## E-Fence 3500

By Dogtra

Remote Controlled Dog Training Collars

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#### **OVERVIEW**

The Dogtra E-Fence 3500 system gives you the ability to allow your dog the freedom he wants within your specified boundaries. Dogtra's containment system contains your dog without the use of conventional fencing that can be chewed through, jumped over or dug under.

The width of the signal field can easily be adjusted at the wall-mount transmitter. The strength of the electrical stimulation can be adjusted on each separate receiver with the intensity selection dial. In the "Stimulation Only"mode, your dog will receive stimulation only. In the "Pager + Stimulation"mode, your dog will receive a silent pager/vibration, followed by stimulation when he approaches the boundary area. In the "Pager Only"mode, you dog will receive and non-stimulating pager/vibration only.

Once your dog consistently avoids the signal boundary, the stainless steel contact points can be replaced with the plastic training probes. With the plastic training probes, your dog will be able to respond to the vibration warning without receiving any electrical stimulation.

Accessories for the system such as additional wire, flags, lightning/surge protector, and the European 220-volt battery charger, are available by calling Dogtra Company at 1-888-811-9111.

#### MAIN FEATURES

- · Wide range of stimulation for all breeds and temperaments
- · Fully waterproof receiver/collar
- · 8 intensity levels on the receiver/collar to control individual dog stimulation needs
- · Non-stimulating High Performance Pager vibration warning before stimulation
- · High Performance Pager vibration only mode
- · Wire breakage light with audible warning tone
- · Long range signal with 40 acres maximum area coverage
- · Advanced filtering system to prevent interference from outside sources

- · Expandable to multiple dogs
- · 2-hour rapid charge Lithium Polymer batteriesork up to 40 acres).

# SAFETY FEATURES

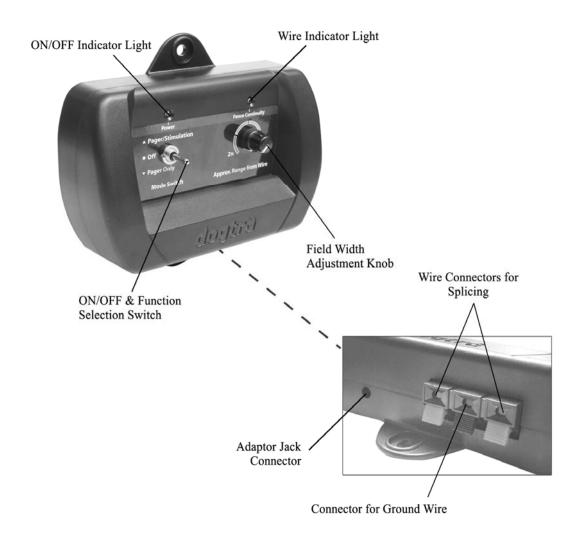
- Dogtra's E-Fence 3500 system collars use state-of-the-art microcomputer technology. The receiver/collar has an automatic control that limits the stimulation to eight seconds.
- $\cdot$  Dogtra's filtering system prevents accidental activation from outside sources other than your transmitter.

# PACKAGE CONTENTS

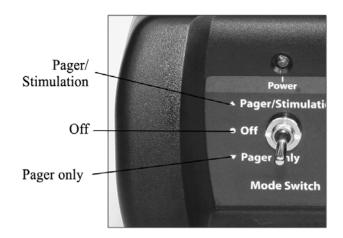
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·Wall-Mount Transmitter
·Receiver/collar
·Transmitter Power Adaptor (25-volt 500mA)
·Receiver/Collar Charger (5-volt 1A)
·Test Lamp
·Boundary Training Flags (50 ea.)
·20ga Underground Fence Wire (500 feet)
·Wire Splices (4 ea.)
·Ground Wire (green)
·Transmitter Mount Screws (2 ea.)
·Plastic Anchor (2 ea.)
·Enhanced Contact Points Male (2 ea.)
·Non-Stimulation Contact Points (2 ea.)
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- ·Contact Point Extension Washer/Adjustment Tool(2 ea.)
- ·Owner"s Manual
- ·Training Book

