protective electrophoretic polymer coating

dilation at 500 mm: 9.9 femtoseconds / million years

power supply: Zn MnO2 primary cells

electronic component count: 49

250 million light years to Gallifrey

TWELFTH DOCTOR'S
SONIC
SCREWDRIVER
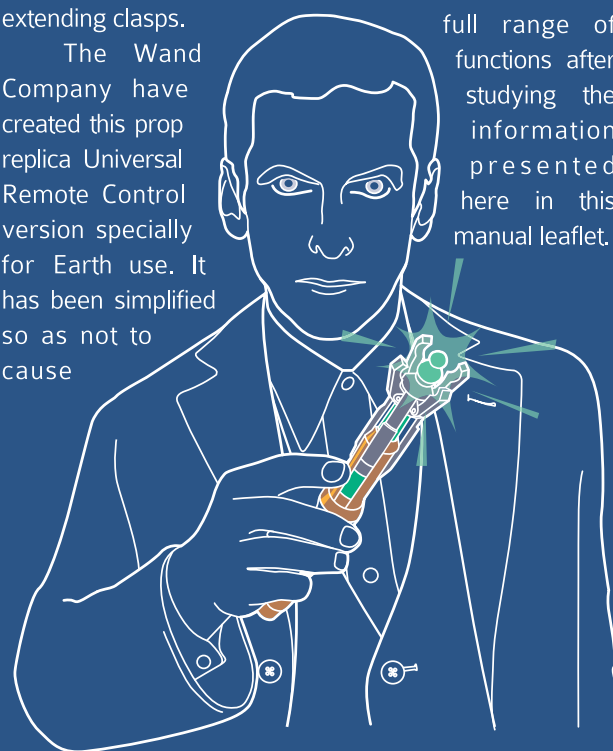# UNIVERSAL
REMOTE CONTROL

The Twelfth Doctor's Sonic Screwdriver was originally fabricated by the TARDIS for the Eleventh Doctor after the Tenth Doctor's screwdriver was completely destroyed. Apart from being bigger than the Tenth Doctor's one, it differs from the previous model in shape, power, its distinctive glowing green tip and extending clasps.

The Wand Company have created this prop replica Universal Remote Control version specially for Earth use. It has been simplified so as not to cause danger to human operators, while still being a very powerful and useful device capable of controlling almost all types of home entertainment equipment.

To avoid confusion and potentially chaotic usage, this model has had its psychic control interface disabled. However, humans will still be able to access its full range of functions after studying the information presented here in this manual leaflet.

TECHNICAL MANUAL &
INSTRUCTIONS FOR USE

PORTABLE, HAND HELD DEVICE FOR ULTIMATE CONTROL OF EARTH-BASED DOMESTIC EQUIPMENT - SPECIFICALLY TUNED FOR HUMANOID OPERATION
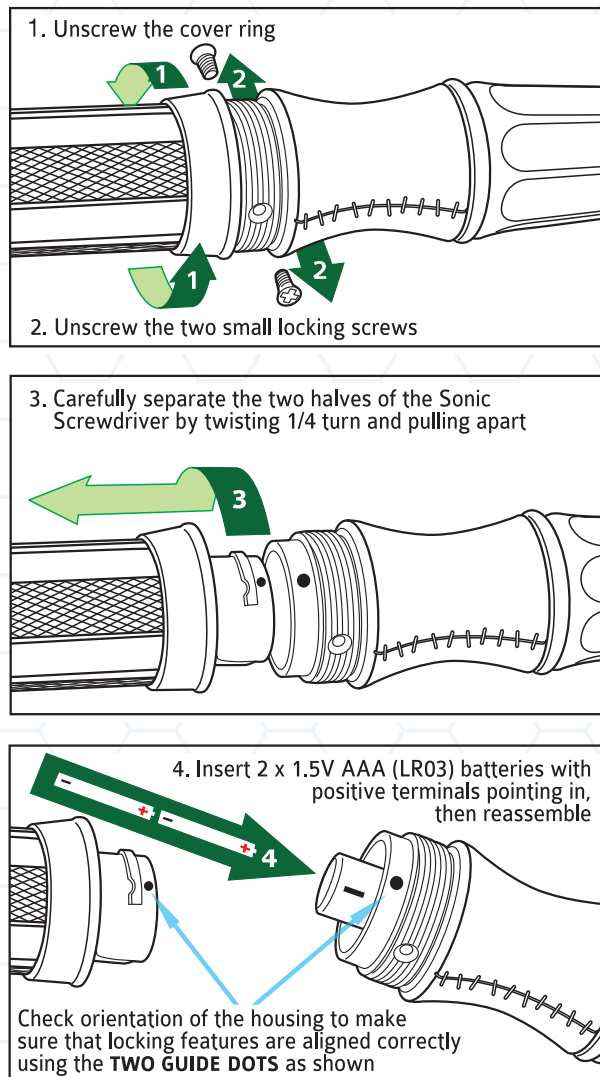
BBC

