The last issue of 'Spinal News' featured an article about accessing a smartphone using a switch or a joystick. This article is a follow-up article introducing another way to access a smartphone that includes the possibility of controlling some household electronic devices.

A recap - smartphones apps and android
A smartphone is a mobile phone with the advanced capabilities of a computer and an app is a small computer program that performs a specific function on your smartphone. Android is an open source operating system used by many makes of smartphone and tablet including Samsung, Motorola, Sony Ericson, LG and HTC making all these devices suitable for the same apps. Android apps are downloaded from the Android Market. Although an iPhone is also a smartphone the apps and devices discussed in this article and last month’s article do not apply to Apple products.

How does one access a smartphone?
Although smartphone access generally requires the touch of a finger. It is now possible to access a smart phone using a switch via Bluetooth. This requires two things 1) a suitable android app such as the Tecla (see last month’s issue) or the ClickToPhone and 2) a Bluetooth switch adapter. A Bluetooth switch adapter communicates with the smartphone via Bluetooth and has an input socket for a switch. It is possible to use any switch such as a chin switch, a sip and puff switch or a buddy button.

What is ClickToPhone?
ClickToPhone for android is an Irish product that simplifies smart phone access for a switch user. Instead of the standard phone display that may be confusing for some, the ClickToPhone replaces the phone display with simple switch-accessible icons. The display can be personalised from a basic display to a complex display.

The beginner level is the simplest model, with phone access only that allows call answering, scanning through contacts and dialing known contacts. The intermediate level allows text messaging through a predictive scanning keyboard as well as dialing new telephone numbers. You can also add new contacts. The advanced level includes short cuts to your music, your pictures and a clock. This means that you can control the music played on your phone using a switch through a scanning keyboard and browse your pictures. If you want access to other apps on your phone the expert level incudes a short cut to your apps allowing you to scan through all of these and then create shortcuts to your selected apps.

How to use ClickToPhone app
Using the ClickToPhone for android app requires downloading the app from the manufacturer at http://www.click2go.ie/resources/manuals/clicktophone-android-app/. It will be available from the android marketplace in the near future. Using a switch requires one of two Bluetooth switch adapters called the ClickToPhone or the Housemate. These adapters connect to the phone via Bluetooth and have a switch socket for any switch.

Once the app is downloaded onto your phone, you select the ClickToPhone as an input instead of a standard touch screen keyboard and the app appears on your phone. You then scan through the icons as the individual buttons are highlighted one at a time, using your switch connected to the phone via the Bluetooth adapter. How you use the ClickToPhone depends on how you customise it.

The ClickToPhone Hardware
The Bluetooth switch adapter designed for the ClickToPhone app is also called the ClickToPhone. This device connects to any android smart phone via Bluetooth. The ClickToPhone enables switch scanning of the app. It is also possible to use a joystick (such as the chin control of a wheelchair) with the ClickToPhone hardware.

1The HouseMate currently is only switch accessible but a joystick accessible version will be available in 2012.
The Housemate Hardware
The HouseMate hardware is similar to the ClickToPhone hardware but also has the ability to learn and transmit infrared signals\(^1\). This means that if you purchase the HouseMate hardware you can access your phone using a switch to navigate between ClickToPhone icons. In addition, you can customise your own environmental control grids within the ClickToPhone app and programme these to control your television, sky box or any other devices that are controlled using infrared. This means that you can have an environmental control system that is based on your phone. If you need to replace your phone, the app and the HouseMate hardware can be used on the new phone as long as it is an android phone (not iPhone).

**Customisations**
As mentioned earlier, you choose how simple or complex you want your phone display to be. This choice then defines what you have access to, so if you choose the basic display you will not be able to look at your Facebook page. If you choose the expert level, you can access all your chosen apps and the traditional phone functions. The speed and type of scanning can of course be made faster or slower depending on an individual’s preference and efficiency.

**Does the ClickToPhone work with an iPhone?**
No, the iPhone is not an android.

**Who will install and maintain this?**
The ClickToPhone app is intended to be user friendly. Users should be able to adjust the settings themselves but may seek advice from other users, occupational therapists or assistive technology experts on how to best customise their own phone. Competent users will be able to install and set up the software including HouseMate functions. Customisation includes designing environmental control grids, teaching the HouseMate hardware the relevant infrared codes.

**What does this all mean?**
This means that you can purchase any one of several smart phones, the HouseMate hardware and a suitable switch and then install the app on your phone. Alternatively, the system can be supplied complete with the software installed on a SIM-free Android smartphone. This means that you can have a phone based environmental control system in addition to access to your phone using a switch.

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