# Description Of Transmitter Parts



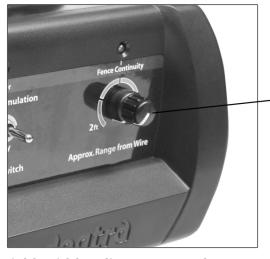




ON/OFF & Function Selection Switch

#### **ON/OFF & Function Selection Switch**

The On/Off & function selection switch has three functions. When the toggle switch is in the up position, the unit will give the dog a pager/vibration followed by stimulation correction. When the toggle switch is in the down position, only a pager/vibration occurs (no stimulation). The power is off when the toggle switch is set to the middle position.



Field Width Adjustment Knob

Field Width Adjustment Knob

This knob controls the width of the signal field (the approximate distance from the boundary wire to the location where the receiver/collar first activates). Turning the knob clockwise increases the field width, giving your dog a wider area before the activation begins. Turning it counter-clockwise decreases the signal field, thus giving the dog a shorter

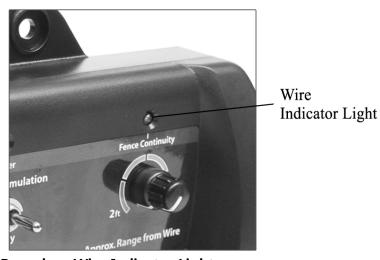
area prior to activation.



ON/OFF Indicator Light

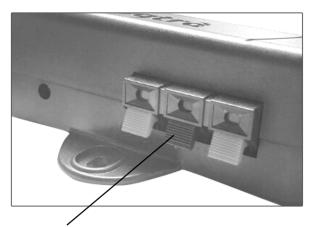
## **ON/OFF Indicator Light**

When the On/Off & function selection switch is either in the up or down position the On/Off indicator light will be on, indicating that the power is on. When the switch is in the middle position the light goes off, indicating that the power is off. The indicator light stays on even if a fuse is blown.



# **Boundary Wire Indicator Light**

When the wires are connected properly, the boundary wire continuity light will be on. In the event that the E-Fence 3500 wire becomes damaged or disconnected, the light will automatically turn off and the warning beep will sound.



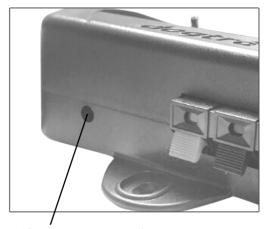
Wire Connectors

# **Wire Connectors For Splicing**

The easy-to-use push-release wire connectors let you instantly connect or disconnect the boundary wire leads. Wires should be stripped approximately a half-inch before being inserted into the red connectors on the bottom of the wall mount transmitter.

The system comes with a ground wire to protect the unit in the event of lightning/power surge. Strip about a half-inch on each end of the ground wire and insert one end into the black connector on the bottom of the wall transmitter. The other end should be buried into the ground or wrapped around a water pipe and secured with electrical tape.

**Option**: A lightning/surge protector can be purchased if there are no grounding options near the wall transmitter.



Adaptor Receptacle

# **Adaptor Jack Connector**

Plug the 120-volt adaptor into a 120-volt wall outlet and insert the adaptor plug into the adaptor receptacle of the transmitter.





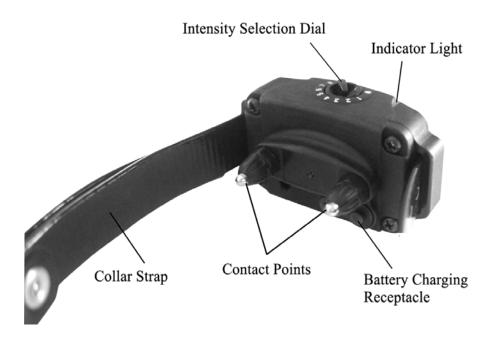
# **Wall-Mount Transmitter**

Use the (2) included screws to mount the transmitter to a wall securely near an outlet. The unit will withstand freezing temperatures, but it is not waterproof. Therefore, we recommend mounting the transmitter in a safe, dry sheltered area such as a shed, garage or carport.

