, DC, or AC + DC) as that used when setting the memory. To read the contents stored at each address (“ADRS”), follow the procedure specified below.

1. Press the ESC key to select the Home Position.
2. Press the MEM key to light up the MEM LED.
3. Enter a memory address using the numeric keys or rotary encoder.

The memory address entered will be indicated in the rightmost area of the 7-segment LEDs.



Fig.4-1 Displaying a Memory Address

This causes the set value stored in the entered memory address to be read.

Pressing the V key in the voltage setting mode causes a voltage value to appear on the 7-segment LED, while pressing the F key in the frequency setting mode causes a frequency value to appear.

To return the memory address display, press the ESC or MEM key.

4. To confirm the read value, press the ENTER key. To cancel it, press the ESC key.

This allows you to exit the memory address display.

4.3 Functions Extended by Using the Remote Controller

Some functions are added to the PCR-LA AC power supply by using the Remote Controller. This section describes how to use such functions.

Power Line Abnormality Simulation

This function allows the PCR-LA power supply to simulate an interruption, fast voltage swell (pops), or fast voltage dip (dips) to conduct a power line abnormality simulation in the AC mode.

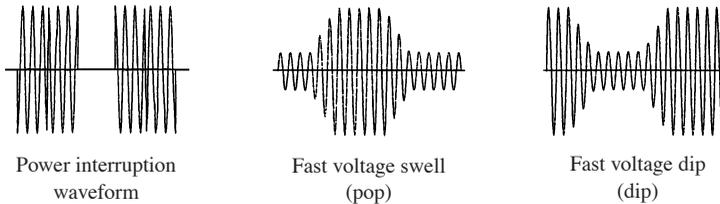


Fig.4-2 Simulated Power Line Abnormality Waveforms

A power line abnormality simulation should be conducted after parameters are set. Press the SIM key, select the desired item from among T1 to T3 and others shown in Fig. 4-3, and then set a value using the numeric keys or rotary encoder (for setting using the numeric keys, press the ENTER key to confirm the value). Press the RUN key to execute the simulation. To stop the simulation, press the STOP key. The V (T3) key sets an rms value.

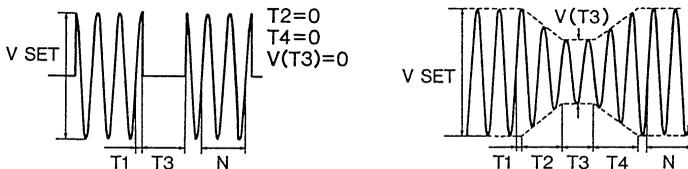


Fig.4-3 Simulated Waveforms and Parameters

Table 4-2 Descriptions of Parameters of the Setting Display

T1	<p>Voltage change start time Time before starting the change. Time from the point that the waveform crosses the zero level to the starting point of abnormal change, such as voltage increase or decrease. For more information, see the Description on page 4-6.</p>
T2	<p>Slope time 1 Interval of time for the voltage to increase (pop) or decrease (dip) from the initial value to the final value specified as abnormal voltage</p>
T3	<p>Voltage change duration Interval of the time which elapses from the end of previous voltage change to the beginning of the next voltage change the voltage is maintained for Variation Voltage during the interval. Specifying zero(0) for this T3 disables this function.</p>
T4	<p>Slope time 2 Interval of time for the voltage to increase (pop) or decrease (dip) from the value specified as abnormal voltage (Variation Voltage) to the initial value.</p>
N	<p>Restoration cycle The number of cycles during the condition that the voltage recovered to the initial value and has been maintained. The number of cycles should be specified at current frequency.</p>
V (T3)	<p>Variation voltage The final voltage value increased (pop) or decreased (dip). This value is specified at the interval of T3.</p>

Table 4-3 shows the settable data items and setting ranges.

Table 4-3 Parameter Settable Range

Setting item	Setting range
T1	0.0 ms to 999.9 ms
T2	0 ms to 9999 ms
T3	0.0 ms to 999.9 ms
T4	0 ms to 9999 ms
N	0 to 9999
V (T3)	0 to rated voltage V_{rms}

- N may lead or lag by one cycle depending on the setting of T1 to T4.
The start of N is at the next zero cross after T3 or T4 has ended.
- Using the RUN and STOP keys, set the start and end of a power line abnormality simulation.

