

# Ability Newsletter

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## Expert Mouse Pro Wireless

### Wireless trackball

The Kensington **Expert Mouse Pro Wireless** has finally arrived in Australia and in our workshop tests it looks like a winner.

As usual with USB, the PC sees what you have plugged in straight away, with a fresh set of batteries it has a range of 2 metres (however the batteries that came with our test unit weren't exactly fresh).

As with the standard Expert Mouse Pro, the Wireless comes with Kensington Mouseworks software, but something new has been added: a detachable wrist rest.

Cordless keyboards have been around for a while now, but that was little benefit unless you had a cordless pointing device. Even for models with a cordless mouse combo, the mouse device was not suitable for people with special needs. The Expert Mouse Pro Wireless may help solve that problem, by providing the perfect counterpart to a wireless keyboard.

The Expert Mouse Wireless Pro is available from Abilitytech for \$199. A Mac version - called the Turbo Mouse Pro Wireless - is also available.



## Products

# Programming the Cherry Numeric Pad

The Cherry Numeric Pad now has the ability to change the assignments of its keys. This allows a huge range of options for users, especially as it enables multiple keystrokes to be performed at the click of a single button.

The Cherry Numeric Pad has four “modes”, which are toggled by the “num lock” button. Depending on the mode, either the top four keys or the entire keyboard may be reprogrammed for different keystrokes. A maximum of 24 letters can be programmed into each key.

The reprogramming facility on the Cherry is entirely hardware based, meaning that the keystrokes will not be dependent on the operating system. The keyboard should therefore work on any system that uses a standard Windows keyboard, including Win ME, Win 2000 and Microsoft XP.

The keys on the Cherry can be programmed to perform common words, phrases or for key combinations.

**One important use for the Cherry Numeric Pad would be to store functions such as “control-alt-delete”, making rebooting possible with a single keystroke.**

The addition of this programmable feature makes the Cherry Numeric Keyboard very versatile.

The Cherry Numeric Pad sells for \$130 at Abilitytech.



## Products

# *RSI Guard Software*

## *RSI prevention strategy management*

RSIGuard is an ergonomic software package that aims to provide a comprehensive RSI prevention and management strategy. The program consists of a number of different elements, each targeting an area of RSI prevention/ management.

The program includes:

- **BreakTimer:** Analyses computer use, including frequency and intensity measurements, and suggests breaks at appropriate times.
- **AutoClick:** A basic auto click feature that allows single left click to be performed. The frequency and sensitivity of clicks can be adjusted to suit the user. This element is designed to eliminate mouse clicking as much as possible.
- **Forget-Me-Nots:** Provides reminders and Micro breaks during computer use.
- **Data logger:** Collects information on keyboard and mouse use. This is stored as well as being fed back to the other programs to allow adjustment.
- **Online Training:** Ergonomic Training is provided by RSIGuard via their website. This includes posture, wand position and workstation set-up.

Buyers also have the option of choosing the extra "stretch-break" edition, which includes animated video with Audio to demonstrate appropriate stretching exercises during breaks.

Overall RSIGuard provides a fairly comprehensive ergonomics package. Extra features such as Autoclick help to make the program stand out from others that are available. The program currently costs \$40 US for the standard edition, or \$65 with the additional Stretchbreak technology included.

A trial copy of both versions is available at <http://www.rsiguard.com>



## Products

# *Andrea Desktop Array DA-400*

## *A new approach to desktop microphone technology*

In spite of the enormous strides taken by voice recognition technology in recent years, one problem area remains: microphones. Many people with disabilities are unable to attach or remove a headset microphone independently. Others find the headset microphone to be uncomfortable or obtrusive.

The desktop microphones that are available have performed well below their headset counterparts, thus leaving users who want more independence with an awkward choice: convenience v. productivity.

We are about to commence tests on a new approach to desktop microphones. The **Andrea DA-400 Desktop Array** works differently to other desktop microphones. Four streams of audio are captured by an array of microphones located in a small desktop device. They are processed by a digital signal processor, delivering (so they say) a "clear and accurate voice signal for speech-enabled PC applications from a distance". The distance mentioned in the specifications is "up to four feet".

We will let you know our test results in the next issue. It could be an exciting development for people with special needs. All going well, it will be available through Abilitytech for around \$350.



