 **COMPETITIVE
EDGE DYNAMICS**

CED 6000

INTRODUCTION

Congratulation on purchasing the CED 6000 Shot Activated Timer. Competitive Edge Dynamics introduces the next generation in timers. Building on the success of the CED 4000, and in response to the feedback from top Professional Shooters. C.E.D. has designed the CED 6000 to be the ultimate training timer at an affordable price. This timer was designed by a team of international IPSC Competitors using the latest technology, high quality components, and custom crafted materials. The result is a compact, lightweight, custom designed timer which is enhanced by its functional ease of use. Your timer is complete with the following features:

- Custom Illuminated LCD display.
- Unlimited shot record & review function with memory recall.
- 999.99 second time record capacity.
- Split time shown on all shots fired.
- Par time function up to 199.9 seconds on shot & stop plate functions. Par time remains set until cleared.
- Repetitive mode (automatic repetition of par time with fixed interval delay)
- Combined comstock function.
- Instant go , fixed (three sec.), or Random (two to five sec.) delay.
- Adjustable sensitivity shot detector / custom screw driver included.
- Low battery LCD indicator.
- Power down mode (after three minutes of non-use).
- Two stop plate input jacks (Man vs. Man) , or multiple hit recording, ideal for air soft use.
- Auxiliary jack, for external loud horn or target turning related use.
- Self-diagnostic test system.
- Low frequency buzzer.
- Automatically selects shot or plate functions.
- Power on/off switch to prevent unnecessary battery drain.
- 9 Volt alkaline battery operation.
- Custom carrying case included. (\$15.00 value)

A table of contents listing each of these features is indicated on the following page for your easy reference.

Please read this operation manual completely to familiarize yourself with all the features of the CED 6000 and to ensure reliable operation.

Preparation

- LOCATION AND FUNCTION OF KEY PARTS AND CONTROLS 1
- BATTERY 2
 - Installation
 - Low battery Indicator
 - Changing battery

