



meets all ANSI/UL 325 Safety Requirements for Vehicular Garage Door Openers

Residential Vehicular Garage Door Operator MODELS: MVP and MVP-SQ

INSTALLATION AND OWNER'S MANUAL

INSTALLER: Place this manual in the plastic envelope provided and permanently attach to the wall near the pushbutton.

107063



READ THIS MANUAL CAREFULLY BEFORE INSTALLATION OR USE

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READ THESE STATEMENTS CAREFULLY AND FOLLOW THE INSTRUCTIONS CLOSELY

The Warning and Caution boxes throughout this manual are there to protect you and your equipment. Pay close attention to these boxes as you follow the manual.

Indicates a MECHANICAL	Indicates a MECHANICAL hazard of DAMAGE to the	Indicates an ELECTRICAL hazard	Indicates an ELECTRICAL hazard of DAMAGE to the
hazard of INJURY OR DEATH. Gives	door, door opener, or equipment. Gives	of INJURY OR DEATH. Gives	door, door opener, or equipment. Gives
instructions to avoid	instructions to avoid the	instructions to avoid	instructions to avoid the
the hazard.	hazard.	the hazard.	hazard.



The purpose of this booklet is to provide assembly, installation and operation information concerning the herein described Residential Garage Door Opener and related Accessory Products.

NOTICE

IT IS IMPORTANT THAT THIS INSTRUCTION MANUAL BE READ AND UNDERSTOOD COMPLETELY BEFORE INSTALLATION OR OPERATION IS ATTEMPTED.

NOTICE

THE IMPORTANT SAFEGUARDS AND INSTRUCTIONS IN THIS MANUAL CANNOT COVER ALL POSSIBLE CONDITIONS AND SITUATIONS WHICH MAY OCCUR DURING ITS USE. IT MUST BE UNDERSTOOD THAT COMMON SENSE AND CAUTION MUST BE EXERCISED BY THE PERSON(S) INSTALLING,

MAINTAINING AND OPERATING THE EQUIPMENT DESCRIBED HEREIN. DO NOT USE THIS EQUIPMENT FOR ANY OTHER THAN ITS INTENDED PURPOSE - OPERATING OVERHEAD GARAGE DOORS.

STANDARD FEATURES:

Digital Radio Controls: This opener is equipped with a transmitter pre-programmed to one of over nineteen thousand private codes. The transmitter can be reprogrammed without difficulty using the external operation buttons. The power head is easily programmed to accept the transmitter signal. (Page 11)

Safe Finish[™] Photosystem: An invisible infrared beam of light guards the door opening and reverses a downward moving door if the beam is broken by a stationary or moving object. The opener's motor control circuitry constantly monitors the Safe Finish Photosystem for proper operation.

Super Station (Deluxe Wall Push Button): A feature-packed accessory unit, the Super Station allows access to all of the opener's functions. Independent Open, Close, and Stop buttons permits full control of the door's operation. The opener's built-in light can be turned on or off independent of door operation. A Learn Enable button allows programming of the radio controls at floor level. A Security Switch allows the opener to be deactivated for extended periods of time. A Security Disable switch is provided if the garage door is the only entryway into the garage. Lighted Push Buttons enhance nighttime use. (Page 17)

Manual Release: A pull cord allows separation of the drive mechanism and manual operation of the door when desired, as in the event of a power failure. (Page 7)

Automatic Reconnection: Once power is restored, or automatic operation of the door is again desired, initiating operation in the normal manner (Push Button, Radio Control, etc.) will effect automatic reconnection of the Manual Release Mechanism. (Page 7)

Alternating Action Operation: The mechanical wall pushbutton functions in an Open/Stop/Close/ Stop & Reverse mode in normal operation. (Page 15)

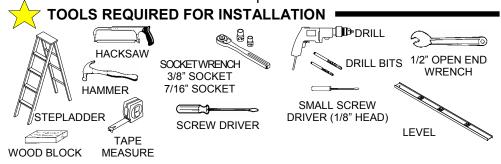
Sensing System: A built-in sensing system detects obstructions during door operation. If in the downward (close) travel mode, the opener will sense an obstruction and reverse the direction of the door. In the open mode, the opener will stop. Since all doors are different, the Sensing System has independent adjustments for customizing the level of force required for the normal opening and closing of specified doors. (Page 16)

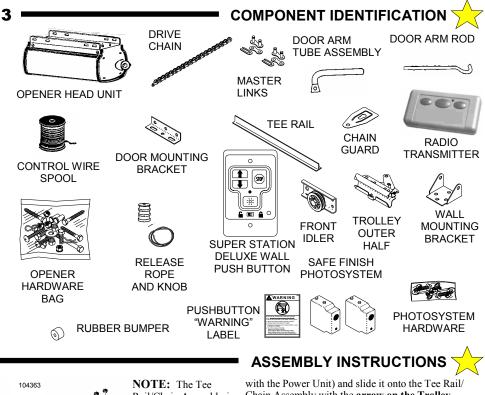
Close Limit Switch: In winter months it's common for small pieces of ice or packed snow to be trapped under the door. Ground swelling can also effect the close limit setting of the opener. The opener's Close Limit Switch overrides the Sensing System during the last one inch of closing travel and prevents the door from reversing if it encounters an obstruction at this point.

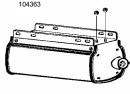
Constant Contact To Close Operation: For utmost safety and security, the operation mode allows constant contact on the mechanical Push Button to close the door if the **Safe Finish™ Photosystem** beam becomes misaligned or if there is an irregularity in the wiring to the device. In this mode of operation, a Radio Transmitter cannot be used to close the door.

OPTIONAL FEATURES:

Wireless Keyless Entry System: A tamper resistant outdoor keypad, the optional Wireless Keyless Entry System permits entry to the garage without use of key or radio transmitter. Easily programmable, it accommodates a 4 digit PIN code (10,000 possible combinations). Lighted Buttons enhance nighttime use. The opener has the ability to learn the PIN codes from two separate Wireless Keyless Entry Systems.







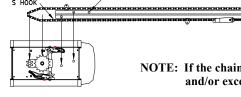
Rail/Chain Assembly is packaged separately from the Power Unit. The Inner Trolley half, Front Idler Sprocket, Chain, and Limit Cams are assembled on the Tee Rail at the factory

Follow the steps outlined below to complete assembly prior to installation. Refer to the component identification illustrations on the previous page.

STEP 1: Protect the Power Unit cover from scratching during assembly by placing it on cardboard. Remove the two 5/16"-18 washered nuts and save them for later use.

STEP 2: Position the Tee Rail/Chain Assembly box near the Power Unit. Open the box and locate the Installation Hardware Packet.

STEP 3: Locate the Outer Trolley half (packaged REMOVE & DISCARD BUMPER MOUNTING HOLE



Chain Assembly with the arrow on the Trolley pointing toward the door (Front Idler).

STEP 4: Using a 1/2" wrench, loosen the outer nut on the Chain Tension Bracket until it is at the end of the threaded rod. Remove and discard the small "S" hook used to keep the chain tight during shipping.