## Products

# QuadJoy v. track IR AT?

The introduction of the Track IR last year made head controlled cursor movement finally available to a lot of people who had previously been unable to afford this technology. The interest and demand for the Track IR has been great, and constant improvement in the software means that the product is getting better all the time. Whilst interest had been focused on the Track IR, other products such as the Quadjoy have been overshadowed. Whilst both products allow control of the cursor by head/ mouth movement, there are differences in the design and features of the units. Whilst the Track IR is a great product, the "feel" of the unit is very different to methods of direct control. This can be important to users.

What are the differences between two types of control?

### 1. Movements needed to make the cursor move

The Track IR uses the rotation of your head as well as a nodding movement to control the cursor. A good range of sensitivities is available, so people with restricted head movement are able to use the unit comfortably. A few people have also had success with chin and nose movement, so the dot can be placed in a number of areas on the head.

In contrast, the Quadjoy uses a combination of lip and head movement to control its mouth joystick. Only a slight movement is needed to operate the unit, again making it useful for people with more limited head movement.

How does this translate when using the units?

From our experience, with some practice the Track IR is ideal for navigating the desktop, dragging items and similar movements. We feel that even with the smoothing effect, there is a little bit of drift in the unit that can impact on its ability to be accurate all of the time. Where this really shows is in areas such as freestyle drawing. Using the Track IR to draw or select a circle is very difficult. The Quadjoy in contrast enables the user to more fluidly create lines and areas of shading.

*More...*

## Research

### 2. Clicking methods

The track IR AT comes standard with a dragging program. Once activated, this program allows the user to choose single, double click, right click and drag functions from a small toolbar. The user then moves the cursor to the correct place, pauses, and then the cursor clicks in that position. Some users find the clicking software to be invaluable to their computer use, others find it time consuming and frustrating. The Track IR also has the potential to have two external switches attached for left and right clicking. These switches can be anything from a jellybean switch to a sip and puff switch, so there is a wide range of switching choices available.

The Quadjoy uses a sip/puff switch built into the control stalk to control clicking. With a little practice, double clicking and dragging are easily performed with gentle sustained sips from the unit.

The differences between these direct clicking and using a clicking program is very much up to personal choice and the individual's situation. For detailed work with art programs and the like, direct access through a switch may give the user more control. For tasks such as navigating the desktop, auto clicking may help reduce the user's fatigue levels.

### 3. Other Factors

Some users may require assistance to place the Track IR's reflective dot on their head. For those that are left alone for periods of the day this may be inconvenient. Some users prefer not to wear the dot all time, and if the dot falls off, then they must wait for someone to assist in placing it on their forehead again.

Some people also prefer not to use their mouth if possible to control the computer. After having to use mouth sticks for other tasks, the Track IR offers individuals the opportunity to use another part of their body for cursor control.

The Track IR has definitely filled a gap for cursor control. Technology that previously cost thousands of dollars is now available for much less. At the same time, personal preference is still a big factor in choosing the unit that is right for you. Units such as the Quadjoy and Lipstick may provide features that some people may favour over the Track IR.

It may be wise to trial these devices for a couple weeks, get a feel for what you prefer, and then make a decision. Ability will soon have both the Track IR and Quadjoy available for rental so you may try the devices before committing yourself to one or the other.

**Ability  
News*****Alan Bimson injured***

For those who haven't heard, our intrepid Web master and technician, Alan Bimson, suffered a fall recently and ended up with a badly broken leg. He is recuperating in hospital and will probably not be back on deck until the end of April. We are sure you will join us in wishing Alan a speedy recovery.

***PhD thesis***

On a brighter note, Graeme Smith has completed the first formal draft of his doctoral thesis. The topic is *The Impact of Computers on the Employment of People with Quadriplegia*. He started writing the 300 page epic in early January and is looking forward to putting it behind him eventually over the next few months. He is however unsure of the connotations of being called "Dr Smith".

***Overseas activities***

Abilitytech has extended its work into south-east Asia. A number of enquiries have led to the development of new techniques for undertaking assessments from a remote base. This is an exciting frontier in our work.

***Albury Visit***

Abilitytech will be participating in the IDEAS Expo in Albury on 24-25 May 2002. We will be offering a day of free assessments on Thursday 23 May, the day before the Expo. Contact Abilitytech for details.

Our best wishes,

*The Abilitytech team.*

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