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# Specifications:

## **Transmitter:**

Power: 9 volt dc battery  
 Frequency: 418 MHz  
 Modulation: FM  
 Indicators: Power/Transmit Red LED  
 Case Size: 2.5" x 4.2" x .8"  
 Weight: .25 lb.  
 Range: 600'+ (depending on environment)  
 Antenna: 1.3" Fixed Mini Tuned  
 Security Code: 2<sup>8</sup> selections

## **Receiver:**

Power In: 12 vdc Battery (supplied)  
 Charger: 110vac Wall Adapter or Solar Panel – 5 watt  
 Standby: 40mA  
 Security Code: 2<sup>8</sup> selections  
 Indicators: Power On Red LED  
 Receive RF Data Yellow LED  
 Channel Active Green LED  
 Options: Latched/Momentary Data  
 Keyless Entry  
 Antenna: 7" Flexible Tuned  
 Overall Size: 9"x 11-1/2"x 6-1/2"  
 Weight: 10 lb.

## **Electric Cable Drive**

Tension: 300lb. cable tension maximum  
 Cable Uptake: 48 inches maximum  
 Speed: 48 in/per min  
 Cable Dia.: 1/4"

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Length: 30 foot cable supplied

# **INSTALLATION INSTRUCTIONS**

**Refer to Fig. 1 & Fig. 2**

**Note:** The *CablePASS* SECURITY GATE requires a hollow post a minimum of 4 feet in length and 3-1/2 inches inside diameter in which to mount the electric driver. We recommend a steel post of 5-6 inches diameter for ease of installation. The anchor post may be any suitable post.

**STEP 1.** Install the Weld Mount Base (8" square plate) onto the hollow gate post by welding in place or similar suitable means.

NOTE: The Weld Mount Base must be oriented so that the direction of the "cable out" is toward the opposite anchor post. The circular opening must be clear for 4 feet below to allow extension of the electric drive cylinder.

**STEP 2.** Insert electric drive arm down through clamp in baseplate until drive motor rests on top of baseplate with motor oriented 45 degrees clockwise to the "cable out" direction. Raise the drive motor 1/8" from the baseplate and clamp the drive arm in place using two 5/16 x 1-1/4" Hex Head Bolts and Nuts.

**STEP 3.** Slide cable guide clamp over outside of drive tube.

**STEP 4.** Install sealing grommet.

**STEP 5.** Thread Tension Pulley Assembly into end of drive tube and tighten. **DO NOT ALLOW INNER TUBE TO ROTATE** to retain the factory preset for the lower limit switch. To check the settings follow the procedure on "Setting Limit Switches" in this Manual.

**STEP 6.** Thread one end of the cable over the idler pulley, through the baseplate opening, down the cable guide, through the tension pulley, and back up the other side of the cable guide. Wrap cable around outside of driver tube and attach 3/16" cable clamp securely to the end of the cable to anchor.

**STEP 7.** Slide the cable guide all the way down till the clamp is to the top of the grommet and tighten in place using two 5/16 x 1-1/4" Hex Head Bolts and Nuts so that the pulley and the cable run straight within the guide.

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**STEP 8.** Insert the drive assembly down through the Mount Plate hole, cable guide first. Bolt the Baseplate to the Weld Mount Base using four 1/4x1” bolts, nuts, and lockwashers, provided. Attach the solar panel bracket (if equipped) on the outside of one of the Baseplate bolts.

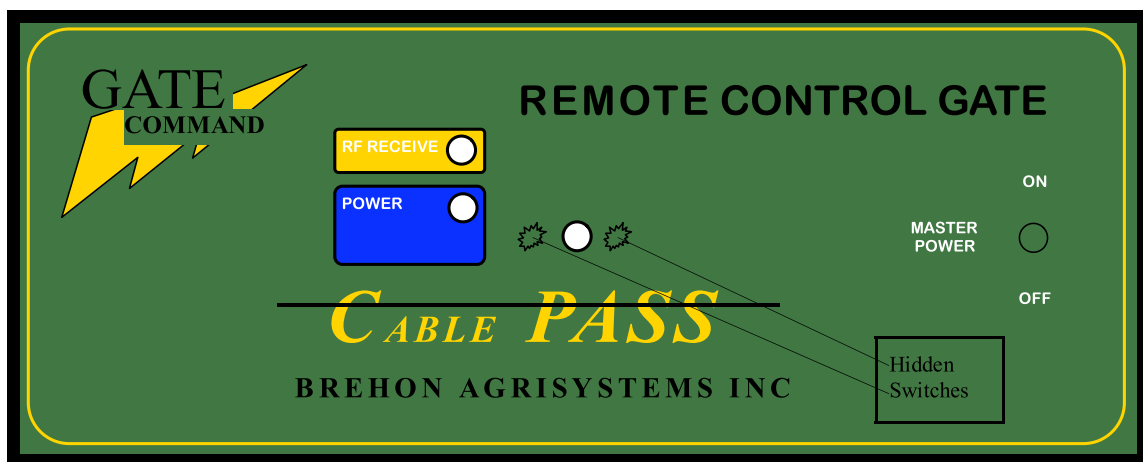
**STEP 9.** Temporarily install the weights on the cable and fasten cable to anchor post. Fasten solar panel to bracket using two 1/4x1” bolts, nuts, and lockwashers, provided. Note that the bolt heads slide in the Solar Panel aluminum channel.

