Pess Mouse Interface for the Atari ST



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Instructions

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1. Introduction

Thank you for your PeST Purchase. PeST has been developed to meet the requirements of Atari ST users, specifically that Atari mice are now in short supply and that the feel of the original device sold back in the 80's is showing its age.

PeST is the acronym for PS2 enumerator for the Atari ST. It enables any PC PS2 mouse to be used with the Atari ST / STF / STFM / STE / Mega / Mega STE / TT / Falcon etc. The device is completely automatic and fully plug and play.

Care has been taken to ensure that no movements of the mouse are lost. In the early stages of PeST's development we tested similar interfaces offered by the competition. No two interfaces had the same feeling. We have been spoilt in recent years by more recent operating systems, in expecting the pointer on screen to move exactly relative to the mouse being handled. This was entirely our aim in developing PeST. If we were going to use it, and if we were going to be happy with it, it had to work!

PeST is uniquely programmed and not available under any other brand names. If you did not buy via pest.atari.org then you do not have a genuine PeST made by us. Beware of cheap fake imitations around the Internet!

2. How it works

PS2 3-byte packets of information are received from the mouse. These are analysed by a programmable computer-on-a-chip. The resulting information is reflected on the Atari ST's mouse port. Effectively our device is a PS2 to BUS mouse converter.

The computer-on-a-chip which performs the conversion has a similar amount of processing power to computers of the late 1970's. It has 2 Kbytes of ROM and about 256 bytes of RAM, with a processing speed of about 1MIPS. The program necessary to make the interface work is about 700 bytes of optimised machine code.

3. Product features

- © *Reconnection* You can change mice without disconnecting the interface.
- © Speed can be changed between 4 modes up to 400% over the original ST mouse.
- © Settings are saved in internal ROM and are never lost.
- © Compact ridged design.
- © Custom programmed micro-controller with our unique firmware.
- © Extension cable with approx 10" of length.
- © Fully Plug and Play.
- © Low power consumption.
- © No drivers or special software required.
- © Wide range of PS2 mouse support.
- © Works with many Atari computers models & ranges.

4. Installation

The device is plugged into the Atari's mouse port. The PS2 mouse is plugged into the PS2 socket. That's it! Future-Technologies recommend a generic 2 button ball mouse. Do not connect or disconnect PeST with the power on. Do not pull PeST by its cable if removing it from the computer.

5. Changing mouse speed modes

Holding BOTH mouse buttons continuously for 10 seconds will cause setup-mode to be entered. A virtual box will be drawn on screen to indicate this. Button control will now no longer be passed onto the Atari ST.

Pressing the LEFT mouse button once, will select the next mode. A series of virtual lines will be drawn on the screen, this is the interface telling you which mode you are in. A single line drawn to the right is mode 1. A line drawn right, and then left back again, is mode 2. Mode 3 = right, left, right. Mode 4 = right, left, right, left.

While selecting modes, the mouse can be moved so that you may see the speed difference for comparison. You may continuously cycle through the modes by pressing the left mouse button until you are happy with the mode selected. It is suggested that you do this on a bare desktop with no windows open.

Pressing both mouse buttons again will exit the setup mode. Another box will be drawn on screen to indicate this. Button control is returned back to the user. Your selected speed setting will be stored in the internal eeprom and loaded on next power up.

6. Mouse disconnection / reconnection facility

In normal use it is not recommended that you interfere with the connection of the mouse, this guidance is laid down in the PS2 standard documents provided to industry. You are however free to do so with the PeST. It was noted that PC style computers can mostly recover when a keyboard or mouse is unplugged, so we wanted that facility too.

When changing or connecting a mouse while the power is on, the interface will recover within 4 seconds. We do not however, recommend changing any equipment with the power switched on.

7. Credits

Chris Swinson of Future Technologies UK for developing the hardware with assistance to ST protocols ,beta testing & debugging.

Alison Challis UK (R.I.P) for her friendship & hard work on the PS2 software.

Thanks go to Wolfgang Hiestand for funding the 2013 batch of PeST.

PeST is a custom made hand built quality product manufactured in England & produced by www.future-technologies.co.uk

Enjoy!