Plastic anchors have been provided to secure mounting onto drywall. Use a 1/4"drill bit to make holes into the drywall. Insert the anchors into the holes so that the open end faces out and mount the transmitter by inserting the screws into the open end of the anchors.

To power the wall transmitter, plug the AC daptor into the standard 120-volt outlet and connect it to the adaptor receptacle of the transmitter.

# Description Of Reciver/Collar Parts





# **Intensity Selection Dial**

The stimulation level is adjustable from each individual dog's receiver/collar so that it is easy accommodate each dog's different personality and temperament.

The stimulation levels range from level 1 to level 8, level 1 being the lowest.

In order to select the proper intensity level for each dog, we recommend that you begin at level 1 and continue to increase the level slowly until you are able to notice a reaction from your dog. This ensures that you select a level that is appropriate for your dog.

When you place the knob at the OFF position, the collar is completely shut off. In order to maintain full use of the batteries in the collar, please turn off the receiver/collar when your E-Fence 3500 system is not being utilized.



**Receiver Indicator Light (LED)** 

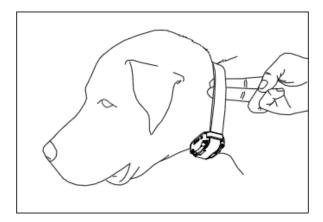
When first activating the E-Fence 3500, the LED light on the receiver/collar will illuminate for approximately 1 second to indicate that the power is on. 2 seconds after the initial light, a

blink will occur every 2 seconds to indicate that the receiver/collar is functioning properly.

The color of the LED indicates the battery life of the receiver. When the collar does not receive a signal from the transmitter for 10 seconds or more, the receiver/collar will go into sleep mode, and the LED light will stop blinking.

(Green = full charge, Amber = medium charge, Red = needs charge)

When your dog gets close to the wire boundary, the indicator light will blink steadily to indicate that the receiver/collar is being activated.



#### PROPER FIT

The collar should be fitted so that the surgical stainless steel contact points press firmly against the dog's skin. You should be able to fit a finger in between the contact point and your dog's skin. The best location is either side of the dog's windpipe.

#### **IMPROPER FIT**

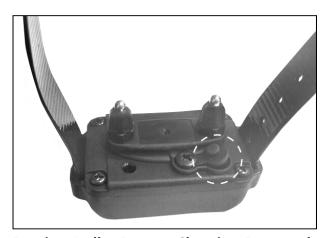
A loose fit can allow the collar to move around on the dog's neck. When this happens, the contact points may rub the skin and cause irritation. If the collar is too loose, electrical contact will be inconsistent and your corrections will be inconsistent also.

Dogtra uses surgical stainless steel contact points and Anti-microbial plastic to protect the

dog's skin.

#### **ATTENTION!**

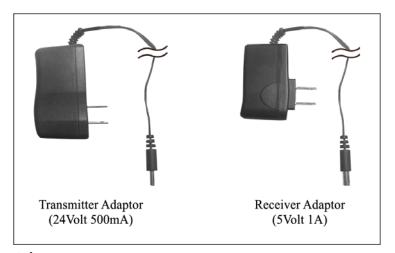
Leaving the receiver/collar in the same location on the dog's neck, for an extended period of time can cause skin irritation. If the dog is to wear the e-collar for long periods, occasionally reposition the collar so that the contact points are moved to a different location on the dog's neck. Make sure you check for skin irritation, each time you use the unit.



Receiver/collar Battery Charging Receptacle

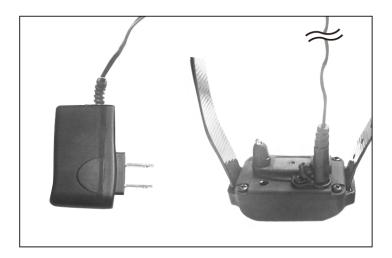
On the inside of the receiver/collar, next to the collar strap, is a battery charging receptacle with a rubber plug.