DOCTOR WHO

BBC

introduction

This Sonic Screwdriver universal remote control is not a toy: it is a device for remotely controlling home entertainment equipment such as TVs, DVD players, Blu-ray players and iPod docks, using infrared codes learned from conventional remote controls by the means of gestures rather than by pressing buttons. A total of 13 different gestures and three separate memory banks enable it to learn up to 39 remote control functions.

In FX Mode, the Sonic Screwdriver produces 12 different sonic buzzes, beeps and scanning sounds from the universe of Doctor Who, all at the press of a button, and has the power to instantly turn off almost any TV without any set up required.

This Sonic Screwdriver is not only a remote control, but is a reproduction of the Twelfth Doctor's Sonic Screwdriver, fabricated from die cast metal, acrylonitrile butadiene styrene (ABS) and soft-touch, leather-effect, thermoplastic polyurethane (TPU).

powering up and down

Before first use, insert batteries as shown here.

1. Unscrew the cover ring

2. Unscrew the two small locking screws

3. Carefully separate the two halves of the Sonic Screwdriver by twisting 1/4 turn and pulling apart

4. Insert 2 x 1.5V AAA (LR03) batteries with positive terminals pointing in, then reassemble

Check orientation of the housing to make sure that locking features are aligned correctly using the **TWO GUIDE DOTS** as shown

Use only good quality alkaline batteries. Do not use rechargeable batteries.

In any operation mode except FX Mode, press and hold the button (a long press) to power up or power down the Sonic; after 30 minutes of inactivity the Sonic will power down automatically.

operational modes

The Sonic Screwdriver has four operational modes. The user can cycle through each mode with a short press on the button: **Practice Mode**, short press ⇨ **Control Mode**, short press ⇨ **Quiet Control Mode**, short press ⇨ **FX Mode**, short press ⇨ back to Practice Mode again, etc.

Practice Mode – Before entering any other operational mode, the user must learn how to do the movement gestures correctly. In Practice Mode, each time a gesture is performed, the Sonic will say which gesture it thinks has been done.

If the Sonic misinterprets a gesture, hold the device steady for a few seconds then repeat the gesture taking care to use short, accurate, positive movements.

Control Mode – Each time a gesture is performed correctly, the Sonic will send the infrared (IR) remote control code that is programmed onto that gesture and will make the standard sonic buzz. If no IR code has been programmed onto that gesture, the Sonic will say "unassigned".

Extending the Sonic reduces its remote control performance in terms of both distance and control angle. For optimum remote control performance, please only use the Sonic as a remote control when retracted.

