

Amazing Gates  
AG900HD  
Swing Gate Opener  
Installation Manual



Find Help Here - Use your phone's camera and press on the link:



**READ ALL INSTRUCTIONS CAREFULLY AND COMPLETELY  
PRIOR TO INSTALLATION AND USE OF OPERATOR.**

This gate operator produces a high level of force. **Stay clear of the unit while it is operating and exercise caution at all times.** All automatic gate operators are intended for use on vehicular gates only. This equipment is similar to other gate or door equipment and meets or exceeds Underwriters Laboratory Standard 325 (UL 325). However, gate equipment has hazards associated with its use and therefore by installing this product the installer and user accept full responsibility for following and noting the installation and safety instructions. Failure to follow installation and safety instructions can result in hazards developing due to improper assembly. You agree to properly install this product and that if you fail to do so Amazing Gates of America, LLC (“AGA”) shall in no event be liable for direct, indirect, incidental, special or consequential damages or loss of profits whether based in contract tort or any other legal theory during the course of the warranty or at any time thereafter. General Warranty is 2 years The installer and/or user agree to assume responsibility for all liability and use of this product releasing Amazing Gates of America, LLC (“AGA”) from any and all liability. **If you are not in agreement with this disclaimer or do not feel capable of properly following all installation and safety instructions you may return this product for full replacement value.**

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## **Product Description and Applications:**

This system is for residential or light commercial automation of a swinging driveway gate. It is not for pedestrian access.

## **Technical Specifications:**

Motor: 24Vdc motor with mechanical release

Gear type: worm gear

Max absorbed power: 144W Peak thrust: 3500N

Nominal thrust: 3000N

Duty cycle: 20%

Stroke length: 12 inches

Power supply: 110VAC converted to 24VDC

Nominal input power: 2A

Maximum operating current: 5.5A for maximum 10 seconds

Maximum gate weight: 500 lbs.

Maximum gate length: 14 feet

Control Panel Voltage: 24VAC, available for 24VDC backup battery

Suitable for single or dual swing gate opener

Radio Controls: 433 MHz customized rolling code

Support remote control: Can memorize up to 120 transmitters

Actuators: 24VDC Actuator x2

## **\*\* WARNINGS \*\***

- A wired photo eye sensor must be installed for this gate operator to function properly (UL325-2016)
- Make sure that the gates are level and swing freely. Keep your hinges greased.
- Do not let children operate or play with the automatic gate system.
- Do not cross the path of the gate when operating. Automatic gates are not for pedestrian traffic.
- Please keep remote transmitters away from children to prevent the automatic gate system from being activated accidentally.
- Do not make any modifications to any components unless shown in this manual.
- Do not try to manually open or close the gate without pulling up the release lever.
- If there is a failure that cannot be solved and is not mentioned in this manual, please contact qualified installation personnel.
- Test the automatic gate system weekly and have qualified installation personnel check and maintain the system at least every 6 months.
- Install warning signs on both sides of the gate to warn people in the area of potential hazards.

⚠ **WARNING:** This product can expose you to chemicals including lead, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Pre-Installation Instructions

### Tools needed for installation:

- drill
- flat head screwdriver
- clamps
- phillips screwdriver
- level
- wrench or deep well socket set
- drill bits
- tape measure
- wire strippers
- marking pen or pencil

### NOTES:

- Ensure the gate is level and swings freely.
- Determine if it will be a **Pull-to-open** setup (swings IN TOWARDS the property) or a **Push-to-open** setup (swings OUT AWAY from the property.)
- **Push-to-open** brackets are NEEDED for a **Push-to-open** setup. (Get in contact with our sales team if you do not have these brackets).
- Operator arms will be mounted on the inside of the gate in either push or pull setup.
- Place the control box within a few feet of the primary operator arm.

### Posts, Columns and Walls

Mount the operator post bracket on a steel post which is at least 3” wide. The post bracket extends past the post several inches.

If a wood post is used, it should be pressure-treated, plumb and square, and at least 6” wide. It is recommended to re-tighten your bolts occasionally because wood tends to shrink and expand.

It is recommended to mount the gate on steel posts **behind** the backplane of columns.

If the posts are between the columns, they should be at least 3” from the column.

If you mount the gate hinges directly to a column (not recommended), make sure that the hinges are within 4” of the back of the column.

Gate hinges should NOT be mounted in the center of a column. The angle will be too wide.

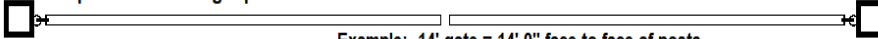
If the hinges are in the center of a column, you must notch the column to accommodate the operator, or you could re-mount the gate hinges on a post behind the backplane of the column.

If the gates is hinged in the center of a column, you could consider swinging the gate out (push-to-open), in which case you would install your operator post bracket on the same face as the hinges.

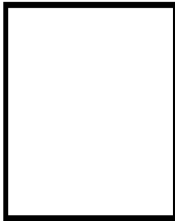
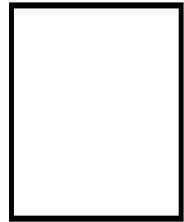
# HANGING GATES ON POSTS AND COLUMNS



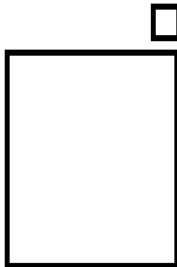
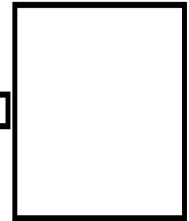
**1. Good Idea**  
 Posts are 3" from the columns, so the gate can open 90 degrees and the opener does not get pinched.