The unit will be fully waterproof with or without the rubber plug. If the dog was in salt-water, be sure to rinse the receiver and charging port with clean water, and let air dry.



# **Adaptor**

The battery charger is designed for a 120-volt wall outlet (An European 220-volt AC charger is also available.).



# CHARGING THE RECEIVER/COLLAR

# Dogtra uses Lithium-Polymer batteries.

- 1. Charge the unit before using the unit for the first time.
- 2. Do not charge the batteries near any flammable substances.
- 3. Fully charge the batteries if the unit is to be stored without use for a period of 3 months or more.

#### Recharge the unit if:

- The LED indicator light on the receiver/collar is emitting a red color.
- The indicator light on the receiver will not come on.
- The indicator light on the receiver comes on momentarily, but will not stay on near the wire.

## **Battery Charging Procedure**

- 1. Attach the charging cables to the receiver as shown.
- 2. Plug the charger into a 120-volt wall outlet.

When properly plugged in, all indicator lights should glow red.

During the charging process, the unit will shut off.

- 3. The Lithium-Polymer battery is fully charged within 2 hours. The lights will stay red during the charging process. The red light will change into a steady green light when the battery is fully charged. (When you disconnect the charger after finishing the charge, you will need to restart the units).
- 4. After charging, cover the battery charging receptacle with the rubber plug on the receiver/collar.

Note: Only use Dogtra-approved batteries, chargers, and

accessories for the E-Fence 3500. Unauthorized chargers may cause the unit to malfunction and the indicator light to blink in an amber color.

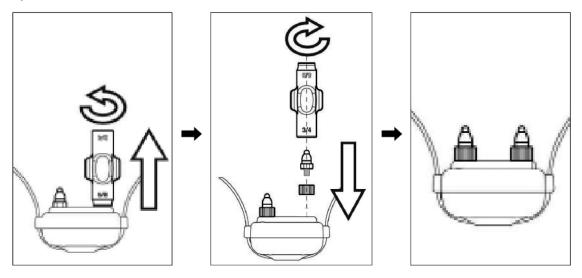
# How th Change the Length of the Contact Points

The Dogtra E-Fence 3500 comes equipped with standard 5/8" contact points that can be extended to 3/4" contact points, for use with dogs with longer coats.

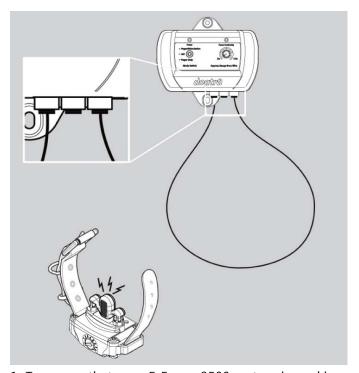
To increase the contact point length from 5/8" to 3/4", follow the steps below.

- 1. Using the included adjustment tool with the side marked 5/8", unscrew the contact points counter-clockwise.
- 2. Place the contact point extension over the exposed threads, flat side down.
- 3. Place the contact points over the extensions and tighten the contact points and extensions clockwise using the adjustment tool with the side marked 3/4".
- \* **Caution** : Tighten until firmly in place. Be careful not to over tighten.

To shorten the contact points back to the standard 5/8", start with the adjustment tool with the side marked 3/4", remove the contact point extensions, and tighten the contact points with the adjustment tool with the side marked 5/8".