STEP 5: Loop the chain around the Idler and Drive Sprocket on top of the Power Unit and then position the Tee Rail on the studs. Secure with the two nuts removed in Step 1.

Slightly tension the Chain by tightening the outer nut on the Chain Tension Bracket. Remove and discard the tape at each end of the Tee Rail Assembly. After double-checking the Chain's alignment with the Drive Sprocket and Front Idler Wheel, use the inner and outer adjusting nuts on the Chain Tension Bracket to adjust the chain to the proper tension, making sure the chain does not twist. When correctly adjusted, the

Chain should show no droop and be approximately 1/2" above the base of the Tee Rail.

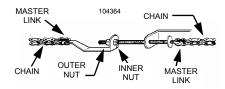
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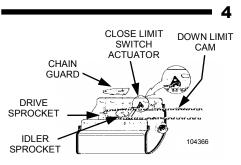
NOTE: If the chain is too loose or too tight, improper operation and/or excessive sprocket noise may result.



STEP 6: Position the open and close Limit Switch Actuators to accept the Limit Cams on the chain, as shown. Install the Chain Guard by sliding the key-shaped hole onto the groove on the Idler Sprocket Shaft and fully seating the rear hole over the Drive Sprocket Shaft. The Limit Cams are installed at the factory. Their settings should be considered temporary and may be changed as required during installation.

STEP 7: Install the Rubber Bumper into its mounting hole on the Tee Rail (see illustration above for location). Secure the Bumper to the bottom of the Tee Rail using one 5/16"-18 X 1" hex head bolt and

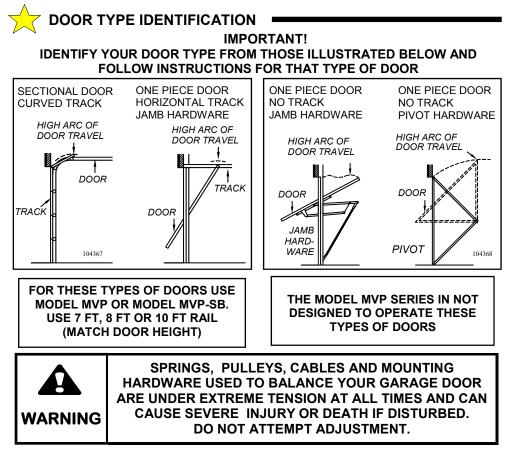




one 5/16"-18 washered nut (supplied) Tighten the bolt a MAXIMUM of 1.5 turns after the bolt and nut are snug.

STEP 8: Recheck the nuts used to secure the Tee Rail to the Power Unit, making sure they are tight. **Recheck** the Chain tension, Chain twist, Chain Guard and the position of both the Close Limit Switch and Open Limit Switch Actuators.

Assembly is now complete and you are ready to begin installation of the opener.



IMPORTANT INSTALLATION 🔶 INSTRUCTIONS

WARNING! TO REDUCE THE RISK OF SEVERE INJURY OR DEATH READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS!

AN UNBALANCED DOOR OR ONE THAT STICKS OR BINDS MAY PREVENT THE SENSING SYSTEM FROM WORKING PROPERLY, CAUSING INJURY OR DEATH. ENSURE DOOR IS PROPERLY BALANCED AND ELIMINATE ANY STICKING OR BINDING PRIOR TO INSTALLATION OF OPENER. A properly balanced door will open slowly from a 3/4 open position, close slowly from a 3/4 closed position, and remain still at a 1/2 open position. If the door is not properly balanced, HAVE A QUALIFIED SERVICE PERSON MAKE REPAIRS TO CABLES, SPRING ASSEMBLIES AND OTHER DOOR HARDWARE BEFORE INSTALLING THE OPENER

YOUR GARAGE DOOR IS THE LARGEST MOVING OBJECT IN YOUR HOUSE, THE SPRINGS, PULLEYS, CABLES AND MOUNTING HARDWARE UTILIZED TO BALANCE ITS OPERATION ARE UNDER EXTREME TENSION AT ALL TIMES AND CAN CAUSE SERIOUS PERSONAL INJURY, EVEN DEATH, IF DISTURBED. <u>DO NOT ATTEMPT</u> <u>ADJUSTMENT.</u> CALL A QUALIFIED SERVICE PERSON TO MOVE, LOOSEN OR ADJUST DOOR SPRINGS OR HARDWARE.

REMOVE ALL ROPES AND REMOVE OR MAKE INOPERATIVE ALL LOCKS CONNECTED TO THE GARAGE DOOR BEFORE INSTALLING THE OPENER.

DO NOT WEAR RINGS, WATCHES OR LOOSE CLOTHING WHILE INSTALLING OR SERVICING GARAGE DOOR OPENERS. WEAR SAFETY GOGGLES OR OTHER PROTECTIVE EYEWEAR.

IF POSSIBLE, INSTALL THE DOOR OPENER 7 FT OR MORE ABOVE THE FLOOR. MOUNT THE EMERGENCY RELEASE 6 FT ABOVE THE FLOOR. REINFORCE LIGHTWEIGHT FIBERGLASS, ALUMINUM AND STEEL DOOR TOP SECTIONS TO AVOID DAMAGE AND TO INSURE PROPER OPERATION OF THE SAFETY REVERSE SYSTEM. CONTACT YOUR DOOR MANUFACTURER FOR A REINFORCEMENT KIT.

DO NOT CONNECT THE OPENER TO A POWER SOURCE UNTIL INSTRUCTED TO DO SO.

CHECK LOCAL BUILDING AND ELECTRICAL CODES FOR MANDATORY INSTALLATION AND WIRING REQUIREMENTS.

CONNECT POWER CORD ONLY TO A PROPERLY GROUNDED OUTLET. IF PERMANENT WIRING IS REQUIRED BY CODES, DISCONNECT POWER AT FUSE BOX OR CIRCUIT BREAKER BEFORE ATTEMPTING ANY WIRING CONNECTIONS.

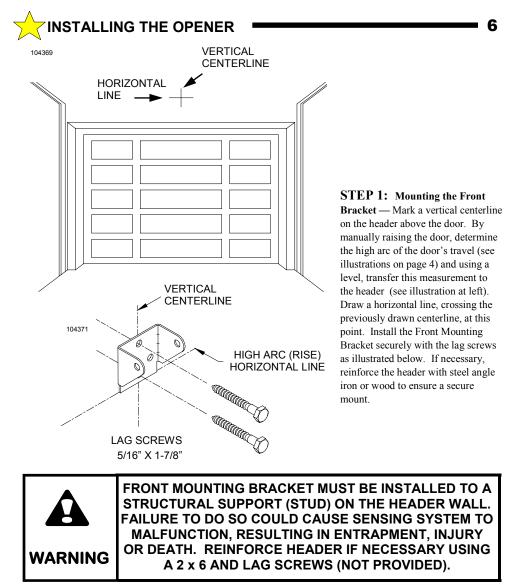
LOCATE THE CONTROL PUSH BUTTON:

- WITHIN SIGHT OF THE DOOR, AND,
- AT A MINIMUM HEIGHT OF 5 FT SO SMALL CHILDREN CAN'T REACH IT, AND,
- AWAY FROM MOVING PARTS OF THE DOOR.

