

The Autopuller®

By CLAY DELAY

Owner's Manual

Model APA



CLAY DELAY
115 Roycroft Dr. West Seneca NY 14224
Phone 716-674-4489 E-mail: claydelay@hotmail.com
www.claydelay.com

The Autopuller Advanced has 5 controls and 2 indicators

The Large Top Buttons are for Arming the Target Machine

As seen when looking down on belt —

Right = Low Left = High

The Small Top Button is for releasing the target manually

Indicator Lights

- #1 Status
- #2 High Target
- #3 Low Target
- #4 Voice



Rotary Switch is voice sensitivity and ON/OFF



Switches for Microphone and Machine Signal inside battery compartment

Components of the Autopuller Package

- Autopuller
- Installed 9-volt Alkaline battery
- Microphone
- Belt strain relief
- Instruction manual (this document)

Features of the Autopuller Advanced

- The voice feature has an adjustable delay that allows you to fine tune your pull delay
- The manual release is instant, regardless of the voice delay time

Setup and Installation

Starts on page 8

Adjustments to match your course

Voice Delay	Page 5
Microphone sensitivity	Page 6
Machine signal	Page 7

Normal Operation

1. To turn the unit on, rotate the side adjuster from the off position. This is now the standby state. A target will not be released until a target machine is armed.
2. Use the side adjuster to set the sensitivity of the microphone. With the microphone plugged in and clipped to your collar, use the voice light on the front panel to adjust for your call. (Refer to page 6 for more information on setting up the internal voice adjuster.)
4. Pressing an arming button will hold the Voice Delay light on, and set the unit in an active state. (For the skeet/sporting clays models, press either large button for a single target or both buttons for doubles). A target will now release in response to your call. The Target lights are a visual indicator that “shows” which target is launched. After each target is launched, the system will go back into the standby state, thus preventing false targets.
5. If you are shooting with a companion, arm the target(s) as usual. When your companion calls for their target, press the small button on the top panel. This will launch a target the same as when you call using the microphone, but since “you” are now the delay, the voice delay is set to 0.

Voice Delay Adjustment

When using the voice command, the Autopuller is very fast at releasing a target. To come closer to a normal pull time, your APA comes with the voice delay time preset at .5 seconds. If the time does not match your normal pull delay, continue reading to adjust.

The Voice Delay is adjustable to allow you to fine tune the amount of time between your call and target launch. To adjust, press and hold the manual button (for approximately 4 seconds) until both the Single/Double light is on steady and the target lights start to blink. Release the manual button. Count the blinks between pauses to establish the present time. Each blink is equal to approximately 1/10 of a second. Press and hold the High house button to increase the count or the Low house button to decrease the count. The range is from 1 to 9. Once you have the count you like, turn the APA off, wait 3 seconds, and turn back on. The new delay will now be stored for future use.

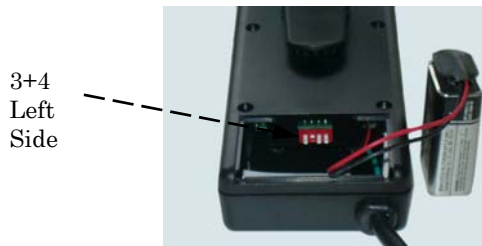
Microphone Setup

The microphone is preset to work in most situations. If you find that the external adjuster does not allow you to comfortably call for your target, you may adjust the sensitivity further by accessing the internal set of 4 switches.

The internal switch is located in the battery compartment. Open the battery door and remove the battery. The switch is now visible in the center of the unit. As seen thru the opening, down is off and up is on. Please reference the picture below and note switch 4 is off and switch 3 is on. The numbers go from left to right, 4 to 1.

The 4 position switch has two functions. Switches 1 + 2 are for machine signal and positions 3 + 4 are for microphone setup.

Positions 3 and 4 are used for microphone sensitivity. The normal settings are for switch 3 to be on and switch 4 to be off. Turning switches 3+4 off will decrease the sensitivity of the microphone. You will now need a louder and longer call before the unit will respond. Turning switches 3+4 on will increase the sensitivity of the microphone. Keep in mind that the increased sensitivity will now release a target very easily, possibly even with the closing of your gun.



