

TRACE

Hardware Operation

PRELIMINARY

Users Manual

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THE CONCEPT

TRACE is a new innovative game for the 21st Century for one or two players. It is played on a purpose built Laser cut Aluminium and Stainless Steel framework by using specially made '*Touch-Wands*' for differing skill levels both standard and expert.

TRACE is simple to use, with the minimum of equipment, by one or two participants - for fun, competitively or for calculable dexterity exercises and a selection of different programs with various skill levels make this new equipment ideal for all ages.

1.1 THE EQUIPMENT

TRACE essentially comprises of two identical Laser cut Aluminium plates set side by side with an intervening Control Panel used to select various programs and show player scores and times. The whole machine is **Free Standing** with solid stainless steel legs.

A dedicated **Microcomputer** monitors game play throughout giving certain audio responses for 'player fouls' and both times and scores the routines on the upper three **LED Displays**.

1.2 BENEFITS

- Competitive and exciting programs to improve both overall dexterity and Hand/Eye co-ordination.
- Minimum space requirements for maximum play potential.
- One or two player participation.
- Accommodates players of all ages and sexes.
- No special kit required.
- Simple rules.
- Foolproof electronic scoring throughout play.

1.3 CAUTIONS WHEN INSTALLING

The **TRACE** machine is designed for indoor use only. It should not be used outdoors or under the following two main conditions:-

In areas directly exposed to sunlight, high humidity, direct water contact, dust high heat or extreme cold.

In locations that would present an obstacle in the case of an emergency, i.e. near fire equipment or emergency exits.

1.4 CAUTIONS WHEN HANDLING

AC power must always be turned off, and the machine disconnected, before replacing any internal parts.

When disconnecting the Power Jack plug from the machine, **remember to push in the RED Locking Tab before attempting to pull the Jack plug out**. Failure to do so may result in damage to the equipment.

When unplugging the machine from an electrical outlet, always grasp the plug, not the mains lead.

If any internal adjustments are required take special care when removing the rear plate not to drop it or damage the machine when replacing.

Care must be taken at all times to avoid electric shock when inspecting or otherwise adjusting the machine.

1.5 WHEN TRANSPORTING

Ideally the machine Framework should be moved by two people to avoid any accident.

Before moving the equipment the mains lead **must be** disconnected.

1.7 MACHINE CONTROLS

Front Panel Control buttons

- RESET** - This stops any running game and returns the machine to standby
- PROGRAM** - Selects the program number (ONE or TWO player)
- START** - Starts the program off
- AUDIO** - Turns off the main audio leaving only the Buzzer sound on
- The adjacent LED is lit up for normal audio ON

LED Displays

- Main central 3 Digit TIME display
- Foul A LED - Flashes when a Foul occurs
- Foul B LED - Flashes when a Foul occurs

Remote Control

This **Key Fob controller** can be used as well as or instead of the Front Panel buttons to **RESET/PROGRAM** and **START** a game allowing a host to take charge of the one or two participating players.

1.8 INTERNAL CONTROLS - Accessible by removing the rear middle panel.

Green LED - illuminates to show that the Power Supply is functioning correctly.

Sound Volume Control - via Blue Preset Volume control potentiometer.

Machine Reset - Green Pushbutton resets the machine to cease play.

1.9 CHOOSING A WAND - Standard or Expert

The main **SLOT** width for **TRACE** is **18mm** and there are currently two **WAND** attachments to choose from.

The first is **2mm** and considered as **STANDARD** giving a **9:1** slot ratio while The alternative attachment is **6mm** giving a mere **3:1** ratio and is considered more difficult at **EXPERT**

2.0 GAME PLAY

The idea of the game is to progress along the entire track with the inserted **WAND** without touching the side of the slot at **ANY TIME** which constitutes a **Foul** and a penalty score.

Currently, and as a concession in the gameplay, the machine logic allows for a transient **1/10 second** track touch without registering a **Foul**.

At the end of the track the **WAND** is carefully withdrawn and then placed in the respective **PLAYER HOLSTER** at which time the overall time is recorded together with the number of **Fouls**.

For a two player game the winner (A or B) is declared for the quickest time and least number of Fouls.

A maximum of **9 Fouls** is allowed for a valid result otherwise the game is aborted with maximum time to complete a full circuit **60 seconds**.

2.1 STARTING A ROUTINE

Ensure both WANDS are in their Holsters before commencing a game.

Press the **RESET** button.

The machine will initially default to a **one player** game showing a '1' on the central **LED** Display

If a **two player** game is needed then either press the **PROGRAM** button on the front panel or the **xx** button on the remote control keyfob so that a '2' is shown on the central **LED** Display. Repeated pressing will toggle between either one or two player as required.

Press the **START** button

The machine will respond with '**GET READY**'.

Nothing will now happen until the **WAND** (or both **WANDS** for two players) are removed from their Holsters.

When this happens a short audio and visual warm up period is given for the players to get their **WANDS** into the starting position.

The game is started with either '**GO**' or a **Gunshot** sound.

Timing information is displayed during the game and any special verbal announcements are made as required.

REMEMBER

The WINNER of a two player game is the one with the least Fouls in the shortest time or the least Fouls within the allotted time of 60 seconds.

TECHNICAL SPECIFICATIONS

1. World Wide power supply 90-240 Volts A.C. or Direct 12V Battery Input with a special Adaptor.
2. The play interface operates at **12 volt DC** for total player safety.
3. The **TRACE** frame is manufactured from Aluminium and Stainless Steel.
4. Free Standing Framework via two dismountable legs.
5. The **approximate** overall space requirements (**in millimetres**) are:
 - a) Wall Mount - 1500 (w) x 100 (d) x 600 (h)
 - b) Free Standing - 2100 (w) x 950 (d) x 1700 (h)
6. **TRACE** weighs less than 20kg including its free standing feet.
7. Central **3 digit high intensity LED** Time Display plus two **'Foul counters'**
8. A totally dedicated **Microcomputer** and digital sampled **real speech** and sound effects for enhanced game play.
9. **One or Two player Software** routines currently - more being developed.

Technical support is provided by sending an E-mail to the location seen at the front of this manual. Telephone support is available at all times.

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