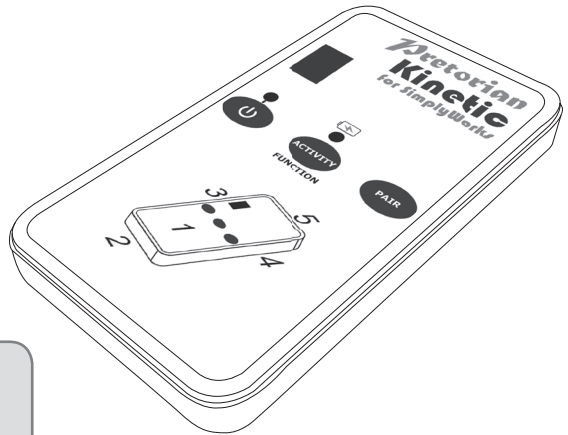


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Pretorian
TECHNOLOGIES LTD.

INSTRUCTIONS

Kinetic for SimplyWorks®



Pack Contents

Carefully check the contents of the box, which are:

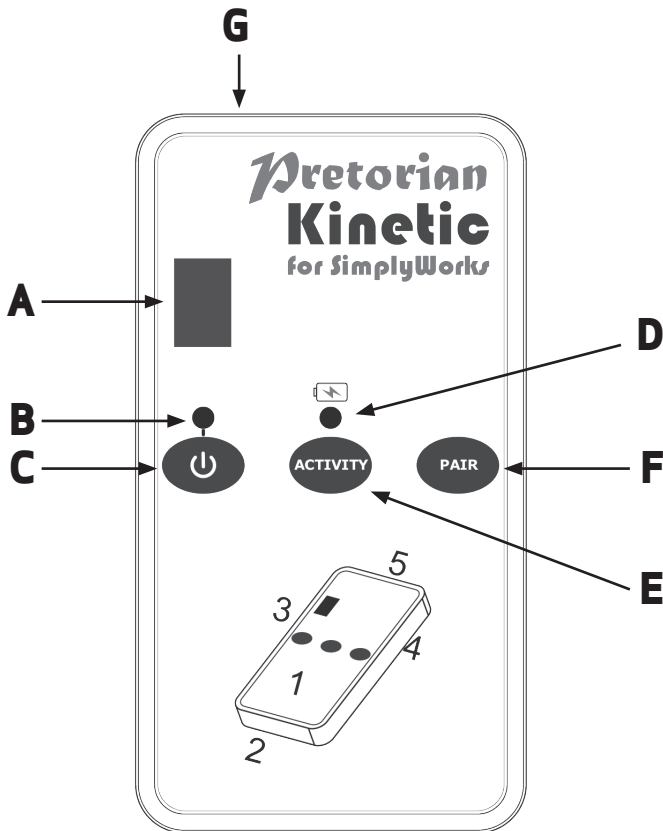
Kinetic for SimplyWorks® unit
USB charging cable
These instructions

Product Description

KINETIC for SimplyWorks® is a fun kinesthetic learning aid which will engage users of all ages and abilities. It is able to determine its orientation in free space and also detect being tapped or tilted, allowing many kinesthetic learning activities to be devised. For example, the unit may be placed inside a soft play cube (separately available) to allow different outcomes as the user turns it from face to face. It may also operate as a

soft switch (soft outer shell also available separately), ideal for switches in sensory rooms. When **KINETIC** is placed inside a waterproof box it may be used as a floating switch, using its tilt feature to detect a significant movement away from its normal floating position. **KINETIC** is simple to set up and loaded with features but to ensure you get the best experience from it, please take time to read this instruction booklet.

- Many built-in activities- makes KINETIC highly versatile.
- Dice, Dice-as-a-Switch, Find Me and Find-Me-Sequence activities for soft play cube.
- Tap activity for use as a soft switch.
- Tilt activity for use as a floating switch.
- Pairs with any SimplyWorks® receiver.
- 10m (32') operating range.
- Integral lithium-ion rechargeable battery.
- Charged from any USB socket.



Compatibility

KINETIC is compatible with any SimplyWorks[®] receiver unit, whether for computer access or for controlling toys, games or mains powered equipment.