Quiet Control Mode – Each time a gesture is performed correctly, the Sonic will send the IR code programmed onto that gesture, make a quiet click and the tip will flash. If no IR code has been programmed onto the gesture, the Sonic tip will flash but it will remain silent.
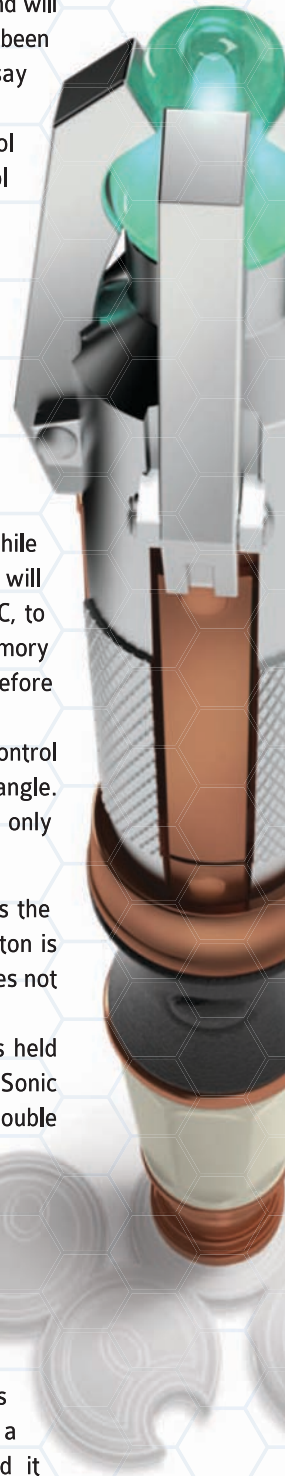
Pressing the button with three short presses while the Sonic is in Control Mode or Quiet Control Mode, will cycle between the three memory banks, A, B, and C, to allow access to codes stored on gestures in each memory bank. Each memory bank stores up to 13 codes. Therefore the Sonic can store up to 39 codes in total.

Extending the Sonic reduces its remote control performance in terms of both distance and control angle. For optimum remote control performance, please only use the Sonic as a remote control when retracted.

FX Mode – In FX Mode a long button press makes the Sonic buzz and lights the tip for as long as the button is pressed. Pressing the button and doing gestures does not send any IR codes.

A double-click press, where the second press is held down, allows the user to access a range of different Sonic sounds. As long as the button is held down after a double press, each time a gesture is performed correctly, the Sonic plays one of eleven more sonic screwdriver sound effects.

In FX Mode the Sonic Screwdriver does not power down automatically after 30 minutes, but after few seconds in its stand it starts to flash its tip briefly, about once every two seconds, indefinitely. After two minutes without any movement, the Sonic Screwdriver runs a quick diagnostic routine then the tip flashes and it

transmits a Morse code message to confirm that it is OK. For as long as it remains motionless, every 1963 flashes it transmits one of 12 different Morse code words and phrases that it has heard the doctor speak. Pressing the button with three short presses while in FX Mode switches to silent Morse code transmission; a further three short presses turns the Morse code sound on again.

To turn off almost any TV without the need to program the Sonic, point the Sonic at a TV then press the button three times and hold the third press. As long as you keep holding the button, the Sonic will buzz as it scans through a sequence of TV on-off IR codes, emitting each one to find the code that will turn off the TV. Each time it sends an IR code its tip will blink. Release the button when the TV is turned off. Pressing the button four times and holding the fourth press will enable a stealth version of this function where the Sonic scans for the correct code, but makes no sound and just blinks its light.

lock function

The Sonic Screwdriver can be locked to stop unauthorised use. To lock the Sonic, press the button four times quickly and enter any three-digit Lock Code at the spoken prompt. To enter the desired three digit Lock Code, press the button rapidly to count out the first number then pause for the Sonic to confirm it. Repeat the process for the second and third numbers of the Lock Code to be stored. As soon the Lock Code has been entered, the Sonic will power down and lock itself. The Sonic Screwdriver will then need to be unlocked by entering the correct code each time it is powered up.

In the event that the Lock Code is forgotten, it may be erased completely by taking the batteries out and putting them back in again. (This does not erase any of the learned IR codes).

The Lock Code can be erased and locking can be disabled, by pressing the button quickly five times whilst the Sonic is unlocked.

