

# Wireless Handheld Segment Timer Controller



User Guide



**Colorado  
TIME SYSTEMS**

A **PLAYCORE** Company

F1050 Rev. 202103

**Manufacturer:**

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**Product Identification**

Product: Handheld Segment Timer  
Model Number: WHC-2

Information in this manual is subject to change without notice. Pictures and illustrations may not accurately depict your version. Please check our website for the most current information; our user manuals are available online in the customer service section of our website.

Part Number F1050, Rev. 202103  
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## Product Description

The Segment Timer Handheld Controller can control Colorado Time Systems multi-sport displays that have four-digit time.

4-digit slim pace clocks display the minutes and seconds of the rep (01:12 in the examples shown).



6-digit slim pace clocks, deck clocks and portable scoreboards display the minutes and seconds of the rep as well as the rep number (2 in the examples shown).




The segment timer can be programmed to control up to 10 programmable sets of up to 50 Reps.

The unit runs on 2 AA batteries; CTS recommends rechargeable batteries. Expected life for a pair of batteries is 8 hours.

# Quick Start

## Power On and Off

Turn the controller on by pressing and holding the “-” key . The unit will show the CTS logo and then display the Rep screen.

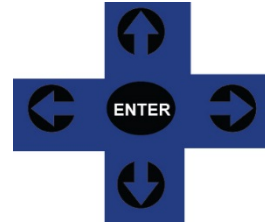
Turn the controller off by entering the menu and selecting Off.

## Navigation, Arrow Keys and Enter Key

To navigate on the screen use the arrow keys



in the middle of the arrow keys.



# Menu

## MENU



At the top of the screen is the word “MENU”. You can display the menu screen by using the arrow buttons to highlight the word MENU (if it is not already highlighted) and then pressing the enter key.




*Note – You cannot enter the menu screen while the clock is running. Stop the clock with the red Stop key if you want to enter the menu.*

The main menu consists of three different items. Use the arrow keys to highlight the preferred function and press the enter key in the middle.

**Time of Day** – This function lets you set the time of day on the controlled pace clock. When a pace clock is on while its controller is turned off, the pace clock will display time of day. To set, simply highlight this function with the arrow keys. Next, use the arrow keys to highlight

**Mode** – Pressing enter alternates between 12-hour mode and 24-hour mode.

**Time** – To change the time of day, use the arrow keys to highlight the time and use the “+” and “-” keys   to adjust the hours or minutes.

**SET/CANCEL** – Highlighting “SET” and pressing Enter  will save any changes. Highlight Exit at the top of the screen and press enter  to return to the Rep screen. Highlighting “CANCEL” and pressing Enter  will return you to the main menu while ignoring any changes made on the Time of Day screen.

**Connection** – This function takes you to a sub-screen where you can modify the wireless connection parameters. The handheld controller must match the channel, PAN ID, and module of the pace clock it is controlling, as displayed on the pace clock at power on.

The pace clock will test the LED segments, and then cycle through a display of Channel (indicated with “C”), PAN (indicated with “P”) and Module Address (indicated with “A”).

If it is necessary to change these settings, use the arrow keys   to highlight the desired parameter and then press Enter  to scroll through the different options.

You can set the following items by highlighting the item with the arrow keys and changing the values with the enter key:

- PAN ID: From 0 to 15
- Channel: From 0 to 11
- Module: From 1 to 6



*CAUTION: If the handheld controller is set to different settings than the pace clock, the board won't receive any data.*




**RSSI** – Entering the **Connection** sub-screen will automatically turn on the RSSI feature. When On, the “received signal strength” is displayed on the scoreboard. The number will be between 24 and 64 hexadecimal, so you may see both numbers and the letters A through F. The lower the number, the stronger the signal. If no number check the channel and PAN on both the WHC and the receiving device. If the number is high refer to Signal Loss Troubleshooting on page 7 .