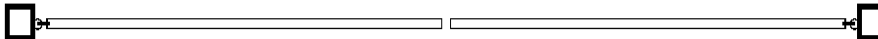
Example: 14' gate = 14' 0" face to face of posts.  
 Two 5" posts, plus 3" on each side = 16" or 1' 4"  
 So distance between pillars is 15' 4" for a 14' gate  
 (13' 4" for a 12 gate, 17' 4" for a 16' gate, 19' 4" for  
 an 18' gate, 21' 4" for a 20' gate)



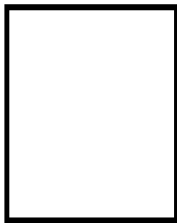
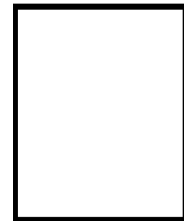
**2. Bad Idea**  
 Posts are too close to columns; when gate opens the opener will pinch between the gate and the column.  
 This would only be okay if the gate swings OUT, Push to Open setup



**3. Good Idea**  
 Posts are behind column.  
 Warning: Don't set your post too close to the column or it will be difficult to drill and bolt the opener bracket to the post. Tip: Lay it all out on the ground on wooden blocks first so you can see where the opener bracket needs to go to line up opener with the gate, then drill the bolt holes before setting the posts



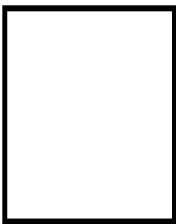
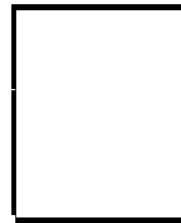
Example: 14' gate = 14' 0" face to face of posts,  
 So distance between pillars is also 14' 0"



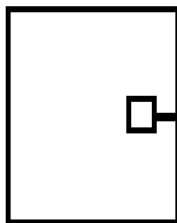
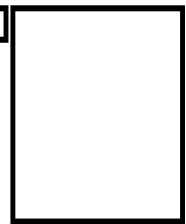
**3.5 Good Idea**  
 Posts are behind columns and hinges are hidden by columns.  
 Warning: Don't set your post too close to the column or it will be difficult to drill and bolt the opener bracket to the post. Tip: Lay it all out on the ground on wooden blocks first so you can see where the opener bracket needs to go to line up opener with the gate, then drill the bolt holes before setting the posts



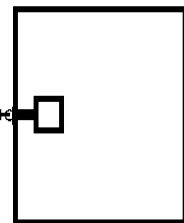
Example: 14' gate = 14' 0" face to face of posts  
 Hinges take up 3", so to hide hinges behind pillars,  
 the pillars are placed 14' minus 6" = 13' 6" apart



**4. Good Idea**  
 No interference between the post and the column.  
 No problem drilling and bolting through the post for the opener bracket.



**5. Bad Idea**  
 If the gate swings in, the linear opener will pinch between the gate and the column and it won't open 90 degrees.  
 You could mount it like this and swing in if you use an articulated arm opener that sits on the ground behind the column and has an arm with an elbow in it (such as the Liftmaster CSW24UL)  
 This also could work with a linear opener if the gate is a "Push to Open", swings out towards the street.  
 Masonry just isn't as strong as steel; however you could put some steel inside the columns, like a post with arms called standoffs, and then weld the hinges to the standoffs;



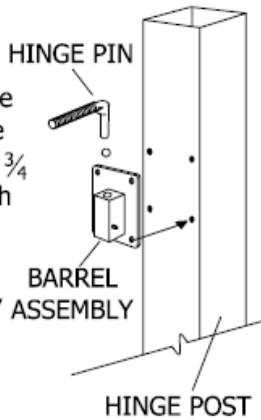
# HANGING THE GATE

We will illustrate a single swing gate. A dual or bi-parting simply has a second hinge post in lieu of a strike post

BESIDES THE EQUIPMENT WE SHIPPED TO YOU, YOU WILL NEED: 1. 2 crescent wrenches 2. screwdrivers 3. a level 4. Some all-weather grease 5. A helper

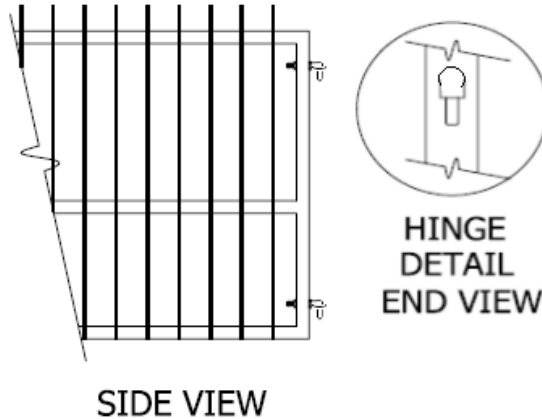
## 1 PREP HINGES

Using the supplied machine screws bolt the hinge barrel assemblies to the posts. The other half of each hinge, the hinge-pin, bolts through the  $\frac{3}{4}$ " holes in the gate itself. Each hinge-barrel takes a ball bearing and a hinge-pin. Using an all-weather grease, put a dollop on each ball bearing and insert a bearing into each barrel.