Charging your KINETIC

Ensure that the internal battery is fully charged by plugging the charging cable into the USB mini socket [G] and then into any USB port, for example on a PC, Mac or a wall charging unit. The charging LED [D] will illuminate green to show that charging is taking place. Once charged, the charging light is extinguished.

If the charge in the battery begins to run low the charging LED [D] will begin to flash red. This is an indication that it should be charged soon.

Turning the unit on and off

Press the on/off button [C] briefly to turn the unit on. The power LED [B] lights. To turn it off again, press and hold the on/off button until the power LED is extinguished. Note that the unit automatically powers down to conserve battery life after one hour of non-use. Press the power button briefly to awaken it.

Choosing an Activity

Before you can begin using KINETIC, you need to choose an Activity. There are seven Activities in all, and they can be categorised as follows:

Number	Activity	Category
1	Dice	Soft Play Cube
2	Dice-as-a-Switch	Soft Play Cube
3	Find-Me	Soft Play Cube
4	Find-Me-Sequence	Soft Play Cube
5	Tilt	Soft Play Cube or Floating Switch
6	Tap/ Catch	Soft Switch for computer or toy/appliance control
7	Tile	Toy/ Appliance control

With the LED display [A] off, press the Activity/Function button [E] briefly and the display will show the current Activity. To change it, press the Activity/Function button repeatedly until you see the required setting on the LED display. A table of settings is also provided on the rear of KINETIC. The display is extinguished approximately four seconds after the last press of the Activity button and the setting is saved.

Although the LED display will remain off in normal use to conserve battery power, it should be noted that the decimal point blinks whenever the unit is triggered. This is useful when first setting up the unit.

Note that all settings are preserved in memory even if the battery is completely flattened.

The following is a summary of how each Activity operates. Each has at least one link to a video which demonstrates that particular Activity.

Activity 1 Dice

Each time the soft play cube into which KINETIC is inserted is turned to a new face, it sends data to the receiving device to indicate which face is now uppermost. The receiving device will usually be a Smooth Talker and it can then play an appropriate message to correspond with a picture, colour, texture or writing on that particular face of the cube. By way of example, faces 1-6 could have pictures of farmyard animals inserted and messages 1-6 could play corresponding animal sounds. Or attach six different textures to the cube faces and have a message to describe each. Or simply attach dots and use it as a speaking dice!

[QR1 on printed version- link on web version]

Activity 2 Dice-as-a-Switch

Each time the soft play cube into which KINETIC is inserted is turned to a new face, it sends a switch activation to the receiving device, just as if a normal accessible switch had been pressed. If the receiving device is a SimplyWorks® Receive plugged into a PC or Mac, it can be made to scan or select an item. The exact function being sent to the computer is defined by the Function setting- see later. If the receiver is a SimplyWorks® Control or Energise on the other hand, it may be used to control a toy or mains appliance respectively.

[QR2 on printed version- link on web version]

Activity 3 Find-Me

KINETIC triggers only when face number 1 of the soft play cube is turned uppermost- the other five faces having no effect. This enables the device to be used as a 'find-me' game. For example, insert differently coloured cards into the pockets on each face of the soft play cube and then ask the user to find the colour blue, which has been deliberately inserted into the pocket on face number 1. If the user turns up any other face, nothing occurs and they are asked to try again. Only when face number 1 is turned uppermost does KINETIC trigger. If the receiving device is a SimplyWorks® Receive, it can make something happen on a computer- for example selecting an item in some software. If it is a Smooth Talker it can play a message and if it's a Control or Energise it can turn on a toy or appliance. Generally speaking, the outcome will be some kind of reward or reinforcement.

[QR3 on printed version- link on web version]

Activity 4 Find-Me-Sequence

This activity builds on the Find-Me activity and can be a progressive step for users who have mastered Find-Me. Find-Me-Sequence triggers when face number 1 is turned uppermost and then when face 2, 3, 4, 5 and 6 are turned up one by one in turn, such that the user must find the items in the correct sequence. Turning up any face which is out of sequence will not result in any output.