The Sonic Screwdriver displayed on its stand

programming the sonic

Before the Sonic can be used by humans to control Earth devices in the home, it will need to be programmed with the infrared (IR) remote control button codes of those devices. The Sonic has 13 different motion gestures or actions. It has three separate memory banks (A, B, and C) and can store one remote control code per gesture in each memory bank, therefore allowing up to 39 remote control codes to be stored in total.

Enter Programming Mode by making two short button presses quickly followed by a long button press (holding the button down for three seconds), while in Practice, Control or Quiet Control Mode. The Sonic will say, "Entering programming mode". The tip will flash once per second while the Sonic is in Programming Mode.

To program the Sonic, perform the desired gesture; the Sonic will say which gesture has been done, then its tip will glow steady green to signify that it is waiting to receive the IR code (button press) from a normal remote control.

short press original remote button

3 cm to 5 cm
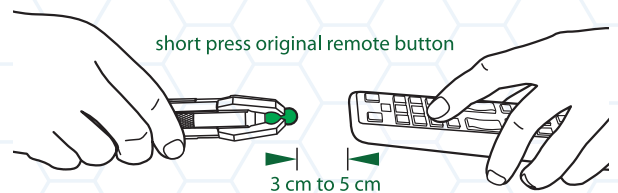
Hold a normal remote control about 3 cm from the tip of the Sonic while the tip is glowing steadily, and **briefly** press and release the normal remote control button for the function you want to program on to that gesture. If the Sonic received the IR code successfully, it will say "OK". If it receives no IR signal after five seconds, it will stop waiting for the IR code, the green tip will turn off and a gesture will have to be performed to make the Sonic ready to receive an IR code again.

Further codes may be programmed onto any other gesture or reprogrammed over the existing code on the same gesture by repeating this process, without having to come out of Programming Mode each time a code has been learned.

Three quick presses of the Sonic button in Programming Mode will cycle between its three memory banks (A,B,C) allowing storage of up to three different sets of 13 IR remote control codes.

Programming Mode can be exited at any time with one short press of the Sonic button. It will automatically exit Programming Mode if no gestures are performed after one minute.

The programmed IR codes are preserved even if the batteries are changed or removed. However, while in Programming Mode, ten short presses erases all memory banks and performs a factory reset. Caution: this operation can not be undone.

If programming problems occur
- Try varying the duration of the original remote control button press from very brief up to about half a second.
- Try varying the distance from the tip of the Sonic to the original remote control from 1 cm up to 5 cm.
- Try replacing the batteries in the original remote control.
- Use new alkaline batteries in the Sonic Screwdriver.

displaying the sonic

Fit the tail of the Sonic carefully into the Gallifreyan text stand. Take care not to push it too forcefully into the stand. If the Sonic is in FX Mode, while motionless on the stand, after ten seconds its tip will start to flash and after two minutes it will transmit a Morse code message to confirm that it is OK, and then every 1963 flashes (about one hour) it will transmit one of 12 of the Doctor's well-known words and phrases.
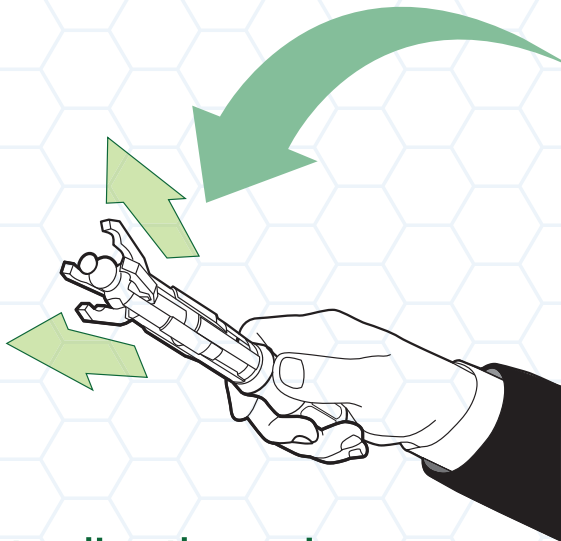
extending the sonic

The Sonic can be extended by approximately 30 mm. The Sonic may be extended either by gripping the knurled grey parts of the upper cage and pulling it away from the handle, or by carefully flicking it. When extending the Sonic, do not force it past its fully extended position.

