Competition Electronics

OPERATING INSTRUCTIONS

POCKET PRO II™

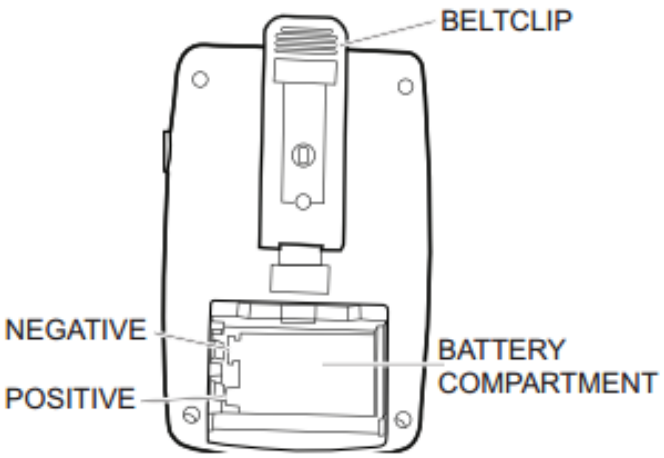
part# CEI-4710

part# CEI-4700

Please read this manual. It contains setup information necessary to achieve proper performance from your Pocket Pro II.

Pocket Pro II
User Manual / Operating Instructions

Battery Installation



The PocketPro II operates on a 9-volt ALKALINE battery. It is important to only use alkaline batteries due to the power demand of the buzzer. To install the battery, remove the battery cover, push the battery securely into its compartment, and replace the cover. Note the white decal which indicates the proper orientation of the battery terminals. When the battery is inserted, the PocketPro II will briefly display the sign-on message, including the firmware revision number. After a few seconds, the display will change to show the main screen. If you are in a hurry, press the menu up or down buttons and the timer will jump directly to the main screen. If at any time you suspect the unit is not functioning normally, try resetting it. This procedure is listed on page 9 of this manual.

Automatic Shutdown

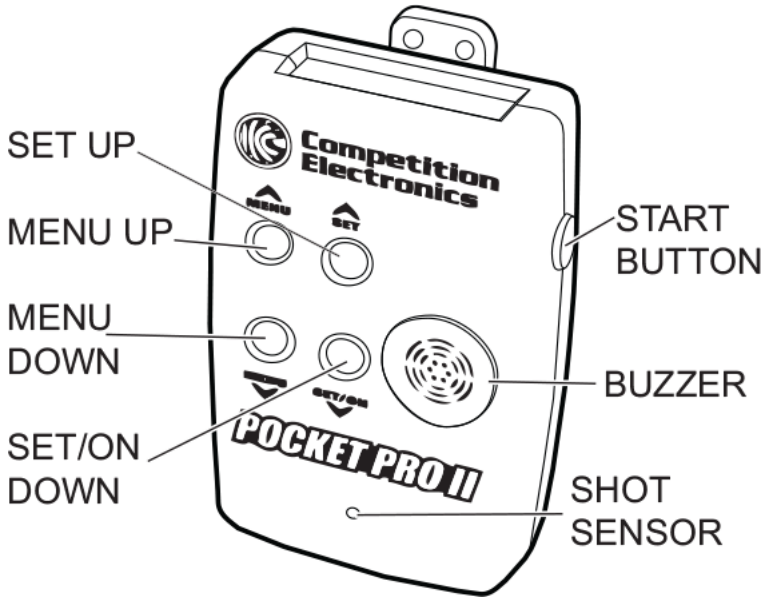
If no shots are detected and no buttons are pressed for a period of ten minutes, the timer will power down automatically. This will prevent battery discharge in the event it is not turned off after use. To wake up the timer, press the SET/ON button.

Quick Start!

If you want to get started right away, all you have to do is press the start button on the side and shoot. The PocketPro II comes from the factory configured and ready to run. After the timer shuts down, press the SET/ON button to turn it on.

