User Instructions for PBTX Transmitter and PBRX Receiver.

Installation:

Transmitters are shipped with batteries installed.
First verify transmitter is operational by pressing any of the four buttons.
The status LED at the top of the transmitter will flash rapidly.
If LED does not flash then check batteries.
If LED flashes at slower rate then the batteries are low and need to be replaced.

Use care when installing the batteries and observe the correct polarity when the batteries are inserted . Use only CR2450N type batteries for replacement.

WARNING!: Battery may explode if mistreated or replaced with incorrect type. Do not recharge, disassemble or dispose of in fire.
Dispose of used batteries properly.

The receiver can now be installed.
Secure the receiver to machine so that all wires will not get pinched or fray on sharp edges. If mounting is a high vibration area it is recommended that receiver is mounted with shock mounts. Next, mount antenna to the flat metal part of the machine. For best performance make sure antenna is able to be seen by the transmitter at all times.

Operation:

Receiver input voltage is +24VDC and is connected to J2 Pin 1. The return (GND) is attached to J2 PIN 2. When power is attached a green LED will turn on.
Each button turns on the transmitter and transmits the defined button closure.
The receiver then decodes the button and closes the appropriate relay.
All relays commons are tied together and to J2 PIN 3. When a relay closes what ever is connected to PIN 3 will then be connected to the output of the activated relay.
I.e. by pressing the start key J2 PIN 4 has the potential of J2 PIN3.
All buttons can be pressed at the same time as long as any single path does not excide 10A.

Functionality:

Pressing the green start button on the transmitter will close relay 1 on the receiver.
Pressing the red stop button on the transmitter will close relay 2 on the receiver.
Pressing the yellow cycle button on the transmitter will close relay 3 on the receiver.
Pressing the white ALT button on the transmitter will close relay 4 on the receiver.
While pressing the function you can see a LED flashing at the same rate as the

transmitter. If LED flashes at a slower rate then not all of the transmitter packets are getting to the receiver.

Specificatioins:

System

Functions	4 Digital on / off
Frequency	433.92MHz
Modulation	Amplitude Modulation
Data	Manchester encoded
Response time	60ms
Data security	16777216 Unique Addresses 16 Bit CRC
Operating range	100 Feet
Temperature Range	-40 to 70 degrees C
Approvals	FCC, Canada ISC, CE

Transmitter

Size	4.15” (105.3mm) x 2.17” (55mm) x .86” (21.8mm)
Weight	3.5 oz with batteries
Sealing rating	IP66 NEMA 4X
Diagnostics	Red TX status / low battery LED
Labeling	Serial #, Model #, Approvals, IEC ICONS
Antenna	Internal
Batteries	2 x 3V lithium CR2450
Battery life	40 hours continuous operation

Receiver

Size	4.54” (115.3mm) x 2.633” (66.8mm) x 1.1” (2.79mm)
Weight	7oz
Diagnostics	Red status (signal, TX low battery) LED Green power LED
Programming	Learn switch
Supplied voltage	24VDC
Contact current	10A maximum
I /O Connector	Amp 12 Pin Mate-n-lock
Antenna	BNC Rubber Duck

FCC/IC Compliance Statement:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 circuit different from that to which the receiver is connected.

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

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.