

# 4talk4 / Scan4 User Manual



The 4talk4 is a robust multi-level speech output device. It has been specifically designed for use in a classroom environment where its clear speech and adjustable output volume, allows pupils to participate in classroom activities.

## Installation

The 4talk4 has been designed as a desk-top unit. The slope of the user accessed front face has been optimised for easy use and the device can simply be placed on a desk or wheelchair tray, or fixed in place using the M4 captive nuts provided in the base. Two M4 screws sufficiently long to go through the desk or tray need to be acquired.

Before the 4talk4 can be used, batteries must be fitted (4 x 'C' cells). See Battery Fitting Instructions.

### Battery Fitting Instructions

To fit the batteries (4 x 'C' cells 1.5v DC), unscrew and remove the battery cover, which is on the rear of the unit. Insert the batteries ensuring they are the correct way round, with the +ve terminal in the position as shown on the battery cover. Re fit the battery cover and tighten the screws. (Do not use Lithium Batteries). (Dispose of batteries as defined by the battery manufacturer).

## Operating Instructions

The following diagrams show the front and rear of the unit and should be used as a reference aid in conjunction with the following instructions.

### 1 On/Off

Press once to turn on and press again to turn off. The unit will automatically power down after one hour, if not used. This feature is designed to conserve battery power and if power down should occur, restart the unit by pressing the ON button.

### 2 Volume +

This switch increases the volume of the replayed message. Press the button and hold. An audible prompt 'Volume up' will be heard and this prompt will get louder. When the desired volume has been reached, release the switch.

### 3 Volume -

This switch decreases the volume of the replayed message. Press the button and hold. An audible prompt 'Volume down' will be heard and this prompt will get quieter. When the desired volume has been reached release the switch.

### 4 Toy On/Off

Battery operated toys can be used with this product, by connecting them to the jack sockets as shown in fig 2. The toy must be modified by using a battery adaptor, which permits connection via a 3.5mm jack plug. These adaptors are sold by most special needs distributors, or can be supplied by Traxsys Input Products.

Sliding the TOY ON/OFF slide switch to the left or right, will select or deselect 'toy operation' mode. When 'toy operation' mode is selected, a toy will operate as and when the large switch (to which the toy is connected) is pressed. Toy operation will continue for the duration of the corresponding recorded message. When not in use, it is recommended that the TOY ON/OFF switch should be in the OFF position, to conserve battery power.

### 5 Level

Selection of these levels for recording and of course replaying, is made by pressing and holding the LEVEL switch (each level has 4 message areas). On pressing this switch, an audible prompt saying 'Level 1', 'Level 2' etc. will be heard and when the required level is reached, the switch should be released. There are 4 levels, 'Level 1' will be selected after 'level 4'.

### 6 Record

In order to record voice messages onto the unit, for playback later by the user, the record button must be held down in combination with the appropriate large coloured switch (a 'record now' prompt will be heard). The person recording the message should then speak into the microphone, making sure they are no further than two feet (0.6 metres) from the microphone. When recording is complete, release the record switch. Loud background noises should be avoided, as these will affect the quality of the recording. Four messages can be recorded on each level, one for each switch. The 4Talk4 allows for up to four levels to be used (sixteen messages in total).

### 7 Playback of Recorded Messages

To playback the recorded messages, the user need only press the appropriate large coloured switch on the front panel. These switches have tactile feedback and need only be operated with light hand or finger pressure. One press and release will allow the full message for that switch to be played. The switch does not need to be held down all the time.

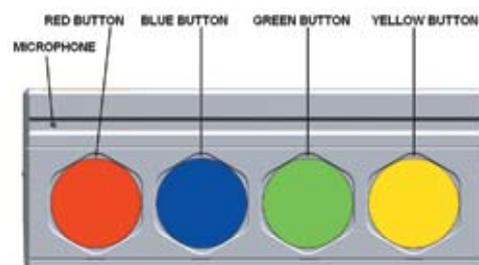


Figure 1

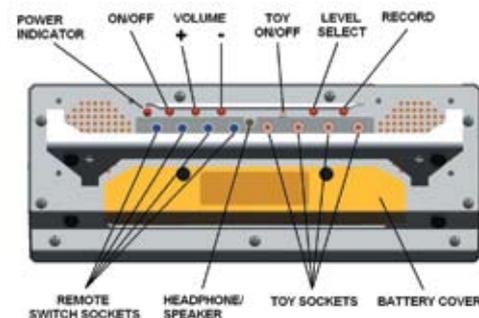


Figure 2

## Other features:

### Remote Switch Sockets:

Some users may have difficulty accessing the four large coloured switches. Four jack sockets are provided to allow the use of any remote switch fitted with a 3.5mm jack plug (such as the Traxsys Joggle Switch). This feature allows any switch user access to the 4Talk4. These remote switches will provide the same function as the switches on the front panel. i.e. voice playback and toy control.