Control Buttons

There are four buttons on the front of the case. Looking at the front of the case, you will see the MENU UP/DOWN buttons on the left, and the SET UP/DOWN value buttons on the right.



MENU UP/DOWN

The MENU UP/DOWN buttons are used to navigate forward and backward through a short loop of menu screens where the user can access information and settable values.

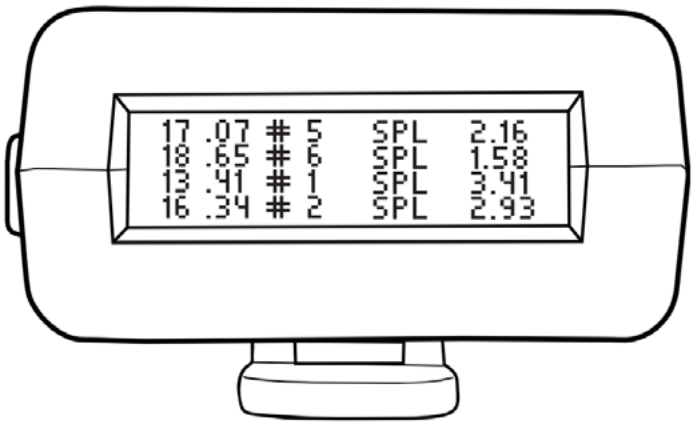
SET UP/DOWN

In menu screens with flashing settable values, pressing the SET (up arrow symbol) will increase the value and SET/ON (down arrow symbol) will decrease the value.

Shot Detection

Each time a shot is detected, it will be added to the “shot string” maintained within the timer. The timer will automatically calculate the “split time.” Split time is the time between the current shot and the previous shot. The timer can store up to 99 shots for a given timing cycle. Subsequent shots will be stored by overwriting the previous value of shot 99.

Shot Review Screen



Shots will be displayed on the shot review screen in a “one shot per line” format. Reading from left to right in the shot line, the shot time appears first, followed by the shot number, and finally the split time, if any. When first navigating to the shot review screen after the start of a cycle, the first shot will appear on the 3rd line, and the last shot will appear on the 2nd line, if there are 4 or more shots. Otherwise, the shots will be clearly identified by their shot numbers. Use the SET UP/DOWN buttons to scroll through the shot string.

Setting the PAR Time (second beep)

The par time setting (also known as the “second beep”) comes configured from the factory for 0 seconds. When the par time is set to 0, the timer will beep only once, at the start of a timing cycle. Setting the par time to other than 0 will give you a beep at the start, and the end of the par time period. Par time is adjustable from 0 to 199.9 seconds. Hold the SET UP or SET DOWN button to increase the speed at which the digits increment for large par times. Press the SET UP and SET DOWN buttons simultaneously to reset the Par Time to zero.

Setting the Start Delay

The start delay is completely configurable. If enabled, it can generate a fixed delay or random delays between .5 seconds and 9.9 seconds. The timer is set to a factory default delay time between 1 and 4 seconds.

Instant (No Delay)

Using the MENU UP/DOWN buttons, advance to the “START DELAY TYPE” screen. Use the SET UP or SET DOWN button to select “ INSTANT.” The timer will start instantly when you press the start button.

Fixed Delay

On the same screen as mentioned in the previous section, select “RANDOM.” Now, using the MENU UP/DOWN button, advance to the “RANDOM START TIME – MINIMUM” and “RANDOM START TIME – MAXIMUM” display screens. In both screens, select the same delay time, between .5 seconds and 9.9 seconds. This will result in a fixed delay time at the setting specified. Note that the timer will not allow you to set a minimum time greater than the current maximum time, or a maximum time less than the current minimum time. It will “push” the alternate time value along to match the setting currently being adjusted.

Random Delay

To achieve a random delay, set the maximum and minimum delay times at the outer limits of the random delay time range desired. When started, the timer will produce a random start delay between these limits each time start is pressed.