Power Line Abnormality Simulation Operating Procedure

- Preset the steady status voltage and frequency.
1. Press the ESC key to call the Home Position.
 2. Set OUTPUT to OFF.
 3. Set the output voltage mode to AC using the AC/DC (SHIFT, 8), and then press the ENTER key.
 4. Press the SIM key.
The PCR-LA power supply will enter the key-lock mode automatically.
This will cause the SIM LED to light up.
 5. Use the T1, T2, T3, T4, N, and V (T3) keys to light up the LED located above the item to be set.

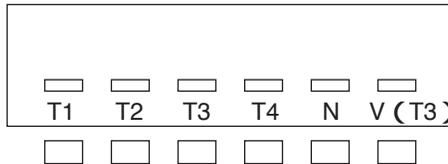


Fig.4-4 Selecting Parameters

6. Use the numeric keys or rotary encoder to set the values.
For setting using the numeric keys, use the ENTER key to confirm a value.
7. Set the OUTPUT key to ON.
If the T2 and T4 set values are any values other than 0 ms, this step may be performed prior to step 4.
8. Press the RUN key. This starts the simulation of power line abnormality.
During power line abnormality simulation, the LED above the RUN key of the Remote Controller lights up and “1” in the S-MODE area on the PCR-LA power supply control panel lights up.

NOTE

- A setting item can be changed in either the OUTPUT ON or OUTPUT OFF condition. However, the timing of RUN (simulation start) is as described below.

When $T2 = T4 = 0$: Before performing RUN, always set OUTPUT OFF. (Then, set OUTPUT ON again and press the F1 (RUN) key to start a simulation.)

When $T2 \neq 0$ or $T4 \neq 0$: Setting items can be changed while the OUTPUT ON condition is maintained, and then RUN can be performed.

9. Press the STOP key. This stops simulation of power line abnormality.

The power line abnormality simulation can also be stopped by pressing the ESC key. In addition, pressing the OUTPUT key turns the output OFF as well as stopping the simulation.

10. Press the ESC key to exit the power line abnormality simulation function.

If the simulation is paused using the ESC key in step 9, pressing the ESC key again causes the simulation to be ended.

This will cancel the key-lock mode in the PCR-LA power supply. Pressing the ESC key on the PCR-LA power supply also causes the power line abnormality simulation to end in the same way.

DESCRIPTION • Voltage change start polarity (POL)

For the voltage change start polarity, the zero cross regarded as the reference for T1 is fixed to the plus zero cross. In this case, the output voltage (waveform) at the L terminal, for which the N terminal of the PCR-LA power supply's OUTPUT terminal board is used as a reference, is indicated.

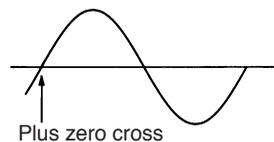


Fig.4-5 Zero Cross

To use the minus zero cross as the reference for T1, invert the polarity of the L and N terminals on the PCR-LA power supply or add a time equivalent to a half-period of the output frequency to the T1 set value.

Denotes the names of the switches, indications, and other parts of the RC03-PCR-LA, and describes their functions.