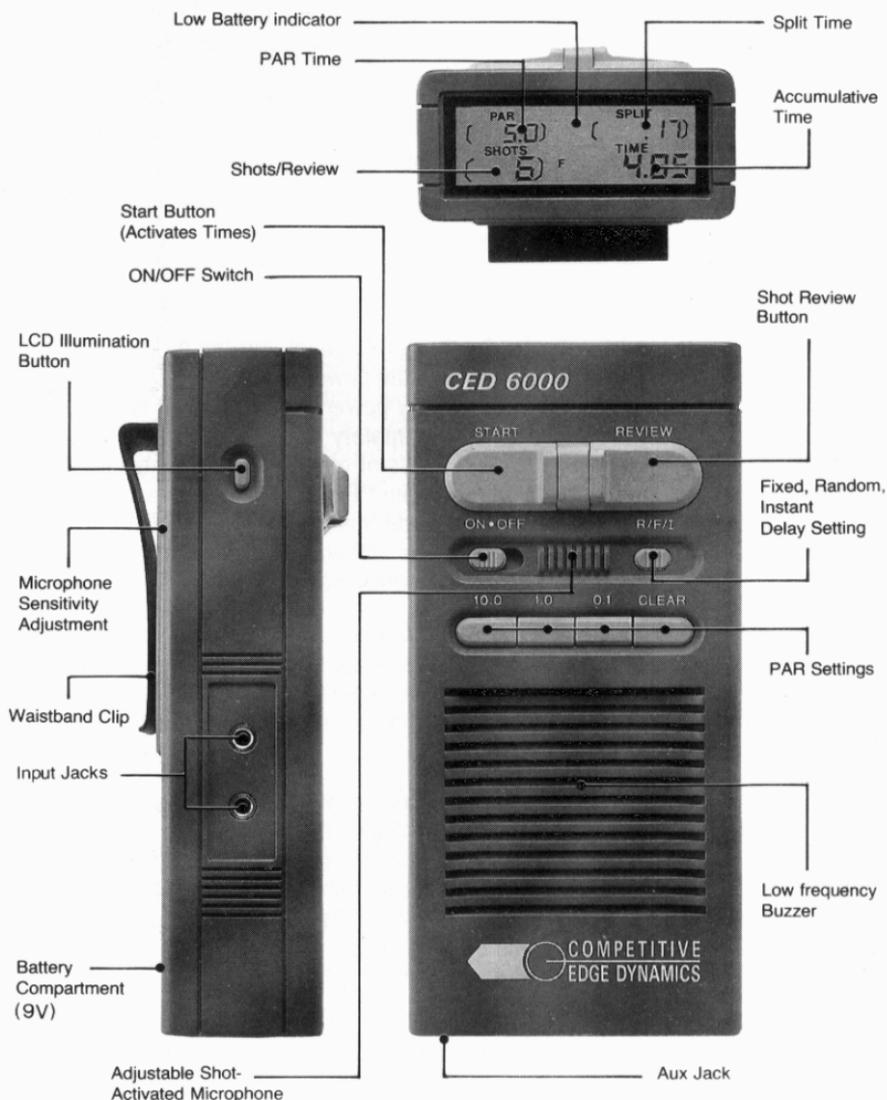
Operation

- BASIC FUNCTIONS 2
 - Power on/off
 - Automatic comstock function
 - Start
 - Review
 - Automatic Power Down mode
- LCD DISPLAY 3
 - Illuminated
 - Fixed, Random, or Instant mode
 - Display features
- FIXED / RANDOM / INSTANT DELAY SELECTION 3
 - Mode selection
 - Functions
- PAR TIME SELECTION 3
 - Selection, Function, Cancellation
- REPETITIVE MODE 4
 - Function of mode / use
- COMBINED COMSTOCK 4
 - Function of mode / use
- SELF-DIAGNOSTIC TEST SYSTEM 4
 - Function / Use
- AUXILIARY JACK 5
 - Location / Function
- INPUT JACKS 5
 - Automatic select operation
 - Stop plate-single or dual jack operation
 - Air Soft use
- SHOT DETECTOR 5
 - Microphone
 - Sensitivity adjustment

Guarantee 6

Warranty 6

LOCATION AND FUNCTION OF PARTS AND CONTROLS



In keeping with Competitive Edge Dynamics policy of continuous improvement and development, CED reserves the right to make any changes, or modifications in the specifications deemed necessary, without prior notice. Therefore, the above photographs and descriptions may vary slightly in detail from your actual product.

PREPARATION

● BATTERY

The CED 6000 functions on a single 9-volt alkaline battery. The battery compartment, located on the lower back panel of the timer, provides easy access for fast, and simple battery replacement. A "low battery indicator" will appear flashing in the LCD display when the battery voltage drops below 7 volts indicating a change is necessary. It will provide the user ample warning to prevent unnecessary timer failure due to loss of battery power.

OPERATION

● BASIC FUNCTIONS

The CED 6000 can be activated by the on/off switch located on the front panel of the timer. It is recommended that the power switch be in the "off" position when not in use to conserve battery power. **The CED 6000 is designed to automatically Power down after approximately three minutes if no input is received.** The LCD will blank-out, but no loss of recorded input will occur. The User can re-activate the timer by pressing the "Review" button to examine any formerly stored results. In Power Down mode there is a minute amount of battery drain. If the timer is left in this mode without actually turning the on/off switch to the off position, it will drain the battery over a period of several days.

The CED 6000 is automatically set for "Comstock" function. Simply turn on the power and press the "start" button to activate the timer. A buzzer will sound, (after the selected delay) while simultaneously starting the clock. Each shot fired will register on the LCD display and continue to do so up to a maximum of 999.99 seconds.

Upon completion of shooting, the LCD display will indicate the total shots fired and the cumulative time recorded. It will also display the Split time, and Par time (if set). To review the time each shot was fired, simply press the "Review" button and the LCD display will return to the first shot and time recorded. This procedure can be continued throughout all shots fired. In addition to the shot number and time, the split time (difference) between the most recently recorded time and preceding shot time will appear on the LCD.

This timer has the capability to record unlimited shots fired. The memory will retain the first 80 shots fired, and then replace the 80th shot with each consecutive shot fired. When the "Review" button is pressed the first shot will always appear. You can then review through to the 79th shot after which the timer will then jump to the last shot fired.

By pressing the "start" button the timer automatically erases the previous data and activates the buzzer / clock accordingly. However, **the CED 6000 is designed to prevent accidental loss of results. In order to re-activate the "Start" button, the "Review" button must be pressed at least once. The one**

exception to this rule, is when the "Combined Comstock" mode is to be used. Refer to "Combined Comstock" section for further details.