INSTALL THE ENTRAPMENT WARNING LABEL NEXT TO THE CONTROL PUSH BUTTON IN A PROMINENT LOCATION. INSTALL THE EMERGENCY RELEASE INSTRUCTION CARD, ATTACHING IT ON OR NEXT TO THE EMERGENCY RELEASE.

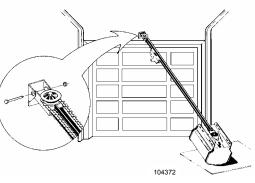
ADJUST THE SENSITIVITY ADJUSTMENTS ENOUGH TO ALLOW THE DOOR TO OPERATE, BUT NOT SO FIRMLY AS TO EXERT EXCESSIVE PRESSURE ON AN OBSTRUCTION BEFORE REVERSING.

AFTER INSTALLING THE OPENER, THE DOOR SHOULD REVERSE WHEN IT CONTACTS A 1-1/2" HIGH OBJECT (A PIECE OF STANDARD 2 X 4 BOARD LAID FLAT) ON THE FLOOR.



STEP 2: Raise the Tee Rail so that the Front Idler Bracket and Front Mounting Bracket align. Insert bolt and tighten nut loosely for now. Later in the installation, this nut must be tightened securely.

STEP 3: Raise the Opener and rest the Power Unit on a ladder or other sturdy support. Open the door to the full open position. Allow 2" of space between the Tee Rail and the top section of the door (as shown in the illustration on the top of page 7, left).





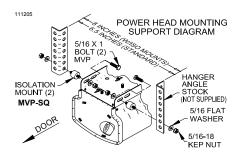
STEP 4: Mount Power Head to Ceiling: Since there is such variety in ceiling structures, all the mounting possibilities for the Power Unit cannot be illustrated here. The main concern is mounting the Power Unit securely to the ceiling joists for operational strength, rigidity and safety. Although there are a series of mounting slots

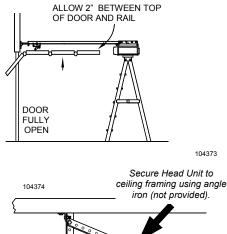
provided on the power unit, try to secure the mounting straps in the slots closest to the front. Mounting may usually be accomplished using standard

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 $1-1/4^{\circ}$ perforated steel angle available at most hardware stores. If in doubt about location of, and attachment to, ceiling joists, a carpenter should be contacted to provide assistance. A cross brace will be necessary if power head is mounted 8" or more from the ceiling.

STEP 5: Return to the Tee Rail/Front Mounting Bracket and securely tighten the bolt and nut that connect the Tee Rail Front Idler bracket and the Front Mounting Bracket. (See Step 2, previous).

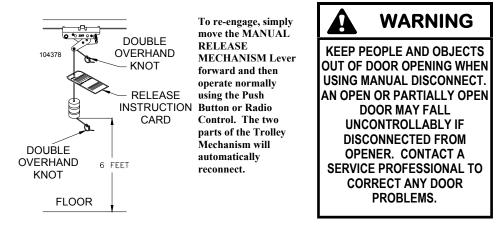




NOTE: The Model MVP-SQ is provided with vibration isolator mounts. Position as shown above.

STEP 6: Tie a **double overhand knot** in one end of the Manual Release Rope and slip the other end through the red Release Handle, the Release Instruction Card, and the hole at the end of the Release Lever on the Trolley. Tie a second **double overhand knot** in the free end, adjusting the Rope so that the **Red Handle is 6 FT above the floor**. If the Rope must be cut, flame seal the cut end with a match or lighter.

NOTE: The MANUAL RELEASE MECHANISM is engaged by pulling the Release Handle down and away from the door. This allows the Trolley Mechanism to separate, freeing the door from the Opener's transport mechanism.



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INSTALLING THE OPERATOR



FIBERGLASS, ALUMINUM OR LIGHTWEIGHT STEEL GARAGE DOORS <u>WILL REQUIRE</u> REINFORCEMENT BEFORE INSTALLATION OF DOOR MOUNTING BRACKET. CONTACT YOUR DOOR MANUFACTURER FOR A REINFORCEMENT KIT OR INSTRUCTIONS.

DOOR ARM CONNECTION AND INSTALLATION

NOTE: If the door is of light construction it is necessary to reinforce the center stile with steel angle or wood to prevent damage to the door if it encounters an obstruction on closing.

Step 7: Connecting Door Arm to Trolley

Release the outer trolley slide such as to effect manual operation, see Page 7.

The door arm assembly consists of the door arm tube section and door arm rod which are packaged separately. To assemble, screw the door arm rod into the the door arm tube in a clockwise direction approximately ten turns. Connect the door arm rod to the trolley ensuring the hook end goes through both holes on the front end of the outer trolley.

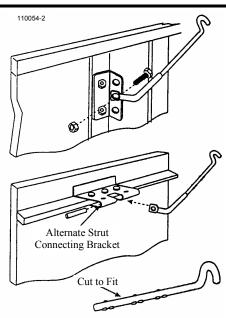


Step 8: Connecting the Door Arm to the Door

Type 1: Door Mounted Bracket

Visually align the door arm connecting hole with the middle hole of the door bracket by rotating the tube section in the appropriate direction.

Release the trolley (leave door arm attached) with the manual release cord and pull trolley toward the power head unit. Now rotate the door arm tube section two turns counterclockwise (increasing the exposed length of the door rod) to provide a cushion when the door is closed or encounters an obstruction. Align connecting hole in the door arm to middle hole in the door bracket; insert 3/8" diameter bolt and tighten locking nut, allowing for free pivot of the arm.



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Note: Do not overtighten locking nut as this will cause binding between the door arm and door bracket.

Type 2: Strut Mounted Bracket

Visually align the door arm connecting hole with the connecting pin of the strut by rotating the tube section in the appropriate direction.

Release the trolley (leave door arm attached) with the manual release cord and pull trolley toward the power head unit. Now rotate the door arm tube section two turns counter-clockwise (increasing the exposed length of the door rod) to provide a cushion when the door is closed or encounters an obstruction. Align connecting hole in the door arm with the strut mounted connecting bracket. Insert connecting pin through the hole in the door arm. Secure the connecting pin to the strut bracket according to the manufacturer's instructions.

Note: Door Bracket Mount or Strut Mount -If rod bottoms in cushion tube, cut rod to allow for proper function of this assembly.

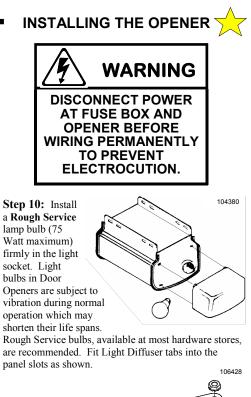
Set the outer trolley to re-engage, see page 7.

