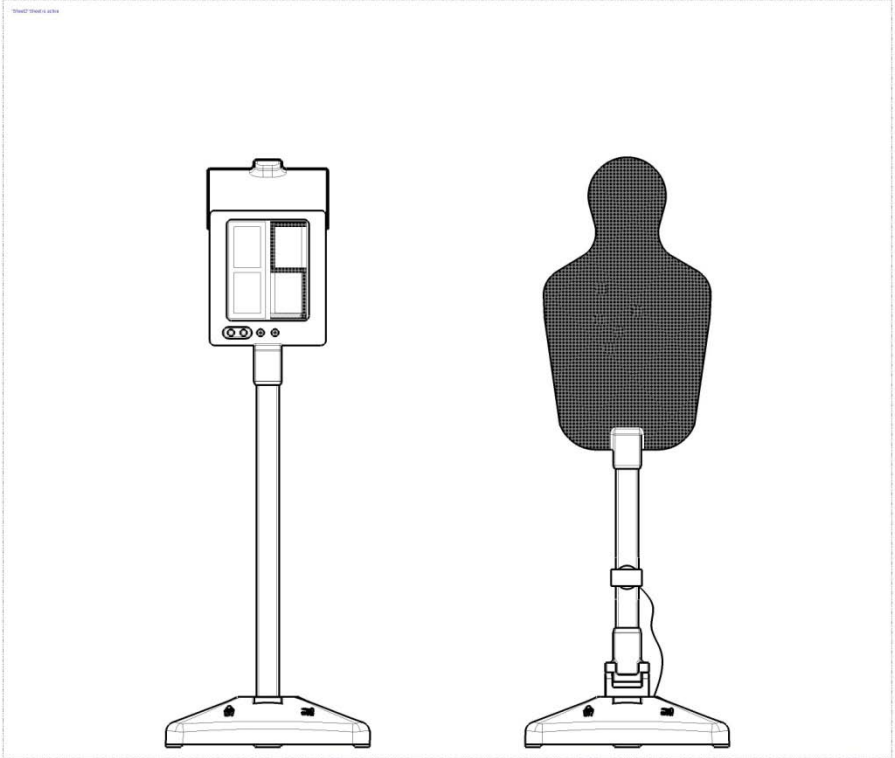


Portable Wireless Shooting-Range System Operating and User's Manual

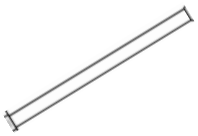
Introduction

RTS (Reactive Target System) introduces a significant technological leap in erecting and managing wireless electronic shooting ranges. It provides accurate counting of hits in indoor and outdoor shooting ranges, both for combat trainees and private individuals.

RTS revolutionary approach enable trainers and trainers to save time, increase productivity, and provide a better & safer shooting experience:

- No need to walk to targets to check hits
- Reduces idle time
- No need to cross the line of fire
- Execute more drills/shooting in less time
- Spend more time on improving shooting skills and decision making

Portable Wireless Shooting-Range System Components

Qty	Description	Illustration
1	RTS Target Pole	
1	RTS Target Base	
1	RTS Numerator (controls up to 9 targets)	
2	RTS Remote-Control	
9	RTS Transmitter + RTS Hit Sensors	
6	AA batteries for the Numerator	Not included
9	CR-123 lithium photo batteries for Transmitter	Included

System Setup

RTS Numerator Setup

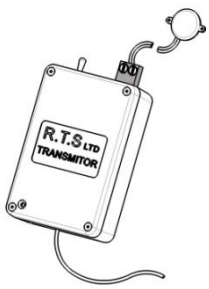
1. Turn the RTS Numerator to its back side, open the batteries lid, and insert the six AA batteries. Close the batteries lid
2. Place a RTS Target Base, attach the RTS Target Pole, and mount the RTS Numerator.
3. Lift the left switch on monitor until the indicator "S 32" blinks for one second.
4. Hold down the right switch on the monitor, "Ln" (Learn) will lights up

5. Keep holding down the right switch until the message "Er" light up, which indicates that all previous records were erased.