### Switch Overlays:

Switch overlays of pictures or words, representing the recorded messages, can be inserted into the four pocket clear plastic wallet supplied with the unit. This is inserted behind the easily removable switch finger guard. Extra wallets and storage folders are available from your 4talk4 distributor or Traxsys Input Products.

### Headphone/Speaker:

Headphones or a remote speaker can be attached to the 4Talk4 by means of the jack socket on the rear panel.



Scan4 is an early communication device to introduce and practise switching. Though excellent for all switch users, it has been designed to help people that have the ability to operate remote switches, such as puff and blow or grasp switches. Visually impaired users will also benefit greatly from the auditory feedback given. Based on the highly successful '4talk4', Scan4 allows switch users to choose from up to sixteen different spoken messages. It can be used in three different modes, called Auto Scan, Step Scan and Dwell Scan.

Scan4 is designed for use in classrooms and other educational settings where clear speech and adjustable volume allows students greater participation. Importantly, the 4talk4 and Scan4 retain their clear speech at high volumes, so that their users can be heard above other noise.

This instruction manual will guide you through setting up your Scan4 and how to change between the different modes. At the end you will find a list of products that you may like to consider for use with your Scan4 such as switches, battery adapters, toys and environmental controls.

## Installation

### Positioning

Place your Scan4 on a desktop or other flat surface within easy reach of the user. Remember that each pad needs to be clearly seen and each recorded message heard. The front of the Scan4 is deliberately sloped for ease of use when pressing each pad. You can also attach other switches according to the preference and mobility of the switch user. If you are setting up switches for the first time with a new user then it is a good idea to speak to their occupational therapist to avoid muscle strain.

### Batteries

Four batteries are included with your Scan4. They are 'C' 1.5v DC type. Only use this type of batteries with your Scan4 – do not use lithium batteries.

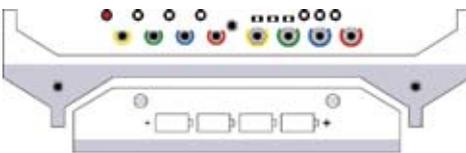


Diagram 1 – fitting batteries

First, unscrew and remove the battery cover on the back of the Scan4. Put in all four batteries ensuring that they are the same way round. When fitted correctly they should match the picture on the battery cover (see diagram 1). Always dispose of used batteries carefully, as directed by the battery manufacturer.

### Fixing

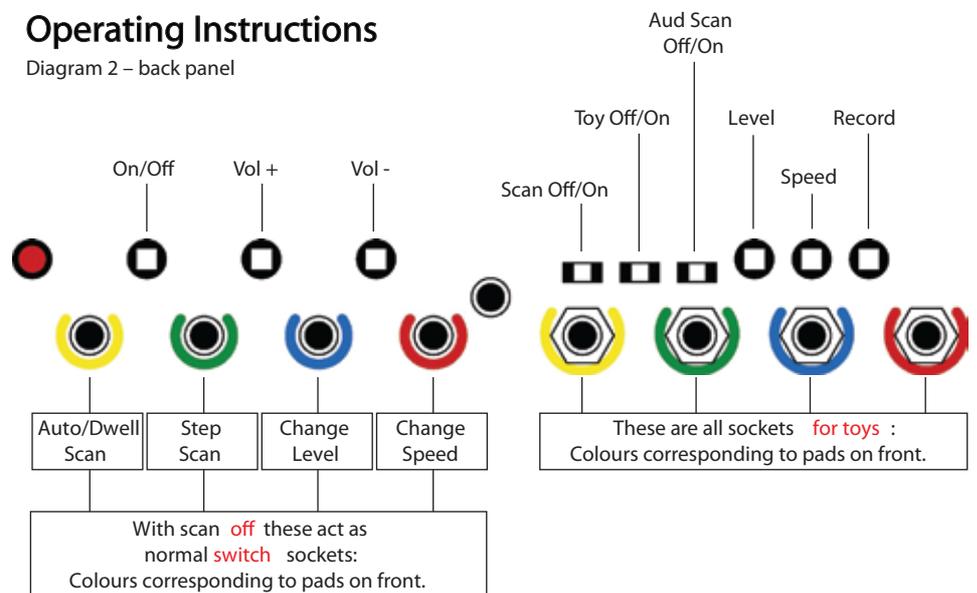
After you have fitted the batteries, you may also like to fix the Scan4 in place using the nuts in the base. For this you will also need to acquire four long screws. Both the nuts and screws used are 'M4' types.