**STEP 10.** Insert wires from solar panel/110vac Adapter through plastic cover grommet. For solar panel: crimp terminals on wires and attach to wiring harness as marked. For 110vac Adapter: connect to 2-pin screw terminals on charger regulator **as marked (+ & -)**. (White stripe wire on adapter is “+”). Connect wires to electric driver and battery as marked. Set cover in place.

**STEP 11.** With the electric drive in its fully retracted position, the cable should drape across the roadway so as to allow vehicles to drive over it. The lead weights should be positioned at the shoulders of the roadway so that the cable remains flat on the roadway. Extend the electric drive (maximum 24”) until the cable raises to the desired height. Set upper limit switch on electric drive. Attach cover on baseplate with 4 10-32 screws provided.

**STEP 12.** Hang sign on cable using two quick links and maintain in position using the two 1/8” cable clamps provided.

## *CablePASS* Front Panel



### “HIDDEN” SWITCHES

The *CablePASS* SECURITY GATE is equipped with two “hidden switches” which are located on either side of the “Channel On” LED which allow the gate to be operated without a transmitter.

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Pressing the button to the left of the light will open the gate while pressing the button on the right will close the gate. The gate will only operate while the button is held.

## ELECTRICAL CONNECTIONS

Connect the BLUE and YELLOW wires to the electric drive terminal block.

Connect the heavy RED and BLACK wires to the battery by sliding the crimp connectors in place.

**Note the polarity:** RED is (+)ve, BLACK is (-)ve.

Thread the solar panel wire through the cover and connect to the light RED and BLACK wires from the battery connectors. Again, note the polarity: RED is (+)ve, BLACK is (-)ve.

## TYPICAL INSTALLATION

With reference to Fig. 3, a typical installation would be a distance between posts of 25 feet spanning an 18' roadway. The cable weights are positioned such that they lay on the shoulders of the roadway to hold the cable down flat. With the cable adjusted to a height of 2-½' (30") above the road surface, the result in a closed-to-open cycle time of 22 seconds. The **CablePASS SECURITY GATE** comes with 30' of ¼" cable, but many various spans and configurations are possible. Consult the manufacturer if you have questions about your particular application.

# General Operation:

The **CablePASS SECURITY GATE** is designed to raise and lower a cable spanning an opening. When connected to its battery, and the ON/OFF Power Switch is in the ON position, the "Power On" RED LED should be lit indicating normal operation. The Electric Drive can be operated using the Transmitter, or Hidden Keypad. Whenever there is power supplied to the electric drive, the "Output" GREEN LED will light, indicating normal operation. This light will stay on when operated using the RF Transmitter indicating the drive has stopped at its preset limit. The Receiver and Transmitter are equipped with an 8-position switch used to set the user security code. The security code is provided to prevent unwanted operation of the Receiver by other devices. Only a Transmitter with identical switch settings will be able to "talk" to this Receiver. When the switches are set identically and the transmitter "talks" to the Receiver, the "Receive Data" YELLOW light will illuminate. This indicates that valid data with a matching security code has been received. Position these switches to any desired On/Off pattern for your own security code. **REMEMBER:** The 8-position switch on the Transmitter must be set **IDENTICALLY**. To access the security code switch, refer to the Controller Board layout.

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To operate correctly it is critical that the limit switches on the electric drive are properly adjusted. Once set, pressing OPEN on the Transmitter will allow the electric drive to operate until the cable has been lowered to rest on the roadway. Pressing CLOSE on the Transmitter will allow the electric drive to operate until the cable is raised to its selected height. The STOP button is only used if you choose to stop the electric drive at any time. It is not required to be pressed at the start or end of any cycle.

For electrical protection, the Receiver has two automatically resetting fuses on the circuit board. Fuse F1 (1 Amp) is intended to protect the RF receiver and data circuitry, and Fuse F2 is intended to protect the relays from overload. These fuses will automatically reset when cooled.

