Name	Code	Availability	Price	Description	Image
DHT21 Temperature & Humidity Sensor	DHT21	In Stock	\$16.00	R505, DHT21 Temperature & Humidity Sensor, 5v VDD.	Of 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
BeagleBone Black Rev. C	BBB01-SC-505	In Stock	\$113.00	What is BeagleBone Black? BeagleBone Black is a low-cost, community-supported development platform for developers and hobbyists. Boot Linux in under 10 seconds and get started on development in less than 5 minutes with just a single USB cable. Processor: AM335x 1GHz ARM® Cortex-A8	Beaglebone Black to c

ESP-32 Microcontroller	ESP-32 S204	In Stock	\$10.00	performing at up to 600 DMIPS Ultra low power (ULP) co-processor Memory: 520 KiB SRAM Wireless connectivity: Wi-Fi: 802.11 b/g/n Bluetooth: v4.2 BR/EDR and BLE Peripheral interfaces: 12-bit SAR ADC up to 18 channels 2 —8-bit DACs 10 ×touch sensors (capacitive sensing GPIOs) Temperature sensor 4 —SPI 2 —IÂ ² S interfaces 2 —IÂ ² C interfaces 3 ×UART SD/SDIO/CE-ATA/MMC/eMMC host controller SDIO/SPI slave controller Ethernet MAC interface with dedicated DMA and IEEE 1588 Precision Time Protocol support CAN bus 2.0 Infrared remote controller (TX/RX, up to 8 channels) Motor PWM LED PWM (up to 16 channels) Hall effect sensor Ultra low power analog pre-amplifier Security: IEEE 802.11 standard security features all supported, including WFA, WPA/WPA2 and WAPI Secure boot Flash encryption 1024-bit OTP, up to 768-bit for customers Cryptographic hardware acceleration: AES, SHA- 2, RSA, elliptic curve cryptography (ECC), random number generator(RNG) Power management: Internal low-dropout regulator Individual power domain for RTC 5uA deep sleep current	
				Espressif Systems Dual-Core Wi-Fi® Dual-Mode Bluetooth®/BLE (Bluetooth Low Energy) Modules are compact, high-performance, low-power devices designed to provide a complete wireless solution tailored to advanced IoT applications. These Modules are powered by the Espressif Systems ESP32 System-on-Chip (SoC), and feature a wide range of peripherals, software stacks, flash memory, and an integrated antenna. • Processor:	

Resistor Kit (1/4 W) @ 1% Tolerance 525 Pieces	R679	In Stock	\$16.00		
Side Cutters	TC120	In Stock	\$10.00	120mm Mini Side Cutters with 25mm Jaw	
Infrared Reflective Line Track Sensor Switch	R1434	In Stock	\$6.00	R1434. Infrared Reflective Switch Line Track Sensor. 1-25mm.	
USB to RS232	H1-340	In Stock	\$8.00		0101010 FE 0101010 TO 01010 TO
Gear Reduced DC Motor	R2421	In Stock	\$6.00	6V, 1:120 Reduction, 100rpm @ 3v (No Load), R2321	
Heat Shrink Tubing	HS385	In Stock	\$24.00	385pcs Heat Shrink Tubing	All the fact of the control of the c