The teacher/therapist/carer prepares a list of the items depicted on each of the six sides in the correct order 1-6 and then asks for them in turn. Each time the user turns up the correct face, they get a reward or reinforcement from the receiving device. Note that the sequence can be set back to 1 at any time by pressing the Activity/Function button briefly. [QR4 on printed version- link on web version]

Activity 5 Tilt

This Activity can find application in many ways. An output is triggered whenever KINETIC is tilted off its normal position by an angle of more than 30°. Once triggered, it will not output data again for at least one second to prevent multiple triggers occurring. It is important that KINETIC is placed with face 1 uppermost (the face which has the buttons and display). If placed inside the soft play cube the unit will detect the cube being tilted without the need for it to be turned to a new face (unlike Dice-as-a-Switch Activity). This can be beneficial for users who do not have the motor skills or strength to easily turn a cube onto a new face. Alternatively, if KINETIC is placed inside a waterproof box* and allowed to float in a body of water such as a hydrotherapy pool, it may be used as a switch if it is tapped or struck.

[QR5 on printed version- link on web version]

Activity 6 Tap/Catch

This Activity allows KINETIC to be used as a switch simply by tapping it. If the unit is placed in a cushion or the (separately available) soft switch shell, simply tapping its surface is sufficient to trigger it. Alternatively, for higher motor skill users, it can be used to detect a catch or the cushion striking a hard surface*. If the receiving device is a SimplyWorks® Receive, the tap/catch it can make something happen on a computer- for example selecting an item in some software. If it is a Smooth Talker it can play a message and if it's a Control or Energise it can turn on a toy or appliance. Once triggered, it will not output data again for at least one second to prevent multiple triggers occurring.

[QR6 on printed version- link on web version]

Activity 7 Tile

This Activity allows KINETIC to be used to turn a toy or appliance to a definite state- on or off- rather than an on/off toggle. If placed in the soft switch shell and a picture of an extinguished lamp is placed on face 1 and a lit lamp on the opposite face, then when paired with SimplyWorks® Control or Energise, the state of the lamp (or whatever appliance may be plugged in) can be set simply by turning the soft switch over. Ideal for sensory rooms to provide a very safe way to turn mains appliances on and off but equally useful for environmental controls of all kinds.

[QR7 on printed version- link on web version]

** KINETIC is not a waterproof product. If using it on or near water, you are responsible for placing it in an outer, waterproof enclosure. Water damage is excluded from the product warranty. Placing the unit in a grip-seal polythene bag and then in a high quality waterproof food container with a runner seal between base and lid is recommended, although it is advisable to test this configuration for water ingress before placing the product in it.*

**KINETIC is not a shock resistant product. It is essential that it is placed in an adequately padded shell to protect it from damage due to it being stuck or it striking a surface.*

Setting the Function

The device's Function setting defines the character or event that is sent to the receiving device when triggered. To view the current Function setting, press and hold the Activity/Function button [E] until the LED display [A] illuminates. The current Function setting is now shown on the display. Note that the display blinks when setting the Function to help differentiate it from setting the Activity. Refer to the table below for a full list of available Function settings.

To change the Function, press Activity/Function repeatedly until the required setting is shown on the display. A table of settings is also provided on the rear of KINETIC. The display is extinguished approximately four seconds after the last press of the Activity button and the setting is saved.

There are different considerations for the Function settings depending on the Activity and the receiving SimplyWorks® device you are using. The following describes these considerations:

Dice

In Dice Activity, KINETIC can output a special data format which tells Smooth Talker which message to play. Alternatively it can output numbers 1-6 or gamepad buttons 1-6 to correspond to faces 1-6 (these are provided to allow third-party software providers to provide an interface with KINETIC). If you are using Dice Activity with Smooth Talker (which is the normal configuration), the Function setting must be between 7 and G to instruct the unit to send the special data format. Only if using with third party software via Receive or Receive Micro should the setting be 6 or less for numeric outputs or H and above for gamepad outputs. The default setting (A= Space) is ideal for use with Smooth Talker. Please refer to the column marked 'Dice Activity' for more details.