Display Backlighting

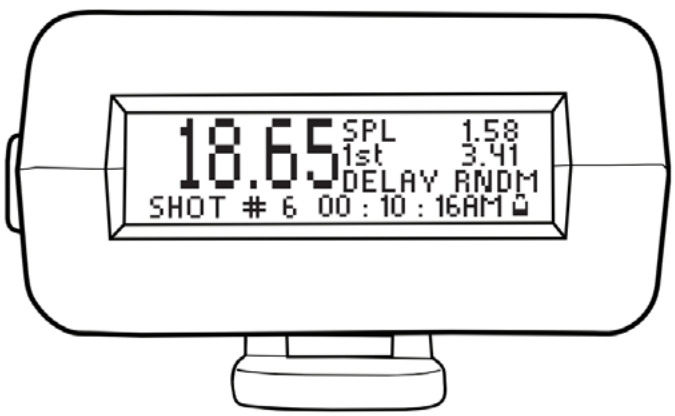
Use the SET UP/DOWN buttons to set the number of seconds the display backlighting will stay on. Setting the value to zero will turn if off. To activate the backlight, press any button. If you would like to illuminate the current display, press the MENU UP, then MENU DOWN button. Longer periods with the backlight turned on will shorten battery life.

Setting the Main Display Type

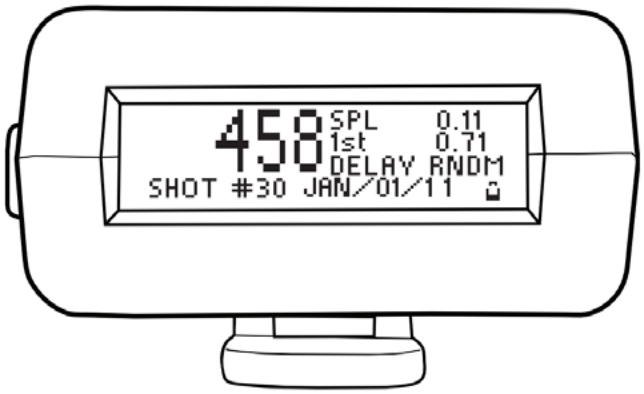
The Pocket Pro II can be configured to show three different types of main displays. These are selected from the "MAIN SCREEN TYPE" menu, and are described below.

Review Direct

When the "Review Direct" main display is selected, the last split time will appear in the upper right hand corner of the main display. Pressing either the SET UP or SET DOWN button will jump directly to the shot review screen. Pressing the MENU UP button will return to the main display screen.



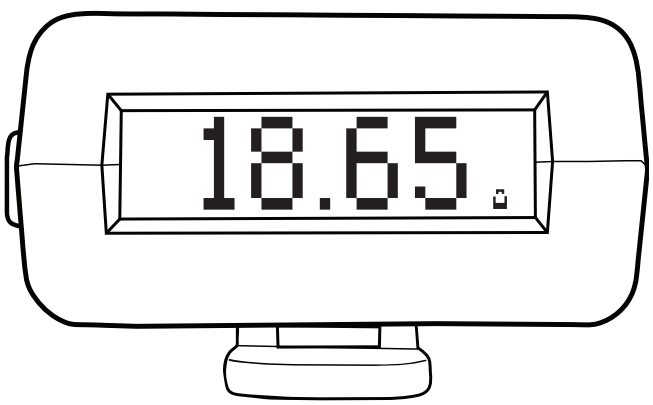
"RPM" Mode



When the "Rounds per Minute" main display is selected, the PocketPro II no longer displays shot times, but now will display rounds per minute. To use this mode, press the START button. After the beep, fire shots; the timer will display the rounds per minute based on the number of shots and the time between the first shot and the last. Shots recorded more than 199.99 seconds after the start beep will render readings invalid until START is pressed again. The normal shot dead time setting is overridden when in RPM mode and set to a fixed value of 0.032 seconds. This allows the PocketPro II to detect shots at rates of up to 1800 RPM.
NOTE: Please see **Accuracy** on page 10

Single Time Only

When the "Single Time Only" main display is selected, the current shot time appears on the main display and is sized to fill up the screen. Pressing either the SET UP or SET DOWN button will jump directly to the shot review screen. Pressing the MENU UP will return to the main display screen.