Desoldering Pump	S7759	In Stock	\$11.00	Solder remover pump. Smaller size. Part Number: 7759	
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				Package Included:	
				 1x SIM900A V4.0 kit 1x Power Cable 1x Antenna 	
				Specifications: Size: 49mm x 47mm Net Weight: 28g Weight: 38g	
SIM 900 GSM Module	R21479	In Stock	\$35.00	Features Per Advertisement: Onboard two set power supply interface VCC5 5V power supply, VCC4 interface, 3.54.5V power supply, optional power on self starting (default) and control start. Onboard SMA (default) and IPXmini antenna interface, SIM900A interface reserved reset. Size of the module is 49*50, all the new and original device. Computer can give early computer debugging USB module power supply, a very large amount of data under the condition of the recommended current more than 1A. Standby dozens of MA data can be set to provide dormancy, dormancy of 10MA low power. Support 2, mobile phone 3,4G card. Serial port circuit: support for 3.3V single chip microcomputer. TTL serial port support 3.3 and 5V single chip microcomputer. SIM card circuit to increase the SMF05C ESD chip. Antenna circuit: guarantee short and straight, so as to ensure the signal strength. PCB display screen printing mark: each interface, convenient development two times, the SIM900/A hardware is completely follow the design when the design manual. Two power supply interface: VCC5, 5V DC above 1A. Computer 5V power supply can be early computer USB. DC long data circuit over larger recommended 5V1A. VCC4, 3.5-4.5V power supply, ibid., suitable for lithium battery. Control pin all leads. A TTL level, compatible with 3.3V and 5V. Two antenna interface, the default SMA straight head, connector for IPXmini antenna. One way of speech interface, the way Mike interface. The control interface of each pin description: GND - GND SIMR SIM900A RXD, TTL level, can not be directly connected to the 232 level SIMT SIM900A TXD, TTL level, can not be directly connected to the 232 level	
				 5. VCC_MCU when the SIM900A module and 5V TTL level communication, this pin is connected to DC 5V; when the level of communication of SIM900A and 3.3V TTL, this pin is connected to DC 3.3V. 6. VCC5DC 5V input. 7. VCC4DC3.54.5 input 	

Automatic Water Pump Kit	S835	In Stock	\$20.00	Automatic Water Pump Kit. Contains Moisture Sensor, relay, pump, and tubing.	
PC Prototyping Board	3X7CMD	In Stock	\$4.00	Prototyping Board: • 24x10 Through hole board to solder components • 16 Surface Mount pads	
Dupont Wire Jumper/Header Connector Kit	R549	In Stock	\$26.00	620 pcs Pin-Socket Dupont Wire Jumper/Header Connector Kit	
Female to Female Jumper Leads (40 Wire) Package	R9314	In Stock	\$10.00	Female to Female Jumper Leads (40 Wire) Package: Female to female lead wires 40 Wires in every package 400 mm Wire Jumper	
Male to Female Jumper Leads (40 Wire) Package	F300M	In Stock	\$10.00	Male to Female Jumper Leads (40 Wire) Package 40 Socket to Pin (Dupont) Wire Jumpers	The street of th

				Description: L293D is a monolithic integrated, high voltage, high current, 4-channel driver. Basically this means using this chip you can use DC motors and power supplies of up to 36 Volts, and the chip can supply a maximum current of 600mA per channel, the L293D chip is also what's known as a type of H-Bridge. The H-Bridge is typically an electrical circuit that enables a voltage to be applied across a load in either direction to an output, e.g. motor.	
Motor Control Shield for Arduino	L293D	In Stock	\$10.00	 2 interface for 5V Servo connected to the high-resolution dedicated timer - no jitter! Can drive 4 DC motors or 2 stepper motors or 2 Servo Up to 4 bi-directional DC motors with individual 8-bit speed selection Up to 2 stepper motors (unipolar or bipolar) with single coil, double coil or interleaved stepping. 4 H-Bridges: per bridge provides 0.6A (1.2A peak current) with thermal protection, can run motors on 4.5V to 36V DC Pull down resistors keep motors disabled during powerup Reset button 2 external terminal power interface, for separate logic/motor supplies Tested compatible for Mega, Diecimila & Duemilanove 	
Desoldering Pump	C18500	In Stock	\$12.00	N/A	DESOLDERING PUMP HANDSKIT TOOL
Raspberry Pi Micro USB Power Supply	T5875DV	In Stock	\$22.00	The official and recommended universal micro USB power supply for Raspberry Pi. We've tested this supply in all kinds of situations, and it's as solid as a rock; it'll keep feeding your Pi the steady 2.5A it needs for proper performance. • 1.5m lead • Interchangeable heads for different countries • Short circuit, over current and over voltage protection • 50,000 hours MTBF	Raspberry Pi Universit Power Supply 2.5A, 5.1V Micro USB 8, 1.5m Cable descriptions to ball descriptions to the color of

				Description:	
				The Raspberry Pi 3 Model B+ is the latest product in the Raspberry Pi 3 range, boasting a 64-bit quad core processor running at 1.4GHz, dual-band 2.4GHz and 5GHz wireless LAN, Bluetooth 4.2/BLE, faster Ethernet, and PoE capability via a separate PoE HAT.	
				The dual-band wireless LAN comes with modular compliance certification, allowing the board to be designed into end products with significantly reduced wireless LAN compliance testing, improving both cost and time to market.	
				The Raspberry Pi 3 Model B+ maintains the same mechanical footprint as both the Raspberry Pi 2 Model B and the Raspberry Pi 3 Model B.	
Raspberry Pi 3	RPI3B+	In Stock	\$78.00	Specifications:	Manager States
B+	KI ISB	III Stock	70.00	1.4GHz 64-bit quad-core ARM Cortex-A53 CPU	Raspberry Pi 3 Model B*
				You will need the latest NOOBS image for the Wireless LAN and Bluetooth drivers to be installed.	

