



Roller II Roller Plus & Joystick Plus



Operating Instructions



TRAXSYS INPUT PRODUCTS
AMETEK

Roller Trackerball/Joystick

Traxsys Input Products have designed and produced this special Roller product in both trackerball and joystick options to improve computer access where the user may have difficulties with a conventional mouse or prefer the ease of use of this product.

The Roller II has been designed to run on PS/2 and USB compatible machines and will auto-detect to either PS/2 or USB dependant on the host computer.

Colour coded buttons match the three switch sockets.

Operating Instructions

It should be remembered that this product is a mouse replacement and its use should relate predominantly to the computer handbook section on using a mouse. The keys are positioned conveniently around the ball/joystick for easy access.



Installation

Please ensure the computer is switched off during installation and remove the existing mouse currently running with your computer. Insert the connector into the same mouse connection on the host computer. The connectors are designed to only connect with the correct orientation, so if it won't go in, don't force it. To complete installation, switch on and boot up the computer. Do not deflect the joystick for a nominal period of 5 seconds during power-up as this will cause the cursor to be mis-aligned. The Roller Trackerball/Joystick is now ready for use. These products are a direct mouse replacement and do not require any additional driver software. Please ensure that the standard mouse driver which corresponds to the correct platform (PS/2, MSF, USB) is selected from the mouse settings within windows.



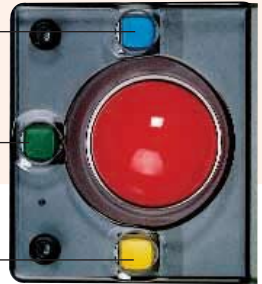


Roller II

Blue Right
Mouse Switch

Green Middle
Drag Switch

Yellow Left
Mouse Switch



Roller II

The left (yellow) and right (blue) keys operate as left and right mouse keys. The centre (green) key is used to select the left drag function. When the green key is pressed, a light indicator flashes and the drag key is latched on. This can be used for dragging images on the screen which enables the operator to concentrate on steering the cursor with the ball/joystick without the need to hold the key in the 'on' position. A second press of the green key will release the latch and the indicator light will go off. In order to toggle 'left-handed' and 'right-handed' button configuration, press and hold the middle and left buttons.

A 'fast mode' has been introduced when using iMac computers (USB only). In this mode, each count of the trackerball or joystick is multiplied by four. To toggle 'fast mode' on and off, the middle and right buttons must both be pressed and held pressed for three seconds. Upon a processor reset, the speed defaults to normal. Upon switching to 'fast mode' the unit generates four counts per edge instead of one.

The unit will auto detect to either PS/2 or USB dependant on the host computer. Three 3.5mm jack sockets allow external switches to be connected and parallel the function of the mouse switches.

Roller Plus/Joystick Plus

The Roller Plus range of units have been specifically designed to improve computer access where the user may have difficulties with a conventional mouse. These robust units have many special features including a speed control key, latching drag switch and buttons that allow only up/down or left/right movements of the cursor



Installation

USB/PS2 Dual Platform Unit

This unit can be used on IBM compatible computers (PC's) that have either a PS2 mouse port or USB ports, or on Apple iMac computers.

It can be identified by the USB connector on the end of the lead and a label on the base of the unit stating 'USB/PS2 Dual Platform'. Included with the unit is a USB to PS2 adaptor.

To install the device on IBM compatible computers with USB ports or Apple iMacs, simply plug the unit directly into a USB port and boot up. For IBM compatible machines with PS2 mouse ports, attach the adaptor to the end of the lead and then connect the device into the PS2 mouse port and boot up. With PS2 operation, ensure no other pointing device is connected to the computer i.e. a serial mouse connected to Comm. 1.

A 'fast mode' has been introduced when using iMac computers. In this mode, each count of the trackerball or joystick is multiplied by four. To toggle 'fast mode' on and off, the middle and right buttons must be pressed and held pressed for three seconds.

The unit also has the ability to swap from right handed operation to left handed operation. In order to toggle 'left-handed' and 'right handed' button configuration, press and hold the middle and left buttons.

Operation

1. Cursor Control

The cursor is moved around the screen by rotating the ball or moving the joystick in the direction you wish the cursor to go. The faster the ball is rotated or the further the joystick is moved, the faster the cursor will move. The cursor will continue to move until the joystick is returned to the central position.

2. Speed Control

This switch gives five cursor speeds. Each time the switch is pressed, the cursor slows down until after the slowest speed, it then reverts back to the fastest speed and the cycle is repeated. For a wider range of speed control, the standard mouse control software can be used - see the computer operating manual.

3. Left Mouse Switch

This switch takes the place of the left mouse switch and is used for single click and double click operations.

4. Right Mouse Switch

This switch takes the place of the right mouse switch.