# TESTING YOUR DOGTRA E-Fence 3500 PRIOR TO INSTALLATION

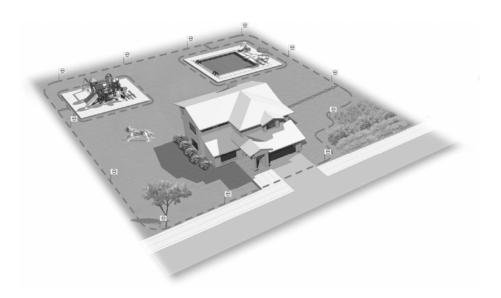


- 1. To ensure that your E-Fence 3500 system is working properly, connect the transmitter adaptor into the adaptor of the transmitter and then plug the adaptor into a household outlet. Switch the stimulation knob to Pager+Stimulation, or Stimulation Only. The ON/OFF indicator light should turn on.
- 2. Unwind the length of ground wire that was provided and strip about 1/2 inch off each end. Insert both ends of the ground wire into the outer, red wire connector jacks, leaving the center jack free. If the wires are connected properly, the wire indicator light will be on.
- 3. Next, activate the receiver/collar by turning the intensity level dial on the receiver to the desired level. The LED light will blink once every two seconds showing that it is on.
- \* If not activated for 10 seconds or more, the system will go into sleep mode.
- 4. Hold the receiver in your hand with the contact points facing up. Place the test lamp over the contact points and approach the test loop.

5. Watch for the test lamp to come on and/or the unit will emit the warning vibration if the unit is in this mode at the wall mount transmitter. Be careful not to touch the contact points as the unit will emit stimulation when activated.

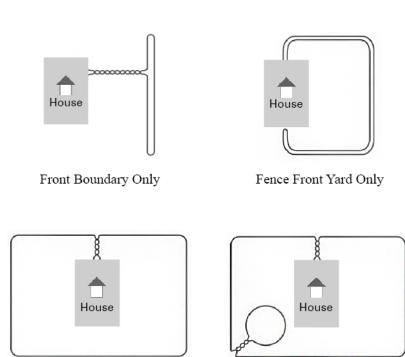
# **INSTALLATION**

## **Fence Wire**



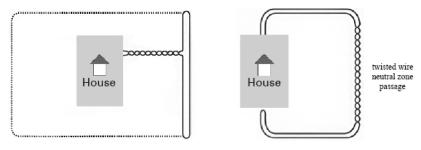
The e-fence boundary wire must make a continuous loop around your property for the system to operate. The signal is delivered from the terminal of the transmitter, through the fence wire, back to the other terminal on the transmitter. When this is accomplished, the wire continuity light will emit a constant red indicator.

## **Wire Placement**



Front or Back Access

Basic Loop with Garden



Front Boundary with Existing Fence

Double Loop with Passage

CAUTION - Before you install your E-Fence 3500 wire, contact the utility company to mark the utility lines on your property before you begin digging. **Be sure to test your wire** layout above ground before permanent installation begins.

Carefully choose the areas in which you want to contain your dog. A diagram may be helpful in predicting unforeseen obstacles. (Please refer to the Common Boundary Designs)

#### **IMPORTANT!**

When creating a Front Boundary Only, Fence Front Yard Only, or Front Boundary with

Existing Fence type of containment system a double loop layout is required. THE TWO PARALLEL WIRES OF THE DOUBLE LOOP MUST BE 6-10 FEET APART to avoid any signal interference. Single loop systems must also be kept 6-10 feet of distance between the wires as well.

# \* Please note, the diagrams are not drawn to scale.

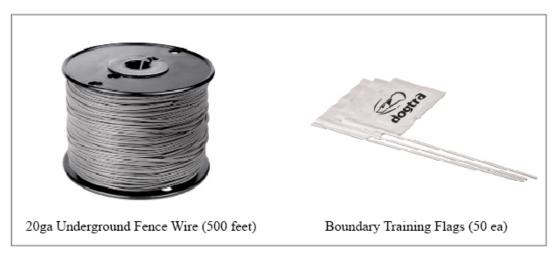
The E-Fence-3500 system includes 500 feet of boundary wire and 50 training flags.

Additional flags and wiring can be purchased through the Dogtra Company. The estimated