**T-Level** – Indicates the version of radio installed in the system

**Version** – Shows the firmware version

**Program mode** – puts the device into a mode to wirelessly update the firmware (**Use only if directed to by a CTS technician.**)

To return to the Rep screen, use the arrow key  to highlight “EXIT” at the top of the screen and then press the Enter key .




**Off** – Use the arrow keys   to highlight “MENU” and then highlight “OFF” and then press the Enter key .

# Interval Timing

The segment timer allows you to create up to ten sets of one to fifty Reps.




## Programming the sets and reps

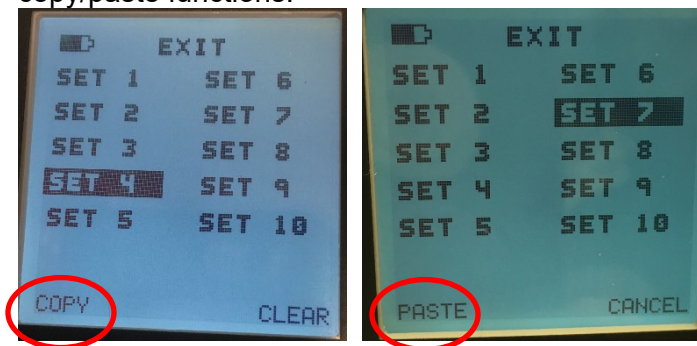
(Up to 10 programmable sets and 50 programmable Reps)

1. Use the blue right arrow and up arrow keys   to navigate the screen and highlight the word "SET" and use the Enter key  to select the "SET" menu.

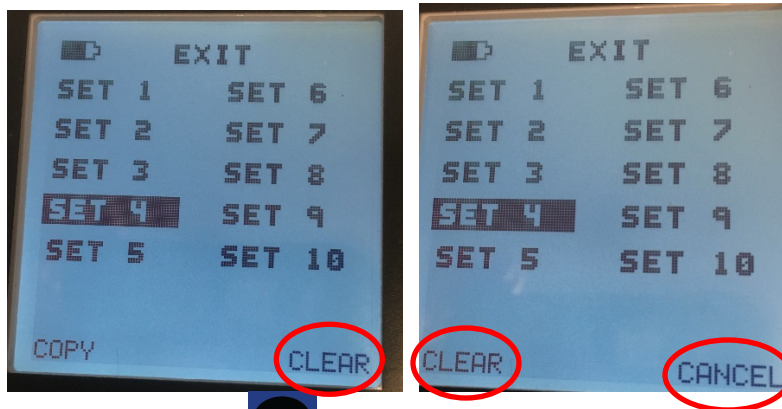



2. While in the SET menu:















- a. Use the blue arrow keys   to navigate between one and ten sets.
- b. To copy and paste a selected set, use Start  to toggle between copy/paste functions.



- c. To clear a selected set, use Stop  to select Clear, and then Start  to select Clear. Use Cancel  to deselect a set.

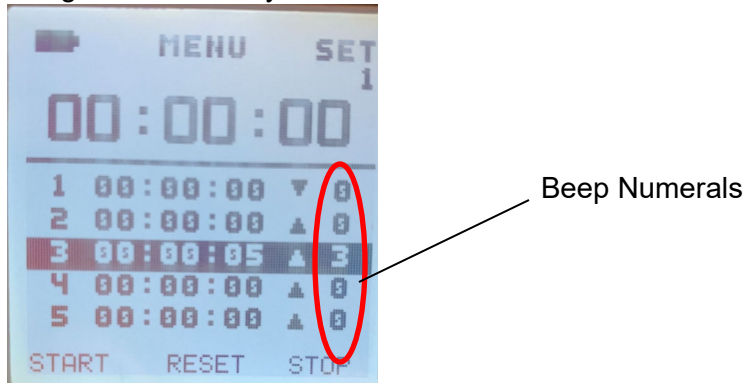






- d. Use the Enter key  to select a set and display the Rep screen for that set.