5. Double Click Switch

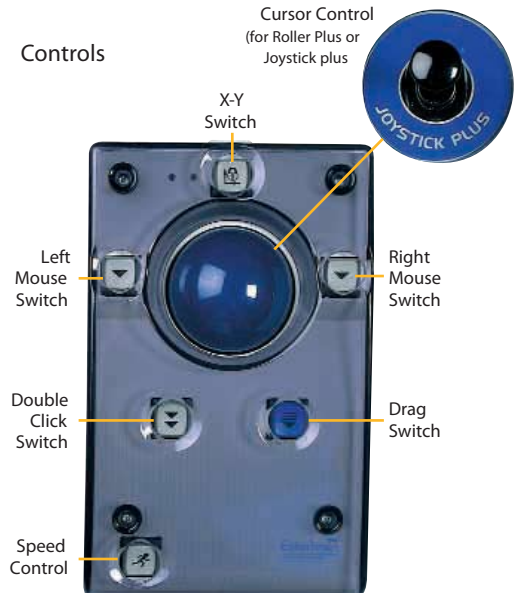
If difficulty is experienced when 'double clicking' with the left mouse switch, a single press of this switch will execute a double click operation.

6. Drag Switch

When this switch is pressed once, 'dragging operations' can be executed. This is the equivalent of holding down the left mouse key. Pressing the switch a second time, cancels this operation. Actuation of the drag function is indicated by an LED at the top left of the unit.

7. X-Y Switch

Pressing this switch once gives left-right cursor movements only, pressing again gives up-down only. To cancel this function the switch should be pressed a third time. Selection of this function is indicated by an LED at the top left of the unit.



Additional Features

All of the switches described on the previous page apart from the speed control, can be accessed remotely by attaching the switch box supplied with the unit to the 'D' connector at the rear of the unit. Any switch with a 3.5mm jack can then be connected to take the place of the switches on the unit.

Warning: Power connectors should not be applied to jack sockets on Alternative Switch Box.

The unit can be firmly secured to a table etc. by means of the two 4mm captive nuts on the base of the unit. Any screws used should not penetrate the body of the device by more than 5mm.



Use

These units are designed to operate as part of a man-machine interface. The units should be operated by moving the trackerball/joystick, switches and speed control using moderate hand pressure only. The units should not be operated by machinery or excessive force used. The purpose of these units is to relay information relating movement of the trackerball/joystick and the status of the switches to the host computer. The use to which this data is put is entirely defined by software operating on the host computer. In some formats, the host computer system may send instructions to the trackerball/joystick to alter the way or speed data is transmitted, or to suspend operation completely.

These units are not designed for use as a measuring device and movement data cannot be used to measure distances or angles. These units are not suitable for applications where malfunction could endanger safety. These units are NOT toys and children should be under adult supervision if allowed to operate them.



Adjustment

The units do not have any user adjustable components.

Maintenance

The units contain no user serviceable parts. If repair is required, the units should be returned to Traxsys Input Products or their authorised representatives.

The following will invalidate the CE mark:-

- * Unauthorised repair or modification
- * Extending the cable or connection to an extension lead. Units may appear to function normally but their EMC performance may be compromised.
- * Operation outside of domestic or light industrial environment.
- * Operation in harsh electromagnetic environments such as close to high voltage switchgear, induction heating equipment, arc welding equipment or the close proximity of high power radio, television, telephone or radar transmitters.
- * Operation in any vehicle, land, sea or air, or direct medical application.
- * Operation of the units whilst damaged.
- * In order to meet the requirements of EN60950 (safety of IT equipment) the units must be connected to a power limited supply, which will limit the power supplied to 15V A max. under fault conditions.

The following may damage the units:-

- * Direct or indirect lightning strikes or nuclear electromagnetic pulse to the units or to any equipment to which they are connected whether operating or not.
- * Subjecting the units to ionising radiation greatly exceeding the normal background level.
- * The application of electrical power or signals to any part of the units except normal connection to the host computer system.

* Electro-static discharge (ESD) to any part of the units whilst the shell of the connector is not connected to ground. Also ESD to any part of the unit behind protective covers of the data pins under any circumstances.

* Immersion in water or any aqueous solution.

* Application of any chemical or solvent which may degrade ABS, PVC or phenolic polymers or cause accelerated corrosion of aluminium, steel or copper.

* Operation outside the temperature range of 0 to 55 degrees Celsius or storage above 55 degrees Celsius.

* Mechanical abuse such as dropping, throwing or crushing the units, causing them to impact heavy objects or the use of excessive force during operation.

Note

The equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The equipment generates, uses and can radiate radio frequency energy and, if not used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:-

- Reorientate or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an output on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Traxsys Input Products manufacture a wide range of educational and special needs computer input devices including:-

- * Trackerballs
- * Joysticks
- * Switch inputs
- * Communication Devices

Please ask our sales office for details.



TRAXSYS INPUT PRODUCTS
AMETEK®

Traxsys Input Products
An AMETEK Company
1 Embankment Way
Ringwood, Hampshire
BH24 1EU United Kingdom