Acres	Square Feet	Fence Wire(500ft/spool)		Flags(50/bundle)	
		Feet	# Spools	# Flags	# Bundles
1/4	10,890	450	1	45	1
1/3	14,520	520	1	52	1
1/2	21,780	620	2	62	2
3/4	32,670	740	2	74	2
1	43,560	850	2	85	2
2	87,120	1,200	3	120	3
3	130,680	1,500	3	150	3
4	174,240	1,700	4	170	4
5	217,800	1,900	4	190	4
6	261,360	2,100	5	210	5
7	304,920	2,250	5	225	5
8	348,480	2,400	5	240	5
9	392,040	2,550	6	255	6
10	435,600	2,700	6	270	6
11	479,160	2,800	6	280	6
12	522,720	2,950	6	295	6
13	566,280	3,050	7	305	7
14	609,840	3,170	7	317	7
15	653,400	3,280	7	328	7
16	696,960	3,400	7	340	7
17	740,520	3,500	7	350	7
18	784,080	3,600	8	360	8
19	827,640	3,700	8	370	8
20	871,200	3,800	8	380	8

requirements are as follows:

# **ADDITIONAL PARTS**



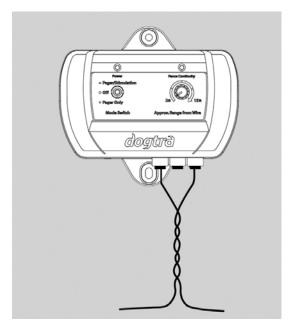
The diagrams on p.18 are indicated for a rectangular layout.

Actual flag/wire requirements may vary depending on the layout you've chosen. You will want to keep a signal field (area where the dog will receive stimulation) at least 6-8 feet on each side of the wire.

In addition, your dog will keep 2-4 feet away from the signal field, so an overall signal field of 8-12 feet is preferred. Avoid making passageways that are too narrow (i.e. along the sides on a house) or your dog may hesitate from using them.

#### **Tools**

To install your, E-Fence 3500 you will need a flat-edge spade, Phillips screwdriver and a wire cutter/stripper. If your layout calls for the wires to be connected across concrete, you will also need a caulking gun, exterior silicon caulk and a circular saw with a masonry blade for cutting the pavement.



Creating a Neutral Zone in the Boundary

You must create a neutral zone from the fence transmitter to the beginning of the fence so the signals do not cross over to any existing utility wires. Start by twisting the two pieces of fence wire so they are braided from the beginning of the neutral zone area to the end.

Braiding the two wires will interrupt the signal of the buried fence, thus creating an area for your dog to cross

without getting stimulation. To braid the fence wire, hold the two wires side by side, and twist them around each other. This can also be done by securing the two wire ends in the opening of a drill and letting the drill twist the wires for you. The tighter the wires are twisted, the better the signal cancellation. Braiding the two wires will interrupt the signal of the boundary wire, thus creating a neutral zone.

#### **Burying The Fence Wire**

**IMPORTANT**: Before starting any digging, contact your local phone, gas and power companies to locate any other buried services.

The E-Fence 3500 boundary wire does not have to be buried to operate. For protective measures we highly recommend the wire be buried about 3-4 inches underground. Begin by digging a 4-inch deep cut where the wire first enters the ground near the transmitter and continue around the path of the loop wire. A 30- to 45-degree

angle cut made with a flat-edge spade will be easiest to close.

**Note**: When covering a large area, a trenching machine may be used to cut into the ground. However, it is recommended that the wire be placed in the trench by hand. A commercial wire-placing machine may damage the wire.

#### IMPORTANT!

**Bury the fence wire after you have tested the system** and are sure it is working properly. Do not nick or scrape the fence wire during installation as it may result in an intermittent signal or no signal.

Make gradual turns at the corners with a radius of at least 3 feet. This will provide a more consistent signal field that will avoid confusing the dog in these areas.

**DO NOT** run the e-fence boundary wire within 6 feet parallel to electrical, telephone, cable TV or other buried wires.

**DO NOT** run the e-fence boundary wire of one section within

10 feet of another section of e-fence wire or the signal may cancel.

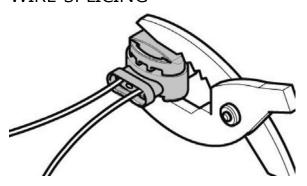
DO NOT run the e-fence boundary wire within 10 feet of a

neighboring pet containment system boundary wire.

