# n-ABLER



Instruction Booklet





### Assistive Technology Desktop Trackball

# Product Description

'n-ABLER' is the most adaptable mouse alternative on the market specifically designed to address the needs of computer users with limited hand control, motor skill difficulties, poor hand-eye co-ordination, lack of manual dexterity and involuntary muscle spasms.

It is especially suitable for improving access for children and young people with some special educational needs, learning difficulties, for those who's work entails long periods of computer use and for older people and others with movement impairment.

The large, high mass, free-running ball requires only a light touch which, together with the function buttons, makes for easy navigation, selection and manipulation of objects on the computer screen.

The 'n-ABLER' emulates a computer mouse but, with fingertip control and the need for only minimal hand movement, reduces wrist and elbow fatigue, requires far less effort and is less tiring. The symmetrical design enables users to work with either hand without having to angle the wrist, and the unit can also be configured for 'left-handed' operation. Its large, integrated hand support/palm rest makes work posture

more relaxed and less

strained.

# Features

- Rugged construction and ergonomic design
- Large footprint for maximum stability
- Symmetrical design allowing use with either hand
- Integral wrist support to minimise fatigue

# n-ABLER

- High mass, 63mm, free-running ball for easy cursor control
- Colour coded buttons mounted sub-flush to prevent accidental activation
- Switchable left and right click buttons
- Double click and latching drag lock buttons
- X-Y axis and Scroll button for up/down or left/right only cursor movements and scrolling facility
- Audible (switchable to mute) and visual warnings indicating selection or change of function
- Cursor speed control
- Auto detecting PS2 and USB protocols
- Easy 'plug and play' installation (no additional drivers required)
- PC and Mac compatible

# Unpacking

Carefully unpack the box, which should contain the following



- n-ABLER unit
- USB to PS/2 adaptor plug
- Instruction booklet
- Warranty card

If any items are missing please contact your supplier immediately

# Compatibility

The **n-ABLER** works with PS/2 and USB compatible computers. This includes the majority of Personal Computers (PCs) and Apple Macintosh computers. PS/2 sockets are circular with 6 pins, whereas USB connectors are rectangular with 4 pins.

# Installation

Ensure your computer is fully turned-off and not just in sleep mode. Locate the relevant socket (PS/2 or USB) on your computer and plug in your **n-ABLER**. Make sure the connector is correctly orientated. Do not force the connector into its socket as you may bend the pins.

If you are using the PS/2 socket on your computer you will need the adaptor plug supplied with your **n-ABLER**.

When you switch on the computer your **n-ABLER** automatically configures itself to either PS/2 or USB operation. Once you bootup the computer the **n-ABLER** is ready to use. There are no driver files to be loaded- the computer's resident drivers are used to help simplify installation.

Roll the ball briefly to ensure the cursor responds to movement. If not refer to the troubleshooting guide on our website <a href="http://www.pretorianuk.com/n-abler">http://www.pretorianuk.com/n-abler</a>, clicking on 'Frequently Asked Questions'.



# Getting Started

Refer to Figure 1 for an introduction to the various buttons and features of your **n-ABLER**.

### I FD

The LED is used to show which features are active:

Green Drag Lock off

Red Drag Lock on

Blinks off briefly (either colour)
Single Axis mode selected

### Flashes Green

Learn mode (see overleaf)

### **Left Mouse Button**

### (Red)

Performs exactly the same function as a mouse 'left click'

### **Double Click Button**

### (Green)

Double clicking on the Left Button can sometimes be awkward, so we've included a button to do it for you! Just press the green button once and your **n-ABLER** does the double click sequence automatically.

If you have decided to have the buzzer on (see Additional Features and Learn Mode) it emits a 'beep, beep' to indicate the double click has taken place.

### **Single Axis Button**

This button is used to freeze movement in one axis allowing you to 'home in' to a position one axis at a time.

Press the button once to give left-right cursor only movement. Press it a second time to give up-down cursor only movement. Press it a third time to give scroll movement (similar to that on a 'wheel mouse'). Press it a fourth time to return to normal operation.

If the buzzer is on it emits a single beep to indicate each change of axis and the LED blinks while in single axis mode.

### FIGURE 1

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### Right Mouse Button

Performs exactly the same function as a mouse 'right click'

### **Cursor Control**

Rotating the ball in the direction you wish the cursor to move moves the cursor.

The cursor speed setting (see figure 2 below) affects the relationship between ball speed and cursor speed.

### Drag Lock Button (Blue)

When dragging an object on the screen it can sometimes be difficult moving the cursor whilst keeping the Left Button depressed. To overcome this difficulty your **n-ABLER** has a Drag Lock Button. Simply press this button to perform the 'dragging' operation.

When you have finished press any button to cancel.

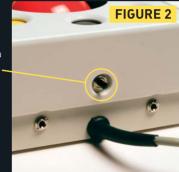
If the buzzer is on it emits an ascending two-tone beep as the Drag Lock is turned on and a descending two-tone beep as it is turned off. Whilst the Drag Lock is on the LED turns red to give you a visual indication that Drag Lock is in operation.

