E R A D
P.O. Box 121715
Ft. Worth, TX 76121
Ph: 817-244-1761
Fax: 817-244-1796
Email: erad@flash.net

RC2004X Wireless Transceiver

418 MHZ

FCC ID: S9FRC2004X

This 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

IC: 5877A-RC2004X

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E R A D has designed a Voice Controlled Wireless Remote Controller Transmitter and Receiver for use in the Clay(s) shooting industry. This system provides complete control and programming for Trap shooting, Skeet shooting, Five Stand, Sporting Clays, and Outdoor (Personal back yard systems), etc. The system is designed to provide Clubs and Individuals significant benefits over the current systems available and major benefits over manual pulling of the clays.

The RC2004X receiver is approximately 6" x 4" x 1 1/2" thick, and is installed by simply connecting it in place of the pull cord. The receiver does NOT require batteries and may be permanently installed. The XT2004 transmitter is the size of a credit card and a little over one quarter of an inch thick. It contains an "LCD" (Liquid Crystal Display) for the displaying of data to the shooter and a 16 position "Keypad" for control and data entry. Access to any given transmitter is through a personal "PIN" number limiting access to the individual owner. It is powered by 2 ea. "2450" button cell batteries, available from most all grocery stores, drug stores, Wal-Mart, Target stores etc. Life expectancy is approximately 1 year.

Installation of the XT2004 transmitter typically is by clipping (or Velcro) to the user above the shirt pocket on the opposite side from the mounting of the gun.

Wiring:

The RC2004X receiver has the ability to control up to 8 machines thru the contact closure of specific relays. Each relay can switch 1.0 amp @ 200 VAC/VDC. Units can be custom ordered with higher voltage relays if necessary.

The power requirement is split into 2 separate groups.

1) LOW voltage receiver will handle all voltages, both AC and DC, from 7 volts to 26 volts.

2) HIGH voltage receiver will handle all voltages, both AC and DC, above 26 volts and up to 200 volts.

3) MIXED LOW and HIGH voltage unit. This is a custom unit where one or more machines are of the LOW voltage type and one or more machines are of the HIGH voltage type. This is NOT typical and usually in this case only the machines with common voltages would be used to power the receiver. The other machines would simply be wired for the release function. Typically the LOW voltage machine(s) would be used as the power source.

VOLTAGE type is based on the voltage that the release coil or motor of the mechanism that the receiver is controlling, has applied to it. For example, if the release mechanism has 115 VAC tied to one end and the other end runs out to the pull cord, than this would be considered a HIGH voltage circuit. If the 115 VAC was run to the pull cord first, and pressing the button supplied this voltage back to the release mechanism, it would still be considered a HIGH voltage circuit. If this is the case it is recommended that the release mechanism be rewired so the voltage out to the pull cord passes thru the release mechanism FIRST and then to the pull cord. This is not a requirement of the RC2004, it is simply a matter of providing as much safety to the holder of the pull cord as possible by providing some minimal current limiting thru the coil of the release device. Note, that many times there is an intermediate release relay that is controlled by the pull cord at a lower voltage level and the actuation of this relay through its contacts actually applies voltage to the release solenoid or motor. If this is the case, then the voltage that is used to control the intermediate relay is what the RC2004 receiver is concerned with, NOT the voltage that runs through the contacts of the intermediate relay to the release solenoid or motor. Wiring from the machine to the specific relay is via a terminal strip. See chart in Appendix (A).

Functions include:

*** CLUB (Changing the Club ID stored in receiver)

NOTE: To change the "Club ID" of a receiver, you must have a PC along with E R A D software RC2004-xx and cable assembly CA2004-xx, or an XT2004 transmitter. See XT2004_Club.doc for instructions on how to change the "Club ID" using the XT2004 transmitter.

*** FIELD (Changing field number stored in receiver)

NOTE: To change the "Field number" of a receiver, you must have a PC along with E R A D software RC2004-xx and cable assembly CA2004-xx, or an XT2004 transmitter. See XT2004_Club.doc for instructions on how to change the "Field number" using the XT2004 transmitter.