				Description:	
				Includes a 16 GB SD Card with NOOBS pre-loaded, Official Raspberry Pi Case, and Official Raspberry Pi Univ. 2.5A Power Supply	
				The Raspberry Pi 3 Model B+ is the latest product in the Raspberry Pi 3 range, boasting a 64-bit quad core processor running at 1.4GHz, dual-band 2.4GHz and 5GHz wireless LAN, Bluetooth 4.2/BLE, faster Ethernet, and PoE capability via a separate PoE HAT.	
				The dual-band wireless LAN comes with modular compliance certification, allowing the board to be designed into end products with significantly reduced wireless LAN compliance testing, improving both cost and time to market.	
Raspberry Pi 3				The Raspberry Pi 3 Model B+ maintains the same mechanical footprint as both the Raspberry Pi 2 Model B and the Raspberry Pi 3 Model B.	element to describe the described to the
B+ Starter Pack	RPI3+STARTER	In Stock	\$130.00	Specifications:	Raspberry Pi 3 Model B+ Starter Pack
				 1.4GHz 64-bit quad-core ARM Cortex-A53 CPU (BCM2837) 1GB RAM (LPDDR2 SDRAM) On-board wireless LAN â€" dual-band 802.11 b/g/n/ac (CYW43455) On-board Bluetooth 4.1 HS low-energy (BLE) (CYW43455) 4 x USB 2.0 ports 300Mbit/s ethernet 40 GPIO pins Full size HDMI 1.3a port Combined 3.5mm analog audio and composite video jack Camera interface (CSI) Display interface (DSI) microSD slot VideoCore IV multimedia/3D graphics core @ 400MHz/300MHz With the ARMv8 processor it can run the full range of ARM GNU/Linux distributions, including Snappy Ubuntu Core, as well as Microsoft Windows 10 IoT edition. 	
				You will need the latest NOOBS image for the Wireless LAN and Bluetooth drivers to be installed.	

				Description:	
				Includes a 16 GB SD Card with NOOBS pre-loaded.	
				The Raspberry Pi 3 Model B+ is the latest product in the Raspberry Pi 3 range, boasting a 64-bit quad core processor running at 1.4GHz, dual-band 2.4GHz and 5GHz wireless LAN, Bluetooth 4.2/BLE, faster Ethernet, and PoE capability via a separate PoE HAT.	
				The dual-band wireless LAN comes with modular compliance certification, allowing the board to be designed into end products with significantly reduced wireless LAN compliance testing, improving both cost and time to market.	
				The Raspberry Pi 3 Model B+ maintains the same mechanical footprint as both the Raspberry Pi 2 Model B and the Raspberry Pi 3 Model B.	and the second
Raspberry Pi 3 B+ (with 16GB NOOBS SD Card)	0-PI-3B+_NOOBS	In Stock	\$100.00	Specifications:	Raspberry PI 3
				1.4GHz 64-bit quad-core ARM Cortex-A53 CPU (BCM2837) 1GB RAM (LPDDR2 SDRAM) On-board wireless LAN ⢠dual-band 802.11 b/g/n/ac (CYW43455) On-board Bluetooth 4.1 HS low-energy (BLE) (CYW43455) 4 x USB 2.0 ports 300Mbit/s ethernet 40 GPIO pins Full size HDMI 1.3a port Combined 3.5mm analog audio and composite video jack Camera interface (CSI) Display interface (DSI) microSD slot VideoCore IV multimedia/3D graphics core @400MHz/300MHz With the ARMv8 processor it can run the full range of ARM GNU/Linux distributions, including Snappy Ubuntu Core, as well as Microsoft Windows 10 IoT edition.	14/04 NOOSS
				You will need the latest NOOBS image for the Wireless LAN and Bluetooth drivers to be installed.	