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STEP 9: Consult the label on the rear panel of the Opener to determine its proper working voltage. Normally it will be marked for 115V, 60 cycle operation. (If it is an export model designed for 220V, 50 cycle operation, the label will clearly indicate this.) The Opener must be plugged into a properly grounded receptacle within 3 FT of the Power Unit. A GFI Type receptacle is recommended. Do not use 2-prong adapters and do not use extension cords for anything more than temporary hook-up and testing purposes. Receptacle wiring should be No. 14 or heavier, and must be in compliance with local building and electrical codes.

If local codes require permanent wiring, a GFI type circuit breaker is recommended to protect the line. Remove the Strain Relief Bushing and withdraw the Line Cord from the rear of the Power Unit to expose the three insulated connectors. Cut the wire at the rubber jacket of the Line Cord and wire in permanently, employing proper wiring practices. Discard Strain Relief. It is not used with permanent wiring.



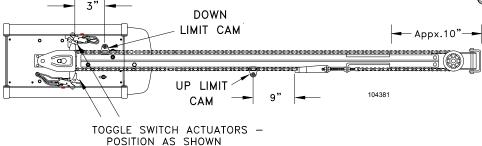


STEP 11: On most models, the Limit Cams are installed at the factory. If the Limit Cams have not been installed, or it is necessary to move a Limit Cam to a different link, fasten them to the chain as shown at right in the approximate positions as illustrated below. Position the Switch Actuators as shown below.



FASTENING LIMIT CAM TO CHAIN





CONTROL AND AUXILIARY EQUIPMENT INSTALLATION OF A STANDARD WALL **PUSH BUTTON**

If desired, a standard wall push button may be installed and connected to your operator. A standard wall push button is not included in your hardware package, it can be purchased from your professional installing dealer or a door bell button [without light] can be substituted. The operating parameters for the standard wall push button are outlined on a page that follows to see if that mode of operation is right for you. The Super Station is included with this operator and the manufacturer recommends its installation as the Super Station will provide full control over the garage door at all times.

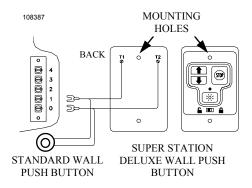
STEP 1: After determining a suitable location, usually near the access door and at least 5 feet above the floor to prevent use by children, use the standard wall push button as a guide to mark the mounting holes. Drill holes for drywall anchors or screws. NOTE: Do not mount directly to masonry walls. Use backer board.

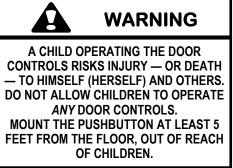
STEP 2: A length of 2-conductor, #22 gauge wire (or heavier) is required to connect the standard wall push button to the garage door operator. Strip approximately 2" of the wire jacket from one end and 1/2" of insulation from each wire. Carefully connect one wire to each of the two terminals. Carefully tuck the loose wires into the case and mount the unit using appropriate screws.

STEP 3: Run the wire from the standard wall pushbutton to the operator, supporting it at 18" intervals with suitable staples. Leave a sufficient length to make the necessary connections to the operator terminal strip.

INSTALLATION OF THE SUPER STATION

The Super Station (Deluxe Wall Pushbutton Station) is a 7 function station designed to work with and maximize the functionality of your garage door opener. Connection to any other opener may damage the opener and/or the Super Station. Only connect one Super Station to each opener. Do not connect more than one Super Station to an Opener.





WARNING: SOME LOCAL BUILDING CODES DO NOT ALLOW SURFACE WIRING. BE SAFE AND CHECK WITH YOUR LOCAL BUILDING **INSPECTOR FIRST.**

STEP 4: Ensure power is OFF to the operator or disconnect the power from the operator. Strip approximately 4" of jacket from the end of the wire and 1/2" insulation from each wire. Connect to terminals 0 and 1 as shown in the illustration below. Support the wire near the operator with wire ties.

Step 5: Install the Control Button Warning Label supplied with your opener near the standard wall push button (see illustration next page).

STEP 1: After determining a suitable location, usually near the access door and at least 5 feet above the floor to prevent use by children, use the Super Station as a guide to mark the mounting holes. Drill holes for drywall anchors or screws. NOTE: Do not mount directly to masonry walls. Use backer board. The Super Station is also designed to be mounted directly to a standard single electrical box.

STEP 2: A length of 2-conductor, #22 gauge wire (or heavier) is required to connect the Super Station to the garage door opener. Strip approximately 6" of the wire jacket from one end and 1/2" of insulation from each wire. Carefully connect one wire to each of the two terminals indicated, noting which color is connected to which terminal. Tighten screws, being careful that no wires are allowed to touch any other terminal or any other conductive part of the circuit board. Do not overtighten the terminal screws.

STEP 3: Push the wire jacket into one of the two notches provided at the ends of the housing, allowing a maximum of 1/8" inch of the jacket inside the case (too much will make mounting difficult). Carefully tuck the loose wires into the case and mount the unit using the screws provided.

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STEP 4: Run the wire from the Super Station to the opener, supporting it at 18" intervals with suitable staples. Leave a sufficient length to make the necessary connections to the opener terminal strip.

WARNING: SOME LOCAL BUILDING CODES DO NOT ALLOW SURFACE WIRING. BE SAFE AND CHECK WITH THE LOCAL BUILDING INSPECTOR FIRST.



STEP 5: Ensure power is OFF to the opener or disconnect the power from the opener. Strip approximately 4" of jacket from the end of the wire and 1/2' insulation from each wire. Connect to terminals 0 and 1 as shown in the illustration above. Support the wire near the opener with wire ties.



STEP 6: Install the Control Button Warning Label supplied with your opener near the Super Station or wall push button (see illustration at right).

Remote Control Radio System

Your transmitter is pre-coded at the factory with one of over 19,000 unique codes, and as such it is possible to control a single opener or a group of openers at one location or at multiple locations. Your transmitter may be mounted on a visor using the metal visor clip (included) or attached to a key-chain with the built-in attachment. Your remote control radio system is compatible with the HomeLink® systems.

Resetting the Transmitter Code

Each button of the transmitter is pre-coded at the factory to one of over 19,000 unique codes. Follow the instructions below to set your own code or to code multiple buttons or transmitters to the same code. You can record your code(s) on the back page of the manual. If recoding is not desired, skip to "Programming the Radio Receiver in the Power Head Unit" on the next page.

The transmitter codes are set using the three operation buttons (+, O, and -) on the front of the transmitter. There are three steps to set the code: 1- The transmitter is placed in program mode; 2- the desired button is selected; and 3- the code is entered. Any one of the buttons or all three buttons may be coded by the sequence outlined below. Also see Express Coding under "Special Notes" at the end of this section.

STEP 1: First, **press and hold the "+" button**. The RED LED will turn on. Next, while continuing to



hole the "+" button, **press and hold the "-" button**. Continue to hold both the "+" and "-" buttons until the LED starts to blink (approximately 5 seconds). When the **LED starts to blink IMMEDIATELY release both** the "+" and "-" buttons. The **LED** will **blink two times** and then remain on to confirm programming mode.