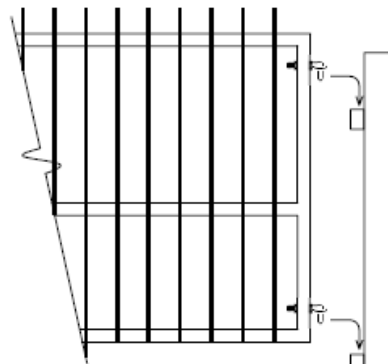
## 2 PREP HINGE-PINS

Next, put the threaded portion of the hinge-pins through the holes in the gate frame, tighten lightly with a wrench, making sure the unthreaded portion points down and is parallel to the gate frame.



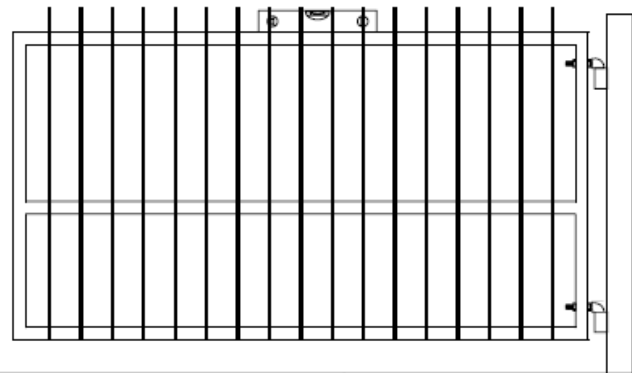
## 3 HANG THE GATE

Using a helper, lift the gate and gently slide it toward and down onto the hinge barrels. This may take two or three attempts since both hinge-pins must enter the barrels simultaneously.



## 4 LEVEL AND TIGHTEN

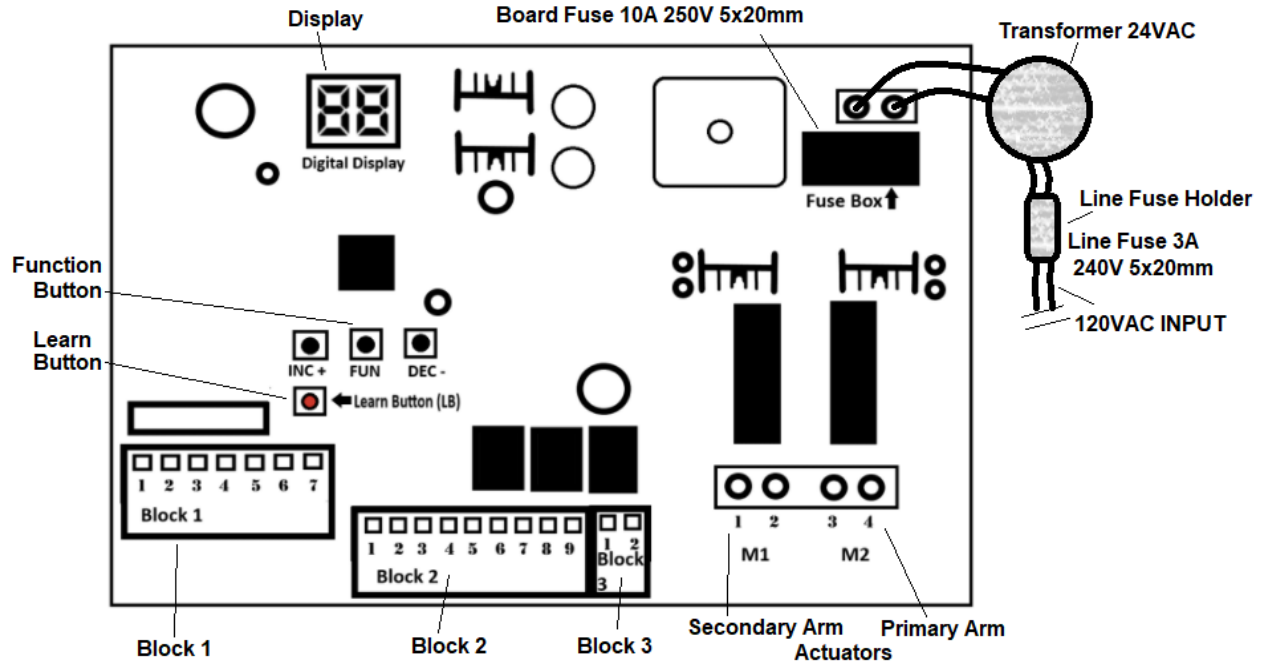
Finally, using your level and the crescent wrenches, adjust the top and bottom hinge-pins with the nuts until the gate hangs exactly level. Check the swing, it should be smooth and quiet. Tighten the hinge-nuts completely.