### **Speed Control** (see Figure 2)

This button allows the cursor speed to be changed to suit your personal preference. Press the button briefly to reduce the speed. There are four speed settings to choose from. Once you reach the slowest speed pressing the button again will return you to the fastest speed.

If the buzzer is on it emits a 'beep, beep, beep' to indicate each change of speed.

Note the speed setting you have chosen is automatically retained in your **n-ABLER's** memory and recalled after loss of power (e.g. if the computer is turned off).





# Learn Mode

### 4

### FIGURE 3



Begin with your **n-ABLER** unit in the intended operating position (1,2,3 or 4 as shown in Figure 3).







### Step 2 - Put your n-ABLER into Learn Mode

Press the Speed Control button at the rear of the unit and keep it pressed for at least one second. When you release it you will hear a 'warbling beep' to indicate your **n-ABLER** is in Learn Mode. The LFD flashes.

### Step 3 - Tell your n-ABLER which way is up

Move the ball in the direction you want the cursor to move 'up'. There will be no immediate cursor movement but when your **n-ABLER** has understood your instruction it emits a single beep and the cursor moves in the direction you want.

### Step 4 - Enable or Disable the Buzzer

If you want the buzzer on press the Red Button once. If you want the buzzer off press the Yellow Button once.

Your **n-ABLER** emits a single beep to acknowledge your selection (irrespective of whether the buzzer will be 'on' or 'off').

### Step 5 - Select which Button is to be Left Click

If you would like the Red Button to be Left Click, press it. Otherwise press the Yellow Button.

Your **n-ABLER** emits a 'warbling beep' to indicate you are now leaving Learn Mode.

Your personal settings are stored in your **n-ABLER's** memory and will be retrieved each time the computer is powered-up.

If you make a mistake simply return to Learn Mode by beginning at Step 1 and repeat the procedure.



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### Programming the Sockets on your **n-ABLER**

Your **n-ABLER** is supplied with the sockets pre-programmed as Left Click and Right Click. The sockets can be re-programmed at any time to access any of the buttons INCLUDING THE SPEED CONTROL BUTTON using the following procedure:

### Step 1 - Put your n-ABLER into Learn Mode B

Press the Speed Control button at the rear of the unit together with the Red Button and keep them pressed for at least one second. As the unit enters Learn Mode B you will hear a 'warbling beep' and the LED flashes red.

# **Step 2** - Press the button you would like the Left Socket to function as

For example, if you want the Left Socket to function as Double Click, press the green (double-click) button once.

Your **n-ABLER** emits a single beep to acknowledge your selection

# **Step 3** - Press the button you would like the Right Socket to function as

For example, if you want the Right Socket to function as Speed Control, press the red Speed Control button (at the rear of the unit) once.

Your **n-ABLER** emits a 'warbling beep' to acknowledge your selection and to indicate that you are leaving Learn Mode B.

Your personal settings are stored in your **n-ABLER's** memory and will be retrieved each time the computer is powered up.

You can quit Learn Mode B at any stage by pressing the Speed Control Button until a 'warbling beep' is heard and the LED returns to a steady green colour. Any new settings you made will not be saved.

If you make a mistake simply return to Learn Mode B by beginning at Step 1 and repeat the procedure.

# Additional Features

Your **n-ABLER** has a variety of additional features to make it easier for you to use:

- A Orientation Facility Your n-ABLER can be used in any of the positions shown in Figure 3. This, together with the option to mount your n-ABLER on a bracket, allows it to be mounted in many different ways to make using it easier.
  - The default setting is with the computer lead furthest from you. If you prefer this you do not need to do anything. If you prefer to use it in a different position follow the steps in the Learn Mode section.
- **B Buzzer** The buzzer gives an audible indication as you switch on/off some of the features. The default setting for the buzzer is 'on' and you don't need to do anything if this is your preference.
  - If, however, you like to work in a quiet environment and wish to have the buzzer 'off' follow the steps in the Learn Mode section.
- C Left/Right Button Swap If you are left-handed, or wish to use your n-ABLER 'upside down' you may wish to swap the Left and Right buttons around. If so follow the steps in the Learn Mode section.
- **D External Buttons** Two sockets are provided at the rear of the unit to allow external Buttons to be connected. The socket adjacent to the Red Button performs the same function as the Red Button, and the socket adjacent to the Yellow Button performs the same function as the Yellow Button. Suitable Buttons are widely available from retailers.

Note that the external Buttons work in addition to the internal ones.

Warning: These jack sockets are not for external power supplies. Never connect an external power supply to the unit, otherwise permanent damage may occur.

## Maintenance

The 'n-ABLER' has no user serviceable parts. If repair is necessary the unit should be returned to Pretorian Technologies Ltd or an authorized distributor.

# Warranty

The 'n-ABLER' is warranted for 24 months from the date of purchase against defects in manufacture, or component failure. The unit is designed for use in domestic, educational, commercial and light industrial applications. Use outside these areas will invalidate the warranty.

Unauthorised repair or modification, mechanical abuse, immersion in any liquid and connection to any equipment other than a host computer will invalidate the warranty.



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