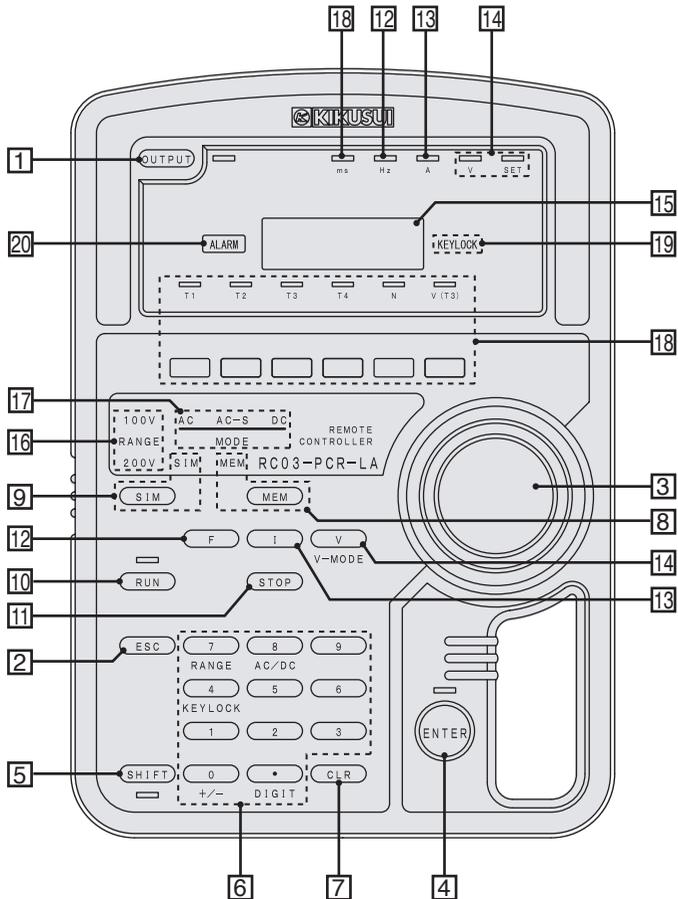


Fig.5-1 RC03-PCR-LA (front view)

[1] OUTPUT key

Selects output ON/OFF. (Whenever this switch is pressed, output ON/OFF is switched alternately.) When output is ON, the LED at the right of the key lights up. Immediately after the POWER switch is turned ON, output is OFF.

[2] ESC key

Used to end or cancel each operation.

[3] Rotary encoder

Used to set a numeric value such as voltage or frequency.

This is a rotary encoder with 24 clicks per rotation. The encoder increases the set value when it is turned clockwise; it decreases the set value when it is turned counterclockwise.

[4] ENTER key

Establishes the key operation. The LED above this key blinks during ENTER wait.

This key has the same function as ENT on the PCR-LA AC power supply control panel.

[5] SHIFT key

Enables the function set in blue letters below each key.

If the SHIFT key is pressed, the LED below this key lights up.

[6] 0, 1, 2, 3, 9 keys (numeric keys) and the “.” key

Used to directly enter the voltage, current and frequency values. (.: Decimal point)

An input value is confirmed when the ENTER key is pressed. It is canceled if the ESC key or the CLR key is pressed.

+/- (SHIFT, 0) key

Switches polarity of the DC mode voltage (+/-).

KEYLOCK (SHIFT, 4) key

Selects the key-lock mode.

In the key-lock mode, KEYLOCK lights up, and all keys except the OUTPUT key and the KEYLOCK (SHIFT, 4) key are disabled.

RANGE (SHIFT, 7) key

Selects output voltage range.

The “100V” indication in the RANGE area lights up when equipment is in the 100V range, “200V” lights up when it is in the 200V range.

When the RANGE key is pressed, the range indication to be selected blinks. Press the ENTER key to confirm the mode selection.

AC/DC (SHIFT, 8) key

Switches the mode among the AC, AC-S, and DC modes. The “AC” indication in the MODE area lights up in the AC mode, the “AC-S” indication in the MODE area lights up in the AC-S mode, and the “DC” indication in the MODE area lights up in the DC mode.

When the AC/DC key is pressed, the mode to be selected blinks. Press the ENTER key to confirm the mode selection.

DIGIT (SHIFT, .) key

Selects the digit mode that enables a specified or higher digits to change in the voltage setting or frequency setting mode.

In the digit mode, the digit selected in the 7-segment LEDs becomes brighter, enabling modification of the selected and higher digits (to the left of that selected).

[7] CLR key

Cancels the set value and recalls the previous value.

[8] MEM key

Calls voltage (and frequency) value (or values) from the memory.

Pressing the MEM key and then selecting a memory address using the numeric keys or rotary encoder will cause the voltage and frequency values stored in that address to be read. Pressing the V key in the voltage setting mode causes the voltage value to be displayed, while pressing the F key in the frequency setting mode causes the frequency value to be displayed.

Press the ENTER key to set the voltage and frequency retrieved in the output mode.