Scan4

## Operating Instructions

Diagram 2 – back panel



First you need to turn on your Scan4. Press the ON/OFF button on the far left hand side as indicated in diagram 2. Press once to turn on, and once again to turn off. When the Scan4 is on, the red light next to it will flash. If you forget to turn off your Scan4, it will stay on for four hours and then turn itself off to conserve battery power.

### Volume

Working your way across the top row of buttons from the ON/OFF button, the next two control VOLUME. Press the 'VOLUME +' button and hold it down. You will hear a voice say "volume up" repeatedly, growing louder until you let go of the button.

To decrease the volume, move to the 'VOLUME -' button (as indicated in Diagram 2) and again, hold it down. A voice will repeat "volume down" until you reach the required level. Then release the button.

### Talking

Your Scan4 works in two different ways. If the 'scan' function is turned off, then you will only hear recorded messages when one of the coloured pads (or a switch connected to the Scan4) is pressed. If the 'scan' function is on, there are other ways of activating

each message. For reinforcement, the LED above the pad will light up to show which pad was pressed. If you are not already familiar with the 4talk4 and speech output, then set the Scan Mode switch to OFF and read through the next few sections first. If you are confident with the Recording, Level, and Toys settings then skip these sections and go directly to Scanning.

### Recording

You can have four levels within the Scan4. These might increase in difficulty, or could just be about different topics. At each level, four different messages can be recorded – one for each coloured pad. Choose a quiet area in which to do your recording as loud background noises will affect the quality of your recording. Each message can be of up to 12 seconds in length.

Diagram 2 shows you where to find the RECORD button on the back of your Scan4. The MICROPHONE is located on the front (top left). You will be recording on to Level 1 by default. Hold down the record button with one hand and press down the corresponding coloured pad with the other. Wait for a voice to say, "Record now" and then speak into the microphone clearly from no more than half a meter away. When you have finished speaking release the RECORD switch.

To playback each message just touch the coloured pads on the front of your Scan4. They require only a very light touch and do not have to be held down – just press once and release. When a pad is selected, the light above it turns on to help the user see which pad they have chosen. Once you have recorded all four messages on Level 1, you may want to change to a different level and record more.

### Level

To change the level simply locate the LEVEL switch (in Diagram 2) and hold it down. A voice prompt will say "Level 1", then "Level 2" and so on up to "Level 4". When you are at the level you require, then release. If you accidentally go past the level you want, just keep the button held down and you will hear the choice again.

### Toys

Controlling toys (or other more age appropriate devices such as fans) can be a really motivating way of introducing people to switches. Battery operated toys can be used with your Scan4. When a Scan4 user selects one of the coloured pads (by pressing the pad or their switch) the toy connected to that same coloured socket on the back will be activated. To use toys you need a battery adapter in order to connect them to the Scan4.

Toys can be activated for short or longer periods of time depending on the length of the recorded message. For example, a message that takes five seconds to record, will playback whilst operating the toy for the same length of time. You might want to record a shorter spoken message and leave a few seconds of silent message before releasing the RECORD button to activate the toy for longer.

When you are not using toys, remember to turn the TOY switch to OFF to help conserve battery power.

### Scanning

With the Scan mode switch turned ON (shown in diagram 2), you choose from Auto Scan, Step Scan or Dwell Scan .

**Auto-Scan** - is when the scanning automatically moves across the coloured pads from left to right at a speed designated by you. A light above each pad turns on to show which pad is currently active. When a switch user presses their switch, the Scan4 will playback the message recorded to the pad that is currently lit.

For auto scan mode, plug your single switch into the GREEN switch socket (see diagram 3).

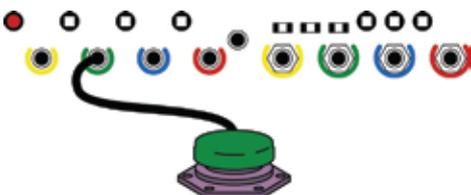


Diagram 3 – single switch settings – auto scanning

**Step-Scan** – gives greater control for the switch user. It requires two switches so should only be introduced to learners who have the ability to operate more than one switch. Plug one of your switches into the GREEN switch socket and the other into the YELLOW switch socket.