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## AG900HD Control Board Reference Page



### Block 1

1. **2SIDE-** for connecting a *Keypad or Intercom* when the gate is a *Double gate*
2. **COM-** for connecting the ground or COM connection of Accessories
3. **1SIDE-** for connecting a *Keypad or Intercom* when the gate is a *Single gate*
4. **SWIPE-** for connecting an *Exit Sensor* to open the gate
5. **COM-** for connecting the ground or COM connection of Accessories
6. **“IR”-** for connecting a *Safety Photo Eye* (Typically the N.O. wire)
7. **12V DC-** output for providing Accessory power (Continuous output current  $\leq 200\text{mA}$ )

### Block 2

1. **24V+ battery output-** for connecting the Solar/backup battery +
2. **24V- battery output-** for connecting the Solar/backup battery -
3. **24VDC+ output-** for 24V Accessory power (max current output 1A)
4. **GND-** for connecting the common of 24V Accessories and for a grounding rod
5. **24V DC lamp + output-** for connecting a Flashing light +
6. **24V DC lamp - output-** for connecting a Flashing light -
7. **24V DC lock output-** for connecting a *Solenoid lock*
8. **COM-** for connecting the COM or ground of a Solenoid lock or Mag lock
9. **lock output-** for connecting a *Magnetic lock*

### Block 3

1. GND Alarm output; Can also be used for a Grounding rod
2. 24V DC Alarm output

### Actuators

**M1-** Wiring for Secondary arm

**M2-** Wiring for Primary arm

## AG900HD Installation

### Step 1: DETERMINING POWER

Skip this step if you have a Solar Setup.

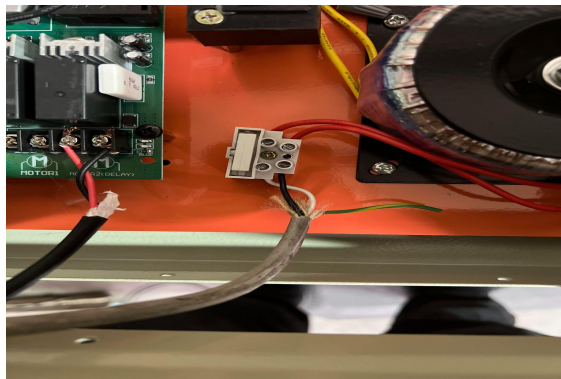
Ensure the 120VAC cable is run through the conduit you set in the pre-installation. It should be on the side of the driveway where your control box will be mounted. High Voltage wire requires conduit.

Note: In case of a power failure, the operators may be opened manually by unlocking and lifting the release lever on top of the operator arm.

### Step 2: MOUNTING AND SETUP

#### Power Setup

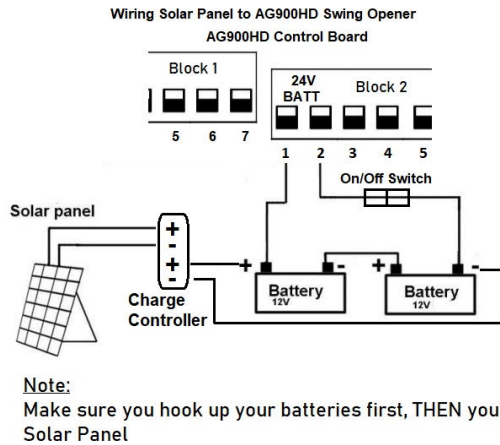
1. Locate and mount the control box close to the power you have laid out in step 1.
2. Connect 120VAC power directly into the fuse holder located in the control box. The hot wire (white) should be in line with the fuse.
3. If you have a bare ground wire, connect it to a green screw connected to the control box.



#### Solar Setup

Two 12Vdc batteries must be wired **IN SERIES** to provide 24Vdc. Your Solar Box comes equipped with (2) 12v-15amp batteries.

1. Connect the charge controller to the batteries.
2. Connect the solar panel to the charge controller. This tells the charge controller that the voltage of 24Vdc is connected. (see Diagram below)
3. Set your battery type:
  - Press the left/menu button to step through the settings until you see the battery type setting.
  - Press and hold the left button until the display flashes, then press + until it shows B02.
  - Press and hold the left/menu button to save the setting