3. In the Rep screen use the double up arrow key  to scroll up a page and the double down arrow key  to scroll down a page.
4. Use the blue up down arrow keys   to navigate the selected Rep screen and Enter  to select a Rep to edit
5. Use the blue right left arrow keys   to select a Rep time category. Use the "+" and "-" keys   to increment/decrement the selected time..
  - Hours can be set from 0-99
  - Minutes can be set from 0-59
  - Seconds can be set from 0-59
6. Each Rep can be set to Count Up or Count Down by using the "-" or "+" keys   when selecting the count up  /count down  toggle symbol. 








7. Beep can be programmed from 0-9 seconds by selecting the beep numeral and using the “-“or “+“keys  .



8. Move the Rep up or down in the order by highlighting the rep and using the “-“ and “+“ keys  .
9. Choose the next Rep by using the arrow keys  .

#### Running the set

1. Use the arrow keys   to select the first Rep in the set.
2. Select Start  to run the set.
3. Select Stop  to stop the set.
4. Select Reset  to restart a Rep.

## Signal Loss Troubleshooting

Symptom	Possible Cause	Solution
No RSSI Value shown on Scoreboard	<ul style="list-style-type: none"> <li>• Scoreboard not powered on</li> <li>• Mismatched Channel</li> <li>• Mismatched PAN</li> <li>• Mismatched Address</li> <li>• Distance too Great</li> </ul>	<ul style="list-style-type: none"> <li>• Turn Scoreboard On</li> <li>• Make sure channel on transmitting and receiving devices are the same</li> <li>• Make sure PAN on transmitting and receiving devices are the same</li> <li>• Make sure Address on transmitting and receiving devices are the same</li> <li>• Move the devices closer together</li> </ul>
High RSSI values or value does not update regularly	<ul style="list-style-type: none"> <li>• Distance too Great</li> <li>• Radio Interference</li> <li>• Damaged Antenna on Scoreboard</li> <li>• Off angle reception</li> </ul>	<ul style="list-style-type: none"> <li>• Move the devices closer together</li> <li>• Select another channel on both transmitting and receiving devices. Suggest moving to one of the ends of the channel spectrum to see if the signal improves.</li> <li>• Check to make sure the Antenna on the receiving device is intact.</li> <li>• Change the orientation to the receiving device or transmitting device to see if the signal improves</li> </ul>

# Conformity

## *North America*



### FCC Compliance Statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Contains: FCC ID OUR-XBEEPRO or MCQ-XBEE3, 2.4GHz transmitter

Contains: Model xBeePRO Radio, IC: 4214-XBEEPRO or xBee3 Radio, IC: 1846A-XBEE3

# European Declaration of Conformity

We,

Everlast Climbing Industries, Inc.  
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declare under our sole responsibility that the

Product: Wireless Handheld Controller  
Model numbers: WHC-X

to which this declaration relates is in conformity with the following European Directives:

European Council Directive 2014/35/EU (February 26<sup>th</sup> 2014) on Low Voltage Equipment Safety  
CENELEC EN 60950-1/Issue:2006/04/01, CENELEC EN 60950-22 Issued:2006/04/01

European Council Directive 2014/30/EU (February 26<sup>th</sup> 2014) on Electromagnetic Compatibility  
CISPR 22 Issue:2008/09/24, CISPR 24 Issue:2010/08/24

European Council Directive 2011/65/EU (July 21, 2011) on the Reduction of Hazardous Substances (RoHS).

European Council Directive 2012/19/EU (July 4<sup>th</sup> 2012) on waste electrical and electronic equipment (WEEE)

The Technical Construction File is maintained at the corporate headquarters of Colorado Time Systems in Colorado, USA.

Date of issue: Jan. 28<sup>th</sup>, 2019  
Place of issue: Loveland, Colorado, USA

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Director of Operations



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