[9] SIM key

Selects the power line abnormality simulation mode.

In the power line abnormality simulation mode, select the desired item using the T1, T2, T3, T4, N, and V (T3) keys to perform data setting.

[10]RUN key

Starts a power line abnormality simulation.

During the simulation, the LED above the RUN key lights up.

[11]STOP key

Stops a power line abnormality simulation

[12]F key, Hz LED

Selects the frequency setting mode. The “Hz” and “SET” LEDs light up.

[13]I key, A LED

Selects the current measurement mode. The “A” LED lights up.

[14]V key, V/SET LED

Selects the voltage setting mode. The “V” and “SET” LEDs light up.

V-MODE (SHIFT, V) key

Switches the voltage display mode. The voltage display mode includes the set voltage (SET) and rms value (RMS). In SET or RMS, the “V” and “SET” LEDs or the “V” LED lights up, respectively.

[15]Numeric display

This is a 5-digit 7-segment LED display.

[16]RANGE indication

Displays the output voltage range.

“100V” lights up above the RANGE indication for the 100V range;

“200V” lights up for the 200V range.

[17]MODE indication

Displays the output voltage mode.

“AC” lights up in the AC mode, “AC-S” lights up in the AC-S mode, and “DC” lights up in the DC mode.

[18]T1 to T4, N, and V (T3) keys, ms LED

Used to select data to be set for a power line abnormality simulation. When time data is set, the “ms” LED lights up.

[19]KEYLOCK indication

Lights up in the key-lock mode.

[20]ALARM indication

In the event of alarm, this indication blinks, and an intermittent buzzer tone sounds.

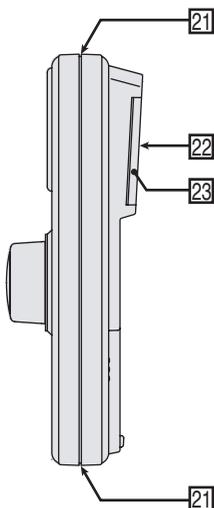


Fig.5-2 RC03-PCR-LA (side view)

[21]8-contacts mini-plug connectors.

Used for connecting the remote controller cable. Use one of these connectors.

[22]Magnet sheet attachment area

The provided magnet sheet is attached here. Use of the magnet sheet allows the remote controller to stick on the side of a PCR-LA AC power supply or other vertical steel surface.

[23]Quick reference card

Briefly describes keys and simulation waveforms. Pull it out and use as necessary.

Describes the maintenance procedures for the RC03-PCR-LA.

6.1 Cleaning

If the panel surface becomes soiled, wet a piece of soft cloth with a water-diluted neutral detergent, and wipe the panel gently.

-
-  **CAUTION** • Be sure to turn the POWER switch of the PCR-LA power supply OFF before performing maintenance.
- Do not use volatile solvents such as thinner or benzene, as they may discolor the device surface coating, erase printed characters, or make the face of the display unit opaque.
-

6.2 Before Requesting a Repair

If a problem occurs in the RC03-PCR-LA, check that problem in accordance with the following Table 6-1. Also, disconnect the Remote Controller from the PCR-LA AC power supply and check if the power supply alone operates normally. If it is not possible to recover a normal status, contact Kikusui distributor/agent to request repairs.

Table 6-1 Troubleshooting Check Sheet

Problem	Check item	Results	Possible causes
Numeric display does not appear, or display content is not normal.	Check if the remote controller cable has been correctly connected.	NO	Improper remote controller cable connection (see 2.4)
The Remote Controller cannot be operated.	Check if the remote controller cable has been correctly connected.	NO	Improper remote controller cable connection (see 2.4)
	Check if the PCR-LA AC power supply display unit indicates "GPIB" or "RS-232C."	YES	The PCR-LA AC power supply is under control of the GPIB Interface or RS-232C Interface.