Dice-as-a-Switch, Find-Me, Find-Me-Sequence, Tilt, Tap

If the unit is paired with a SimplyWorks® Receive for PC or Mac use or Receive Micro for Android use, the exact Function setting depends on the software you will be using it with. Many software titles use Space and Enter to scan and select respectively, so if you wish to use the dice to select an item, choose Enter (Function A), for example. Refer to the user guide for the software you are using for further guidance.

If the unit is paired with a SimplyWorks® Smooth Talker, Control (which also encompasses related products such as Control Lite and Control Pro) or Energise, it does not matter what Function setting is used.

Note that Control and Energise must be set to either a Latched or Timed mode.

Tile Function uses a special string of data to ensure that the output of the device with which it is paired is definitively on or off (and not simply toggled to the opposing condition). It does not send the normal Function settings and the unit may therefore be set to any Function. **Please note that a Control Plus or Energise Plus is required for this Activity- see the label on the base of the product to confirm.**

Function Setting	Class	Function	Dice-as-a-Switch, Find-Me, Find-Me-Sequence, Tilt and Tap Activities	Dice Activity
0	Keyboard	Numeral 0	General purpose keyboard functions widely used for computer access.	Gives numeric outputs 1-6 to indicate faces 1-6. Use with third party software and Receive.
1	Keyboard	Numeral 1		
2	Keyboard	Numeral 2		
3	Keyboard	Numeral 3		
4	Keyboard	Numeral 4		
5	Keyboard	Numeral 5		
6	Keyboard	Numeral 6		
7	Mouse	Left Click	Mouse Functions are often used for selecting items in various software titles.	Special output suitable for Smooth Talker. Plays messages 1-6 when faces 1-6 turned uppermost.
8	Mouse	Right Click		
9	Mouse	Draglock		
A	Keyboard	Space	General purpose keyboard functions widely used for computer access	
B	Keyboard	Enter		
C	Keyboard	Tab		
D	Keyboard	Up Arrow		
E	Keyboard	Down Arrow		
F	Keyboard	Left Arrow		
G	Keyboard	Right Arrow		
H	Gamepad	Gamepad 1	Gamepad functions are used with various software titles including Inclusive Technology and Crick	Gives gamepad outputs 1-6 to indicate faces 1-6. Use with third party software and Receive.
J	Gamepad	Gamepad 2		
L	Gamepad	Gamepad 3		
N	Gamepad	Gamepad 4		
R	Gamepad	Gamepad 5		
T	Gamepad	Gamepad 6		

Pairing KINETIC with a SimplyWorks® receiver

Once you have chosen the required Activity and Function, the final task is to Pair the unit with its SimplyWorks® receiver. Whichever SimplyWorks® receiver you choose, the procedure is the same. Firstly power up the receiver and press its Pair button. The adjacent Pair LED will begin to flash. While it is flashing, press the Pair button [F] on KINETIC. The LED display on KINETIC [A] will display a rotating pattern to show that the unit is negotiating with the receiver. Once they are paired, the Pair LED on the receiver will light constantly for around five seconds and KINETIC will display 'P' on its LED display.

Placing KINETIC in a soft play shape.

To get the most from KINETIC, you will most likely place it in some sort of soft play shape. Pretorian Technologies provides a soft play cube and a soft switch shell as accessories for KINETIC although the product will work in any suitably adapted enclosure. The most important thing is to ensure that KINETIC's sides remain parallel with all flat sides of the outer enclosure, otherwise it will not be able to determine its orientation. If you are using Pretorian's soft play shapes there are recesses in the foam to accommodate the product and keep it parallel. If you are not using Pretorian accessories, we recommend you either produce a similar recess in the foam or provide some other means to keep it in position.

If using Dice, Find-Me or Find-Me-Sequence Activities, it is also vitally important to know the number of each face of the dice. On the front panel of KINETIC a picture of the product shows the face numbers of the first five sides, face number 6 being the back of the product (opposite side to the display and buttons). Note that as with a conventional dice, the sum of opposing sides is 7. When you insert KINETIC into the soft play shape, it is essential that you note the number of each outer face so that you know which pocket to insert each visual prompt into.

Battery Life and Battery Charging

A fully charged battery gives approximately 50 hours of use. When the battery is getting low, the charging LED [D] begins to blink red. This is an indication that you should charge the battery soon.

