

POWERTouch™ 1000

RF Remote Control System

Owner's Manual

By TouchTronics, Inc.

**Easy
Installation...
Reduces Costs**



**All Channels
are User
Programmable**



Oval Hand-Held Transmitter Not Shown

System Specifications

1000 Series Receiver Specifications

Voltage	9 - 16 Volt DC (12 Volt DC Nominal) 24 Volt DC Optional
Current	5A / Output - 10A System Max
Switch Inputs	2 (6 Additional Optional)
Outputs	4 or 7
Frequency	433 MHz
Antenna	Standard: Fixed Optional: Removable 6' Whip / TNC Exterior / 14' Cable

1000 Series System Specifications

Range-Pulsed	100 Feet Typical 300 Feet Clear Field
Range-Continuous	50 Feet Typical

Codes

Number	Over 16,000,000
Type	Digital Rolling Codes
Enrolling	Self-Learning

1000 Series Transmitter Specifications

Frequency	433 MHz
Battery	Lithium, Coin style (*CR2032)
Voltage	3 Volt DC
Battery Life	50,000 2-Second Presses

*All transmitter styles

1000 Series Physical Dimensions

Receiver Enclosures	
Standard (unsealed)	6.50" x 5.50" x 1.00" (LxWxH)
Optional (sealed)	9.25" x 5.25" x 1.25" (LxWxH)
Transmitter Enclosures	
Large Key Fob (sealed)	3.25" x 2.00" (LxW)
Oval (water resistant)	4.50" x 2.00" (LxW)
Small Key Fob (sealed)	2.60" x 2.00" (LxW)
Mini Key Fob (water resistant)	2.10" x 1.40" (LxW)

Receiver Selection Chart

Receiver Model	4 - Relays	7 - Relays	12VDC	24VDC	30A Connector	Fixed Antenna	TNC Connector	2 Switch Inputs	6 Add'l Switch Inputs	Input Status LEDs
1010-R	x		x			x		x		
1011-R	x		x				x	x		
1012-R	x		x		x	x		x		
1013-R	x		x		x		x	x		
1020-R	x			x		x		x		
1021-R	x			x			x	x		
1022-R	x			x	x	x		x		
1023-R	x			x	x		x	x		
1030-R		x	x			x		x	x	x
1031-R		x	x				x	x	x	x
1032-R		x	x		x	x		x	x	x
1033-R		x	x		x		x	x	x	x
1040-R		x		x		x		x	x	x
1041-R		x		x			x	x	x	x
1042-R		x		x	x	x		x	x	x
1043-R		x		x	x		x	x	x	x

Transmitter Selection Chart

Model	Description	Sealed
1000-TF2	Large key fob, 2 button	x
1000-TF4	Large key fob, 4 button	x
1000-TF6	Large key fob, 6 button	x
1000-TX2(S)	Oval hand-held, 2 button, (S) = power switch	
1000-TX4(S)	Oval hand-held, 4 button, (S) = power switch	
1000-TX6(S)	Oval hand-held, 6 button, (S) = power switch	
1000-TK1	Small key fob, 1 button	x
1000-TK2	Small key fob, 2 button	x
1000-TK4	Small key fob, 4 button	x
1000-TM1	Mini key fob, 1 button	
1000-TM2	Mini key fob, 2 button	
1000-TM4	Mini key fob, 4 button	

TouchTronics, Inc. ❖

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Manual NST11424-1
Rev 2008-02-18

Operation

Receiver

Inputs (DIP switch programmable)

Switch Input A1
Switch Input A2

Outputs (DIP switch programmable)

1 Momentary or Latching
2 Momentary or Latching
3 Momentary or Latching
4 Momentary or Latching

} 4-Relay Models

5 Momentary or Latching
6 Momentary or Latching
7 See DIP Switch Options Below

} 7-Relay Models

Transmitter Styles

Photos Not To Scale

Standard - Large Key Fob
2, 4 & 6 Button



Option- Small Key Fob
1, 2 & 4 Button



Option - Large Oval Hand-Held
2, 4 & 6 Button
(Power Switch Optional)



