

## Instructions for operating the <u>WRC-8-T</u> wireless controller.



## **Description**:

- > The WRC-8-T specifically controls the DC-Digital model's DC-XX-UTW-A, wireless, multifunctional timers/time of day clocks.
- ➤ This is a wireless handheld controller that houses a 2.4Gigahertz 1milliWatt (802.15.4 protocol) FCC, CE approved radio. The radio and electronics controls DC-XXXUTW-A Clock/Timer types.
- ➤ Average working range is approximately 150 ft. depending on interference and or obstructions. A higher power longer range (64 milliWatt) radio is available upon request.
- ➤ The radio and electronics is housed in a Black Polycarbonate enclosure that comes equipped with a belt clip.
- There are 8 buttons (switches) that are made of metal dome membrane and make a snap sound when pressed and released.
- ➤ One press and release = one operation. Each time a button is pressed and released the receiving Clock/Timer will sound an acknowledgment tone if it is accepted as a logical operation. (This will be discussed in further detail below).
- ➤ The Controller is powered by one 9 volt alkaline battery (approximately 10,000 operations). It is recommended that the battery be replaced once every year to reduce corrosion buildup on the terminals.



➤ The standard factory radio channel is channel "0,0" but can be programmed upon request to accommodate additional Clock/Timers and their respective controllers operating in the same proximity, simultaneously.

## **Operation**:

- ➤ To operate the WRC-8-T controller a 9 volt alkaline battery power source is required.
- Attach a 9 Volt battery to the battery connector located on the back side of the handheld case under the slide away 9 volt battery cover.
- Each function of the controller is designated on the handheld case label overlaid on top of its associated button (switch) and may be mode specific for the controlled Clock /Timer. Note: Several buttons have the capabilities of use in more than one mode of operation.
  - o Specific modes of operation:
    - Time of day mode
    - <u>Timer up</u> mode
    - Timer down mode
- Time of Day mode: The controlled Clock/Timer is 12 Hour Time of Day only unless the optional 24 hour mode is ordered. When power is first applied to the Clock/Timer that is to be controlled the default mode is <u>Time of Day</u> mode. <u>Time of Day</u> mode can also be achieved by pressing and releasing the <u>Clock Timer</u> button. This will toggle the controlled display between those respective modes.
  - In <u>Time of Day</u> mode the only active function buttons are <u>Set Hours</u>, <u>Set Minutes</u> and <u>Set Seconds</u> (for zeroing the seconds).
    - Pressing and releasing either the <u>Set Hours</u> or the <u>Set Minutes</u> function button will cause that respective function to change on the controlled Clock/Timer. The hours or minutes will continue to step at a rate of 2 per second until the <u>Set Hours</u> or the <u>Set Minutes</u> function button is pressed and released a second time.
    - Pressing and releasing the <u>Set Seconds</u> will zero the <u>Time of Day</u> seconds.
- ➤ <u>Timer</u> modes: The controlled Clock/Timer has 2 Timer modes <u>Timer Up</u> mode and <u>Timer Down</u> mode. To change the controlled Clock/Timer to <u>Timer</u> mode press and release the <u>Clock Timer</u> function button. This button toggles the controlled Clock/Timer between the two respective modes.

o <u>Timer Up</u> mode: The <u>Timer Up</u> mode is indicated by the illumination of the upper left **LED.** <u>Timer Up</u> mode is achieved by pressing and releasing the <u>Up</u> <u>Down</u> function button. Note: <u>Timer Up</u> and <u>Timer Down</u> modes toggle back and forth on the controlled Clock/Timer every time the <u>Up Down</u> function button is pressed and released.



- o <u>Timer Up</u> mode Continued.
  - **Active** function buttons in **Timer Up** mode are:
    - Start Stop
    - Zero "0"
    - Clock Timer
    - Up Down
  - <u>Start Stop</u> function button: Press and release the <u>Start Stop</u> function button. This causes the Clock/Timer to:
    - <u>Start:</u> from a previously stopped or paused value. -Or-
    - Start: from zero.
      - -Or-
    - Stop: Stops (pauses) the controlled Clock/Timer.

<u>Note:</u> Once the controlled Clock/Timer has been <u>started</u> and <u>running</u> the following function buttons will be <u>inactive</u>:

- o **Zero "0"**
- o UP Down
  - Active function buttons:
    - Start Stop
    - Clock Timer
- Zero "0" function button: This function button is only active after the Clock/Timer has been stopped (paused). It returns the Clock/Timer back to zero; 00 Hours, 00 Minutes, 00 Seconds, 00 Hundredths.
- Clock Timer function button: Can be pressed and released at any time during the timing process. Note: If the Clock/Timer that is being controlled is in the timing process and is running in <u>Timer Up</u> mode and the <u>Clock Timer</u> function button is pressed and released then the Clock/Timer will display the Timer or the Time of Day Clock. If the time of day is being displayed then the Upper Left LED will <u>flash</u> indicating that the <u>Timer Up</u> function is active and running.