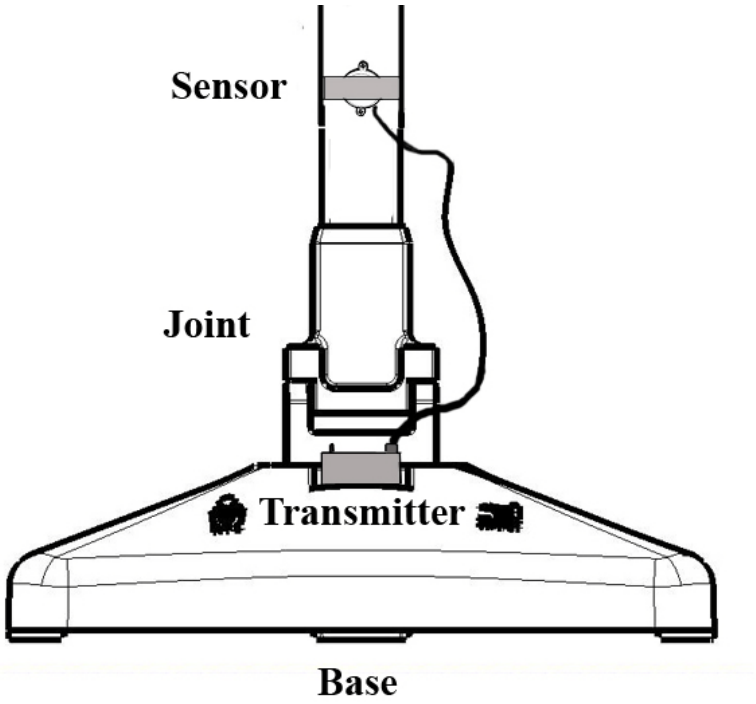
Preparing the targets

1. Place RTS Target Base on the ground, making sure it is stable, with captions facing the firing line.
2. Place the RTS Target Pole into the appropriate socket on the base and attach the place the RTS Self-Healing Torso to the upper part of the column. For a knock-over target, attach the RTS Smart Joint to the RTS Target Base using the round socket in the middle of the base. Insert the RTS Target Pole into the RTS Smart Joint.
3. Attach the RTS Hit Sensor to the RTS Target Pole, about 2 inches above the base, facing the firing line.
4. Connect the RTS Hit Sensor's wire to the transmitter and make sure that it is properly connected.
5. Adjust the RTS Transmitter Hit Sensitivity Switch The transmitter's switch has 3 positions:
   - Middle: normal sensitivity.
   - Left (away from the sensor connector): high sensitivity.
   - Right (toward the sensor connector) : low sensitivity.

   Insert transmitter into its socket in the base – sensitivity switch facing down and the antenna facing up.



6. Repeat for additional targets (up to 9 targets).

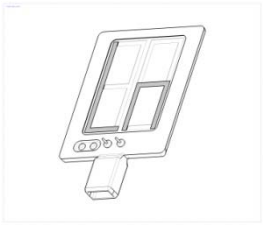


Connecting RTS Remote-Control with the RTS Numerator

1. Hold down the RTS Numerator's right button until LN lights up.
2. Press several times on any of the remote control buttons until R 1 is visible
3. Repeat procedure for up to 3 remote controls

Connecting targets with the RTS Numerator

1. Hold down the RTS Numerator's right button until LN lights up.
2. Hit the RTS Self Healing Target Torso with a metallic object or shoot one bullet at it. T1 (Target No.1) appears on the monitor.
3. Repeat procedure for up to 9 targets.



System Operation

Operating the Remote Control

1. Button #1 (upper left corner) turns Monitor On/Off
2. Button #2 (upper right corner) rolls the target numbers forwards
3. Button #3 (bottom left corner) resets the score for the target on the display.
4. Button #4 (bottom right corner) rolls back to the targets on the monitor.
5. Pressing buttons 1 and 3 simultaneously will reset the score for all the targets.

Low Battery Indicator

RTS Transmitter Battery: at the point where the RTS Transmitter battery is about to be too weak for normal operation, the RTS Transmitter will report "Low Battery" to the RTS Numerator. When the RTS Numerator displays the score for that given RTS Transmitter (say "T3") you will see the following sequence:

1. The RTS Numerator will display "T3"
2. After one second "Lb" will be displayed , and two fast beeps will be played
3. After additional second, the hit score for the target will be displayed.

When you see the "Lb" indicator it is time to replace the battery in the target transmitter.

RTS Numerator Batteries: at the point where the RTS Numerator batteries is about to be too weak for normal operation, the RTS Numerator will display the "Low Battery" indicator, "Lb" and play a beep for 2 seconds just before the screen goes to sleep mode (black out). You should immediately replace the batteries in the RTS Numerator.

Operation Specifications:

- Effective distance from target to monitor up to 300 meters depending on the topology and wireless interference conditions of the range's area. Transmission range can be increased by raising the RTS Transmitter higher up from the ground level.
- Closest effective firing range: 5 meters for pistol, 10 meters for rifle

System Trouble Shooting

Part	Problem	Resolution
Numerator	Does not turn on:	• Check that the batteries are correctly inserted. • Check that the batteries are fully charged and change if necessary.
Numerator	Incorrect scoring:	1. Check that the Transmitter operates correctly (see below) 2. Position the transmitter near the Numerator (10 yards) 3. Check for correct scoring. 4. If problem persist, replace the RTS Numerator batteries
Sensor & Transmitter	Unable to connect a target to the Numerator Or On target hits not counted by Numerator	• Check that the RTS Hit Sensor connected firmly to the RTS Transmitter. • Position the Transmitter with the "RTS Ltd. Transmitter" is facing you. Note the led in the left bottom corner. • Set the Transmitter sensitivity switch to the left (away from connector) • Hit the target with a heavy object and watch the led. • If led lights up for one second and then blinks four times, the Transmitter function correctly . • If not, replace batteries and repeat test. • If still see the problem, connect another RTS Hit Sensor and repeat the tes.
Sensor & Transmitter	Transmitter Sensitivity	• Start by placing selector sensitivity switch on default (middle position). • In case of low score: move sensitivity switch away from the green connector to increase sensitivity • In case of over score: move sensitivity switch towards the green connector to decrease sensitivity

NOTE: 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.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Reactive Target System Ltd.) could void the user's authority to operate the equipment.