Option - Mini Key Fob
1, 2 & 4 Button



Signal Transmissions

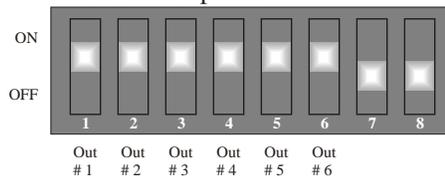
Standard - Press & Release Button
No maximum signal duration

Option - Multi-channel signal

Status LED

Standard - One flash per second transmitting
- No flash if low battery

DIP Switch Options



DIP switch located inside receiver enclosure

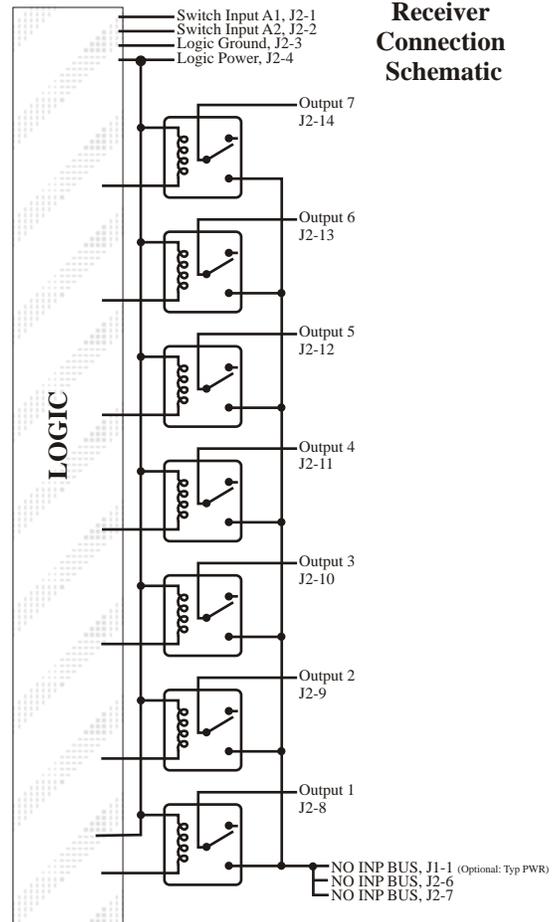
DIP Switches 1 - 6 control outputs 1 - 6 respectively:

OFF = Momentary
ON = Latching

DIP Switches 7 & 8

<p>ON</p> <p>OFF</p>	<p>Option 1 - Direct Switch Inputs Switch Input A1 controls output #1 Switch Input A2 controls output #2</p> <p>DIP Switch 7 - OFF DIP Switch 8 - OFF</p>
<p>ON</p> <p>OFF</p>	<p>Option 2 - Hydraulic Pump Output #7 is ON anytime outputs 1 - 6 are active. Switch Input A1 controls output #1 Switch Input A2 controls output #2</p> <p>DIP Switch 7 - OFF DIP Switch 8 - ON</p>
<p>ON</p> <p>OFF</p>	<p>Option 3 - Cascade Output #7 turns ON for 2-seconds whenever output #1 is activated. Switch Input A1 controls output #1 Switch Input A2 controls output #2</p> <p>DIP Switch 7 - ON DIP Switch 8 - OFF</p>
<p>ON</p> <p>OFF</p>	<p>Option 4 - Courtesy Light Output #7 turns ON for 20-seconds whenever output #1 is activated. Switch Input A1 controls output #1 Switch Input A2 turns OFF all outputs as long as it is active.</p> <p>DIP Switch 7 - ON DIP Switch 8 - ON</p>

Receiver Connection Schematic



ENROLLING NEW TRANSMITTERS - Self-Learning Receiver

1. Remove cover from receiver enclosure.
2. Locate LEARN switch (small, square push-button style switch located in the corner of the printed circuit board).
3. Press and release the LEARN switch and observe LEARN LED (next to LEARN switch).
4. LED is flashing when unit is in LEARN Mode and new codes can be enrolled.
5. When LEARN LED is flashing, press any button on transmitter.
6. LEARN LED blinks to confirm enrollment. Release transmitter button.
7. Press any button on the new transmitter to confirm that the new code has been enrolled.
8. Replace receiver enclosure cover.