*** COMNDS (Adds, removes commands from receiver)

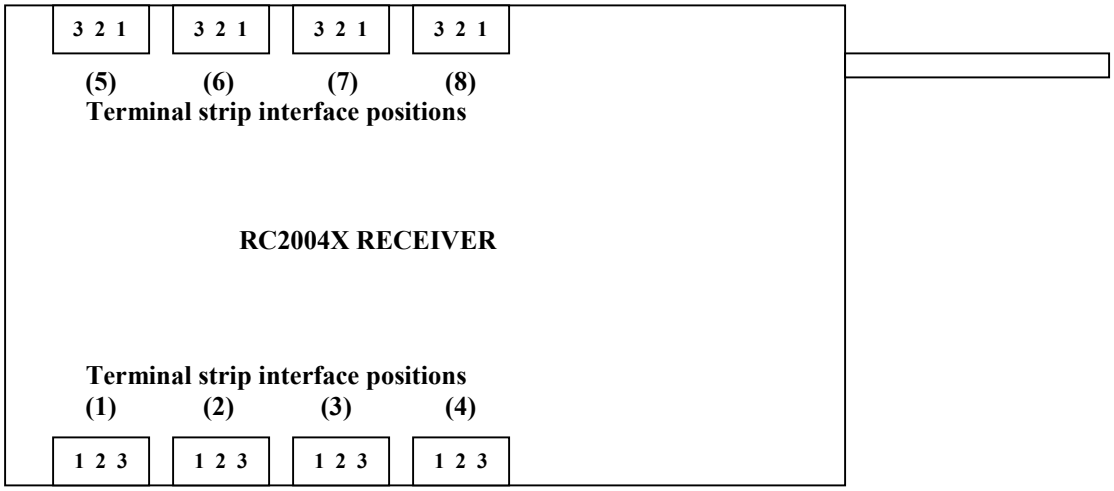
NOTE: To change the commands stored in a receiver, you must have a PC along with E R A D software RC2004-xx and cable assembly CA2004-xx, or an XT2004 transmitter. See XT2004_Club.doc for instructions on how to "Add or Remove" commands using the XT2004 transmitter.

Note: For information on interfacing to the receiver via the comport with cable assembly CA2004-xx, see RC2004_Soft.doc manual.

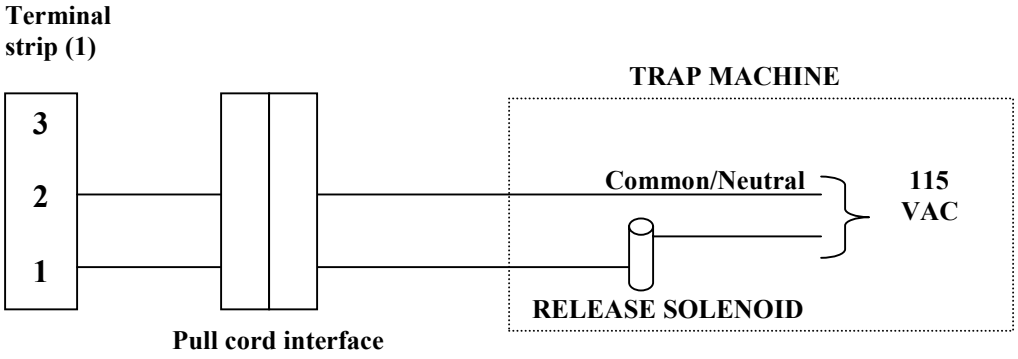
APPENDIX (A): WIRING SCHEMATICS:

RC2004 RECEIVER/TRANSCEIVER

TERMINAL STRIP (MACHINE) INTERFACE POSITIONS

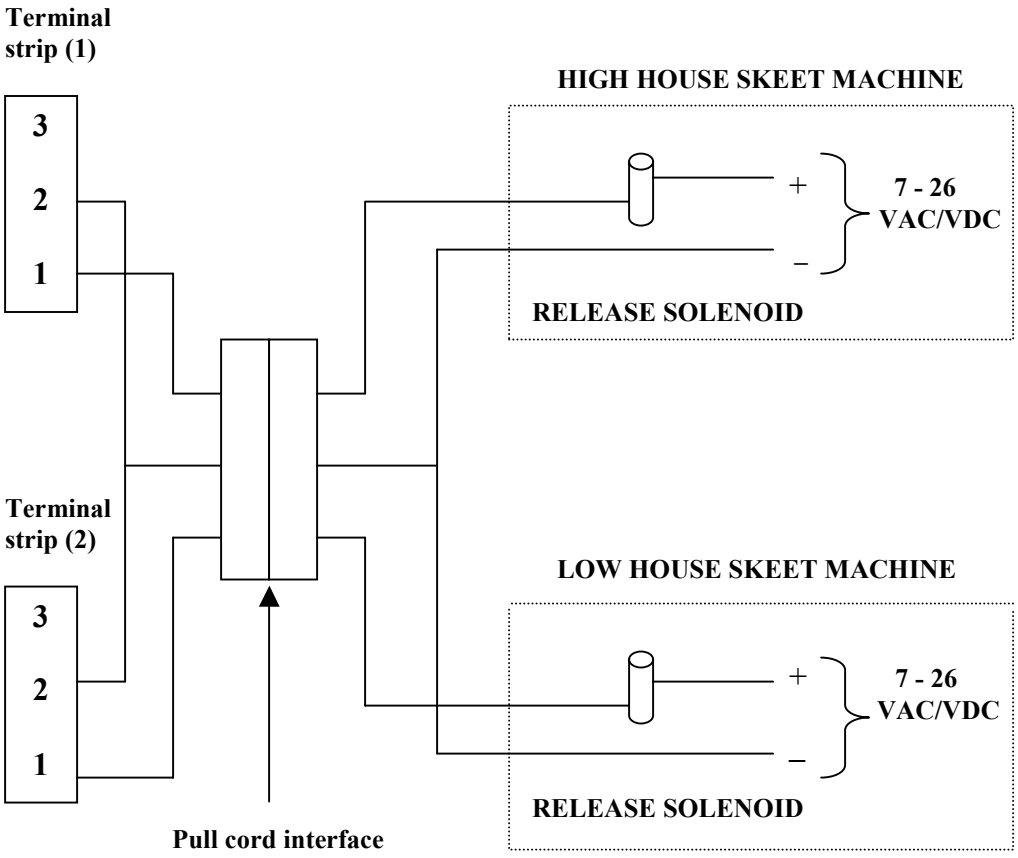


EXAMPLE OF 115 VAC TRAP CIRCUIT



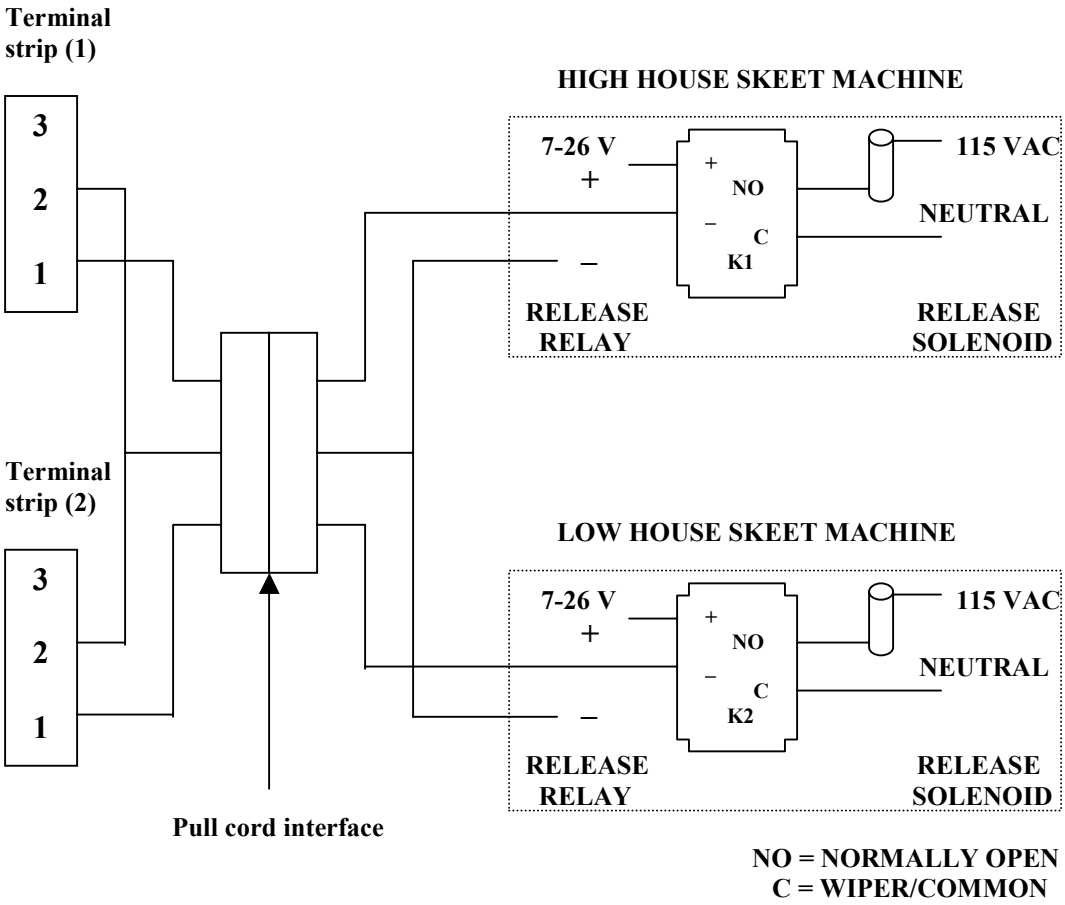
NOTE: **NEVER wire to pin 3 of the terminal strip without FIRST contacting E R A D. (817-244-1761 or erad@flash.net)**

EXAMPLE OF 7 - 26 VAC/VDC SKEET CIRCUIT



NOTE: **NEVER wire to pin 3 of the terminal strip without FIRST contacting E R A D. (817-244-1761 or erad@flash.net)**

EXAMPLE OF 115 VAC RELEASE COIL WITH A 7 - 26 VAC/VDC INTERMEDIATE RELEASE RELAY



NOTE: **NEVER wire to pin 3 of the terminal strip without FIRST contacting E R A D. (817-244-1761 or erad@flash.net)**

APPENDIX (B): FCC instructions to the User:

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 and 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:

* Reorient or relocate the receiving antenna.

* Increase the separation between the equipment and receiver.

* Connect the equipment into an outlet on a different circuit.

* Consult the dealer or an experienced radio/TV technician for help.

This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. Operation with non-approved equipment may result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.