6

Machine Signal Setup

The machine signal is set to work on most machines. If you are having difficulties in releasing a target, adjust the signal length using the internal switch.

The internal switch is located in the battery compartment. Open the battery door and remove the battery. The switch is now visible in the center of the unit. As seen thru the opening, down is off and up is on. Please reference the picture below and note switch 4 is off and switch 3 is on. The numbers go from left to right, 4 to 1.

The 4 position switch has two functions. Switches 1 + 2 are for machine signal and positions 3 + 4 are for microphone setup.

Positions 1 and 2 are used to increase the length of the signal needed for the target machine to launch a target. A foot operated machine or older machine will need a longer signal. With both switches 1 and 2 off, the pulse to the machine will be .5 seconds. Placing switch 1 on, adds .5 seconds, for a total of 1 second pulse. Placing switch 2 on will add 1 second, for a total of 1.5 seconds. Placing both switches 1 and 2 on will give a signal of 2 seconds.

NOTE: If after making an adjustment the signal is too long, a second target may be released. Just place switch 1 back in the off position.



7

Wiring Setup

The Autopuller was designed to be used with either your existing pull cord or a external grade extension cord. If you use the existing cord, remove the head from the cord and install a female connector in its place. A mating male connector is installed on the original head and on the Autopuller. This will allow you the choice of either control unit. If you decide to replace the pull cord with an exterior grade extension cord, install the necessary connectors on the cord and on the Autopuller. See installation for wiring instructions.



Connectors attached to Autopuller, original pull head and cord.

Installation:

Trap model: It is not important as to which way the 2 wires are connected to your cord.

Skeet/Sporting Clays models: The 3 wires have to be connected in a specific way. To operate 2 target machines, 1 wire has to be common to both, (green), 1 wire is for High, (black), and 1 wire is for Low, (white). You will need to determine the matching wires your particular cord. If you connect the wiring incorrectly, the Autopuller will not release the correct target with the appropriate button. If this occurs, simply rearrange the wires until the system works properly. (refer to page 12 for specific information)

NOTE: If a skeet or sporting clays model is to be connected to single trap machine, connect both the white and black wires together on 1 terminal and the green wire to the 2nd terminal.

Wiring information

The normal electrical color code does not apply to the Autopuller hookup. Due to the limitations on types of wire available, the colors are only references as to how you need to attach the connector.

Green - Is common to both the High and Low machines

White - Is to be connected to the Low machine

Black - Is to be connected to the High machine

For your reference, 3 of the common size connectors are shown below. (The standard 110v is shown to assist you in establishing sizes.)

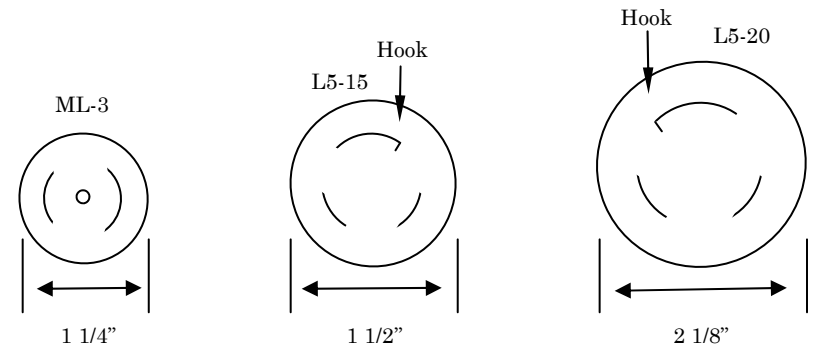


Standard 110v Plug

ML-3

L5-15

L5-20



As seen when looking at the outside terminals
Dimensions are approximate and may vary based on manufacturer

Quick Answers to Common Questions and Problems

- **Erratic Operation** - Turn unit off, count to 5, turn unit back on
- **Erratic Operation** - Possible a bad battery, replace with a 9v alkaline
- **Wrong House Triggers** - See page 12 to correct wiring to plug
- **APA seems to work ok but no target launch**
Be sure target machine is on and the wiring connectors are connected properly and securely. Refer to page 9 for troubleshooting
- **False triggering of targets** - Lower sensitivity of microphone using external adjuster and switches inside of battery compartment. See page 6 for setup.