STEP 2: While the LED is on, press and release the button you wish to code. The LED will blink once and then remain on.

STEP 3: Using the operation buttons on the front of the transmitter, enter a 9-digit random code. Every time a button is pressed the LED will turn off and on. After the 9-digit code is



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Step 2

entered, the LED will blink twice to confirm a valid code and remain off.

Special Notes - Express Coding

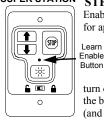
Repeat the steps listed above as needed or desired for each button. Each button can be programmed to a unique code, however all three buttons may be programmed at one time (Express Coding). To Express Code, select the "+" button in Step 2, then end the code entry in Step 3 with the "+" button (the first 8 entries can be any random code). The code for each button may be changed at any time. However, if the plus button is programmed as described above, it will replace the existing code settings of the zero and minus buttons.



Programming the MVP Radio Receiver in Adding the Power Head Unit

Your opener will "learn" up to eight code transmissions from preprogrammed transmitters. Locate the "Learn Enable" Button on the Super Station (Deluxe Wall Pushbutton Station). The button is located inside a small hole on the front of the super station. You will need a pointed object to activate the button (such as a paper clip straightened out). Locate the red LED indicator on the rear panel of the operator power head unit (see illustration). The red LED light on the rear panel of the power head unit and the operator work light will serve as a status indicator during the programming sequence.

SUPER STATION



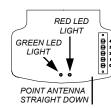
STEP 1: Press and hold the Learn Enable button on the Super Station for approximately five seconds. The

red LED light on the rear panel of the power head unit (and the work light) will illuminate and then

turn off. IMMEDIATELY release the button when the red LED light (and the work light) turn off. This action will erase any previous signal

that was learned by the control board and prepare it to learn your transmitter signal. At this time have your transmitter ready to transmit.

STEP 2: Press and quickly release the Learn Enable button on the Super Station. The red LED light on the



rear panel of the power head unit (and the work light) will illuminate and remain on, the control board is now ready to learn the signal from your transmitter. Within a twenty second time frame. press the button on your

transmitter while pointing the transmitter at the power head unit. The red LED light on the rear panel of the power head unit (and the work light) will then turn off. This is your indicator the control board has received and accepted the signal from the transmitter. If the red LED light on the rear panel of the power head unit (and the work light) remain on for more than 5 seconds this indicates a code is already stored in the receiver. Repeat Step 1 above to erase the code in the receiver. Recheck the antenna wire on the power head unit, for proper operation the antenna wire should be POINTED STRAIGHT DOWN toward the floor (see illustration) for most situations.

Transmitters

If additional transmitters are desired just match the code in the new transmitter to the code in the existing transmitter. If you forget the existing code just recode new and existing products to a new code and



OF PERSONAL INJURY, DAMAGE TO DOOR OR PROPERTY, ONLY **OPERATE DOOR** CONTROLS WHEN DOOR IS IN CLEAR VIEW. KEEP REMOTE CONTROL AWAY FROM CHILDREN IN A SECURE AREA.

erase and reprogram your door operator. Any number of transmitters may be used to operate your door operator as long as one button of each transmitter is programmed with the same code learned by the door operator.

Installing the Transmitter

The transmitter is supplied with a metal clip which may be used to attach the unit to a sun visor. If the clip is used, slide it into the recess provided on

the back of the transmitter case

until the snaps on the case fit around the clip. If the transmitter is installed in a pocket in your car, follow all the manufacturer's instructions. Improper installation may cause



intermittent transmitter operation which can result in unexpected door operations.

Battery Replacement

The MVP Quik-Code transmitter is provided with two factory installed 3-volt batteries which should be replaced after two years of normal use. The transmitter code is retained in permanent memory and will not be lost during battery replacement. To replace the batteries, remove the back of the case using quarter or your thumb. Carefully slip the batteries out of the holders and replace with fresh CR2032 3-volt batteries. The "+" on the batteries must point away from the circuit board. Replace the back of the cover and resume normal use.

Radio Operational Check - Note: Before performing the radio operational check complete installation of the Safe Finish[™] Photosystem on page 13 and review the Installation Check List and Important Safety Instructions on pages 14 and 15.

After programming your transmitter and the MVP receiver power head unit, check the operation of your radio controls

七 HomeLink HomeLink® is a registered trade mark of Johnson Controls, Inc.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.



12 ·

CONTROL AND AUXILIARY EQUIPMENT

by moving approximately 45 feet back from the garage door, then press the appropriate transmitter button that has been programmed for that door. The red LED light will illuminate on the front face of the transmitter. This is your indication that a signal has been generated and sent out by the transmitter (provided a valid programming sequence has been done with the transmitter). Operation at this distance should be reliable. However, environmental conditions and the location of the transmitter and receiver antenna will affect distance.

• If the opener doesn't activate check if the power head unit has been programmed to accept the transmitter signal. The red LED on the rear panel of the power head unit will blink two times rapidly if it has accepted a valid transmitter signal. If the LED light does not blink reprogram the MVP power head unit to accept the transmitter signal by following the previous instructions "Programming the MVP Receiver Power Head Unit" making sure you

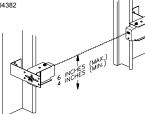
INSTALLATION OF 2 WIRE SAFE FINISH PHOTOSYSTEM

STEP 1: Mark the position of the SAFE

FINISH[™] Photosystem as follows: Mark a line on the left and right door jamb (close to the door track) FOUR (4) inches AND SIX (6) inches above the floor. The top mark is the maximum height and the bottom line is the minimum height that the photosystem

accessory can ¹⁰⁴³⁸² be placed.

STEP 2: Mount the Photosystem "L" Brackets as follows:



A. Remove

the four mounting brackets from the package. Temporarily place the "U" shaped brackets, one around the receiver (unit with window and red LED) and one around the transmitter. **NOTE:** *It is easier to slip the photosystem units in from the side of the bracket than forcing them in from the front of the bracket.*

B.Your photosystem assembly is provided with a universal bracket set. Using either the transmitter or receiver (window up towards the ceiling), hold the "L" bracket and the "U" bracket set together while moving them in between the limit marks on the door jamb. Continue to move the photosystem assembly within the limit marks until it clears the door hardware. *See Illustration, left.* Check to ensure the window on the front of the photosystem unit is within the limit marks on the door jamb.

erase any previously learned signal (Step 1).

•If the distance is inadequate check the battery and replace if necessary.

•If the distance is inadequate check the position of the power head unit antenna (see above).

•To maximize the operating distance move the transmitter to different locations in the car until a satisfactory distance is achieved. Vanity mirrors on sun visors will affect performance.

If the HomeLink[®] transmitter does not activate the operator or distance is inadequate, verify proper operation using the transmitter packed with your opener. Contact your HomeLink[®] system provider for help with configuring the HomeLink[®] transmitter and to resolve distance problems when using the HomeLink[®] system.