### Step 3: MOUNTING OPERATOR ARM(S)

#### ❖ Pull-To-Open Application

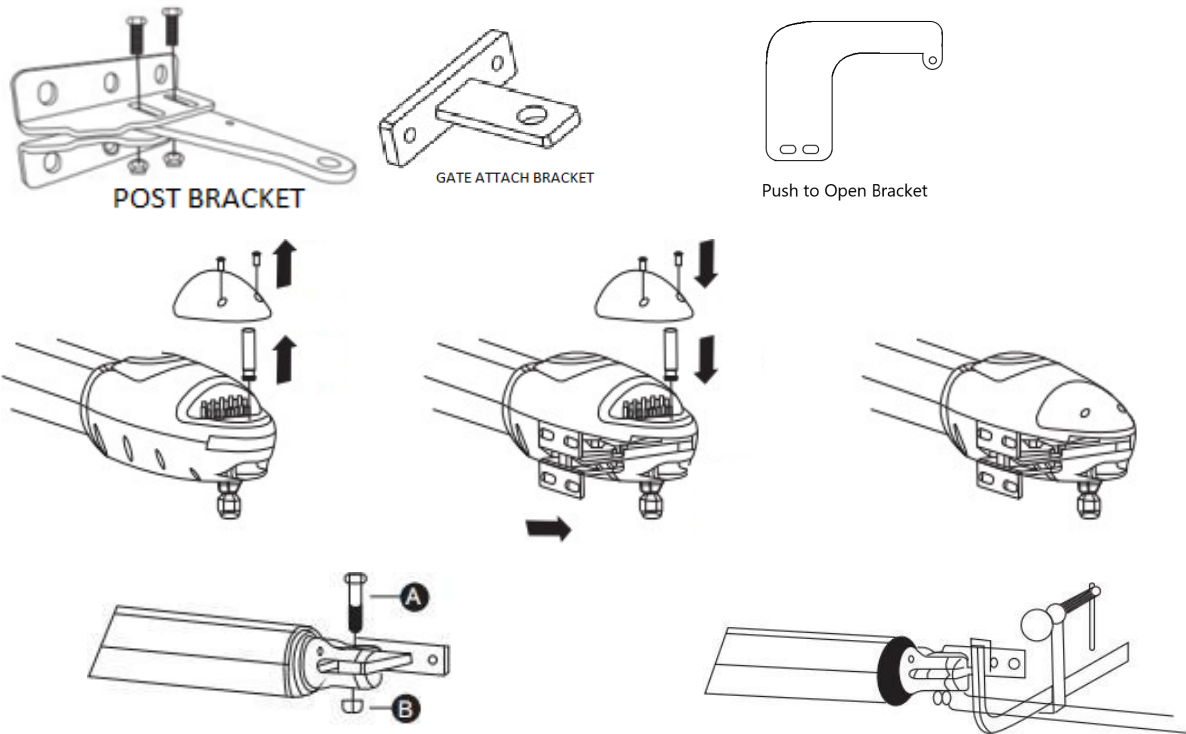
Operator Mounting Instructions for a PULL-TO-OPEN application when the gate swings IN TOWARDS the House. (DO NOT drill and bolt yet. Start by CLAMPING the brackets in place.)

#### ❖ Please use pictures below as a starting point to mounting your arms

#### Step by step instructions



- Open the gear motor cover and remove the mounting pin and attach the post bracket to the opener arm.
- Attach the gate bracket to the operator arm and then place arms on clamped post bracket and clamped gate bracket
- Unlock and pull up the manual release lever. Extend the arm all the way out. The arm will be completely extended when the gate is closed.
- Start with the gate in the desired closed position, with the arm fully extended, and clamp the gate bracket to the gate and clamp the post bracket to the post. Make sure it is level. Don't drill and bolt yet.
- Open the gate until the opener arm is fully retracted.
- Close the Gate to ensure the close limit stays intact otherwise adjust the arm(s) position again and keep trying. Loosen the post bracket adjustment bolts and move the gate to the desired open position and re-tighten the bolts. (NOTE: This might take some time to adjust) Continue adjusting until it opens and closes to where you want it.
- Drill holes in the gate and post and bolt the gate bracket to the gate.



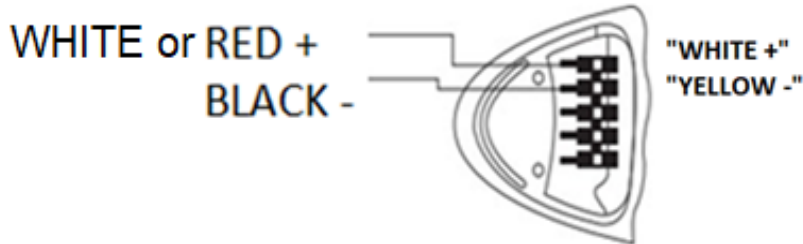
### Push to Open Application



- The opener will be fully Extended when the gate is Open, and fully Retracted when the gate is Closed. There is not a limit setting on the control board.
- The CLOSED limit is set by mounting the Gate Bracket on the gate in the right place.
- The OPEN limit is set by loosening the Post Bracket bolts and moving the gate manually and then tightening the bolts.
- Make sure the arm is level.
- Follow the remainder of the Pull-to-open instructions after this point.

## Step 4: Wiring the Arms

The operator arm is not pre-wired. Remove the rear cover on the operator arm. Use the included 2 conductor 16-gauge stranded wire and feed it up through the strain relief nut. Next, securely fasten the white or red (+) wire to the positive (+) “**WHITE**” terminal block and fasten the black (-) wire to the negative (-) “**YELLOW**” terminal block. Close the gear motor cover and tighten the two screws.



Run the two-conductor cable from the operator arms to the control box. Only two conductors are needed for each arm. It is recommended to use a 3/4” conduit (such as PVC tube) under the driveway.

### Pull-To-Open application:

#### ❖ Double Gate:

- Primary operator arm on the near side of the driveway:
- Black Wire to M2 (4)
- White or red Wire to M2 (3)
- Secondary operator arm on the far side of the driveway
- White or red Wire to M1 (2)
- Black Wire to M1 (1)
- From the right: Black, Red, Red, Black

1 2 3 4

Motor1 = Secondary Arm    M1    M2    Motor2 = Primary Arm

- + + -



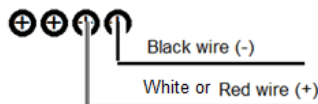
#### ❖ Single Gate:

- Black Wire to M2 (4)
- White or red Wire to M2 (3)
- From the right: Black then Red

