

Quick Start Manual

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INFINITY

SERIES

THE NEW STANDARD FOR QUALITY

INFCTP

Infinity C Programmable Digital Thermocouple Temperature Meter with Time Proportional Control

NEWPORT

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Using The Quick Start Manual

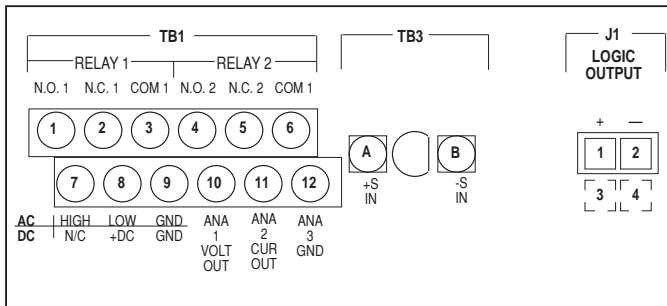
Use this Quick Start Manual with your INFCTP controller to perform common tasks to set up and configure your unit. For detailed instructions, refer to the appropriate section in the INFCTP Reference Manual.

Factory Defaults

The INFCTP is shipped from the factory as follows:

Description	Setting	See Manual Section:
Thermocouple Type	K	8
Decimal Point Resolution	1 Degree	9
Units	Fahrenheit	10
Setpoint 1	Active Above, Unlatched	11
Setpoint 2	Active Above, Unlatched	12
Deadband	0003	13
Analog Output	Current (4-20mA) $0_i = 4 \text{ mA}$ $1000_i = 20 \text{ mA}$	15

Wiring the Controller



Wiring Diagram

Thermocouple Wire Connection

1. Connect positive lead of thermocouple to TB3-A.
2. Connect negative lead of thermocouple to TB3-B.

Note: The negative lead is red.

AC Power Wiring

1. Connect AC High to TB1-7.
2. Connect AC Low to TB1-8.
3. Connect Chassis Ground to TB1-9.

Alarm 1 (Setpoint) Hook-up

1. Connect a jumper from AC High (TB1-7) to Relay 1 Common TB3-3.
2. Connect TB1-1 (N.O.) to External Alarm AC High.
3. Connect External Alarm AC Low to TB1-8.

Alarm 2 (Setpoint) Hook-up

1. Connect a jumper from AC High (TB1-7) to Relay 2 Common TB1-6.
2. Connect TB1-4 (N.O.) to External Alarm AC High.
3. Connect External Alarm AC Low to TB1-8.

Analog Output Wiring for 4 - 20 mA Current

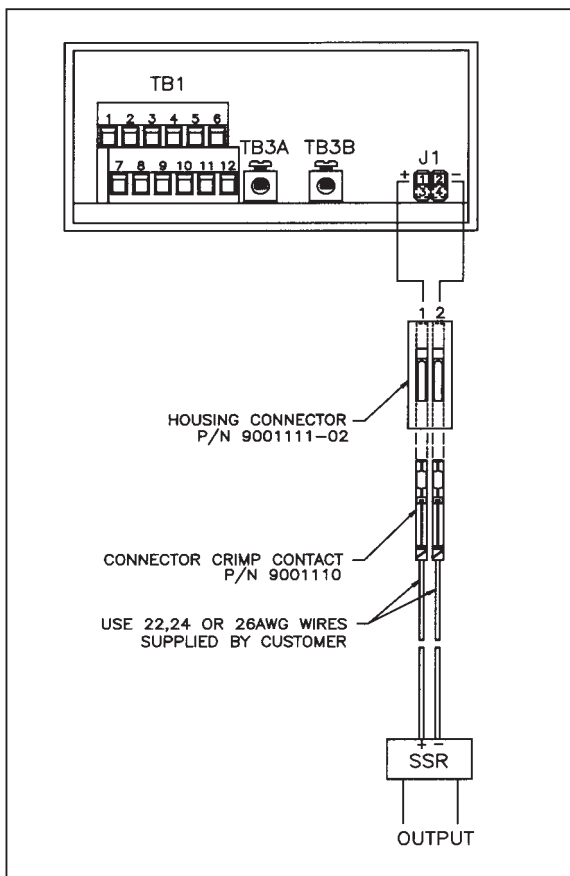
1. Connect Positive Lead to Terminal 11.
2. Connect Negative Lead to Terminal 12.