				Description:	
				The Brand New Raspberry Pi Zero Wireless has landed at BuyaPi.ca! The Raspberry Pi Zero is an ultra low cost and ultra small variant of the original Raspberry Pi. It's tiny, measuring just 65mm x 30mm, and is perfectly designed for embedded applications, wearables, prototyping and any other Pi based tinkering you can think of, on a micro scale!	
				The Raspberry Pi Zero Wireless features on board Wireless Internet & Bluetooth for all your connectivity needs!	
				Raspberry Pi Zero Wireless Features:	
Raspberry Pi Zero WH	PI-ZERO-WH	In Stock	\$38.00	BCM2835 chipset, Overclocked to 1Ghz 512MB RAM Tiny Form Factor: 65mm x 30mm x 5mm Fully HAT compatible 40pin GP1O, pre-soldered Stream and watch Hi-definition video output at 1080P Micro SD Slot for OS Tiny Current Draw ~ 140mA at 5V! Mini-HDMI for Video Micro-USB OTG Host for Data Micro-USB for Power Micro-CSI Camera Port On-Board WiFi On-Board Bluetooth	
				HAT Compatibility Note: The Pi Zero W is fully compatible with all HAT breakout boards, as it features the same 40 Pin GPIO as the Raspberry Pi 2/B+/A+	
				Weller SP40NCN Medium Duty Soldering Iron, Red/Black	
Weller Medium Duty 40 Watt Soldering Iron	SP40NCN	In Stock	\$52.00	 High-Performance LED Soldering Iron - 40 Watts, up to 900-DegreeF Three 5mm high temperature long-life LEDs at 25 Lumens/ft² for superior soldering accuracy and application illumination Co-molded soft grip ribbed handle design for maximum comfort and reduced slipage Triangular area for maximum of tip control. Round handle for ease of tip rotation Package Includes: Iron with MT10, 6mm tip, iron stand, user manual 	

Weller 25 Watt Soldering Iron	SP25NKCN	In Stock	\$38.00	Weller SP25NKCN 25 Watt LED Soldering Iron Kit, Red/Black High-Performance LED Soldering Iron - 25 Watts, up to 750-DegreeF Three 5mm high temperature long-life LEDs at 25 Lumens/ft² for superior soldering accuracy and application illumination Co-molded soft grip ribbed handle design for maximum comfort and reduced slipage Triangular area for maximum of tip control. Round handle for ease of tip rotation	
Crimping Tool	SN28B	In Stock	\$36.00	 Package Includes: Iron with MT1, 3mm tip, iron stand, user manual, soldering aid tool, lead-free solder, spare MT2 and MT3, 3mm tips Insulated Terminal Crimper Pin Crimping Tool for 2.54mm 3.96mm 28-18AWG Professional crimping tool for 2.54mm 3.96mm KF2510 connector. Crimping capacity: 0.1-1.0mmŲ. Insulated handles, very safe to use. Material: High-carbon steel. 	STOCZ UNVP
Crimping Tool (AWG28-20)	SN01B	In Stock	\$42.00	SM Terminal Crimping Tool for D-SUB Terminals Sq.mm 0.08-0.5mm2 (AWG28-20) - ST XH2.0mm XH2.54 XH3.96mm SN-01BM XH2.54 SM plug terminal spring clamp terminals Crimping Tool Crimping pliers Wire-electrode Cutting Die Sets Promises a Precise Crimp Crimping Range: 0.08-0.5mm²,AWG:28-20AWG Length: 190mm Weight: 0.37kg	Aboys Brow you also Played
Tube of Solder	21-1050	In Stock	\$8.00	• Diameter: 1.0 mm • Weight: 17 g • 60/40 Rosin Core	21-1050 SOLDER