ERASING ALL ENROLLED TRANSMITTERS

1. Press and hold the LEARN switch.
2. LEARN LED will flash rapidly for about 10 seconds, followed by two long flashes.
3. Release LEARN switch.
4. All transmitter codes are now erased.

Optional Enrolling Method

1. Remove and reconnect power to unit. This will place unit into LEARN mode for 5-seconds.
2. Press any button on transmitter. Wait 5-seconds and confirm the transmitter has been enrolled by pressing any button and verifying the correct output turned ON.

Installation

Receiver Installation

Determine installation location of receiver and antenna - typically under the dash or behind a wall. There are two types of receivers:

- 1) Standard Receiver - as pictured below
- 2) Optional Sealed Receiver

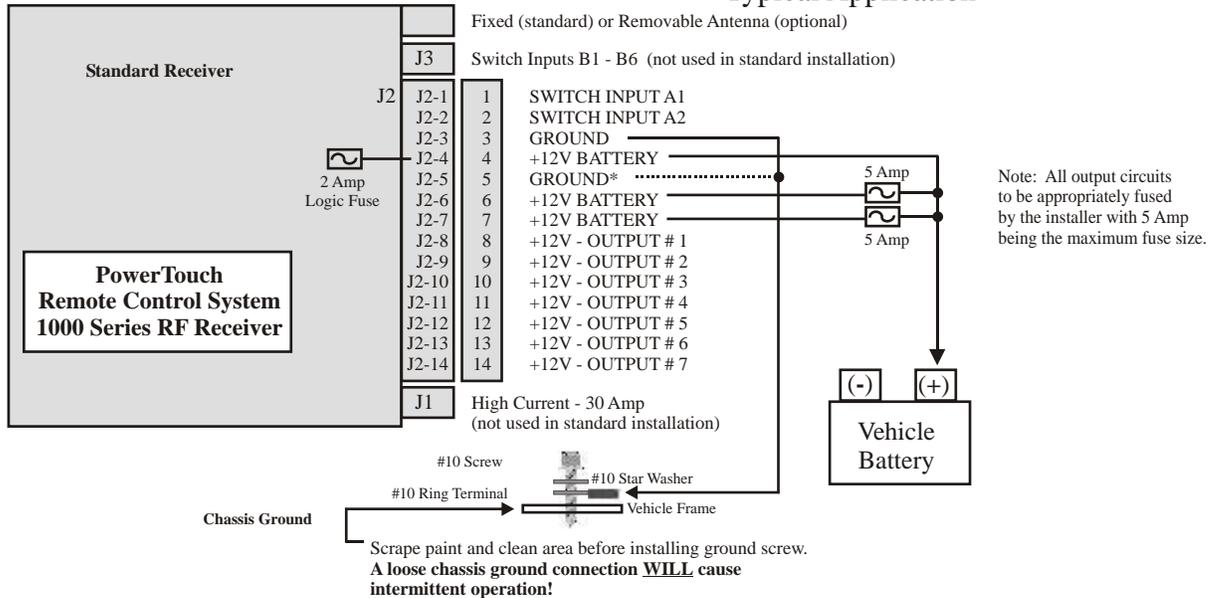
Antennas

- A) Fixed Antenna (Installed inside enclosure)
- B) Removable 6" Antenna / TNC Connector
- C) Exterior Antenna / 14' Cable

Antenna Installation

1. The antenna must be installed in an open, non-metal area in order to receive RF (radio frequency) transmissions.
2. RF transmissions are reduced if antenna is:
 - A) within 6 feet of a large motor
 - B) near large bundles of wires
 - C) near other RF devices
 - D) touching any metal