- o <u>Timer Up</u> mode Continued.
  - <u>UP Down</u> function button: This function button will be active only when the controlled Clock/Timer is in <u>Timer</u> mode and is stopped (paused). Pressing and releasing this button and the above condition has been met will cause the controlled Clock/Timer to switch from <u>Timer Up</u> mode to <u>Timer Down</u> mode. Note: pressing the <u>UP Down</u> function button toggles the controlled Clock/Timer between either <u>Timer Up</u> to <u>Timer Down</u> mode respectively. This function button is inactive during <u>Time of Day</u> mode and after the Timer has been started (running).
- <u>Timer Down</u> mode: <u>Timer Down</u> mode is indicated by the illumination of the lower right <u>LED</u>. <u>Timer Down</u> mode is achieved by pressing the <u>Up</u> <u>Down</u> function button. Note: <u>Timer Up</u> and <u>Timer Down</u> modes toggle back and forth on the controlled Clock/Timer every time the <u>Up Down</u> function button is pressed and released.
  - Active Function Buttons in Timer Down mode:
    - Start Stop
    - Zero "0"
    - Set Hours
    - Set Minutes
    - Set Seconds
    - Last Value
    - Clock Timer
    - Up Down
  - <u>Start Stop</u> function button: To start the Timer Up timing process press and release the Start Stop function button. This causes the Clock/Timer to:
    - Start: from a previous value or
    - Start: from zero
    - **Stop:** Stops (pauses) the Clock/Timer

<u>Note:</u> Once the controlled Clock/Timer has been <u>started</u> and <u>running</u> the following function buttons will be <u>inactive</u>:

- o <u>Zero "0"</u>
- o <u>Last Value</u>
- o Set Hours
- o Set Minutes
- o Set Seconds
- o UP Down



- o <u>Timer Down</u> mode Continued.
  - Active function buttons:
    - Start Stop
    - Clock Timer
  - Zero "0" function button: This function button is only active after the Clock/Timer has been stopped (paused). It returns the Clock/Timer back to zero; 00 Hours, 00 Minutes, 00 Seconds, 00 Hundredths.
  - Set Hours function button: This function button is used to set the hours on the controlled Clock/Timer. Pressing this button once will cause the controlled Clock/Timer to start stepping up the <u>Timer Down</u> hours at a 2 per second rate. Pressing and releasing it again will cause the controlled Clock/Timer to stop setting the controlled Clock/Timer's <u>Timer Down</u> hours. Note: This function button also sets the hours when the controlled Clock/Timer is in <u>Time of Day</u> mode. (4 digit Clock/Timers only; When the <u>Set Hours</u> function button is pressed and released the <u>seconds</u> will be automatically set to <u>zero</u>.)
  - Set Minutes function button: This function button is used to set the minutes on the controlled Clock/Timer. Pressing this button once will cause the controlled Clock/Timer to start stepping up the <u>Timer Down</u> minutes at a 2 per second rate. Pressing and releasing it again will cause the controlled Clock/Timer to stop setting the controlled Clock/Timer's <u>Timer Down</u> minutes. When the <u>Set Minutes</u> function button is pressed and released the <u>seconds</u> will be automatically set to <u>zero</u>. Note: This function button also sets the minutes when the controlled Clock/Timer is in **Time of Day** mode.
  - Set Seconds function button: This function button is used to set the seconds on the controlled Clock/Timer. Pressing this button once will cause the controlled Clock/Timer to start stepping up the <u>Timer Down</u> seconds at a 2 per second rate. Pressing and releasing it again will cause the controlled Clock/Timer to stop setting the controlled Clock/Timer's <u>Timer Down</u> seconds. (4 digit Clock/Timers only; When the <u>Set Seconds</u> function button is pressed and released the <u>hours</u> will be automatically set to <u>zero</u>.)

<u>Note:</u> On 4 Digit Clock/Timers Hours and Seconds cannot be set at the same time. It is either one or the other.

Ex. 1:30:00 (1 Hour, 30 minutes, 00 seconds)

Or

Ex. 00:1:30 (0 hours, 1 minutes, 30 seconds)



- o <u>Timer Down</u> mode Continued.
  - Last Value function button: This button sets the controlled Clock/timer to the last preset <u>Timer Down</u> value see <u>Set Hours</u>, <u>Set Minutes</u> and <u>Set Seconds</u> above. Once the <u>Timer Down</u> value has been set this button will allow it to be reset to the last value over and over until; 1 the power has been removed from the controlled Clock/Timer and or 2 the Zero "0" function button has been pressed causing all timer values to be set to zero.
  - Clock Timer function button: Can be pressed and released at any time during the timing process. Note: If the Clock/Timer that is being controlled is in the timing process and is running in <u>Timer Down</u>
    Mode and the <u>Clock Timer</u> function button is pressed and released then the Clock/Timer will display the Timer or the Time of Day Clock. If the time of day is being displayed then the lower right LED will <u>flash</u> indicating that the <u>Timer Down</u> function is active and running.
  - <u>UP Down</u> function button: This function button will be active only when the controlled Clock/Timer is in <u>Timer Mode</u> and is <u>stopped</u> (paused). Pressing and releasing this button and the above condition has been met will cause the controlled Clock/Timer to switch from <u>Timer Up</u> mode to <u>Timer Down</u> mode. Note: pressing the <u>UP Down</u> function button toggles the controlled Clock/Timer between either <u>Timer Up</u> to <u>Timer Down</u> mode respectively. This function button is inactive during <u>Time of Day</u> mode and after the Timer has been started (running).

for further questions please contact Industrial Electronic Service D.B.A. DC-Digital @ 937-746-9750 or visit us @ www.dc-digital.com.