Shot Dead Time

Once a shot is detected, the PocketPro II will ignore shots for a period of time after detection. This is called dead time. Sometimes, it is necessary or desirable to adjust this time, for example, to detect shots that occur more rapidly than normal, or to lock out detection of echoes, etc. Shot dead time is factory configured for a duration of 0.11seconds, but can be increased or decreased if necessary. Navigate to the SHOT DEAD TIME display using the MENU UP/DOWN buttons and adjust as desired. The normal shot dead time setting is overridden when in RPM mode and set to a fixed value of 0.032 seconds.

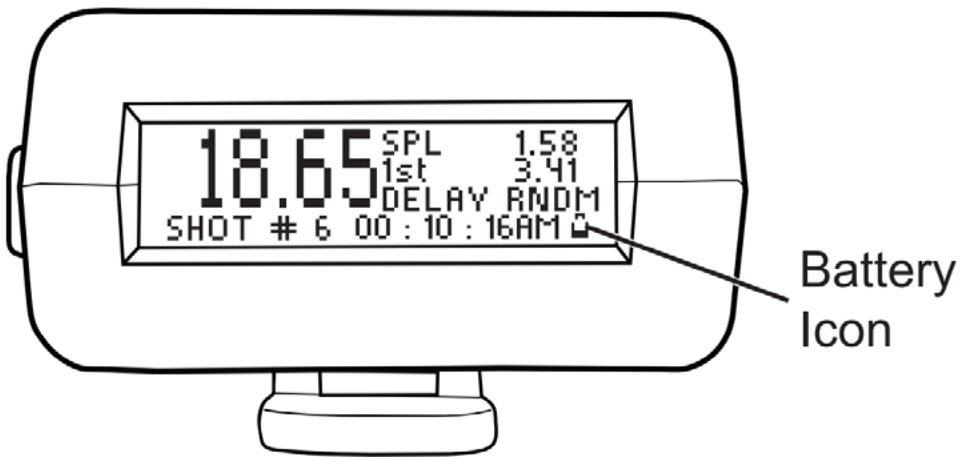
Shot Sensitivity

Shot sensitivity is variable between 0 and 25 and is settable from the SHOT SENSITIVITY screen. Use the SET UP/DOWN buttons to adjust the value. Increase the value for greater sensitivity; decrease it for less sensitivity. Keep in mind that higher sensitivity settings will also increase the chance of false shot detection from handling, vibration, or other noise sources.

Setting the Date and Time

Using the MENU UP/DOWN buttons, cycle through the MONTH, DAY, YEAR, HOURS, and MINUTES display screens using the SET UP/DOWN buttons to set the date and time. To synchronize to the nearest second, set the “MINUTES” value and at the mark, advance to the next/previous display screen. Internally, the timer will be set to 0 seconds at the instant you change to a different menu screen. Be sure to note the AM/PM setting on the hours screen. The timer will usually retain time and date settings when changing batteries if the change is done as quickly as possible. However, if the battery is removed and not replaced immediately, time/date information is lost and must be reset.

Battery Status



Battery Status can be monitored in two places. On the main screen, a battery icon appears in the lower right-hand corner of the display. As the battery discharges, the icon will become more and more "hollow." For a more detailed display of the battery condition, press the MENU UP or DOWN buttons repeatedly until the "battery condition" display appears. Here, you can see an expanded "bar graph" type display of the battery level. The timer will operate normally down to a reading of around 6V. Below this point, a low battery message will be displayed and the battery should be replaced immediately to avoid undefined operation.

