

POCKET PRO II

Operating Instructions-BL model

Battery Installation

The PocketPro II operates from a 9-volt alkaline battery. To install the battery, remove the battery cover, push the battery securely into its compartment, and replace the cover. Note the clearance around the two battery terminals are different sizes and the battery can only be successfully inserted one way. 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.

On rare occasions, the timer may fail to start properly when the battery is inserted. If this occurs, remove the battery, wait a moment, and reinsert it.

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.

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 INC/DEC Value buttons on the right.

- **MENU UP/DOWN**

The MENU UP/DOWN buttons are used to move through the menu screens used to control the timer and to view information.

- **INC/DEC Value**

In screens with settable values, pressing the INC or the DEC buttons will change that 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 last 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.

The Shot Review Screen

Shots will be displayed on the shot review screen in a "one shot per line"

Setting the Date and Time

Using the MENU UP/DOWN buttons, cycle through the "MONTH", "DAY", "YEAR," "HOURS" and "MINUTES" display screens and use the INC/DEC Value 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.

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 0.11 seconds, 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 INC/DEC variable buttons to set 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,

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 INC/DEC value buttons to scroll through the shot string.

Setting the PAR Time (second beep)

The par time setting is 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 INC or DEC Value switch down to increase the speed of the changing par time for setting large par times. Press the INC Value and DEC Value buttons down simultaneously to reset the par time to 0.

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 INC/DEC Value buttons 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 vibration, or other noise sources.

Display Backlighting

Use the "INC/DEC value buttons to set the number of seconds the display backlighting will stay on. Setting the value to zero will turn it 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.

Automatic Shutdown

If no shots are detected and no buttons pressed for a period of 10 minutes, the timer will go into low power mode and the display will go blank. To "wake-up" the timer, press the "DEC Value" button.

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 "gas-gage" 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.

Restoring the Timer to Factory Defaults

To restore factory default values within your timer, remove the battery, then hold down the "Start" button and reinstall the battery. After reinstalling the battery, release the start button. The sign-on display will appear briefly, and after that, the timer is ready to go.



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 delay between these limits each time start is pressed.

Setting the Main Display Type

This timer 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 of the INC/DEC Value buttons 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", below.

- **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 of the INC/DEC Value buttons will jump directly to the shot review screen. Pressing the MENU UP button will return to the main display screen.

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.

Shooting when it's Cold

The LCD display becomes sluggish at lower temperatures. If this happens, keep the timer under your jacket when not in use to keep it warm.

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).
Internal resolution: 1 mSec
Max # of shots stored: 99
Max rounds per minute: 1800