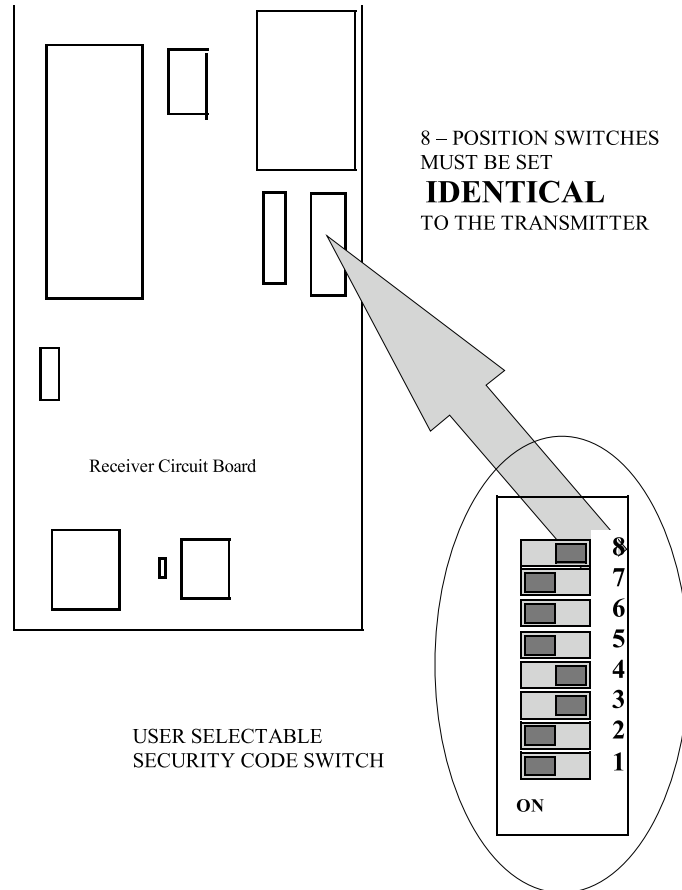
## **TRANSMITTER:**

The Transmitter is powered by a 9v battery which, when installed, should light the red "power" light when a switch is pressed. If the battery does not exceed 7 volts the Power light will not come On, indicating battery replacement is required.

Set the 8-position switch to your own security code, which matches the code on the Receiver to which it is to "talk". Note that any number of Transmitters can "talk" to the same Receiver as long as they have the security code, which matches the receiver.

To access the Transmitter security code switch, remove the battery cover and battery. Remove the two retainer screws. Grasp the front and back of the case and gently slide the top downwards (away from the antenna) approximately 1/4" until it unclips from the bottom, and then gently separate.

## ***CablePASS* SECURITY GATE Controller Board Layout - (Receiver)**



## SETTING LIMIT SWITCHES

### Electric Drive

**CAUTION:** If you want to test this actuator on a bench, make sure to hold the inner tube with your hand or with a screwdriver through the rod end when the inner tube is moving in and out. Otherwise the inner tube may turn freely and destroy the factory preset mechanical lower and upper limits.

#### A. RESET LOWER LIMIT

The factory preset mechanical lower limit on this unit is  $\frac{1}{4}$ " to  $\frac{1}{2}$ " from the retracting end of the actuator.

**MAKE SURE THE ACTUATOR IS PROTECTED AT ITS LOWER MECHANICAL LIMITS WHEN YOU ATTACH IT TO THE MOUNT.** Otherwise, please reset lower limit as following procedures:

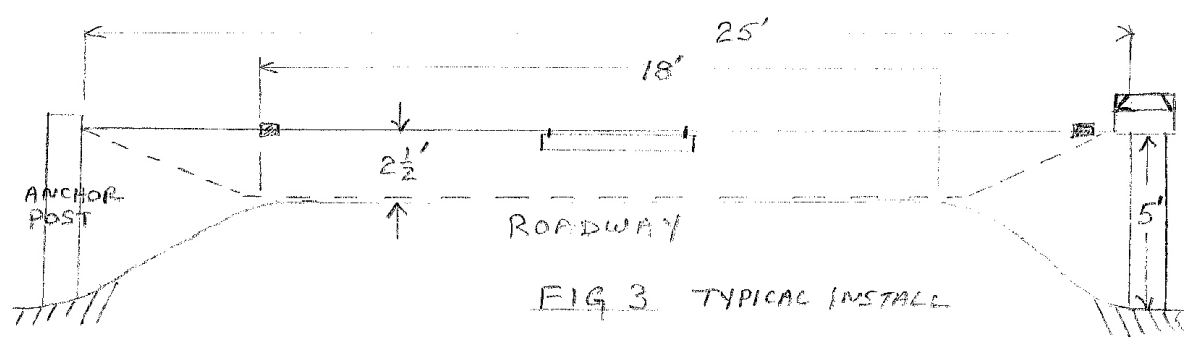
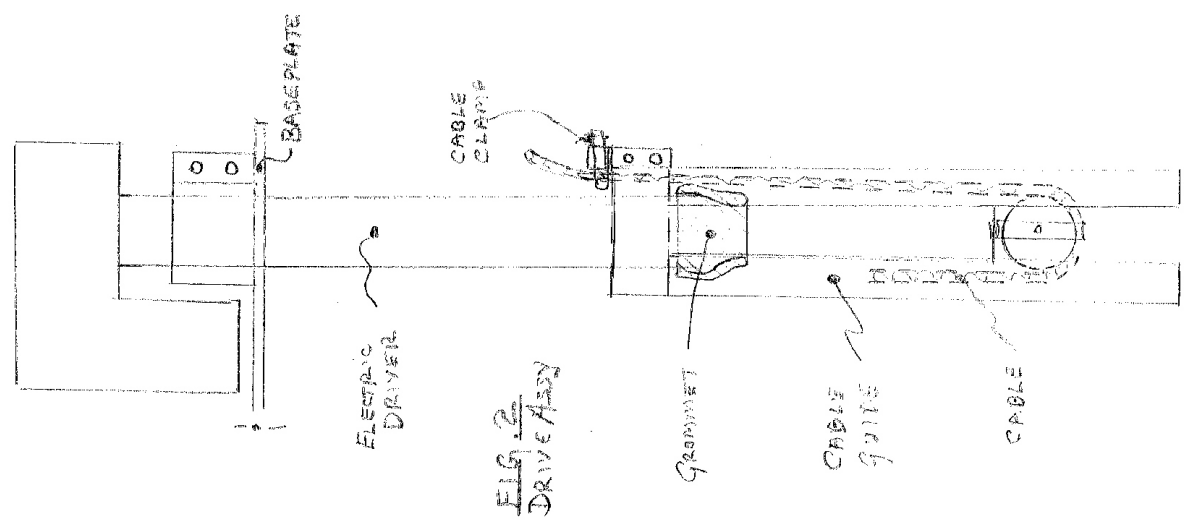
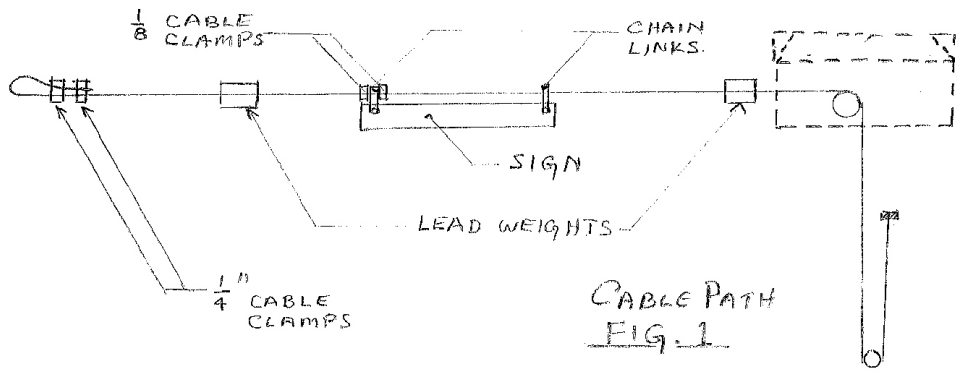
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- 1) If the inner tube has been connected, detach it first.
- 2) Use the Receiver to retract the actuator until the motor stops by itself. Important not to hold the tube now. Allow it to retract freely.
- 3) Hand turn (or use a screwdriver through the rod end to help) the actuator to retract it further until you cannot turn it any more. Now the lower limit is set on Zero Inches.
- 4) Hand turn the inner tube to **extend it 2 turns**.

#### B. RESET UPPER LIMIT

- 1) Extend the actuator to where you want to set the upper limit.
- 2) Locate the two plastic cams located one on top of the other. The upper one is for the upper limit adjustment.
- 3) Loosen the two limit cam screws (if equipped).
- 4) Turn the upper cam clockwise until you hear (you can also feel) a “CLICK” sound from the limit switch.
- 5) Test the limit switch setting to ensure it is correct.

**Think Safety:**  
**Do Not install or operate where  
damage to property or persons may occur.**



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