for 0 -10 Voltage

1. Connect Positive Lead to Terminal 10.
2. Connect Negative Lead to Terminal 12.

Transistor Logic Output

1. Connect Positive Lead to Terminal J1-1.
2. Connect Negative Lead to Terminal J1-2.

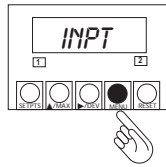


Transistor Output Connections

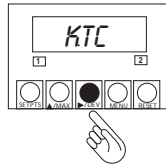
Using the Menus

To Change the Thermocouple Type:

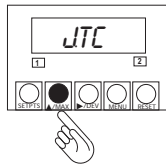
1. Press MENU until the display shows *INPT*



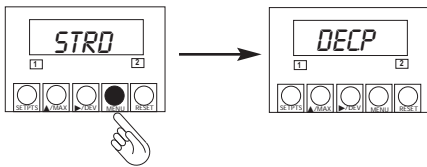
2. Press ▶/DEV to show current thermocouple type.



3. Press ▲/MAX to select the setting from J, K, T or DJ.TC.



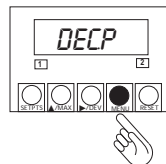
4. Press MENU to store the value.
The display shows:



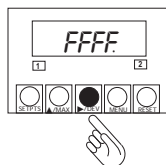
5. Continue with step 2 of the next section, or press RESET twice to display the current temperature.

To Change the Decimal Point:

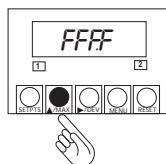
1. Press MENU until the display shows *DECP*



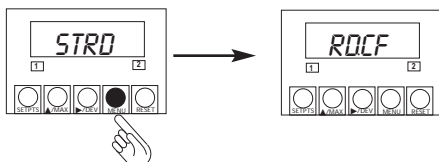
2. Press ▶/DEV to show the current decimal point location.



3. Press ▲/MAX to select the setting from FFFF. or FFF.F.



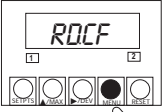
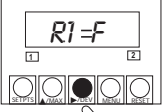
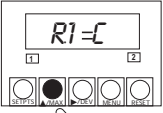
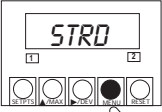
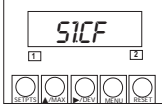
4. Press MENU to store the value.
The display shows:



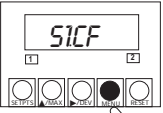
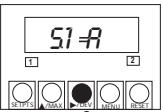
5. Continue with step 2 the next section, or press RESET twice to display the current temperature

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To Select Temperature Unit (Fahrenheit or Celsius):

1. Press MENU until the display shows *R0CF*

2. Press **▶**/DEV to display the current temperature unit.
 
3. Press **▲**/MAX to select between *°F* and *°C*.
 
4. Press MENU to store the value. The display shows:
 
 →
 
5. Continue with step 2 of the next section, or press RESET twice to display the current temperature.

To Configure Setpoints (Setpoint 1 or Setpoint 2)

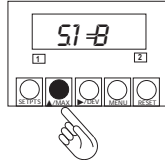
1. Press MENU until the display shows *S1CF* (for Setpoint 1) or *S2CF* (for Setpoint 2)
 
2. Press **▶**/DEV to select the Setpoint item you want to change.
 

Setpoint Configuration Selections

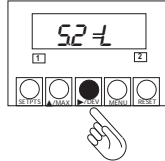
For Setpoint 1	S.1 = A Active Above the Setpoint B Active Below the Setpoint
	S.2 = L Setpoint to be Latched U Setpoint to be Unlatched
	S.3 = O On/Off Control P Time/Proportional Control
	S.4 = R Reverse Acting D Direct Acting
	S.5 = S Slow Proportional Control F Fast Proportional Control
For Setpoint 2	S.1 = A Active Above the Setpoint B Active Below the Setpoint
	S.2 = L Setpoint to be Latched U Setpoint to be Unlatched

To Configure Setpoints (Setpoint 1 or Setpoint 2) (cont d):

3. Press ▲/MAX to toggle between selections.



4. Press ►/DEV to make your selection or to move to the next setpoint configuration.



5. Repeat steps 3 and 4 until you have configured all setpoints.

Warranty

All Products from NEWPORT ELECTRONICS, INC. are warranted against defective material and workmanship for a period of one (1) year from the date of delivery.

If the unit should malfunction, it must be returned to the factory for evaluation. Our Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by NEWPORT, if the unit is found to be defective it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of NEWPORT's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

In addition to our standard warranty period, NEWPORT ELECTRONICS will extend the warranty period for one (1) additional year only if the warranty card enclosed with each instrument is returned to NEWPORT.