Typical Application



PIN #	FUNCTION DESCRIPTION	VOLTAGE	CURRENT	I / O	COLOR	GAUGE
STANDARD J2 CONNECTOR						
J2-1	SWITCH INPUT A1	+12V	N/A	INPUT	WHT/RED	18 AWG
J2-2	SWITCH INPUT A2	+12V	N/A	INPUT	GRY/RED	18 AWG
J2-3	CHASSIS GROUND	GROUND	500mA	INPUT	BLK/WHT	18 AWG
J2-4	LOGIC POWER	+12V BATTERY	500mA	INPUT	RED/WHT	18 AWG
J2-5	REVERSAL REST @ GROUND - OPTION	GROUND	5 A	INPUT	BLK	18 AWG
J2-6	RELAY POWER	+12V BATTERY	5 A	INPUT	RED	18 AWG
J2-7	OPTIONAL RELAY POWER	+12V BATTERY	5 A	INPUT	RED	18 AWG
J2-8	CHANNEL 1 - RELAY OUTPUT 1 (RR@G*)	+12V	5 A	OUTPUT	YEL	18 AWG
J2-9	CHANNEL 2 - RELAY OUTPUT 2 (RR@G*)	+12V	5 A	OUTPUT	ORG	18 AWG
J2-10	CHANNEL 3 - RELAY OUTPUT 3 (RR@G*)	+12V	5 A	OUTPUT	BLU	18 AWG
J2-11	CHANNEL 4 - RELAY OUTPUT 4 (RR@G*)	+12V	5 A	OUTPUT	GRN	18 AWG
J2-12	CHANNEL 5 - RELAY OUTPUT 5	+12V	5 A	OUTPUT	PNK	18 AWG
J2-13	CHANNEL 6 - RELAY OUTPUT 6	+12V	5 A	OUTPUT	VIO	18 AWG
J2-14	PROGRAMMABLE OPTION-RELAY OUTPUT 7	+12V	5 A	OUTPUT	TAN	18 AWG
OPTIONAL J1 POWER CONNECTOR						
J1-1	POWER - OUTPUTS 1 - 6	+12V	30 A	INPUT	RED	12 AWG
J1-2	GROUND - OUTPUTS 1 - 4 (RR@G*)	GROUND	30 A	INPUT	BLK	12 AWG
OPTIONAL J3 SWITCH INPUT CONNECTOR						
J3-1	SWITCH INPUT B1	+12V		INPUT	YEL/BLK	18 AWG
J3-2	SWITCH INPUT B2	+12V		INPUT	ORG/BLK	18 AWG
J3-3	SWITCH INPUT B3	+12V		INPUT	BLU/BLK	18 AWG
J3-4	SWITCH INPUT B4	+12V		INPUT	GRN/BLK	18 AWG
J3-5	SWITCH INPUT B5	+12V		INPUT	PNK/BLK	18 AWG
J3-6	SWITCH INPUT B6	+12V		INPUT	VIO/BLK	18 AWG

*Reversal Rest @ Ground

TouchTronics, Inc. Warranty Policies and Procedures

- 1) Each individual product is warranted under the TouchTronics Limited Warranty program for 1 full year from date of purchase or a *maximum* of 2 years from the date of manufacture.
- 2) No product will be covered under the TouchTronics Limited Warranty program that has a manufacture date older than 2 years.
- 3) To receive technical support or warranty service, call our technical support center during regular business hours. 1-800-294-2570
- 4) To enable our technical support staff to better serve you, please have the following information available when you call.

Date Of:	
Purchase	
Installation	

Product Information:	
Model Number	
Serial Number	

Vehicle Information:	
Dealer Name	
Dealer Phone	
Make / Model	

Please fill in all pertinent information at the time of purchase or installation

Limited One (1) Year Warranty

Section One

Seller will warrant any product originally manufactured or assembled and sold by seller for a period of *up to TWO YEARS* (24 months) from the original date of manufacture or **ONE YEAR** (12 months) from the original retail sale or O.E.M. in-service date.

Section Two

The following are in lieu of all warranties; expressed; implied; or statutory, including but not limited to, any implied warranty of merchantability of fitness for a particular purpose and of any other warranty obligation on the part of seller. Seller, except as otherwise hereinafter provided, warrants the goods against faulty workmanship or defective materials for a period of *up to TWO YEARS* (24 months) from the original date of manufacture or **ONE YEAR** (12 months) from the original retail or O.E.M. in-service date.

Seller's sole and exclusive liability shall be (at seller's option) to repair; replace; or credit buyer for such goods which are returned by buyer during the applicable warranty period set forth above, provided that (I) seller is promptly notified in writing or by phone upon discovery by buyer that such goods failed to conform and an explanation of any alleged deficiencies, (II) such goods are returned to seller, (III) seller's examination of such goods shall disclose that such alleged deficiencies actually exist and were not caused by accident, misuse, neglect, alteration, improper installation, unauthorized repair or improper testing. If seller elects to repair or replace such goods, seller shall have a reasonable time to make such repairs or replace such goods.