● LCD DISPLAY

The display provides constant review of the most recent cumulative time recorded, Split time, Par time, and the number of shots fired. It also indicates which start mode the timer is currently set in, and has a "low" battery warning" indicator which will flash repeatedly indicating a battery change is required. In addition, an "A or B" will appear when both input jacks are in use to indicate the winner of "Man vs. Man" events.

The LCD is equipped with an **illuminated display** which can be activated by pressing the button located on the side of the timer. This is ideal for "low light" shooting conditions.

● FIXED / RANDOM / INSTANT DISPLAY SELECTION

The CED 6000 provides three types of start functions. A "**Fixed**" three second delay from the time the "start" button is pushed to the activation of the buzzer and clock, allows sufficient time for preparation and standby. A "**Random**" mode provides a "two to five" second delay, designed to eliminate any advantage during individual practice. The timer randomly selects a delay on a continuously changing basis. An "**Instant**" go, enables total control by the Range Officer. The timer is activated immediately upon pressing the "Start" button.

● PAR TIME SELECTION

Selection of a "Par time" from 0.6 to 199.9 seconds can be accomplished with the CED 6000. As the buzzer sounds for 0.5 seconds, the minimum Par time accepted by the timer is 0.6 seconds. Therefore, if the 0.1 button is pressed by itself, the LCD display will indicate 0.6 seconds. **The Par time operates in both shot and plate modes.** By pressing the appropriate "**Par**" selection button (10.0, 1.0, 0.1) located on the front panel of the timer, a specific required time can be entered. The segment of time indicated on each button will advance with each press of the button, or you may hold the button down and the time will advance automatically. If an incorrect time is set or if you wish to clear the Par time, simply press the "**Clear**" button to erase the stored time. Par time mode may also be cleared by pressing all the buttons until zero's appear in all the digit segments, or by turning off the timer. **Turning off the timer erases all memory previously stored.**

To activate the timer and the selected "Par time" simply press the "start" button. A second "stop" beep will occur at the selected "Par time". The timer will continue to record shots even after the required Par time has elapsed. This allows accurate review of all late shots and their exact time fired. **When in Par time mode, the second beep will sound at the exact pre-set time for 0.3 seconds only! This is to conform with the current IPSC / USPSA rules relating to overtime penalties.**

● REPETITIVE MODE

This advanced feature of the CED 6000 is ideal for PPC, UIT, Police & Military Qualification type courses where a series of simulated "Exposures" at fixed intervals are required. This function simulates the effect of a turning target system where the "Face" period is selected by the shooter, and the "Edge" period is fixed within the CED 6000 at 7 seconds.

To select the "Face" period of time, simply follow the "Par time" setting instructions. To set the number of "repeats" desired, press and while holding the "Review" button, select the number of repetitions by pressing the 1.0 or 10.0 Par buttons to the desired amount. **(Set the "Face" Par Time first. Then proceed to set the "repeat" value).** The selected repeat value will appear on the LCD under the "SPLIT". Once you activate the timer, the selected number will disappear as the proper split function operates. However, the selected number of repeats will take place as pre-set. The number of shots and time will be erased as each new repeated segment is started allowing the clock to begin at zero again.

The start of the selected "Face" period is indicated by the pressing of the "Start" button and the sounding of the buzzer. If the Auxiliary jack is in use, a 5 volt dc impulse of 0.5 seconds will be emitted in direct conjunction with the buzzer. At the end of the set Par time, the buzzer (and 5 volt impulse if in use) will sound for 0.3 seconds indicating the end of the "Face" period, and the beginning of the "Edge" period. Seven (7) seconds later, the sequence will start again and continue doing so until it has completed the full amount of repeats that have been pre-set into the timer. To cancel the program, either press the "Clear" button, or turn the timer to the OFF position.

