

BRB Systems USA Co.

Instruction Manual.

USA Trap Solo Voice Release System. 12V & 120V Versions.

IMPORTANT: Read and understand this manual before assembling, installing or using this system. Improper use of this system can cause serious injury.

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(1) Safety Information.

CAUTION:

This system is powered by electricity. To reduce the risk of electric shock, do not remove any cover from the apparatus. There are no user serviceable parts inside. Refer servicing to BRB Systems USA Co.

Make certain that any person assembling or installing this system has read and fully understood this Instruction Manual. It is your guide to safe and proper operation of this system.

- System power supply units marked **12V only** are to be used with 12V dc power sources only and are supplied ready for connection to a 12V car style battery. Car batteries contain acid and so extreme care must be taken when handling them. 12V car batteries are capable of supplying large amounts of current and care must be taken not to connect the + (red) and – (black) terminals together.
- System power supply units marked **120V only** are to be used with 120V ac power sources only.
Do not defeat the safety purpose of the polarized or grounding type plug fitted to this apparatus. If the provided plug does not fit into your outlet, consult a qualified electrician for rectification.
Exterior 120V outlets should be GFCI protected for your safety. If the outlet is not GFCI protected then contact a qualified electrician for rectification.
- Protect the power cord from being walked on, pinched or damaged in any way.
- Unplug this apparatus during lightning storms or when unused for extended periods of time.
- Use only the attachment parts / accessories provided by BRB Systems USA Co.
- Do not allow liquid entry into the system components.
- Ensure that the trap is disconnected from its power source and unloaded before connection of the USA Trap Solo. Failure to do so could result in the unexpected operation of the trap causing serious injury.
- Ensure that the trap is disconnected from its power source and unloaded and that it is completely disconnected from the USA Trap Solo before attempting loading, maintenance or repair of the trap. Failure to do so could result in the unexpected operation of the trap causing serious injury.

- Extreme caution must be taken when a manually loaded trap is in use. This system is not able to determine whether a loader is ready for a target to be launched. Therefore it is extremely important that shooters using the system be instructed on the importance of not making inadvertent calls as this may cause the system to operate the trap and cause serious injury to the loader.
- Ensure that any cabling associated with this system is routed so as not to cause a tripping hazard for the systems operators or users. Where cabling must be routed across walkways the use of rubber walkway mats is recommended.
- Always remember that the manual button release will operate even if the system power is switched off. Failure to take note of this may result in serious injury.

(2) System Component Assembly.

Each USA Trap Solo is supplied with the following components:

1 x microphone.

1 x microphone / control box stand.

1 x power supply / relay box.

1 x main control box with integral control & microphone cabling.

No-ox terminal anti-corrosion compound.

Instruction manual and warranty.

Optional Equipment:

Remote manual button release.

Microphones.

The microphone supplied, bolts to the top of the stand with the bolt, washers and wing nut supplied. The microphone should be bolted to the stand so that the foot pedal faces away from the shooter.

Set the angle of the microphone to an angle of approximately 45 degrees above the horizon.

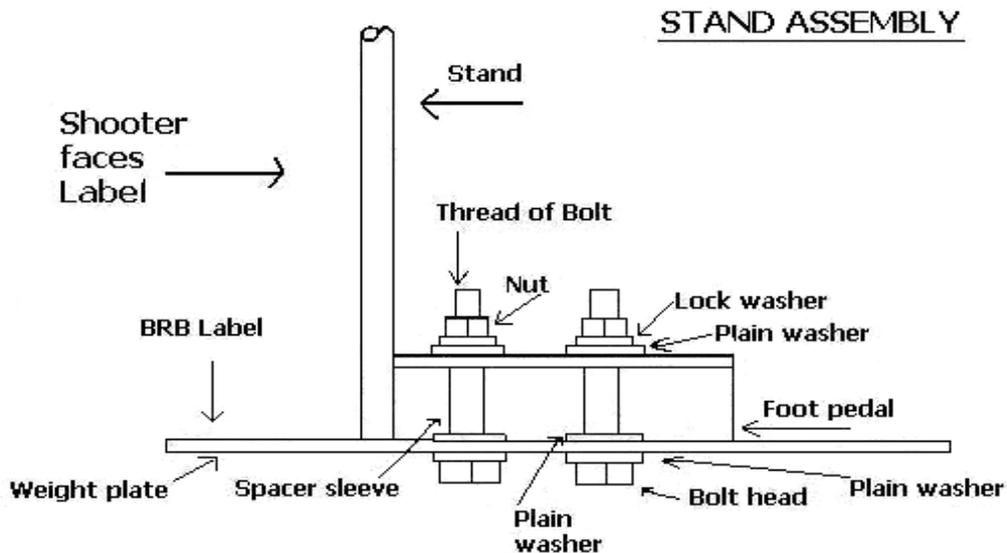
The microphone is connected to the main control box with the short microphone cable and can be identified by it's 2 pin plug.

When connecting the microphone cable to the microphone, form a relaxed loop in the cable from the plug and cable tie the cable to the stand to prevent excessive strain on the microphone socket.

Microphone / Control Box Stand.

The stand supplied is made to be mounted to a weight plate. Using the assembly kit provided, bolt the stand to the weight plate as shown in the diagram below.

Each stand has integral brackets for the easy storage of the unused microphone cabling.