Resetting the Timer to Factory Defaults

To reset factory default values within your timer, remove the battery, then hold down the "Start" button and reinstall the battery. Look at the display to see the message "INIT N/V MEMORY". Now release the start button and the reset is complete.

Timer "Wraparound"

Internally, the timer is continuously counting up to 199.99 seconds and then "wrapping around" to 0. When the start button is pressed, this internal time is reset to 0. This means that the maximum timing period is limited to 199.9 seconds. Shots recorded after this will reflect the "wrapped" time. Splits are calculated correctly, as long as the timer has wrapped around only once since the start of the cycle.

Accuracy

The PocketPro II measures internally to a resolution of 1 mSec, but shot displays, splits, etc. are internally rounded to the nearest 10 mSec. For this reason, RPM readings may appear to be inaccurate, when manually calculated using the displayed shot string values. In reality, the RPM reading is actually more accurate than the manual calculation, since it is calculated using the internal shot times, which are measured with 1mSec resolution.

Specifications

Operating temp range: 32-110 deg. F.
Accuracy: Quartz crystal controlled. (Within 1/100 second)
Max # of shots stored:99
Max rounds per minute: 1800
Buzzer Output: 105dB @ 1500Hz
Battery type: 9 volt alkaline

Return Shipping Address

Competition Electronics, Inc.
3469 Precision Dr.
Rockford, IL 61109
Phone: 815-874-8001
FAX: 815-874-8181
www.competitionelectronics.com

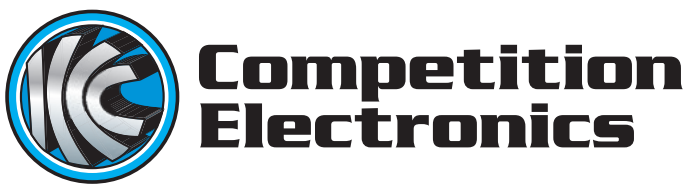
**********LIMITED WARRANTY**********

COMPETITION ELECTRONICS, INC., warrants the PocketPro II manufactured by it to be free from defects in material and workmanship for a period of 2 years from date of purchase by the original purchaser for use. COMPETITION ELECTRONICS, INC., at it's option, will repair or replace without charge, or refund the purchase price of, any product which fails during the warranty period by reason of a defect in material or workmanship found upon examination by COMPETITION ELECTRONICS, INC., to have been the cause of the failure. This warranty does not cover any failures attributable to abuse, mishandling, and failure to follow operating instructions, alteration or accident.

To make claim under this warranty, the purchaser must return the product to COMPETITION ELECTRONICS, INC., at the address shown below, properly packed and with shipping charges prepaid. All claims must be made within (30) days after the product failure and, in any event, within thirty (30) days after the expiration of the 2-year warranty. All claims must be accompanied by a sales slip or other written proof of date of purchase. TO THE EXTENT PERMITTED BY LAW, ANY AND ALL IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE EXCLUDED; ANY IMPLIED WARRANTIES NOT EXCLUDED ARE LIMITED IN DURATION TO 2 YEARS FROM DATE OF PURCHASE. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE EXPRESSLY EXCLUDED FROM THE REMEDIES AVAILABLE TO THE PURCHASER, AND THE REMEDIES PROVIDED IN THIS WARRANTY SHALL BE EXCLUSIVE TO THE EXTENT PERMITTED BY LAW.

(Note: Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the foregoing limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.)

If any product returned by the purchaser is found by COMPETITION ELECTRONICS, INC., to require service not covered by warranty, COMPETITION ELECTRONICS, INC., will so advise the purchaser and request further instructions. COMPETITION ELECTRONICS, INC., will recondition to working order any PocketPro II returned to it regardless of condition upon the purchaser's remittance of payment of 1/2 of current retail price, if it is still manufactured by COMPETITION ELECTRONICS, INC.



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