#### Driveways/Sidewalks

When crossing an asphalt driveway, make a 1/2-inch deep cut across the driveway using a circular saw and masonry blade. Close the crack with asphalt sealant after the fence wire is placed in it. If an expansion joint is available on driveway and sidewalks, place e-fence wire in the joint and close it with outdoor caulk. When crossing gravel, bury fence wire at least 3 inches deep. PVC pipes or a garden hose can be used to protect the wire. In water, anchor the wire with large rocks. Use PVC piping or garden hose to protect the wire.

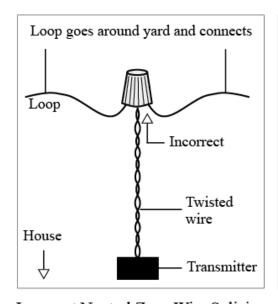
## WIRE SPLICING

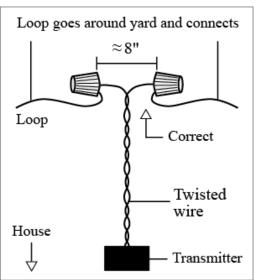


#### The wire connection must be waterproof

Do not use electrical tape, or soldered/twisted wire nuts in this type of connection as it will cause an intermittent signal or disarm the system.

The waterproof splices included in the E-Fence 3500 system are designed to provide a sealed connection between the wires. The insulation on the boundary wire should not be stripped before placing wire into the holes. To use the waterproof splices, boundary wire is placed into the outer holes of the splices. This should leave the center hole empty. A pair of pliers should be used to gently press down and snap together the top of the blue part of the splice.

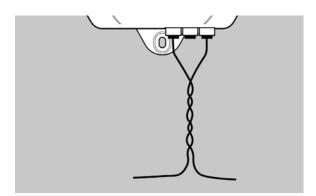




Incorrect Neutral Zone Wire Splicing Correct Neutral Zone Wire Splicing

#### Connecting the Fence Wire to the Transmitter

Splice the two ends of the twisted wire to each of the two ends of the fence wire. Drill a hole through the exterior wall or window/door sill or run the fence wire through an existing utility line hole. Connect the twisted fence wire to the transmitter, either wire to either terminal (wire ends must be stripped 1/2 -inch). A red indicator light should appear indicating a continuous fence wire field. If no light appears, check to make sure that all fence wires are properly connected and that the wire is not damaged.



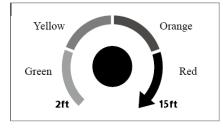
#### The Signal Field

The Field Width Adjustment Knob on the transmitter controls the signal field width. Increasing or decreasing the signal field width does not affect the stimulation intensity. To test the signal field, walk slowly toward the boundary wire holding the collar/receiver at approximately the height of the dog's neck. Contact points must be upward with the test light attached. Watch for the test lamp to illuminate, this will give you an idea of the width of the signal field. The wider the signal field is, the less chance that the dog will run through the field and out of your yard. The signal field should extend at least 6 feet on both sides of the wire (creating a field that is 12-feet wide total). An 8-12 foot field is preferred.

This will maximize the effectiveness of the containment system and minimize the chances that the dog will run through the signal field.

**Note**: If you alter the field adjustment knob by turning it clockwise or counterclockwise, or by removing it, you must check the signal field for the desired setting.

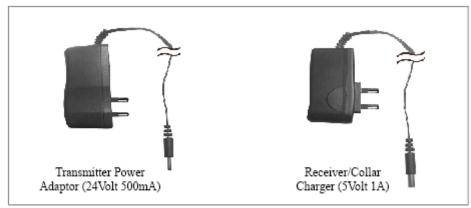
When you are satisfied with the field width setting, bury the fence wire below the grass and place the flags at the distance where the test light comes on.



Field Width Adjustment Knob

# **Optional Accessories**

The following items may be purchased separately. To purchase accessories, please visit Dogtra's online store at or call customer service at 1-888-811-9111.