Power Supply / Relay Box.

The 12V version is supplied with alligator clips (red for the + terminal and black for the - terminal) and is connected to a 12V battery such as a car battery.

When connecting always observe the polarity or damage may occur to the system.

The 120V version is supplied with a 3 pin grounded plug for connection to a mains 120V grounded power supply.

The power supply / relay box is located in the trap house and is connected to the control box via the 60 ft long main control cable which can be identified by the 3 pin plug fitted.

The trap connection cabling is made to be a direct replacement for the manual button release cable. For safety reasons it is recommended that the connection of this cable, to the trap, be made by using the trap manufacturer recommended plug. Due to the large variety of plugs used by trap manufacturers BRB Systems USA Co. does not supply this part with the purchase of a voice release system. The appropriate plug that will fit your trap will be available from the trap manufacturer.

Main Control Box.

The main control box is connected to the microphone with the 2 pin microphone cable and the power supply / relay box with the 60 ft long 3 pin main control cable.

The enclosure is IP65 rated as 'splash proof', but should not be immersed in water. As with any electronic equipment it is recommended that this unit be treated with respect and kept dry. Avoid prolonged periods of exposure to the weather, particularly rain.

No-ox Anti-corrosion Compound.

Each USA Trap Solo comes with no-ox compound applied to the plug and socket connections of the microphone and power supply / relay boxes.

It is recommended that periodically a thin coating of the compound provided be applied to the plug and socket connection to ensure good contact connection and trouble free use of the system.

(3) Installation.

For ease of installation, the USA Trap solo is manufactured in such a way that if the plug fits the socket then the connection is correct.

- A- Ensure the power to your trap is switched off.
- B- Connect the power supply / relay box release cord to the trap release cord via the terminal block connector.
- C- Set the microphone, control box and stand in the desired shooting position, with the foot pedal facing away from the shooter.

The ideal position for the microphone is within 3 ft of the side of the shooter. Right handed shooters usually prefer the microphone to their left and left handed shooters to their right.

If preferred the microphone can be set in front on an angle to the left or right or be placed directly in front of the shooter.

- D- Connect the control box to the power supply / relay box with the control cable.

(4) Operation.

There are no settings or adjustments that can, or need to be, made to the system by the user.

After checking that no work is being carried out to the trap, connect the USA Trap Solo to its power source.

Switch the On / Off rocker switch on the control box to the On position. The indicator LED on the button box should light to indicate that the system is ready for use.

A target can now be released by the shooter upon his call.

With the microphone installed within 3 ft of the side of the shooter, the shooter should be able to call for a target in the same way as he would if the trap was being operated by a person. There is no need to turn and call toward the microphone or call excessively loudly.

Singles Mode.

When a call is detected by the system the System Status indicator will extinguish and a target will be released.

Once a call is detected the system will not operate again for 2.5 seconds, in order to allow the trap time to reload.

When ready to accept another call the System Status indicator will light.

Following Pair Mode.

When a call is detected by the system a target will be released.

Once a call is detected the system will not operate again for 2.5 seconds, in order to allow the trap time to reload during which time the System Status indicator will flash at a high rate.

After the 2.5 seconds has elapsed the System Status indicator will extinguish and a 2nd target will be released.

Once the 2nd target is released the system will not operate again for 5 seconds, in order to allow the trap and shooter time to reload.

When ready to accept another call the System Status indicator will light.

Note: The USA Trap Solo Voice Release System has integral filtering to eliminate background noise etc. However the microphone is operational when the system is switched on. Therefore the referee must make it known to the shooters that in the same way as with a manual release system there should be no unnecessary talking on the line.

Manual Release.

Manual target release is via the button box cord fitted as an optional addition at manufacture.

To manually release a target the referee can operate the trap by pressing the push button on the button box. When the push button is pressed the System Status indicator on the button box is extinguished and the target is released simultaneously.

Note: The push button release will operate even with the system power switched off.

To avoid the accidental release of a target when the system is not in use a 2 minute safety shut down is built into the system. When the system shuts down in this way the System Status

indicator will slowly flash continuously. To return the system to operational status simply switch the On / Off switch on the button box Off and then On or manually release a target with the button release. When this is done the indicator will light continuously to show the system is ready.

(5) Maintenance.

The rugged manufacture of the USA Trap Solo Voice Release System should ensure many years of trouble free use if it is not abused and given simple maintenance.

As with any electronic equipment the system should be treated with respect.

- Avoid moving any component of the system by pulling it by the cabling.
- Do not allow any component to be immersed in water.
Due to the trap house often being subterranean and water logged keep the power supply / relay box off the floor.
Placing a thin plastic bag over the microphone, secured with rubber bands protects them from water and appears to have no noticeable effect on operation.
- Each USA Trap Solo Voice Release System comes with no-ox compound applied to the plug and socket connections.
It is recommended that periodically a thin coating of the compound provided be applied to the plug and socket connections to ensure good electrical contact.
- Regularly inspect the power cord from the power source to the power supply / relay box for wear or damage. If any wear or damage is found replace immediately.

There are no settings or adjustments that can be made to the system by the user. Should difficulty be found with the system operation do not remove any of the system covers. This will void the system warranty and may result in an electric shock hazard.

Refer servicing to BRB Systems USA Co.