1 2 3 4

M1    M2    Motor2 = Primary Arm

- + + -

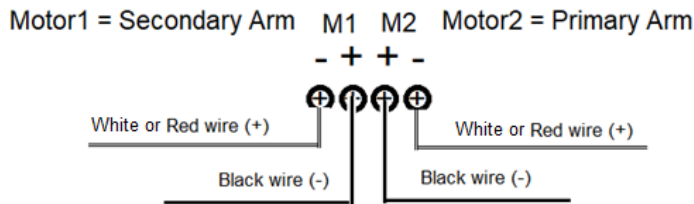




## Push-To-Open Application

### ❖ Double Gate:

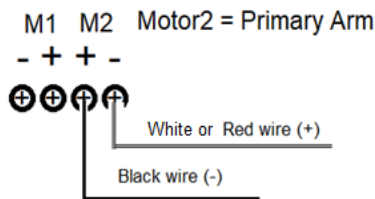
- Primary operator arm on the near side of the driveway:
  - White or red Wire to M2 (4)
  - Black Wire to M2 (3)
  - Secondary operator arm on the far side of the driveway
  - Black Wire to M1 (2)
  - White or red Wire to M1 (1)
  - From the right: Red Black Black Red
- 1 2 3 4



### ❖ Single Gate

- White or red Wire to M2 (4)
- Black Wire to M2 (3)
- From the right: Red then Black

1 2 3 4



## Step 5: Program a Remote

- Press and release the red LEARN button on the Control Board. (The blue light turns off when the board is in Learn mode)
- DOUBLE GATE: Press the Top Right button on your remote (If the programming is successful, the blue light will flash four times and the buzzer will sound once for each remote or keypad that has been added)
- SINGLE GATE: Press the Top Left button on your remote.
- To improve the range, bend the flexible black antenna and extend it down through the bottom of the cabinet

**NOTE:** Be careful not to hold down the LEARN button or it will reset all the remotes that were previously programmed. (See FAQ for HomeLink®)

**Test the Operators:** Test the operator arms before installing other accessories such as a photo eye, exit sensor or keypad. This will prevent installation problems.

## Step 6: Program Control Board Function Settings

Set **PC** to 02 for a Double gate or 01 for Single gate

Press and HOLD the FUN (Function) button until the display shows P0

Press INC+ repeatedly until the display shows PC (Receiver Setting)

Press FUN once to see the current setting

Press INC+ repeatedly until the display shows 02 for a double gate or 01 for a single gate

Press FUN to SAVE the setting

- Set **PE** to 0 for a Double gate or 01 for a Single gate
  - Set **P5** High Speed Running Time to 11 seconds, adjust up or down later
  - Set **P6** Auto Close Timer for Exit/Swipe to 45 seconds (Set to 0 and the gate will not automatically close after Exit)
  - Set **P9** Auto Close Timer for Receiver/2Side/1Side to 45 seconds (Set to 0 and the gate will not automatically close after opening from remotes or keypad)
  - To exit programming mode, press and release the red LEARN button quickly, or allow it to time out - Be careful not to hold the LEARN button down or it will RESET all remotes
- NOTE: Other** Function Settings may be left as they are

### LIST OF FUNCTION SETTINGS

**P0 - Sets the soft start time** for the actuators from 0-6 seconds.

Recommendation: Leave at the default of 2 seconds.

**P1 - P4 sets the level of stall force** which determines how hard and long the gate will push against an obstruction before reversing

Unless you need to change them, leave these at the factory default settings as follows:

P1 - 6 (applies to secondary arm at low speed)

P2 -10 (applies to secondary arm at high speed)

P3 - 6 (applies to primary arm at low speed)

P4 -10 (applies to primary arm at high speed)

**P5 - Sets the high-speed running time.** This allows the gate to run at its highest speed for however many seconds you set before slowing down. Recommendation: Start at 11 and work either up or down from there. Factory Default is 5 seconds

#### **P6 – Swipe/EXIT Auto Close**

Sets the **auto close time** in seconds when the gate is opened by an **exit sensor or wired keypad** that is wired into terminal #4 **SWIPE**.

Factory default: 10 The gate will automatically close after 10 seconds after SWIPE is activated

Turn OFF auto close with a setting of 0

Turn ON auto close by setting this at 1 to 99 seconds

When gate is open and the auto close timer is on, the blue led blinks

**P7 - Sets the open delay time** for the Secondary gate to open when utilizing a **lock**.

Can be set from 0 to 10 seconds.

A setting of 1 means the Primary Arm (MOTOR1) starts to open 1 second before the Secondary Arm starts to open. Factory default is 0 seconds

**P8 - Sets the close delay time** for the gate to close when utilizing a **lock**.

This staggers the gates so that they don't close at the same time

Can be set from 0 to 10 seconds

1 means the Primary Arm (MOTOR2) starts to close 1 second after the Secondary Arm (MOTOR1.)

Factory default is 0 seconds

### **P9 – Receiver Auto Close Delay Timer**

Sets the **auto close delay time** in seconds after the gate has been opened by a **remote transmitter or wireless keypad**.

