New Turning Target System Instructions

Thank you for your interest in this turning target system.

Please read these instructions fully before using this system.

Notice: The seller accepts no liability for the use or misuse of this product. It is the responsibility of the user to determine and follow all safety requirements.

Please Note: The intent of this system is to bring the shooter a low-cost unit. As such, surplus parts are used and no attempt is made to "polish" the system. Therefore parts like the bracket, washers and such will have tool marks, etc. Each unit is individually constructed and may differ from others. No explicit warranty is offered, but Ed Hall will repair/replace/refund returns for a period of 90-days on a case-by-case basis. Shipping charges will not be refunded. Before sending any unit back (even for a refund) call Ed Hall at 518-359-2635.

Please ensure all parts are accounted for before discarding the packaging.

Your system will consist of the following:

<u>Bracket with motor unit</u> and frame. There should be a one-foot upright at each end of the frame and a length of wire wrapped around the motor, with a coax power connector on the end.

<u>One (1) Battery</u> with a coax connector glued in place on one terminal and an automotive type fuse and holder connected to the opposite terminal. It is suggested that the battery be charged after each use.

One (1) spool of speaker type wire with 1/4" phone plugs on each end.

One (1) 12-volt AC charger for the battery.

If purchased with the package, there should also be a <u>"Rangebox" controller unit</u> and its accompanying instruction sheet. **Note:** If the "Rangebox" was received as part of a complete system, most of the options should already be set up. However it would still be good to familiarize yourself with the "Rangebox" through its instruction sheet.

What you will need to supply to complete and use your system:

<u>A tripod or vertical surface</u> for mounting the unit. The tripod will need to be able to tip the mounting plate to a vertical position for use. The sturdier the tripod, the less additional movement when the frame turns.

A safe area to set it up.

<u>A target backer</u> 24" wide X 1/4" thick on which to place your target(s).

Targets of your own choosing.

<u>A controlling unit</u> to cycle your turner. If the "Rangebox" was purchased as part of the system it will provide the commands and signals to run the turner.

One (1) 9-volt battery (for the "Rangebox")

A speaker, audio system or earphones to hear the commands from the "Rangebox."

Assembly: The only assembly needed for this unit is the mounting to a solid surface, connection of cables and the insertion of a cardboard backer.

Safety Note: This unit has moving parts. To minimize the possibility of pinched fingers, etc., keep the battery disconnected whenever working directly with the unit.

Because this unit turns back and forth under battery power, it is suggested that you set it up and insert your card board backer prior to connecting the battery.

While being sure not to be in the way of the target frame should it turn, connect the battery cable to the battery. Connect the other end of the spool of cable to your controller and test the operation of the unit.

Yet another safety reminder: Although there should be no reason for the target to turn on its own, it is suggested that the battery be disconnected at all times when working directly with the turning system, to include mounting new targets.

Using more than one turner from a single controller: Multiple turners can be connected to a single controller using a 1/4" male to dual 1/4" female adapter (or multiples of). A Radio Shack P/N 42-2448 (or several) can be used. Connect the adapter cables to the Rangebox and then connect the individual turner cables to the adapters.

Mounting Holes: The unit is provided with a series of five holes in a diamond pattern in the middle of the back surface. The center hole of this diamond is threaded for a 1/4-20 bolt. The four other smaller holes are for the anti-slip pin found on most tripods. Additionally, two 1/4 inch holes are available for mounting to a different type surface. Other holes can be made in the bracket for your mounting needs, but care should be taken to avoid damaging any parts.

In case of difficulty: The following items should be checked before calling, but do call if any questions arise.

First ensure that everything is connected and turned on. Some terminology before we start - the 1/4" plugs and jacks have three contact areas (stereo). On the plug, the end is called the "tip," the next section is the "ring," and the large part is the "sleeve."

1. Press Play - Audio is heard, goto 2 - No audio, goto 3

2. Press Cycle - Target Turns, system is fine - Target does not turn, goto 3

3. If possible, try a different headset/earphone if no audio. Next, remove and replace the 9volt battery in the Rangebox (verify the battery is good). Look for loose wires/connections in the Rangebox -Loose wires, contact Ed Hall. Turn unit back ON and listen for a relay click while pressing and releasing the Cycle button several times. Relay clicks (and audio is heard), goto 4 - No clicks (or no audio), contact Ed Hall

4. At this point the Rangebox should be working - if there is audio and the relay clicks, goto 5 - no audio or no clicks, go back to 35. Unplug the turner control cable from the Rangebox (or other controller) and using a shorting device (a paper clip should work), connect the tip of the connector to the sleeve of the connector. Target turns, contact Ed Hall - Target doesn't turn, goto 6

6. Check fuse on battery. If blown, goto 7 - if good, goto 8

7. Disconnect battery and replace the fuse. While watching out for the frame, reconnect the battery. The frame should move to or remain in the edge position, but motor should NOT be trying to turn further. If the motor is still trying to turn, disconnect the battery and contact Ed Hall - If fuse is still good and the frame is in the edge position, goto 8

8. Connect the control cable to the jack in the turner and **while watching out for the frame**, short the 1/4" plug tip to the sleeve. If the frame turns, be sure it moves to the face position and stays, **and make sure the arm is not against the stop with the motor still trying to run.** If the motor is still trying to run, disconnect and contact Ed Hall - If the unit does not face, goto 9

9. Unplug the cable and check both connectors for loose wires. Repair if necessary (or contact Ed Hall) - one wire should be connected to the sleeve and one to the tip with nothing connected to the ring. Both ends are the same. If a meter is available check for continuity between the connectors - tip to tip and sleeve to sleeve. If a repair was made, plug the cable back into the turner and **while watching out for the frame,** short the tip to sleeve on the opposite connector. If nothing happens, contact Ed Hall - if the turner turns, goto 10

10. Connect all the cables and set up the system. Test the system for proper operation. If the unit does not operate correctly, contact Ed Hall - if unit does operate properly, proceed with your shooting session.

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