C.P.A.

CORROSION POTENTIAL ASSISTANT

OPERATOR/ MANUAL



For Technical Support Call: 1-888-964-1488 www.ruralelectric.com

SAFETY NOTICE:

Important

- 1. Always read and understand the entire installation manual prior to connecting the CPA to any circuit.
- 2. Comply with limitations of load and maximum current contained in this manual.
- 3. Always follow all local electrical safety codes regarding the use of this equipment.
- 4. Rural Electric, Inc. reserves the right to revise the contents of this manual at any time.
- 5. Only qualified personnel should operate electrical test equipment.
- 6. This equipment should only be utilized as designed.
- 7. Field modifications will void all warranties and may result in equipment damage, serious injury or death.
- 8. Rural Electric assumes no liability for the proper use of this equipment.

Section 1: C.P.A. Introduction

Overview:

- 1. The C.P.A. is an easily adjustable loop timer to make and break your test circuit while you focus on your measurements.
- 2. Power is controlled via a single on/off rocker switch on the face plate.
- 3. Just insert the included alligator clip probe leads, connect to your test circuit & press \circlearrowleft to start the cycle timer.
- 4. Pause the timer with the \circlearrowleft button to easily adjust cycle times with \triangle & \bigcirc
- 5. The CPA is 9VDC battery powered & incorporates electrically isolated mechanical dry contacts for your test circuit.

Section 2: Controls & Indicators

The CPA controls and indicators are identified and described below

Controller LCD Display:

The controller display is used to display information regarding the operating status of the CPA. (Fig. 1)

The following messages are displayed

-Relay Work Status
-Current Work
Mode
-Timer status
-Time

Relay work status
Set

Out Display Relay Work Status

Down

Current work mode

Pause / Trigger

Operating Controls:

On / Off Selector:

This rocker switch provides 9VDC power to the cycle timer module.

Pause / Trigger Button:

Press to enable/disable the cycle timer.

(h)

(Press & hold) to enable/disable the 5 Minute Auto Dimming

Display Feature

Set Button:

Press to display, select or set a menu parameter.

Up Button:

Press to increase a menu parameter.

Down Button:

Press to decrease a menu parameter.

Display Indicators:

Relay Work Status:

The CPA will display "OP" when CLOSED the relay coil is energized. The CPA will display "CL" when OPEN the relay coil is at rest.

Current Work Mode:

The CPA has 10 working modes. (P0-P9)*
The display will read P6 when in Looping Cycle Timer Mode

* Modes 0-5 & 7-9 are externally triggered and thus outside the scope of CPA functionality.

Parameter Description:

Relay will keep ON for time OP

Relay will keep OFF for time CL Controller

loops the above action.

The number of cycles (LOP) can be set.

(number of cycles "----" means

unlimited.)

Display Parameters:

The button will display the current parameter settings of the system.

The button will select between the current available parameters, run time and number of cycles.

Edit Parameters:

- 1. Enter parameter setting menu with a long press of the O button.
- 2. Press the \bigcirc / \bigcirc buttons to set the working mode to 06 for the CPA.
- 3. Press the button to select the working mode and enter the system parameter settings.
- 4. In the system parameter setting interface the button will select the system parameters to be modified (press UP/DOWN to modify value.)
- 5. Press the \bigcirc button to switch the timing unit(1s/0.1s/0.01s/1min) in the OP/CL parameter modification interface.
- 6. Long press button to save the settings parameter and exit the settings interface, after all the parameters are set.

Section 4: Maintainance

Your Rural Electric CPA is a robust piece of equipment designed for harsh environments but, like any electronic device it should be routinely inspected for conditions that may cause failures. Follow these guidelines to help prevent issues.

- 1. Inspect enclosure housing for evidence of moisture penetration.
- 2. Inspect alligator clips & probe leads for failing insulation, open conductors or flaws.
- 3. Cycle relays & measure nominal resistance across probe leads to confirm proper operation.
- 4. To clean the Product, wipe the instrument with a cloth that is lightly dampened with water or mild detergent. Do not use aromatic hydrocarbons, chlorinated solvents, or methanol based fluids.

Section 4: Troubleshooting

Quick Solutions Guide:

No power to controller display:

The controller display should always show text when powered on. Lack of a controller display is indicative of a dead battery. Replace as necessary.

- 2. Verify power switch is on.
- 3. If still, the display is not functional, suspect controller failure.

CPA does not cycle with (1) commands:

- 1. Verify CPA Workmode is "P6" and CPA is powered on. Correct as necessary.
- 2. Remove power probe leads from I/O jacks and validate relay closure with ohmmeter between the test probe jacks. If relay cycles contacts, verify test probes.

Rural Electric, Inc. Terms of Limited Warranty Corrosion Potential Assistant (C.P.A.) 1042314

Subject to each of the terms and conditions stated herein, Rural Electric, Inc. (hereinafter "RE") warrants solely to the original purchaser that such product is free from defects in materials and workmanship, and is in compliance with RE published specifications (current at the time of purchase) for normal use and service for 2 years from the date of manufacture or 1 year from date of purchase, whichever is sooner. Our obligation under this warranty shall be limited to the repair or exchange of any part which may prove defective under normal use and service by the original purchaser and which our examination shall disclose to our satisfaction to be defective or not in compliance with said specifications.

This warranty is expressly in lieu of all other warranties expressed or implied. Including the warranty of merchantability and fitness for use of all other obligations or liabilities on our part, and we neither assume or authorize any other person to assume for us any other liability in connection with the sale of this product. This warranty shall not apply to this product or any part thereof which has been subject to accident, negligence, modification, alteration, abuse or misuse.

We make no warranty whatsoever in respect to accessories or parts not supplied by us likewise, this warranty does not apply if the product is repaired or serviced by anyone other than RE or personnel trained by RE or if operated in a manner contrary to the instructions which accompany the product or by damage caused by circumstances beyond RE' control, Whether in use or otherwise. The term "original purchaser" as used in this warranty shall be deemed to mean that person whom the product is originally sold and no other person or persons. This warranty shall apply only to products sold or purchased within the United States.

In any and all events, RE shall, not be liable for any breach of warranty in an amount exceeding the purchase price of the product. RE shall repair or replace at its sole option any fabricated part consisting of components or nonconforming (with specifications) parts of the product without charge for the part or parts and shall bear the entire labor expense for any such repair when any such labor is performed or part or parts furnished by RE only. To obtain warranty service, purchaser must notify RE of any alleged defect within the warranty period.

This limited warranty applies only to a product purchased for use from RE. Under no circumstances shall RE be liable to original purchaser or any other person for any incidental, special or consequential damages (including any lost profits, loss of goodwill or lost savings) whether arising out of breach of warranty, breach of contract or otherwise.



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