Turn off auto close with a setting of 0

Turn ON auto close with a setting of 1 to 99 seconds

Factory default is 0 seconds

When gate is open and the auto close delay timer is on, the blue led blinks

### **PA - Used when connecting a flashing light or alarm**

0 Alarm sounds when the third remote button is pressed and held, lamp lights for 30 seconds

1 Alarm sounds when the third remote button is pressed and held, lamp lights while gate is moving

2 Alarm sounds when the third remote button is pressed once and stops when it pressed again; lamp lights for 30 seconds

3 Alarm sounds when the third remote button is pressed once and stops when it pressed again, lamp lights while gate is moving      Factory default is 0

**Pb – Solenoid Lock Time** Used to extend the time a gate would remain locked (if using a lock) before the gate starts opening

**0** = one half second

**1** = 5 seconds

Factory default is set to 0

### **PC – Radio Receiver Mode**

Recommendation: Set this to "1" for a Single gate and "2" for a Double gate

1 = Single gate mode

2 = Double Gate Mode

3 = Top Left Remote button only opens Primary side; Top Right remote button opens both sides

0 = Disables opening by the remote or wireless keypad

### **Pd - Safety photo beam setting**

Specifies which type of contact the safety photo beam is using

00 Normally Closed "N.C."

01 Normally Open "N.O."

Recommended: 01 for Normally Open "N.O."

Factory setting is 01

### **PE – Single vs Double Gate**

Specifies whether the gate is a Double gate or a Single gate

00 Double Gate

01 Single Gate

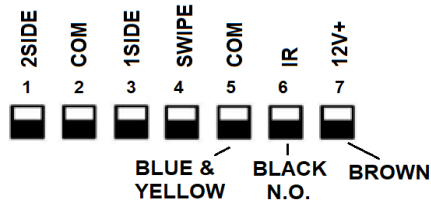
Factory setting is 0

**Po- Resets** the control board



## Step 7: Installing a Safety Photo Eye

1. Mount the photo eye brackets to the gate posts, or on short posts on each side of the driveway - Set them about 18" above grade
2. Wire the photo eyes:
  - BLACK ("NORMALLY OPEN"/N.O.) --- IR (Block 1 Port 6)
  - BLUE & YELLOW --- "COM" (Block 1 Port 5) or (Block 1 Port 2)
  - BROWN --- POSITIVE 12V + (Block 1 Port 7)
  - WHITE --- NOT USED (N.C.)



## Step 8: Installing Amazing Gates Gatemaster Wireless Keypad

(Note: See video on our website)

Be careful not to hold the LEARN button down or it will reset all the remote

Be careful when removing the keypad from the cover - slide it down

1. Open the keypad with the included wrench and install the batteries - Alarm will sound
2. Hold down the metal bar on top and bring the keypad near the control board
3. Connect the keypad to the gate operator control board:
  - Enter 0000\* to enter programming mode
  - (Expect one long beep)
  - Press 55#; keypad will beep once to confirm
    - For a single gate press 01#
    - For a double gate press 02#
  - Press and release the red Learn button on the operator control board.
  - The control board will beep, and the digital display will show a number.
4. Add a keypad code
  - Enter 0000\* to enter programming mode (expect one long beep)
  - For a Single gate press 01# (expect one beep)
  - For a Double gate press 02# (expect two beeps)
  - Enter the new 4-digit code followed by the # key; for example 2020# (expect one long beep and one short beep to confirm)
  - Keypad will automatically exit programming mode
  - Test the code
  - Three codes may be entered, adding more erases old ones
5. If you need to RESET the keypad: With the keypad open, and with the alarm sounding, insert a paperclip in the small hole on top for 5 seconds - all three leds will light up
6. To change the keypad master programming code:
  - Enter the current installer code, for example 0000\* (expect one long beep)
  - Press 69# (expect one short beep)
  - Key in new 4-digit installer code followed by the # key for example 4640# (expect one long beep and one short beep)
  - Keypad will automatically exit programming mode
7. Mount keypad on gooseneck mounting post - Use a 4" x 5" x 1" piece of Trex material or wood as a mounting adapter

## Step 9: Install an Automatic Exit Sensor

**NOTE:** Connect exit sensor with Power OFF. When you Power ON and wait 2 minutes, the exit sensor will calibrate and signal the gate to open  
Suggestion: Run Exit cable in a PVC pipe buried alongside driveway  
See Function Settings for auto close timer settings

### Wiring the Amazing Gates Gatemaster Exit Probe

Red — 24VDC (Block 2 Port 3)

Black— GND (Block 2 Port 4)

Blue — SWIPE (Block 1 Port 4)

Green and Green of Sensitivity Device — COM (Block 1 Port 5)

Yellow — Twist together with Yellow of Sensitivity Device

## Step 10: Wiring Locks

1. Solenoid Lock wiring
  - Brown- Lock (Block 2 Port 7)
  - Blue- COM (Block 2 Port 8)
2. Mag Lock Wiring
  - COM - COM (Block 2 Port 8)
  - Relay - Lock ( Block 2 Port 9)
  - Get power from a separate power supply

## Step 11: Wiring A Timer

1. Dual Gate
  - N.O. --- 2 SIDE (Block 1 Port 1)
  - Com --- “COM” (Block 1 Port 5)
  - 12V timer:
    - Power + --- “12V” (Block 1 Port 7)
    - Power - --- “COM” (Block 1 Port 5)
  - 24V timer:
    - Power + --- “24Vdc” (Block 2 Port 3)
    - Power - --- “GND” (Block 2 Port 4)
2. Single Gate
  - N.O. --- “1 SIDE” (Block 1 Port 4)
  - Com --- “COM” (Block 1 Port 5)
  - 12V timer:
    - Power + --- “12V” (Block 1 Port 7)
    - Power - --- “COM” (Block 1 Port 5)
  - 24V timer:
    - Power + --- “24Vdc” (Block 2 Port 3)
    - Power - --- “GND” (Block 2 Port 4)