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Arduino Mega 2560	R65A	In Stock	\$40.00	Features: The Mega 2560 is a microcontroller board based on the ATmega2560. It has 54 digital input/output pins (of which 15 can be used as PWM outputs), 16 analog inputs, 4 UARTs (hardware serial ports), a 16 MHz crystal oscillator, a USB connection, a power jack, an ICSP header, and a reset button. It contains everything needed to support the microcontroller; simply connect it to a computer with a USB cable or power it with a AC-to-DC adapter or battery to get started. The Mega is compatible with most shields designed for the Duemilanove or Diecimila. Specifications: Microcontroller: ATmega2560 Operating Voltage: 5V Input Voltage (recommended): 7-12V Input Voltage (limits): 6-20V Digital I/O Pins: 54 (of which 15 provide PWM output) Analog Input Pins: 16 DC Current per I/O Pin: 40mA DC Current for 3.3V Pin: 50mA Flash Memory: 256 KB of which 8 KB used by bootloader SRAM: 8 KB EEPROM: 4 KB Clock Speed: 16 MHz Package list: 1 x MEGA2560 R3 Board 1 x USB Cable	
5v 2.4A AC to DC Adapter	SGA12U05-P1J	In Stock	\$24.00	 5v 2.4A AC to DC Adapter Mfg. by Meanwell Enterprises, CO., LTD. Output Voltage: 5v DC Max. Current: 2.4 A Max. Power: 12W Cable (Lead) Length: 1 Meter 	SGATZUE-P13 SSATZUE-P13
Large Desoldering Pump	21-8220	In Stock	\$22.00	Large Desoldering Pump ESD Safe Mfg. TENMA	VACUUM DESOLDERING TO
195 Polyester Film Capacitors	САР-РАСК	In Stock	\$22.00	195 Polyester Film Capacitors 10nF to 470nF 10 pcs/value, Total 100pcs	Napole Tigore To Chandle To Chandle To Market To The Tigore The Mar

Metal Mechanical Gripper	R454A	In Stock	\$14.00	 Metal Mechanical Gripper Intended to be used with: - MG995 Servo - SG5010 Servo - MG996 Servo 	■ 3ne xxxx
USB Socket to Alligator Clip	S81	In Stock	\$6.00	 USB Socket to Alligator Clip 30 cm cord length Use with caution 	- anis-xano
SG-92 Servo Motor	S79	In Stock	\$10.00	SG-92 Servo Motor Voltage Range: 4.2v to 6v RC Toys & Hobbies RC Airplane Parts - Item NO.: SG92R Weight: 9g Dimension: 23×12.2x27mm Stall torque: 2.5kg /cm(4.8v) 6 X SG92R Mini Servo 9g 2.5kg For RC Airplane - RC Toys & Hobbies RC Airplane Parts- 6x SG92R servo	
1Kg Load Cell	R400	In Stock	\$12.00	1Kg Load Cell IP65 Rated Voltage Range: 5 to 9v DC MAX Rated Output: 1.0mV/V (±0.15mV/V) Wiring: Red -> Power In; Green -> +Signal; White -> - Signal	
120 Electrolytic Capacitors	R499	In Stock	\$12.00	 Sets of 10x12 values (1uF to 470uF) 10 Caps per 12; 12 Bags in total. Rated from 16v to 50v 	
Thermoelectric Cooler	R21428	In Stock	\$8.00	Thermoelectric Cooler Size: 40 x 40 x 4 mm Model: 12706 Maximum Voltage: 12v Maximum Current: 5A Operating Temperature: -30 to 70 degrees Celsius Maximum Power: 60 W Weight: 22g	84(2)-CD22

				AHX711 Module for Load Call	
AHX711 Module for Load Cell	R223	In Stock	\$8.00	The Load Cell Amplifier is a small breakout board for the HX711 IC that allows you to easily read load cells to measure weight. By connecting the amplifier to your microcontroller you will be able to read the changes in the resistance of the load cell, and with some calibration youâ∈™II be able to get very accurate weight measurements. This can be handy for creating your own industrial scale, process control or simple presence detection. This version of the Load Cell Amplifier features a few changes that you specifically asked for! We have separated the analog and digital supply, as well as added a 3.3uH inductor and a 0.1uF filter capacitor for digital supply. The HX711 uses a two-wire interface (Clock and Data) for communication. Any microcontroller's GPIO pins should work, and numerous libraries have been written, making it easy to read data from the HX711. Check the hookup guide below for more information. Load cells use a four-wire Wheatstone bridge configuration to connect to the HX711. These are commonly colored RED, BLK, WHT, GRN and YLW. Each color corresponds to the conventional color coding of load cells: Red (Excitation- or GND) White (Amplifier+, Signal+ or Output+) Green (A-, S- or O-) Yellow (Shield) The YLW pin acts as an optional input that is not hooked up to the strain gauge but is utilized to ground and shield against outside EMI (electromagnetic interference). Please keep in mind that some load cells might have slight variations in color coding. For connection instructions, please see: https://learn.sparkfun.com/tutorials/getting-started-with-load-cells	
MG-996R Metal Gear Servo Motor	R145	In Stock	\$14.00	MG-996R Metal Gear Servo Motor Voltage Range: 4.8v to 7.2v High Torque Colour: Black Stall Torque: 13 kg / cm (4.8V), 15 kg / cm (6.0V). Operating Speed: 0.17 sec/60Â;Ā£ (4.8V no load), 0.14 sec / 60Â;Ā£ (6.0V no load) Operating voltage: 4.8 - 7.2V. Dimension: 40mm x 19mm x 43mm.	
50N Electromagnet	S267	In Stock	\$14.00	 50 Newton Electromagnet Voltage: 12v Current: 330 mA Lifts: 5Kg Holding Force: 50 N 	