The Sonic is heavy so take extra care when flicking it. Do not hit anyone or anything with it and make sure that you keep a tight grip of the handle so as not to let go of it and damage the Sonic or injure someone by accidentally throwing it.

retracting the sonic

To retract the Sonic, hold the Sonic by the handle in one hand and close the clasps with the other hand, then while holding the clasps closed, push the front of the Sonic back towards the handle until it is fully retracted.

Please note, the Sonic is only designed to function as a remote control when retracted.

care instructions

This Sonic is a sensitive instrument of control and should be handled with care. Do not bend or stress the Sonic while extended; clean only with a soft, slightly damp cloth; do not immerse in water. To protect the Sonic while not on display, keep it safely in its merchandising box tray.

button pressing guide

The Sonic has many features but only one button, and therefore requires a number of different button pressing sequences to access these features. Depending on the mode the Sonic is in, certain button pressing sequences will do different things.

FX Mode has been designed especially for play and cosplay. In FX Mode the Sonic consumes very little power unless the button is pressed. In all other operational modes, the Sonic must be turned on before it can be used.

When in Practice Mode, Control Mode or Quiet Control Mode:

sonic screwdriver **OFF**

`LONG ⬇ PRESS`

sonic screwdriver **ON**

sonic screwdriver **ON**

`LONG ⬇ PRESS`

sonic screwdriver **OFF**

When in FX Mode:

`LONG ⬇ PRESS`

lights tip and makes classic sonic buzz

`SHORT ▼ PRESS`
`LONG ⬇ PRESS`

doing gesture lights tip and plays one of 11 more sonic sounds

NOTE: in FX Mode the Sonic Screwdriver consumes very little power unless its button is pressed

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When in any operational mode:

`SHORT ▼ PRESS`

next operational mode

When in Control or Quiet Control Mode:

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`

sends a remote control code just like a gesture

When in Control, Quiet Control or Programming Mode:

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`

switches memory bank cycling through A, B, C

When in FX Mode:

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`LONG ⬇ PRESS`

all TV off scan

When in Practice, Control, or Quiet Control Mode:

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`LONG ⬇ PRESS`

enter Programming Mode

`SHORT ▼ PRESS`

exit Programming Mode enter Control Mode

When in FX Mode:

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`

toggles silent Morse code on or off

When in FX Mode:

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`LONG ⬇ PRESS`

Any-TV-off scan – stealth

When in any operational mode

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`

enables Lock Code entry sequence

`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`
`SHORT ▼ PRESS`

erases Lock Code

RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

FX Mode					Sound FX
	Press and Hold	standard Sonic buzz	Pull	Mk 1 Sonic	
	Flick up	red Sonic	Tap on top	minefield scanning	
	Flick down	broken Sonic	Tap on bottom	mine detonation	
	Flick left	alternative Sonic	Tap on left	Sonic bloop	
	Flick right	special B Sonic	Tap on right	general scanning	
	Push	Mk 7 #1 Sonic buzz	Rotate	low Sonic buzz	

use Practice Mode to master the Sonic's 13 gestures

- Rotate anticlockwise
- Rotate clockwise
- Flick upwards
- Flick downwards
- Flick left
- Flick right
- Push forward

- Pull back
- Tap on top
- Tap on bottom
- Tap on left
- Tap on right
- Double button press