C.Place a mark in the center of the lag screw elongated mounting hole. Measure its position and place a similar mark on the opposite door jamb. The brackets may be temporarily mounted to the jamb with a 1" flat head nail (provided) using the small hole above the slot. Using two 5/16" X 1-1/2" lag screws (provided), permanently mount the "L" bracket to both door jambs.

STEP 3: Connect the Photosystem as follows: A.Remove the transmitter and receiver from their "U" mounting brackets.

Refer to Page 22 for various wiring options for the Safe Finish[™] Photosystem. Steps B and C, below, describe the wiring for Series Connection with Receiver First, as illustrated on Page 19.

B.Run a wire pair (not supplied) around the garage door jamb between the transmitter and receiver "L" mounting brackets. **NOTE:** Leave about 12" of extra wire at each end. Use a minimum 22 gauge solid "trace" wire for interconnect.

C.Run a wire pair (20 or 22 gage solid wire) from the receiver position (unit with "LED" light in the front, may be either side of the door) back to the rear bulkhead of the garage door opener. **NOTE:** Leave about 12" of extra wire at the receiver end and about 24" of extra wire at the opener end.

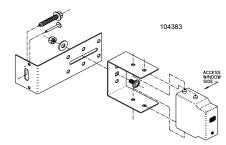
D.Strip approximately 5/16" from each wire end at the photosystem units and at the opener.

E.Using two (2) wire nuts (supplied), connect the wire ends at the SAFE FINISHTM Photosystem transmitter to the pigtail wire ends coming out of the transmitter unit. Although not required, it is recommended to connect the trace wire ends together and the unmarked wire ends together.

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F. Using two (2) wire nuts (supplied), connect the wire ends at the SAFE FINISHTM Photosystem receiver to the pigtail wire ends coming out of the receiver unit. *Although not required, it is recommended to connect the trace wire ends together and the unmarked wire ends together.*



STEP 4 : Final Installation

A. Attach the"U" brackets to the "L" brackets with a 1/4-20 carriage bolt, washer and hex nut (provided). Insert the bolt from the inside of the "U" bracket and hand tighten only at this time.

PRE-POWER ON-INSTALLATION CHECKLIST Before continuing with the operation and adjustment section, make sure that:

- The front and rear mounts for the opener are sound and secure and the rail is positioned correctly above the high arc of the door, and that the opener is positioned over the door action centerline.
- 2. For sectional door and one piece door with tracks, the position of the door arm (with the door closed), is such that it's connecting point on the trolley is 5" to 8" behind it's connecting point on the door bracket. The door arm should never be perfectly vertical when the door in in the closed position.
- 3. The Manual Release Label and cord are secure to the Manual Release Lever. The handle is located 6 FT above floor level and requires no more than a 50 pound pull to activate. The trolley and the release mechanism are properly lubricated.
- 4. The standard wall push button or the Super Station (deluxe wall push button station) is in such a position and of such a height that it can only be actuated by an adult of average height. The Control Button Warning label is prominently displayed next to the push button or wall station.

B. Place the transmitter and receiver units into their respective "U" brackets. See Illustration, at right.
C. Connect the

c. Connect the interconnect wire pair to the garage door opener terminals marked



"1" & "4". Although not required, it is suggested that the "trace" be connected to Terminal 4. See Wiring Diagram, Page 19.

Tighten all mounting screws and bolts. Final alignment and the system test is covered on Page 17, Step 5 "E: Operation and Adjustment Instructions.

- All wiring is correct to codes or better. There is ground continuity form the supply. The ground prong on the power cord is intact.
- 6. All ropes have been removed from the door. The door moves freely without binding when raised or lowered manually. The door is correctly balanced and lubricated. All door hardware is secure and sound. The sensitivity has been adjusted to minimum force for the application.
- The door reverses on obstructions to within 1.5" of the floor. The concrete or other surface beneath the closed door provided uniform contact.
- The plastic envelope for this manual is attached to the wall near the push button or wall station and this manual is placed there for owner use and reference.
- On door with extension type counterbalance springs, restraint cables have been placed through the springs.
- 10. There is Ground Fault Interruption (GFI) protection of the power line to the opener or in the receptacle.
- On doors with adjustable bottom edges, edges have been locked after adjustment.

14



- NEVER LET CHILDREN OPERATE OR PLAY WITH DOOR CONTROLS. KEEP THE REMOTE CONTROL AWAY FROM CHILDREN.
- ALWAYS KEEP A MOVING DOOR IN SIGHT AND KEEP PEOPLE AND OBJECTS AWAY FROM THE DOOR AREA UNTIL THE DOOR IS COMPLETELY CLOSED. NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.
- NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
- TEST THE DOOR OPENER MONTHLY. THE DOOR MUST REVERSE UPON CONTACT WITH A 1-1/2" HIGH OBJECT (OR A 2 X 4 BOARD LAID FLAT) ON THE FLOOR. AFTER ADJUSTING THE SENSITIVITY OR THE LIMIT OF TRAVEL, ALWAYS RETEST THE OPENER. FAILURE TO ADJUST THE

TURNING ON POWER TO THE OPENER

NOTE: It is now necessary to turn on the power in order to run the opener to test the operation and check the limit settings. Before doing so, ensure that all mounting hardware is installed and has been properly tightened, that all electrical connections are per local code requirements, and that proper wiring practices have been followed. Also, double-check that all ropes have been removed from the door and that the doorway is clear.

BASIC OPERATING PARAMETERS

Please note the following Operating Parameters which apply to Openers with Auxiliary Entrapment Protection System (Safe Finish™ Photosystem, Installation Instructions on Page 15) and a standard wall push button connected. Please see page 17 for instructions concerning the Super Station Deluxe Wall Push Button operating parameters.

IF THE DOOR IS...

...FULLY OPEN, then pushing the standard wall Push Button or the radio control will cause the door to begin MOVING DOWNWARD. OPENER PROPERLY MAY RESULT IN SERIOUS INJURY OR DEATH.

- IF POSSIBLE, USE THE EMERGENCY RELEASE ONLY WHEN THE DOOR IS CLOSED. USE CAUTION WHEN USING THE RELEASE WITH THE DOOR OPEN. WEAK OR BROKEN SPRINGS MAY ALLOW THE DOOR TO CLOSE RAPIDLY, CAUSING SEVERE INJURY OR DEATH.
- KEEP THE GARAGE DOOR PROPERLY BALANCED. SEE THE DOOR OWNER'S MANUAL. AN IMPROPERLY BALANCED DOOR MAY CAUSE SEVERE INJURY OR DEATH. HAVE A QUALIFIED SERVICE PERSON MAKE REPAIRS TO CABLES, SPRING ASSEMBLIES AND OTHER HARDWARE.
- SAVE THESE INSTRUCTIONS!

...FULLY CLOSED, then pushing the wall Push Button or the radio control will cause the door to begin MOVING UPWARD.