● COMBINED COMSTOCK

The CED 6000 features the ability of combining several comstock scores cumulatively. Designed for situations where you want to add the time of two or more strings together, but require separate start beeps. Upon completion of the first string of shots, press the "Clear" button, which serves a dual function where by activating the combined mode function. After the "Clear" button has been pressed, push the "Start" button to re-activate the timer. At the sound of the beep, the timer will continue the time count and shot number from the exact time of the last shot recorded in the timer. This procedure can be repeated as many times as desired. **Do not push the "Review" button when using this mode until after completion of all combined segments. Par time mode can not be used while Combined Comstock is in use.**

● SELF-DIAGNOSTIC TEST SYSTEM

The CED 6000 incorporates a self-diagnostic test program enabling it to be checked systematically for proper functioning. This provides additional quality control with fast and easy self check capabilities. To run this program, first press and hold the "Clear" button while turning on the timer. After 2 seconds,

release the "Clear" button. The timer will proceed to run a testing program of all the segments. Once finished, the buzzer will sound indicating successful completion of the test and verifying that all segments are functioning properly.

● AUXILIARY JACK

An auxiliary output jack is located on the base of the CED 6000. When a jack plug is inserted, five volts of dc current is emitted in exact conjunction with the buzzer for 0.5 seconds to match the duration of the beep. When the Par time setting is in use, the impulse emitted at the completion of Par, is 0.3 seconds matching that of the buzzer beep. This circuit can be utilized to operate a remote, self powered buzzer, horn, light, loud speaker, or a low-voltage relay for target turning applications.

● INPUT JACKS

The CED 6000 provides two input jacks located on the side of the timer. By connecting a "normally closed" type relay switch (not included) to a target or plate, an impulse can be relayed through the jack to the timer.

By inserting a mono switch plug into an input jack, the timer **automatically deactivates the shot detecting microphone and will only record shots / times received by impulse through the input jack.** The "start, Review, Split, Par," functions and buzzer continue to operate as normal. The switch can be vibration or sound activated, or one of several varieties of standard normally closed switches available in the market.

When using either "A or B" jack by itself, unlimited shots may be recorded. This is ideal for use with Air Soft Competitions, or when practicing plates. You can design a parallel "**closed**" switch line using vibration type or condenser microphones to run from each plate. Each hit will activate a shot and time. When using both jacks simultaneously (**Man vs. Man**), the timer will record both times and indicate the winner! The first time received will appear in the "Time" column and the second time will appear under the "Split" column. Either "A" or "B" will also appear on the LCD to indicate the winner. The jacks are marked "A, B" to allow for clear distinction between Competitors.

A special feature of the CED 6000 is that it detects an open circuit. The next sequence cannot be started until the circuit is closed again. Therefore, both plates must be properly re-set before the timer will operate. This protects you from false starts.

● SHOT DETECTOR

A high sensitivity microphone is used in the CED 6000 to insure accurate recording of shots. An adjustment setting is located on the back panel of the timer, to the side of the waistband clip. This allows for flexible adjustment when needed depending on the shooting location and conditions. A small, flat head screw driver is required to make an adjustment.

The CED 6000 shot detecting microphone is factory set to function under most types of conditions. However, due to various changes in range conditions, it is strongly recommended to test your timer on the range to be used, prior to Competition to insure it is properly set. This will eliminate any chance of recording errors!

Always hold the timer with the front panel facing the Shooter! The microphone is located on the front panel and should have direct, clear access to the Shooter. In cases where a person is shooting around walls, or other objects, the timer should be held in a manner which provides unobstructed view to the person shooting. The official should be careful not to cover the microphone, or allow ejected cases to hit the timer during recording. Ideally, the timer should be within six feet of the person firing the shot to be recorded.

GUARANTEE

****30 DAY MONEY BACK GUARANTEE****

The CED 6000 was designed to provide the optimum timer at an affordable price. We want you to be completely satisfied, with our product. If you are not satisfied, simply return it to us with receipt of purchase, and undamaged within 30 days for a full refund.

WARRANTY

****ONE YEAR LIMITED WARRANTY****

If the CED 6000 breaks due to defective parts or workmanship, we will replace it for you within the first year. This warranty does not cover any failures attributable to abuse, mishandling, failure to follow operating instructions, alterations, or accident. If you accidentally break it, we will repair it at cost for you. All claims must be accompanied by the original sales receipt or written proof of purchase, and be returned in a properly packed manner with shipping charges prepaid. We are proud of our product and we want you to be too.

Returns or warranty service should be directed through your purchase location. However, if you should encounter any problems or wish to correspond on any matter, please write or fax to:

COMPETITIVE EDGE DYNAMICS LTD.

G.P.O. Box 10590,
Central, Hong Kong.