To move the light on to the next coloured pad, the switch user must press the switch connected to the YELLOW switch socket. When they have reached the desired message, press the switch connected to the GREEN switch socket and the message will playback. See diagram 4 below.

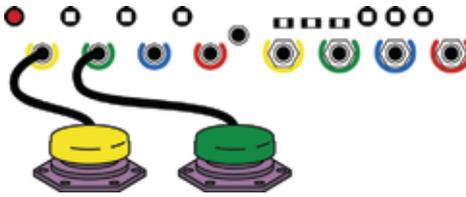


Diagram 4 – two switch settings – step scanning

**Dwell Scan** – allows single switch users to move at their own speed across the coloured pads, then to select their choice by simply waiting. This can be a much faster way of accessing a chosen message than waiting for the automatic scanning to scan across. Alternatively, a switch user may have difficulty pressing the switch in a given time frame so can select their choice at their own pace, then 'dwell' to hear playback.

For dwell scan mode, plug your single switch into the YELLOW switch socket (see diagram 5).



Diagram 5 – single switch settings – dwell scanning

### Speed

Your Scan4 allows you to alter the rate at which the coloured pads are scanned – i.e. how quickly the light moves from one pad to the next. To change this rate, find the SPEED button as shown in diagram 3 and press it once. You will see that each press will slow down the scan rate by watching the lights above the pads on the front. There are four scan speeds. The fastest is 1.5 second gaps to 2.6 seconds, 4.4 seconds and the slowest speed is 7.6 seconds. If you accidentally go past the speed you want, just press the button again and you will return to the fastest speed.

### Auditory Scanning

An important part of your Scan4 is the facility to use auditory prompts, as well as the light above each coloured pad, to indicate the message being spoken. This enables the visually impaired to use Scan4 to introduce to early scanning techniques, as well as those who may have difficulty interpreting symbols and other graphics on each pad.

To use this function make sure that your Scan mode switch is set to ON. Think of one or two words to describe each graphic. Each prompt can be up to 2 seconds in length. Repeat the steps for the Recording section of this manual by holding down the RECORD button and pressing the appropriate coloured pad simultaneously. In addition, to record auditory prompts, you must wait for the scan light

to reach the appropriate coloured pad. For example, if you want to record an auditory prompt to the red pad, wait for the light above to be illuminated, then press record and speak when prompted. As with the playback messages, you just need to release the button to finish recording.

To hear what you have recorded as auditory prompts, make sure that BOTH the SCAN and AUDIBLE SCAN switches are set to ON (shown in Diagram 2). You will hear what you have recorded at the same time as the light above each pad is illuminated.

## Products that can be used with your Scan4:

### Toys and other battery operated devices

Anything with an on/off switch can be converted for switch use and can make the communication process easier and more engaging. Battery adaptors are supplied separately from Inclusive Technology.

### Switches

Traxsys Input Products and Inclusive Technology supply different coloured switches in a range of sizes. If you already have your own switches then these will also work with your Scan4.

### Graphics

As well as using your own images, drawings, symbols and tactile objects, Inclusive Technology supply thousands of graphics on CD. Collections include Disability Clip Art and Picture this Pro. To store your graphics ready for use, 4 Pic 4 is a useful folder with custom made wallets to slot straight into the Scan4.

## Contact information:

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# Maintenance

## THESE PRODUCTS CONTAIN NO SERVICEABLE PARTS

The unit is battery powered therefore at intervals these will need replacing. If repair is required, the unit should be returned to Traxsys Input Products or Inclusive Technology or their authorised representatives.

### The following will invalidate the CE mark:

- Unauthorised repair or modification
- Operation outside of office or classroom 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 unit whilst damaged.
- In order to meet the requirements of EN60950 (safety of IT equipment) this unit must be fitted with correct battery type in the correct orientation.
- THESE PRODUCTS MUST NOT BE CONNECTED TO A MAINS POWER SUPPLY.

### The following may damage the unit:

- Direct or indirect lightning strikes or nuclear electromagnetic pulse to the system or to any equipment to which it is connected whether operating or not.
- Subjecting the unit to ionising radiation greatly exceeding the normal background level.
- The application of mains electrical power or low voltage mains plug in module.
- Also ESD to any part of the system.
- Immersion in water or any aqueous solution.
- Application of any chemical or solvent, which may degrade ABS 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 unit, causing it to impact heavy objects or the use of excessive force during operation.

### Note :

This 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.

This 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 this 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:

- Reorientation 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

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