Plug the charging cable into the charging socket [G] and then into a USB socket on a computer or wall charger. The charging LED will be illuminated green. Once charging is complete (a matter of a few hours if fully discharged) the charging LED will be extinguished. You can then unplug the cable.

Should you mislay the charging cable, replacements can be purchased by asking your local electrical retailer for a camera connection lead. It has a USB type A plug at one end and a mini-USB plug at the other.

Note that KINETIC plugs into a computer USB port for charging purposes only and no functional connection is made between the two devices.

Maintenance

Your KINETIC has no user serviceable parts. Should repair become necessary the unit should be returned to Pretorian Technologies or an authorised distributor. KINETIC contains a lithium ion battery that isn't replaceable by the user. Although the unit uses the very latest battery technology, it may eventually need to be replaced. Please return the unit to Pretorian Technologies for such replacement.

Disposal of batteries is often subject to local laws. Please consult your local authorities for information relating to your locale. Never dispose of a battery in fire.

Troubleshooting

In your KINETIC doesn't operate correctly please use the following guide to determine the cause. If, after following this guide, your unit still does not operate as you expect, please contact your supplier or email Pretorian for support before returning it.

Symptom	Possible Cause/ Remedy
My KINETIC will not pair with my chosen receiver	<ul style="list-style-type: none">• Ensure battery is charged• Ensure unit is awake by pressing Power button• Move KINETIC and receiver within 1m (3') of each other
Nothing happens when my KINETIC is triggered in any mode.	<ul style="list-style-type: none">• Unit is not paired with receiver- follow procedure in Pairing section of this manual.
I am using KINETIC in Dice mode with Smooth Talker but the messages play in strict sequence.	<ul style="list-style-type: none">• Make sure the Function setting is between 7 and G (inclusive)
I am using KINETIC in Dice Activity but all the messages are in the wrong order.	<ul style="list-style-type: none">• The unit has not been inserted into the soft play cube in the correct orientation. Refer to the orientation guide on the front panel of KINETIC and ensure that the visual prompts correspond to each of the faces 1-6.
I am using KINETIC in Find-Me or Find-Me-Sequence Activity but the unit triggers on the wrong face.	<ul style="list-style-type: none">• The unit has not been inserted into the soft play cube in the correct orientation. Refer to the orientation guide on the front panel of KINETIC and ensure that the visual prompts correspond to each of the faces 1-6.
I am using KINETIC in Dice-as-a-Switch/ Tilt/ Tap Activity paired with a Control or Energise and the output is activated only briefly when KINETIC is triggered.	<ul style="list-style-type: none">• Control/Energise must be set to either Latched or Timed modes.
I am using KINETIC in Dice-as-a-Switch/ Tilt/ Tap Activity but nothing happens when the unit is triggered.	<ul style="list-style-type: none">• The Function is not set correctly for the task you wish the unit to carry out. Please refer to 'Setting the Function' for more details.
Sometimes my KINETIC isn't triggered when the soft play cube is turned onto a new face.	<ul style="list-style-type: none">• Ensure that the surface that the soft play cube rests upon is flat. If the cube remains tilted when resting on the surface, it may be unable to detect that its status has changed.
I'm using Tap Activity but sometimes the unit doesn't trigger when tapped.	<ul style="list-style-type: none">• Try to increase the mechanical 'coupling' between the tap source and the unit by reducing the amount of padding in the cushion or using stiffer padding.
I'm using Tile Activity but the output of the toy/appliance is the wrong way round.	<ul style="list-style-type: none">• The 'off' visual prompt should be placed on the face adjacent to the KINETIC keypad and display and the 'on' visual prompt on the face adjacent to the back of KINETIC

Warranty

Your KINETIC is warranted against defects in manufacture and component failure. The unit is designed for domestic and educational applications only. Use outside these areas will invalidate the warranty. Unauthorised repair or modification, mechanical abuse, immersion in any liquid or connection to incompatible equipment will also invalidate the warranty.



Pretorian
TECHNOLOGIES LTD.

Unit 37 Corringham Road Industrial Estate
Gainsborough Lincolnshire DN21 1QB UK
Tel +44 (0) 1427 678990 Fax +44 (0) 1427 678992