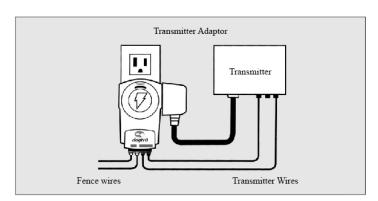


· European Adaptor for 220-volt outlets



· Lightning/Surge Protecor (PANAMAX)

# **Connecting a Lightning Surge Protector**



Plug the lightning protector into a grounded (3-wire) 120V AC outlet within five feet of

where you want to locate the transmitter. Cut the e-fence wires near the protector and strip all four ends back ¼ inch. Push the connector tab firmly away from yourself and the connector jaws will open. Push the stripped end of the wire into the connector.

#### **TROUBLESHOOTING**

#### 1. Dog Doesn t Respond to Stimulus

- Adjust the collar fit.
- Trim the dog's hair or use longer contact points to make better skin contact.
- Recharge the battery in the receiver/collar .
- Adjust the stimulation intensity level.

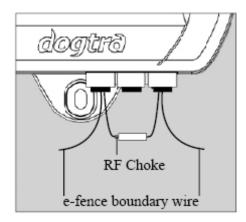
#### 2. System Test Procedures:

Whenever you experience a malfunction, you will need to do a test loop to determine which component - collar, wall transmitter or yard wire – is not working. Follow these steps to perform the test loop procedure.

- 1. Make a test e-fence using at least 10 ft. to 20 ft. of fencing wire(or use the ground wire).
- 2. Remove the existing boundary wire from your wall transmitter.
- 3. Insert the two ends of the test e-fence wire into the wall transmitter.
- 4. Turn the field width adjustment knob to the 9 o'clock position or a low setting.
- 5. Place the test light on the receiver/collar. With the receiver/collar, approach the test loop and note the distance between you and the wire when the collar activates the test lamp.
- 6. Turn the field width adjustment knob to the 12 o'clock position or a medium setting.
- 7. Back away from the wire and approach it again. Determine the distance between you and the wire when the collar activates. The distance should be greater on the medium range setting.

If more than one collar receiver is used, repeat the above test on each collar. If there is no red light on the wire indicator light of the wall transmitter with the test loop wire in place, the wall transmitter is malfunctioning. If the red light is solid on the wall transmitter, but the collar does not activate on the test loop wire, the receiver/collar is not working. Recharge the battery in the receiver/collar and repeat the test. If the collars are activating normally, there may be a wire break in the fence wire.

#### 3. Finding a wire break using an RF Choke



You will need a 100 µµH RF Choke and an AM radio tuned to AM530.

Go to the wall mount transmitter box and disconnect the two underground wire leads from the RED terminals, where they connect to the transmitter. In place of each wire lead, connect one end of the RF Choke. Next, take the two underground wire leads and reconnect them into the RED terminals. You should now have a wire from the RF choke and an underground fence wire in each RED terminal. Turn up the transmitter signal strength to full. (RED area on the dial) Take the radio (tuned to approx. AM530 on the dial) and the volume turned up. Walk slowly along the path of the wire, holding the radio as close to the ground as possible and directly over the wire. You should hear a whirling/static noise where the wire is intact and no whirling noise where the break is located.

#### **Fixing the Break**

Once you have found the break, <u>cut out the damaged area and usea weatherproof gel style</u> <u>wire splicer</u>to reconnect the two wires. If the break is large, or if you cannot identify the break location, you may need to splice in some extra wire to bypass the area that is damaged.

## GENERAL MAINTENANCE TIPS

Your system requires very little maintenance. The receiver/collar for the E-Fence 3500 system is fully waterproof. To remove dirt, simply wipe with soap and water.

The wall transmitter is not waterproof and must be protected from the elements in a shed, garage or carport.

Do not attempt to dismantle or repair the wall mount transmitter or receiver/collar: this will void the manufacturer's warranty. These components contain computerized

circuitry that should be serviced only by an authorized expert.

# \*Caution

Any changes or modifications of this device which are not specifically approved by the party responsible for compliance could void the user's authority to operate the equipment.

# **FCC Warning**

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.

This is a sensitive radio device. Any unauthorized changes or modifications to this device that are not expressly approved by Dogtra Co.,Ltd will void the devices warranty, and might void user's authority to operate the equipment. So don't do it please.

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