20x4 LCD Module 12C	R81	In Stock	\$16.00	Operating Voltage: 5v Space for 20x4 Characters (on screen) Interface: I2C I2C address: 0x27 Pin definition: GND, VCC, SDA, SCL Contrast adjust: potentiometer The module is a low-power consumption character LCD module with a built-in controller The module can be easily interfaced with a MCU Display format: 20 Characters x 4 lines; White text, blue backlight Size: 9.8 x 6 x 1.2mm
3 AA Battery Case (with Switch)	R584	In Stock	\$6.00	3 AA Battery Case (with Switch) Holds 3x AA Batteries On/Off Switch
RS232 Serial to Terminal Breakout Board	S791	In Stock	\$6.00	RS232 Serial to Terminal Breakout Board The wire range of the 9 Positions Screw Terminal Block is 22-14AWG. All-copper DB9 Socket, anti-oxidation, contact better. Terminal pitch 3.96mm, screw hole diameter 2mm, need to use a slotted screwdriver width 2mm be removable. Product Name: DB9 Adapter Total Size: 39 x 35 x 15mm/1.6" x 1.3" x 0.6"(L*W*H) Mount Hole Dia.: 3mm / 0.12" Mount Hole Center Distance: 29mm / 1.2" Material: Metal, Electric Part
Male to Male Jumper Leads (40 Wire) - 100mm	R9310	In Stock	\$5.00	Male to Male Jumper Leads (40 Wire) - 100mm: Pin to Pin jumper 40 Wires in package 100 mm Wire Jumper
Male to Male Jumper Leads (40 Wire) - 300mm	R9313	In Stock	\$10.00	Male to Male Jumper Leads (40 Wire) - 300mm: Pin to Pin jumper 40 Wires in package 300 mm Wire Jumper

Component Tester Kit	IEESB_KIT_CTV1	In Stock	\$15.00	det M d cap ar junc cur hi i Ca 0.09 Ind other DC The built PV Tho high	the Component tect PNP and I OSFET, JFE liodes, thyristo pacitors, induction faction (Uf) throw the law of the lious series resistant to the lious series re	NPN bipolar t I field effect to Drs, resistors(0 ctors. Automa actor (B), pin do ough a high the conds, only th measurement Features: assurement ope on current is on battery oper asurement range e displayed as igher than 210 the European at signal generate wave signal 2MHz all generator p ated signal of eter function of signal (in this accuracy Specifications Model: N Suitable Output V Connecte Input Vo Working PCB Siz Product Package Product 2 cm/5 Package x 6 cm/	ester kit can automatic ransistor, N, P-channel ransistors, diodes, two 0.1 Ohm - 50M Ohm), tic detection of current lefinitions and emitter reshold voltage and high e large capacitance and is will take a long time. Peration, auto power off inly 20nA, support for ation ge from 25pf to 100mF. Ited above the equivalent olution is 0.01 ohms e from 0.01MH to 20H, resistance if the inductor 100, that will be displayed resistance. For can produce optional within the range of 1Hz - 100 produce the pulse width 1 - 99 percent can test 1Hz - 25KHz or case a slight decrease in (1) Emiliary of the complex of	
					1 x Master Ch	hip ncoder Switch		