Seller's warranties as herein above set forth shall not be enlarged, diminished, or affected by, and no obligation or liability shall arise or grow out of, sellers rendering of technical advice or service. Damage to products caused by the customer or during installation cannot be claimed under this warranty. All devices returned that are not covered under the seller's warranty policy, will be charged a minimum of \$25.00 for evaluation plus additional charges for components and labor to repair the device not to exceed the original selling price. Seller considers the following to be typical examples of customer or installation damage: burned or broken traces on the printed circuit board, burned or damaged components, dirt or water residue on the printed circuit board or inside the case, modifications by the customer, broken cases or housings and dead batteries

Section Three

A return material authorization number (RMA) must be issued by seller before any product is returned for evaluation or repair. Warranty repairs must be completed at authorized repair facilities.

Warranty policy 1 rev a.doc
01.01.03 rev a
09.30.98 rev int
Effective January 1, 2003

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FCC Compliance and Advisory Statement. This hardware device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for 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 installed or used in accordance with the instructions, may cause harmful interference to radio communications. 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: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

Canadian DOC Statement. This digital device does not exceed the Class B limits for radio noise emissions from digital apparatus specified in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

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Déclaration FCC. Cet équipement a été testé et déclaré conforme à la section 15 du règlement de la FCC. Son fonctionnement est soumis aux conditions suivantes: 1) l'équipement concerné ne doit pas causer d'interférences dangereuses, et 2) il doit accepter toute interférence reçue, y compris les interférences risquant d'engendrer un fonctionnement indésirable. Cet équipement a été testé et déclaré conforme aux limitations prévues dans le cadre de la catégorie B des appareils numériques défini par la section 15 du règlement de la FCC. Ces limitations sont stipulées aux fins de garantir une protection raisonnable contre les interférences gênantes en installation résidentielle. Cet équipement génère, utilise et diffuse des ondes radio, et s'il n'est pas installé ni utilisé en conformité avec les instructions dont il fait l'objet, peut causer des interférences gênantes avec les communications radio. Cependant, nous ne pouvons vous garantir qu'une interférence ne se produira pas dans une installation particulière. Si cet équipement produit des interférences graves lors de réceptions radio ou télévisées qui peuvent être détectées en allumant et en éteignant l'équipement, vous êtes invités à les supprimer de plusieurs manières: 1) Réorienter ou déplacer l'antenne de réception; 2) Augmenter la distance séparant l'équipement et le récepteur 3) Connecter l'équipement à un circuit différent de celui auquel le récepteur est connecté; 4) Contacter votre revendeur ou un technicien radio/TV qualifié. Toutes modifications ou tous changements effectués sans l'accord exprès de la partie responsable de la conformité aux normes pourraient contraindre l'utilisateur à ne plus utiliser son équipement. Afin d'assurer la conformité avec les règlements FCC, les câbles d'interface blindés fournis avec le produit doivent être utilisés, ainsi que tout autres composants ou accessoires également spécifiés, lors de l'installation du produit.

Déclaration du Ministère des Communications Canadien. Cet appareil numérique est conforme aux limitations concernant l'émission d'interférences radio par des appareils numériques de catégorie B, telles que stipulées dans le cadre de la norme Appareils numériques ICES-003 édictée par le Ministère canadien de l'industrie.

Cet équipement a été déclaré conforme à la norme RSS-210 édictée par le Ministère canadien de l'industrie. Son fonctionnement est soumis aux conditions suivantes: 1) l'équipement concerné ne doit pas causer d'interférences, et 2) il doit accepter toute interférence reçue, y compris les interférences risquant d'engendrer un fonctionnement indésirable.

Technical Support Via Web Site / Email www.touchtronics.com Techsupport@touchtronics.com or 'Contact Request' link on the web page	Technical Support Numbers Indiana Local 1-574-294-2570 Toll Free 1-800-294-2570 Fax 1-574-293-1611	Sales Support Phone 1-800-294-2570 Fax 1-574-293-1611 Email sales@touchtronics.com
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