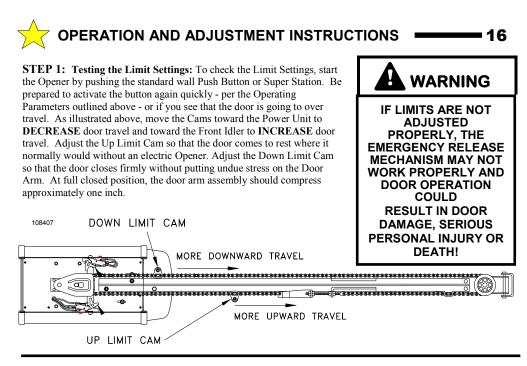
...MOVING UPWARD, then pushing the wall Push Button will cause the door to STOP. The next push of the wall button will cause the door to begin MOVING DOWNWARD (Alternate Action Operation).

...MOVING UPWARD, then pushing the radio control will cause the door to **STOP**. The next push of the wall button will cause the door to **RESUME UPWARD MOVEMENT** (Radio Operation).

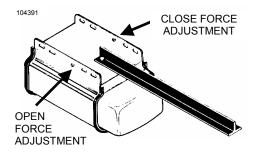
...MOVING DOWNWARD, then pushing the wall Push Button or the radio control will cause the door to STOP, PAUSE FOR APPROXIMATELY ONE SECOND, AND THEN BEGIN MOVING UPWARD.

...**MOVING DOWNWARD** then reaches the down limit, the lamp will blink off for a 1/2 second then turn back on again, remaining on for 4 minutes 30 seconds and will then automatically turn off.

...MOVING UPWARD then reaches the open limit, the lamp will remain on for 4 minutes 30 seconds and will then automatically turn off.

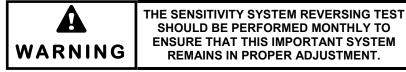


STEP 2: Adjusting the Sensitivity Force — Sensitivity System force adjustment screws are located on the side rails of the Power Unit and can easily be adjusted with a screwdriver. Turn the screws CLOCKWISE for more force and COUNTERCLOCKWISE for less force.



STEP 3: Testing the Sensitivity Force — To test the Sensitivity System, start the Opener and grasp the bottom door handle halfway through the door's travel (opening or closing). When testing in the **CLOSE** direction, a second person will be needed to maintain pressure on the Push Button **IF** an Auxiliary Entrapment Protection Device has not yet been fitted. If a second person is

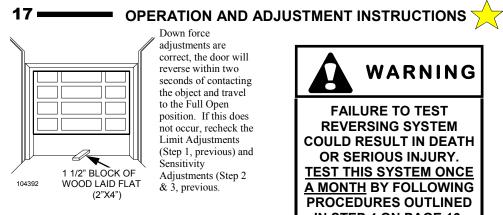
unavailable, use a stiff cardboard carton placed in the door's downward path to indicate the force the Opener is



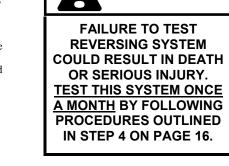
IMPROPER ADJUSTMENT OF SENSITIVITY SYSTEM FORCE COULD CAUSE ENTRAPMENT, INJURY OR DEATH. SET ADJUSTMENTS FOR JUST ENOUGH FORCE TO OPERATE THE DOOR RELIABLY, BUT NO STRONGER. Contact a service professional to correct any binding, sticking or other door problems. DO NOT OVER-ADJUST SENSITIVITY SYSTEM TO COMPENSATE FOR A POORLY WORKING DOOR.

exerting. If the force adjustment screws are properly set, the door should stop if opening, and reverse if closing without exerting undue pressure.

STEP 4: Testing the Opener's Reversing System — To test the Opener's Reversing Feature at floor level, place a solid object at least 1-1/2" thick (such as a standard 2 X 4 board laid flat) on the ground where the center of the door will contact it. Close the door. If the



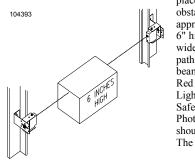
NOTE: Any time adjustments are made to Limits or Sensitivity, YOU MUST RETEST THE OPENER FOR THE REVERSING FEATURE AT FLOOR LEVEL AS OUTLINED ABOVE.





A DAMAGED OR MALFUNCTIONING PHOTOELECTRIC ACCESSORY SYSTEM COULD ENABLE A GARAGE DOOR TO CLOSE ON PEOPLE OR PROPERTY, CAUSING SERIOUS INJURY OR DEATH. PERFORM THIS TEST MONTHLY TO INSURE YOUR SAFE FINISHTM PHOTOSYSTEM IS WORKING PROPERLY.

STEP 5: Testing the Safe Finish[™] Photosystem — Start the door in the close travel direction and then



place an obstacle approximately 6" high by 12" wide in the path of the beam. The Red Pilot Light on the Safe Finish™ Photosystem should go out. The door

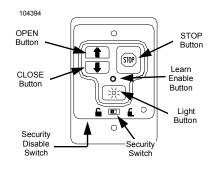
should stop and reverse to the full open position.

With the door fully open and at rest, place the obstacle in the path of the beam once again. Activate the Standard Wall Push Button. The opener should revert to and remain in the PUSH AND HOLD mode of operation for close travel. A radio control will not start the door downward with the beam blocked.

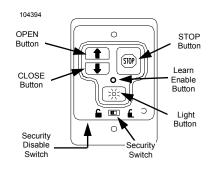
IF THE GARAGE DOOR TRAVELS MORE THAN ONE INCH IN A DOWNWARD PATH AFTER RELEASING THE BUTTON (WITH THE PHOTOBEAM BLOCKED), THE SAFE FINISH™ SYSTEM IS MALFUNCTIONING. CHECK THE ELECTRICAL CONNECTIONS AND ALIGNMENT OF THE PHOTOCELL MODULES.

STEP 6: Operating the Super Station (Deluxe Wall Pushbutton Station) Controls - The Super Station replaces standard a doorbell-type push button to allow you to integrate fully with all the convenience and security features built into your garage door opener.

1. Open Pushbutton — Green-backlighting, arrow pointing up. Used to start the door upward. This button will also stop and reverse a door that is closing. The button has no effect on a door that is opening. The function of this pushbutton is automatically disabled when the Security slide switch is set to the "ON" position and the door is fully closed.



OPERATION AND ADJUSTMENT INSTRUCTIONS



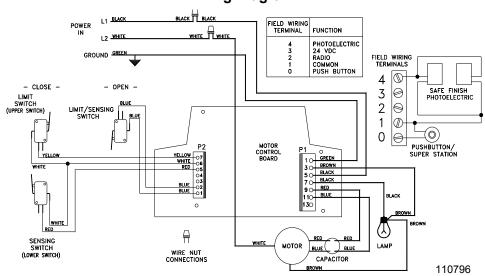
- Close Pushbutton Green-backlighting, arrow pointing down. Used to start the door downward. This button has no effect on a door in motion. Will allow constant pressure close operation if the photocell is misaligned.
- **3. Stop Button** Red-backlighting, universal "STOP" within an octogon. Used to stop a door in motion. This button has no effect on a door that is stopped.
- **4. Light Pushbutton**—Yellow-backlighting, "Sun" symbol. Turns the opener light on and off, but does not activate the door operator. The opener light will stay on until turned off using this pushbutton, or until door operation is initiated, which overrides the function of this pushbutton and automatically turns the light off after 4-1/2 minutes.