Problems at setup:

First time the APA is being hooked up to a particular machine:

- Insure the target machine is turned ON and working properly by connecting the original release and launching targets.
- Turn the APA on by rotating the voice adjuster from the off position. The front panel Voice Delay light should now be blinking. Verify the light is now blinking. Press one of the arming buttons and verify that the light is now on steady. Press the small manual button. The light should go off, the corresponding target indicator will come on, and you should hear a “click” from inside the box. If the target light does not turn on properly, check for a bad or disconnected battery. If unit appears to be dead, contact Clay Delay for assistance.
- Since this is the 1st time you are using this unit on the field, check the wiring to the course connector and verify that the connection is correct. If all appears to be ok, the signal to the machine may be too short to trigger a target. Increase the machine signal length. Refer to page 5, Machine Signal Setup for further instructions.
- If the APA is functioning, but not correctly, refer to “Common Problems when attaching connectors” on page 12.

Foot-operated released machines

The signal to a foot-operated machine needs to be longer than a pushbutton controlled machine. If you experience a problem releasing targets, increase the signal pulse by opening the battery compartment and turning switch 1 and/or switch 2 on. Refer to page 7, Machine Signal Setup for further instructions.

Common Problem When Attaching Connectors:

Machines work properly but the wrong machine triggers;

Black and White wires reversed in connector

High and Both work but no Low:

Black and Green wires reversed in connector

Low and Both work but no High:

White and Green wires reversed in connector

Problems after APA has been working:

APA starts to operate erratically:

Examples are the APA not going into standby after a shot or the voice circuit not responding the same as before.

- If your unit starts to operate erratically, turn your unit off, wait 5 seconds, then turn back on.
- If you still have problems, replace the 9-volt battery with a new Alkaline battery. A lower grade or weak battery may not power your unit properly.
- If all appears to be ok, contact Clay Delay for assistance.

APA was working on the connected machine, but now will not trigger targets:

- Insure the target machine is ON and working properly by connecting the original release and launching targets
- Check the connector at the target machine and the APA and insure they have not come loose.
- Verify the APA is operating properly by watching the front panel lights when you turn the APA on. The voice light should blink on, go off, and stay off and the Voice Delay light will be blinking. Press one of the arming buttons and verify the Voice Delay light stops blinking and stays on. Press the small manual button. One of the target lights should blink on, pause, then go off. Now press the other arming button, and press the manual button. The other target light should turn on, pause and go off. If the above sequence is correct, and all appears to be fine, contact Clay Delay for assistance.

APA works on 1 machine but not on a different machine:

- Verify that the connector wiring is the same on both machines.
- The second machine may need a longer signal. Refer to page 7 for adjusting the machine signal.

Future References:

Voice Delay Setting _(5)_____

Voice Switches 3 and 4 _____

Club _____

Connector _____

Signal Switches 1 and 2 _____

Club _____

Connector _____

Signal Switches 1 and 2 _____

Club _____

Connector _____

Signal Switches 1 and 2 _____

WARNING

Many individuals have elected to connect a common household 110-volt style male connector to the cord on the Autopuller. If the Autopuller is inadvertently plugged into an outlet, turned on, and operated, major damage will occur.

DO NOT, UNDER ANY CIRCUMSTANCE, PLUG THE AUTOPULLER INTO ANY OTHER CONNECTION THAN THE TARGET MACHINE CONNECTOR!

If your Autopuller will be used by other individuals, Clay Delay advises that you spend a little more for a dedicated twist lock connector. This will insure that a possible problem with a wall outlet cannot occur.

If you decide to connect a household connector, the owner of the Autopuller, not the Clay Delay company, takes full responsibility for proper use of their unit.

Thank you for ordering an Autopuller

Safety should always come first. The Autopuller was designed to give consistent pulls without the need for a trap boy. You should never be alone when practicing, but with Autopuller you do not have to rely on your companion to do the pulling.

CLAY DELAY takes no responsibility for damage caused by incorrectly wired trap machines, modified trap machines, modified units, incorrect data given to CLAY DELAY at time of order, or use of the Autopuller for purposes other than that for which it was designed.

This product is covered by a 1-year warranty against manufacturing defects.

CLAY DELAY
115 Roycroft Dr. West Seneca NY 14224
Phone 716-674-4489 E-mail: claydelay@hotmail.com
www.claydelay.com