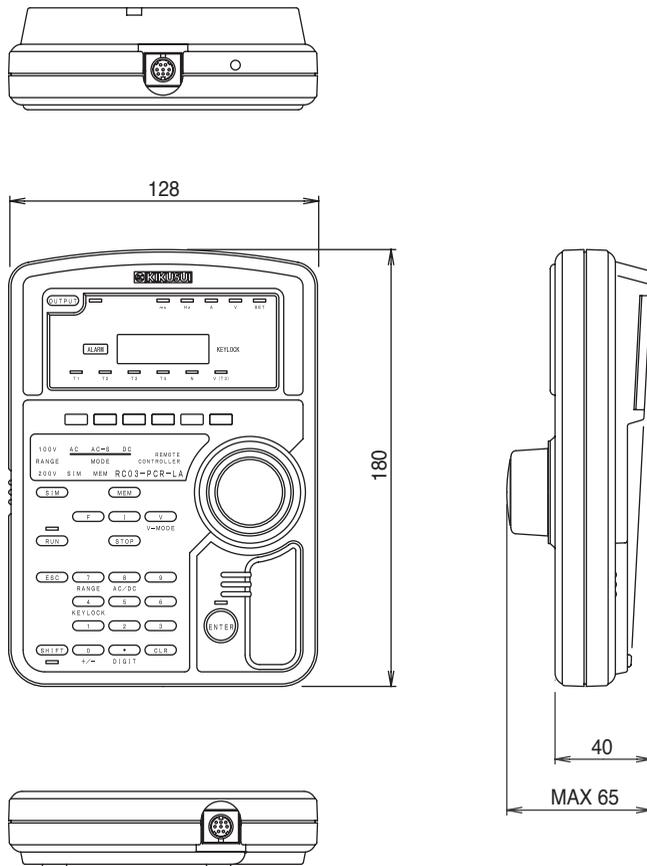
Contains a list of the specifications.

7.1 Specifications

The table below shows only the functions to be extended to the PCR-LA AC power supplies.

Item		Setting range	Resolution	Setting accuracy
Setting functions				
Power line abnormality simulation				
T1	x 1 ms	0 ms– 999.9 ms	0.1 ms	For T2 = T4 = 0, $\pm(1 \times 10^{-3} + 0.1 \text{ ms})$ For T2 \neq 0 or T4 \neq 0, $\pm(1 \times 10^{-3} + 1 \text{ ms})$
T2	x 1	0 ms–9999 ms	1 ms	$\pm(1 \times 10^{-3} + 1 \text{ ms})$
T3	x 1	0.0 ms–999.9 ms	0.1 ms	For T2 = T4 = 0, $\pm(1 \times 10^{-3} + 0.1 \text{ ms})$ For T2 \neq 0 or T4 \neq 0, $\pm(1 \times 10^{-3} + 1 \text{ ms})$
T4	x 1	0 ms–9999 ms	1 ms	$\pm(1 \times 10^{-3} + 1 \text{ ms})$
N	x 1	0 cycle to 9999 cycles	1 cycle	1 cycle
V(T3)		Same as output voltage setting range	0.1 V	—————