This Sonic Screwdriver is a motion sensitive device, designed to recognise 13 distinct and accurately performed gestures. It is a sensitive device and the gestures do not need to be forceful or dramatic, just positive and accurate. Always start a gesture holding the Sonic Screwdriver level and steady. Only a short,
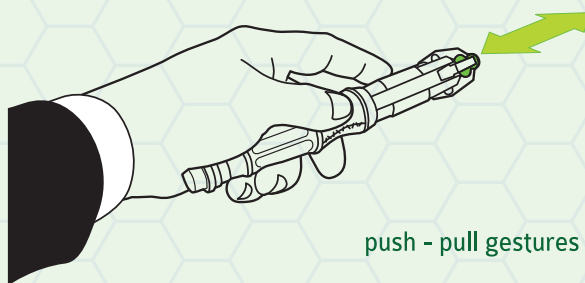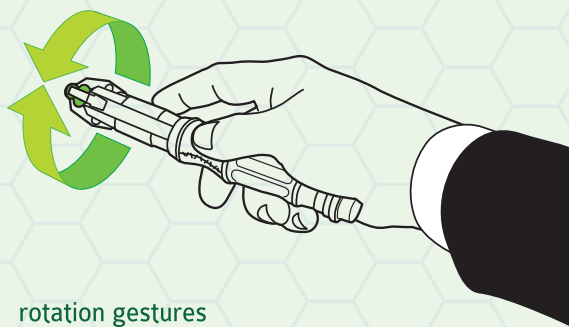
push - pull gestures

positive action is required; the tip of the Sonic Screwdriver only needs to move about 5 cm (two inches). To become expert at the gestures, put the Sonic Screwdriver into Practice Mode and perform
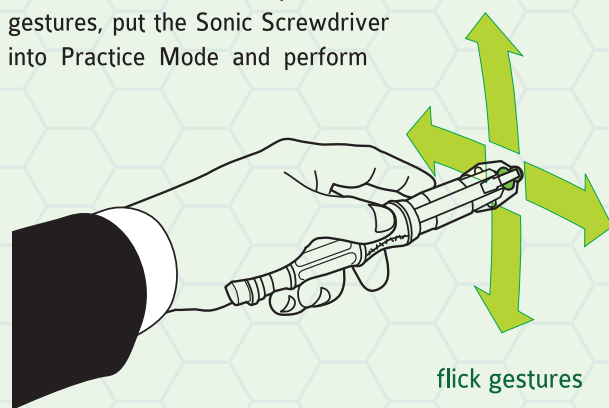
flick gestures

each of the gestures in turn. When the Sonic recognises a gesture it will say which gesture it thinks

rotation gestures

has been done. Repeat each gesture until you can do them easily and repeatably. The rotation gestures must be performed slowly, holding the Sonic Screwdriver steady and level, as if gently turning a volume knob.

The flick and tap gestures are not dependent on the Sonic's rotational orientation or the position of the grip button.

For the perfect tap gesture, tap the Sonic Screwdriver
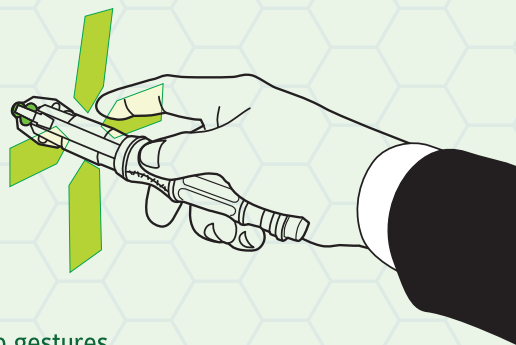
tap gestures

on the knurled area of the Control Centre. The gestures may be performed with the Sonic Screwdriver extended or retracted, but function better when retracted.

A double-click short press of the button is the thirteenth gesture.

Important battery information

Please correctly insert 2 x AAA (LR03) batteries before first use. Always use alkaline batteries. To avoid battery leakage, never mix old and new batteries.

Always follow the instructions carefully. Only use AAA alkaline batteries and be sure to insert them correctly by matching the + and − polarity battery symbols with the Sonic housing + and − markings;
- DO NOT use rechargeable batteries;
- DO NOT mix old and new batteries;
- DO NOT short-circuit the supply terminals;
- DO NOT mix different types of batteries;
- ALWAYS remove exhausted batteries from the product.

ITEM No. WRC11015