We are glad to offer suggestions on the use of our various products. Nevertheless, NEWPORT warrants only that the parts manufactured by it will be as specified and free of defects. NEWPORT MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of buyer set forth herein are exclusive and the total liability of NEWPORT with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall NEWPORT be liable for consequential, incidental or special damages.

Every precaution for accuracy has been taken in the preparation of this manual; however, NEWPORT neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the products in accordance with the information contained in the manual.

SPECIAL CONDITIONS: Should this equipment be used in any nuclear installation or activity, buyer will indemnify NEWPORT and hold NEWPORT harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.

Return Requests

Direct all warranty and repair requests/inquiries to the NEWPORT Customer Service Department. Call toll free in the USA and Canada: 1-800-NEWPORT, FAX: 714-546-3022.

BEFORE RETURNING ANY PRODUCTS(S) TO NEWPORT, YOU MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OUR CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit. NEWPORT's warranty does not apply to defects resulting from action of the buyer, mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting NEWPORT:

1. P.O. number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems you are having with the product.

FOR **NON-WARRANTY** REPAIRS, consult NEWPORT for current repair charges. Have the following information available BEFORE contacting NEWPORT:

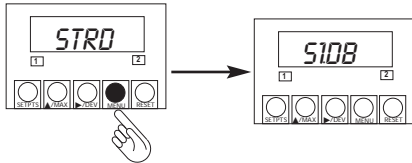
1. P.O. number to cover the COST of the repair,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems you are having with the product.

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To Configure Setpoints (Setpoint 1 or Setpoint 2) (cont d):

6. Press MENU to store your selection(s).

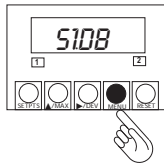
If you are configuring Setpoint 1 the display shows *STRD* and then *S2CF*. If you are configuring Setpoint 2, the display then shows *S1DB* or *TIME* (depending on if you selected On/Off or Time Proportional Control)



7. Continue with step 2 of the next section, step 2 of the Cycle Time section, or press RESET twice to display the current temperature

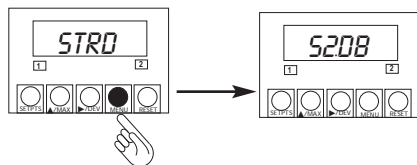
To Set the Deadband:

1. Press MENU until the display shows *S1DB* or *S2DB*



2. Press **▶**/DEV to display the last stored 4-digit number with the 4th digit flashing. Continue to press **▶**/DEV to select the digit you want to change.
3. Press **▲**/MAX to change the value of the flashing digit.
4. Repeat steps 2 and 3 until you have changed all digits you want to change.
5. Press MENU to store the value.

If you are configuring Setpoint 1 Deadband, the display shows *STRD* and then *S2DB*. If you are configuring Setpoint 2 Deadband, the display then shows. *OTCF*

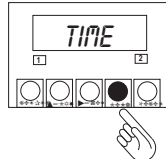


6. Press RESET twice to display the current temperature.

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To Set Cycle Time (Time Proportional Outputs):

1. Press MENU until the display shows *TIME*

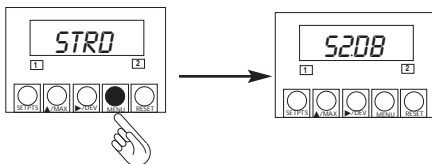


2. Press ►/DEV to display the last stored value. Continue to press ►/DEV to select the digit you want to change.

The third digit flashes if you selected slow proportional control; the second digit flashes if you selected fast proportional control.

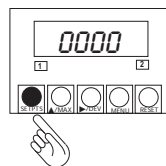
3. Press ▲/MAX to change the value of the flashing digit.
4. Repeat steps 2 and 3 until you have changed all digits you want to change.
5. Press MENU to store your selection.

The display shows:

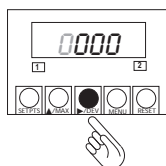


To Enter Setpoints:

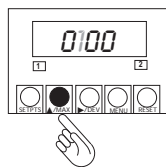
1. Press SETPTS to display the current setpoint.
The leftmost digit will flash.



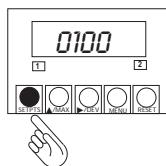
2. Press ►/DEV to select the digit you want to change.



3. Press ▲/MAX to increase the value of the flashing digit.



4. Press SETPTS to store the setpoint.



5. Repeat steps 1 through 4 to enter the next setpoint.