7.2 Dimensions



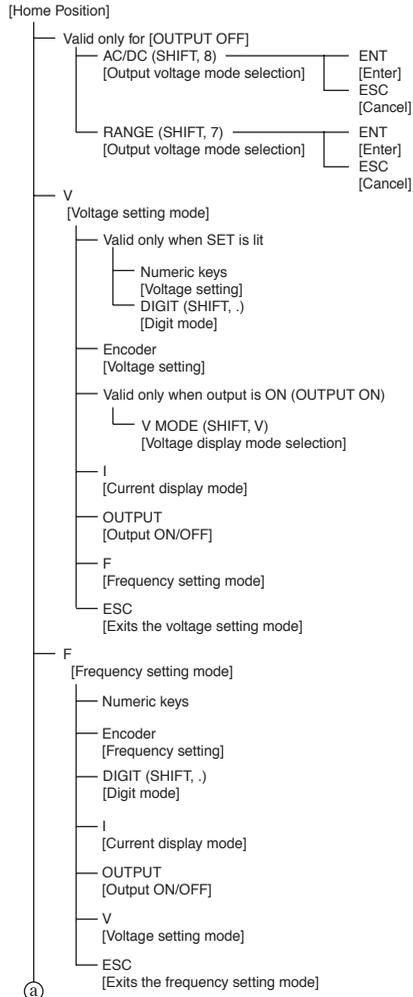
Unit: mm

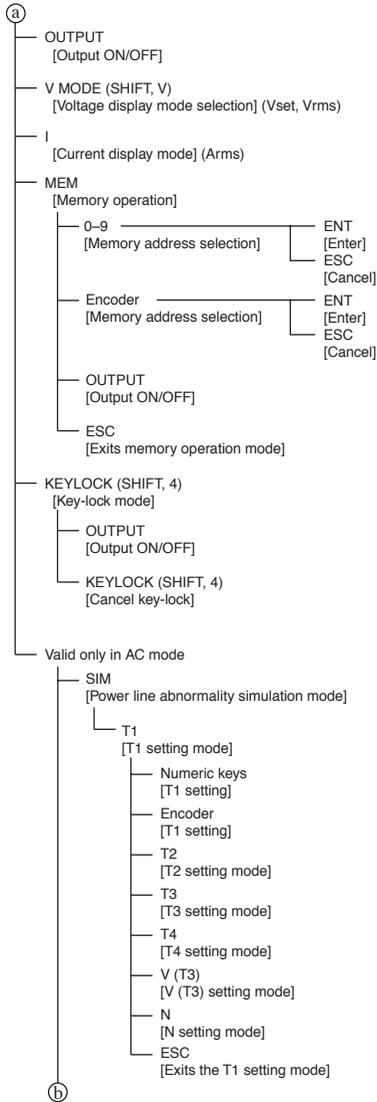
Fig.7-1 Dimension of RC03-PCR-LA

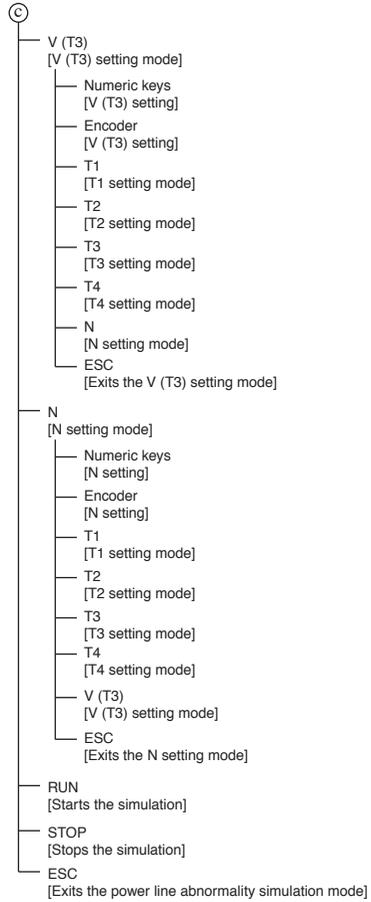
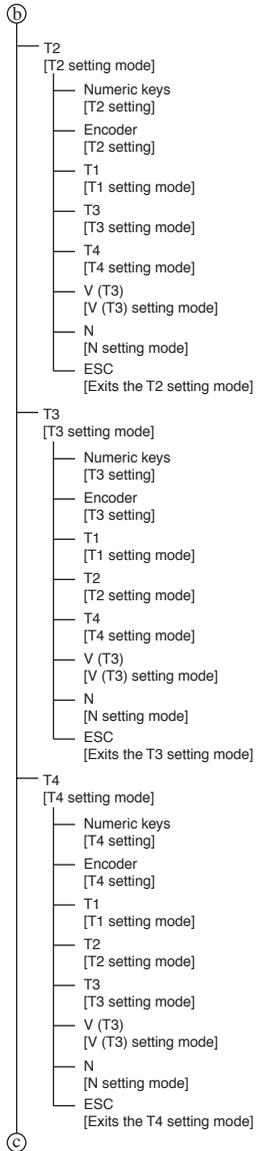
Appendix

Contains the Hierarchy of Remote Controller Key Operating Menus, and the Power Line Abnormality Simulation Operation Setting Sheet.

A.1 Hierarchy of Remote Controller Key Operating Menus







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REMOTE CONTROLLER

RC03-PCR-LA

OPERATION MANUAL