## **Step 12: Wiring a Wired Keypad or Receiver**

(See Function Settings for auto close timer settings)

### 1. Dual Gate

- N.O. --- 2 SIDE (Block 1 Port 1)
- Com --- "COM" (Block 1 Port 5)
- Power + --- "12V" (Block 1 Port 7)
- Power - --- "COM" (Block 1 Port 5)
- 24 Volts:
- Power + --- "24Vdc" (Block 2 Port 3)
- Power - --- "GND" (Block 2 Port 4)

### 2. Single Gate

- N.O. --- "1 SIDE" (Block 1 Port 4)
- Com --- "COM" (Block 1 Port 5)
- Power + --- "12V" (Block 1 Port 7)
- Power - --- "COM" (Block 1 Port 5)
- 24 Volts:
- Power + --- "24Vdc" (Block 2 Port 3)
- Power - --- "GND" (Block 2 Port 4)

## MAINTENANCE

Grease the gate hinges a couple of times a year. Keep the control box clear of cobwebs  
Spray a silicone lubricant on a rag and wipe it on the extended operator shaft every couple of months. For solar setups, during the winter, remove the batteries and charge batteries as needed on a trickle charger on the lowest setting overnight.

## FAQ

Q: How can I set my gate to close automatically after opening it with a remote or keypad?

A: Change Function P9 to set your receiver auto close timer to however many seconds you want the gate to stay open

Q: Why is only one side of my gate opening?

A: This could be because Function PC on the control board defaults to 03 which allows different remote transmitter buttons to open one side or both sides. Go to Control board settings and set the PC to 02.

Q: How can I set my gate to open and close faster?

A: Change the setting for high speed running time, P5 in the control board setting.

Q: The remote transmitters have a very short range. How can I increase the range of my remote transmitters?

A: Open the cabinet and bend the flexible black antenna and extend it down through the bottom of the cabinet.

Q: Why is my gate staying open or only closing for a few seconds before reopening?

A: Check the wiring for your arms and switch the red and black wires.

Q: Why won't my batteries charge back up when they go below 15v?

A: The Charge Controller is a 12v/24v controller, so when the batteries drop too low it switches from 24v mode to 12v mode. This means that it will only charge up to 15 volts but won't go any higher than that. Remove the batteries from the unit and charge them back up with a trickle charger such as a motorcycle battery charger.

Q: Why does the gate stay open and not automatically close?

A: Check your photo eyes and make sure the beam is hitting the reflector. Also check that your P9 auto close setting is greater than 0.

Q: How to keep dew, fog and rain off my photo eye?

A: You might need to purchase a hood for your reflector to help prevent rain from keeping the gate open. For dew and fog, try making a tube or tunnel to put around the reflector.

Q: How to fix the Exit sensor being inconsistent or too sensitive?

A: Sometimes it helps to turn off the power to the control board for 5 minutes. When you turn it back on, wait a bit and let the exit probe "recalibrate" itself. Sometimes it helps to put an exit probe in a piece of conduit. Sometimes it helps to put an exit probe in sand instead of dirt. (Note- every time you turn off the board you need to recalibrate the exit sensor.).

Q: How do I connect HomeLink® in the car or truck?

A: Add an aftermarket radio receiver and remotes such as the 850LM and 891LM for HomeLink® to work with your system. The HomeLink® website will show which receivers will work with your vehicle.

Q: How do I change my Charge Controller settings?

A: Set Float/CV: Press left/menu button to step through the settings. The main display shows the current level of the battery in Volts. Press the left/menu button once to see the Float or CV voltage. Press and hold the left menu button until the display flashes, and then press the right + or – buttons until it shows 28.5 V. Press and hold the left/menu button to save the setting. Set Battery Type: Press the left/menu button to step through the settings until you see the battery type setting. Press and hold the left button until the display flashes, then press + until it shows B02. Press and hold the left/menu button to save the setting.

Q: How do I keep my Gate Open?

A: There are only a few ways to keep your gate open. 1. You would Have to disable your auto close in the P6 and P9 settings or 2. You can cover your photo eyes when the gate is in the open position and that will keep the Gate open.

Q: My remotes won't stay programmed or are there any weird issues?

A: Disconnect all accessories and then go to Program Function Settings and reset the control board with function Po. That will reset all the program settings. Next, erase the remotes by holding down the red Learn button on the board. After that reprogram one remote and then try to open gate. Add accessories back in, one at a time, and test after each one.

Q: The Manual Release lever is stuck and I cannot get it open. What should I do?

A: When you first get the system the manual release will be hard to open. It is okay to give it a lot of force or use a screwdriver for leverage for the first few opens just until it gets a little loose.

Q: How can I make my solar setup work better or more consistent?

A: If you notice that your solar is not working as well and you want it to be consistent you might want to look at first getting a second solar panel that way you can catch sunlight all day from east to west. Then if you are still having trouble we recommend getting even bigger batteries at 12v 35ah. you will need 2 of them to make 24v.



Take a picture of this QR code with a smart phone to find the latest installation and troubleshooting videos for the Amazing Gates systems



## **CONTACT INFORMATION**

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