

SI398

“Treat and Train” Dog Training Device

MANUAL

1. INTRODUCTION

1.1. General

The Treat and Train is a device that assists a dog owner in training their dog to improve its behavior using positive reinforcement. Its primary intent is to decrease barking, jumping or other unruly behavior at the front door. The device consists of a remote controlled food dispenser that the dog owner can activate at will, and there are automatic modes that will dispense the dog food automatically at set intervals. A DVD video will be included for the user to understand how to use the training device effectively.

1.2 Material

- 1.2.1. ABS or polycarbonate construction. Materials should be resistant to UV light because it could be used outdoors. It should also be water resistant or rain/sprinkler proof.

1.3 Features

- 1.3.1. Easy set up and operation.
- 1.3.2. Rugged and stable design that will accept abuse from large dogs and weather. It won't be easily pushed around or knocked over by the dog. Non marring rubber feet on base to resist sliding. The food should be well contained inside the device.
- 1.3.3. The food should only be visible from the outside of the device through the transparent top cover.
- 1.3.4. Other than the audible cues, the mechanical operation of the device should be quiet. Some dogs will be afraid of the machine if it is too noisy.
- 1.3.5. All controls should be located on the device where the dog will not be able to easily paw at the buttons. The timer LED should be visible from 20 feet away in all directions.
- 1.3.6. Easy to load with food. Should hold 2-3 cups of dog food. It should reliably dispense kibble down to the last few remaining pieces.
- 1.3.7. Easy to disassemble for cleaning.
- 1.3.8. Dispenser must accommodate and be capable of being adjusted to dispense dog kibble only one at a time. The kibble will range in size from 4 to 18 mm. This might be accomplished by the customer easily exchanging parts in the device. The device must work with semi-moist dog food to be used as a higher motivation for the dog.
- 1.3.9. The dispensing of the food is synchronized with an audible (to humans and dogs) cue that is easily distinguished from normal ambient. The volume of the cue is adjustable. The cue should be distinct, but not

irritating to people. It should also be immediate and reliable with the push of the dispense button on the remote.

- 1.3.10. The device can be set for manual operation or interval operation. The interval mode is used for working on a dog's down stay.
- 1.3.11. The interval mode has options. One is that it will dispense treats automatically; the other is that it will audibly prompt the trainer to dispense the treat using the manual dispense at a certain interval. The trainer prompt is a different and distinct tone that is only to tell the trainer it is time to dispense. This allows the trainer to decide if the dog is behaving properly before dispensing the treat.
- 1.3.12. In the automatic interval mode, the device will have a sensor that automatically determines if the dog is sitting within 2 feet of the front of the machine before dispensing a treat. The machine will dispense treats at a regular or variable interval ranging from 3 seconds to 5 minutes. The sensor will have different sensitivity settings and the sensor can even be defeated so it will dispense treats automatically no matter what the dog is doing. A small LED on the dispenser will indicate that the sensor is sensing the dog or some object in front. This will be used to set the sensitivity level.
- 1.3.13. The intervals are set using a 12 position dial. The intervals are either regular or variable over an increasing range.
- 1.3.14. Starting an interval session in the regular interval mode also starts a session timer in the dispenser. 3-60 second intervals starts a 1 minute timer, 2 min and 5 min intervals starts a 2 min timer or a 5 minute timer respectively. During the interval session a bright LED should turn ON on the dispenser. When the timer finishes the LED should turn off and the Auto mode should stop because that interval session is complete. In the variable mode, there is no timer to start and stop the session. The trainer must stop the session manually by pressing the button again on the remote.
- 1.3.15. The mechanism should unclog any of the dispensing holes mechanically with each rotation.
- 1.3.16. There should be an IR interrupt or some other mechanism to assure that a kibble is actually dispensed. If the IR interrupt does not sense a kibble dropping, the feeder should continue to attempt to dispense several more times (without any additional audio cue) until it senses that the kibble has dropped. Or it will stop because there is a fault or there is no more kibble in the machine.
- 1.3.17. The remote has a "jackpot" feature where it will have the dispenser give the audible cue once, but then dispense treats rapidly. This is used for when the dog has performed especially well. This is accomplished by pressing and holding the manual dispense button on the remote. As long as the button is held, the device should continue to dispense treats.
- 1.3.18. The radio frequency remote should have at least a 100 feet range line of site.
- 1.3.19. The dispenser electronics should "go to sleep" after 30 minutes of inactivity if operating on batteries. After waking the unit up with remote input, it will respond immediately to any commands. If an adapter is being used, there should be no sleep mode. (Check power draw to see if

sleep mode is necessary.) The batteries should last at least 6 weeks of regular training.

- 1.3.20. The manual is very comprehensive giving many tasks to achieve certain behaviors, but primarily to reduce or eliminate barking, jumping or other unruly behaviors at the front door. There should be an overview listing of the steps in the manual with a short description of each step.
- 1.3.21. A separate “target” will be included for the dog to recognize as something to touch for training purposes.
- 1.3.22. The target should be mounted on a telescoping stick. The stick can also be placed into a heavy base that will self right the target.

2. CONTROLS

2.1 Dispenser

- ON/OFF power button or switch
- Volume dial (controls prompt cue and dispense cue)
- Switch---Trainer prompt only/Auto dispense)
- Sensor Sensitivity OFF, LO, MED, HI (Auto mode only)
- Intervals adjustment dial 12 positions (3,5,7,10,15,20,25,30,45,60 sec, 2 min, 5 min)
- Intervals Switch---Regular Intervals/Variable Intervals

Interval Settings (10 trials should average to the setting value)

Setting	Setting (n)	Variable Lower Limit	Variable Upper Limit (2n-3)
1	3 sec	3 sec	3 sec
2	5 sec	3 sec	7 sec
3	7 sec	3 sec	11 sec
4	10 sec	3 sec	17 sec
5	15 sec	3 sec	27 sec
6	20 sec	3 sec	37 sec
7	25 sec	3 sec	47 sec
8	30 sec	3 sec	57 sec
9	45 sec	3 sec	87 sec
10	60 sec	3 sec	1 min 57 sec
11	2 min	3 sec	3 min 57 sec
12	5 min	3 sec	9 min 57 sec

2.2 Remote Control (Note that the buttons should be distinctly separate from each other so there is little chance that the wrong button will be pressed)

- Manual dispense button (Jackpot if you press and hold)
- Intervals ON/OFF (Down stay practice) (timer start)

3. FUNCTIONAL DESCRIPTION

- 3.1. Install batteries into dispenser or connect power adapter.
- 3.2. Open food hopper cover and fill with food.
- 3.3. Set operation mode.
- 3.4. Use as instructed.

4. POWER

- Dispenser – 4 D batteries or AC adapter
 - Remote control – CR2032 battery
5. CIRCUIT DESIGN
- Collaborative effort of SI Design and contract manufacturer.
6. ACCESSORIES
- Instructional video DVD (included)
 - AC adapter (included)
7. PACKAGING
- 4-color chipboard box, end flap style, corrugated inserts, polybag over unit, shrink-wrap over box.
 - Enclosures: User Manual, DVD, Owner Response Card
 - Quantity per Master Carton: 3pcs
8. APPROVALS
- None required

NOTE:

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER AUTHORITY TO OPERATE THE EQUIPMENT.

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.