“The UltraCane is in a league of its own. There is nothing else like it.”

At the Sight Village show in Glasgow, business owner Paul Warner discovered the UltraCane could help him negotiate a crowded exhibition hall in a different and better way than his long cane. Paul believes the UltraCane represents a significant leap forward in mobility technology for the visually impaired and here he shares some practical tips and advice for users.

“The long cane is a tactile instrument which only works when it hits something. By contrast the UltraCane also works when it doesn’t hit an obstacle. It gives the user a totally new level of perception and the ability to detect, without hitting, is fantastic.

“In a crowded exhibition space I found I could weave in and around groups of people without touching anyone. To gain a sense of what is there - without touching - was a new experience. Usually in a situation where there are lots of people, the only way I know where they are is when the tip of the cane clips their ankles. I soon realised that with an UltraCane I simply scan around and when the vibrations in the handle stop I know there is a free passage ahead and off I go. The contrast was immediate and for me this had an emotional impact. Aside from the practicality, I had found a gadget that could give me a new sense and a different perception of the world.”

Paul, a former commercial property lawyer, now runs his own consultancy www.vict-consultancy.co.uk training visually impaired people to use a range of technological aids and software. Working from his home base in Glasgow, Paul can travel anywhere in Britain to provide training to individuals or small groups at their homes, places of work or learning institutions and the use of Skype enables him to extend the service worldwide. Paul also provides advice on assistive technology procurement and website accessibility to businesses and other organisations.

Paul’s sight was affected by a degenerative condition affecting premature babies. He was registered blind at 15 and was mobility trained with a long cane, which initially he only used at night. As the condition worsened he relied on his long cane all the time. He is now aged 50. Living in a city environment, Paul uses his UltraCane to negotiate around a variety of obstacles and street furniture on a daily basis.

**Using the UltraCane at a push button crossing**

“One of the advantages of having an UltraCane is being able to locate the placement of the pole at a push button crossing. The positioning is notoriously unpredictable, can often be
further away from the bumpy pavement surface than you would expect and could be either to the left or right. Just by scanning and following the vibration I can find the pole easily. The scanning technique is also good when negotiating doorways and finding a free passage through narrow ramps with railings on each side. Using an old style long cane was more trial and error and required a lot more concentration. This is a much more efficient way of navigating and saves time.”

Scaffolding

“With a traditional long cane I had to keep hitting the sides or the foot of the poles, either outside or inside the tunnel that the scaffolding creates. It slows you down. Now I don’t even bother sweeping if there is no buzzing signal - I walk right through.

“Scaffolding with No Entry is supposed to have cross bars at different heights. Occasionally this is overlooked which is a contravention of the regulations and can mean that a visually impaired person is at risk of getting an iron bar in the chest or face. With the UltraCane that wouldn’t happen as it detects that a horizontal post bar is present well above ground level. I have come a cropper several times with a standard long cane in this situation and it made me very nervous. The UltraCane gives me a level of confidence that I simply can’t get with a standard long cane. The user is not aware and doesn’t even need to know about the technology it uses – you simply react accordingly to a physical stimulus.”

Skips and parked cars

“I was using my long cane when I once walked into an illegally parked skip – the shape is such that the angles jut out, so the lip hit me in the chest before the stick was anywhere near the base. When vehicles are parked on the pavement in narrow residential, streets, I sometimes don’t know they are there till my leg hits the bumper, due to the fact that the tip of the traditional cane can sweep underneath without hitting anything. The UltraCane picks up the presence of the vehicle so I generally have more confidence when I’m out and about. Personally this is a huge boost. If you are injured you become a stressed out person to some degree so having something else to hand that makes getting around less stressful is great.”

Queues

“The UltraCane is really handy when I need to find the end of a queue and it also helps me to know when a queue moves forward. In a carpeted bank, for example, the sound is deadened so I can’t pick up the auditory clues that would tell me when people are moving. With a long cane you usually find where the queue starts because you have hit someone else’s ankles. The UltraCane gives me a signal before I hit another person. If I put it on the 2 metre setting I know when it stops buzzing that the queue is moving forward. You can’t rely on other people in these situations and having an UltraCane means I don’t have to ask and hope they will help. Any aid which makes the public treat me as an independent, capable person is a good thing, in my view.”
Less of a danger to others

“Good mobility means you don’t hurt other people – it’s not just about keeping yourself safe. If you accidentally bump into another person, especially if they are elderly, you can send them flying. If people are in your path and don’t or can’t move, they tend to get hit or clipped so you find you are constantly saying sorry to people. All this is much reduced with the UltraCane.

“I generally use the 4 metre setting when I’m out and about as it gives you adequate time to adjust. The 2 metre setting is good indoors. It is great to have some idea of the layout ahead, as the UltraCane is in effect looking ahead for you. You can adjust your speed when the sweep lets you know that nothing is ahead. You don’t expect to be able to do that with an ordinary stick. The UltraCane gives me the ultimate confidence to walk briskly, which is brilliant.

“Another benefit I have noticed is that a much narrower sweep is required so I generally expend much less energy walking along and with a narrower sweep I have much less chance of clipping the ankles of other people.

“One of the really important things for a blind person is the ability to hear traffic and other people. In a noisy environment, and when it is windy, the ability to hear and locate yourself is affected. Being able to use the UltraCane for navigation compensates in the situations when the audio clues you would normally rely on to navigate are reduced.”

Shorelining

“Using a long cane there are two ways to locate a wall to your side and where the wall ends. You can tap along the sides of the wall or you can listen to the acoustics. When tapping, the sound changes at the end of a wall and blind people need to focus on these differences but in a noisy environment you may find you have neither sight, nor hearing. The Ultracane is particularly useful in this situation. By turning your wrist slightly from right to left every so often, the frequency of vibrations will tell you how far away you are from the wall and when it ends, without having to make contact with it.

“In my case I use an Android phone with a GPS Sat Nav app and a bluetooth earpiece. I therefore have a reduced ability to hear other things whilst a voice is giving me directions. The UltraCane compensates for this as it is giving me added feedback in a different way and therefore makes the use of GPS safer and more comfortable.”

Do’s and Don’ts

“You cannot be a sloppy long cane user with an UltraCane. Mobility training teaches you that your wrist must be in line with your sternum and you must hold the UltraCane with that in mind. It is not designed to be held at the side of the body. This technology works but it must be used correctly. If something is in range in front of you the cane will buzz. But if you
are walking with the handle in line with your shoulder, you are not holding it the right way for it to detect obstacles directly in your path and therefore you could be putting yourself in danger, if you are relying on the lack of buzzing from the UltraCane.

“Let the lack of buzzing be a warning. There is a temptation to charge ahead when there is no buzzing but bear in mind you could be walking very quickly - into the road. So the reaction to no buzzing should be awareness rather than speed and you should still rely on long cane techniques. When you learn with a long cane or a guide dog you are told to never to respond to a car horn as you could be misinterpreting the signal as a sign of safety to cross. In the same way mobility trainers should explain to users how to correctly interpret signals from the UltraCane to ensure they remain safe at all times whilst still getting the most from this fantastic mobility aid.”

Paul Warner

- by email (paul@vict-consultancy.co.uk)
- by Skype (Skype nickname: Plex29)
- by telephone (+44 (0)141 416 2132)