5. Security Switch — Prevents unwanted door operation from pushbutton, key switches, keyless entry systems, radio controls, etc. When the Security Switch is moved to the ON position (towards "locked" symbol), with the garage door <u>fully closed</u>, signals from all of these devices are locked out by the opener. Such devices will continue to work until the door is fully closed, allowing you to set the switch (when leaving on vacation, for example), leave the garage and close the door remotely.

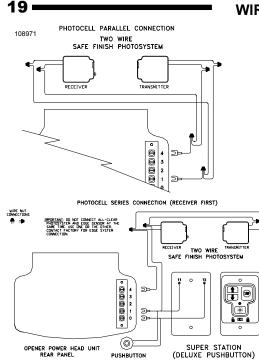
(NOTE: YOU WILL NOT BE ABLE TO OPEN YOUR GARAGE DOOR USING RADIO CONTROLS OR EXTERIOR ACCESS CONTROLS UNTIL THE SECURITY SWITCH IS RETURNED TO THE OFF POSITION ("unlocked" symbol). <u>THIS</u> <u>MUST BE DONE FROM INSIDE THE GARAGE.</u>) When the Security Switch is engaged, the green lighting behind the Open/Close Pushbuttons is extinguished as an indication.

 Security Disable Switch - located under and to the left of the Security Switch. Disables the Security Switch feature. Use if the garage door is the only entryway to the garage.

Learn Enable Button - Located inside a small hole on the front face of the Security Switch. Allows programming of a radio transmitter. See "Programming the Radio System" on page 11 for button features and restrictions. Use a pin or pointed object to activate (such as a paper clip straightened out)..



Wiring Diagram



WIRING AUXILIARY EQUIPMENT

Your Residential Garage Door Opener is furnished with an enhanced 2 Wire Safe Finish[™] Photosystem. The features include:

Time-Saving Electrical Connections. No screw terminals! Just strip the ends of the wires back 5/16 inch and use the supplied wire nut connectors for a quick hook-up to pre-wired garages or to the wires you run on site. See the figure above applicable to your installation.

Universal Wiring Capabilities. The Safe Finish[™] Photosystem can be wired in series or parallel combinations. Virtually any

existing wiring can be used. See the figures above.

Improved Sunlight Immunity. Under certain conditions, direct sunlight can overpower photobeam systems. We have provided an extra internal circuitry to reduce sunlight problems. When required, the position of the transmitter and receiver may be interchanged with out rewiring.

TROUBLESHOOTING GUIDE

USE EXTREME CAUTION AT ALL TIMES WHEN ATTEMPTING TO DIAGNOSE AND RECTIFY PROBLEMS WITH YOUR GARAGE DOOR OPENER. BEFORE ATTEMPTING ANY SERVICE ON UNIT, DISCONNECT OPENER FROM POWER SUPPLY. YOUR GARAGE DOOR IS THE LARGEST MOVING OBJECT IN YOUR HOUSE, AND THE SPRINGS, PULLEYS, CABLES AND MOUNTING HARDWARE UTILIZED TO BALANCE ITS OPERATION ARE UNDER EXTREME TENSION AT ALL TIMES AND CAN CAUSE SERIOUS PERSONAL INJURY, EVEN DEATH, IF DISTURBED. CALL AN EXPERIENCED SERVICE PERSON TO MOVE, LOOSEN OR ADJUST DOOR SPRINGS OR HARDWARE.

With the appropriate cautions in place, use the fast find LED diagnostic chart (at right) or the Sympton/ Probable Cause/Solution matrix to diagnose the problem. The LEDs are located on the power head unit rear panel, see page 12 for picture diagram. Contact the factory if your problem persists or is not listed.

WARNING

DIAGNOSTIC CONDITION	RED LED	GREEN LED		
Normal Operation	OFF	OFF		
Learn Mode	ON	OFF		
Memory Full	ON FOR 25 SEC, AUTO OFF	OFF		
Decode RF Signal	SHORT FAST BLINK	OFF		
Shorted Push Button or Wire to Button	OFF	ON		
Photobeam Obstruction	OFF	FAST BLINK		
Contact Reverse	FAST BLINK	OFF		
Stuck Relay	SLOW BLINK	OFF		
Stuck Open Limit	OFF	SLOW BLINK		

A	Manufacturer's Limited Warranty					
AllS	tar Pro, LLC warrants its MVP Series residential vehicular garage door operators as follows:					
A.	The drive train to be free from defects in materials and workmanship for:					
	Model MVP-SQ: The entire period of ownership by the original purchaser Models MVP: for 20 years from the date of purchase by the original purchaser.					
	The drive train includes the motor, drive pulleys, drive shaft and sprocket, T-rail, frame and chain.					
B.	The controller circuit board, capacitor, photobeams and all other parts in all models will be free from defects i materials and workmanship for a period of two (2) years from the date of purchase by the original purchaser.					
Cont	ontact your dealer to obtain service for your operator.					
To obtain service under this warranty the buyer must obtain authorization instructions for the return from AllStar Pro, LLC before returning the goods. The goods must be returned with complete identi copy of proof-of-purchase, freight prepaid and in accordance with AllStar Pro, LLC's instructions or th accepted. In no event will AllStar Pro, LLC be responsible for goods returned without proper autidentification.						
Pro, Pro,	books returned to AllStar Pro, LLC for warranty repair within the warranty period, which upon receipt by AllSt o, LLC are confirmed to be defective and covered by this limited warranty, will be repaired or replaced at AllSt o, LLC's sole option, at no cost and returned pre-paid. Defective parts will be repaired or replaced with new of ctory rebuilt parts at AllStar Pro, LLC's sole option.					
This limited warranty does not cover non-defect damage, damage caused by unreasonable use, damage caused b improper installation or care, vandalism or lightning, fire or excessive heat, flood or other acts of God (including, be not limited to misuse, abuse or alterations, failure to provide reasonable and necessary maintenance), labor charge for dismantling or reinstalling a repaired or replaced unit, or replacement batteries.						
merc shall inabi negli	e warranties are in lieu of all other warranties, either expressed or implied. All implied warranties is thatability and/or fitness for a particular purpose are hereby disclaimed and excluded. Under no circumstance AllStar Pro, LLC be liable for consequential, incidental or special damages arising in connection with the use is lity to use this product. In no event shall AllStar Pro, LLC's liability for breach of warranty, breach of contract gence or strict liability exceed the cost of the product covered hereby. No person is authorized to assume for tar Pro, LLC any other liability in connection with the sale of this product.					
	warranty gives you specific legal rights. You may also have other rights which vary from state to stat ranty effective after January 1, 2002.					
	For Information:					

Serial #:	
Date Installed:	
Your Dealer:	

Downingtown, PA 19335

This garage door operator complies with all requirements of Underwriters Laboratories Standard UL325.

June 2007 P/N 111069 Rev. E

IF DESIRED, RECORD YOUR RADIO TRANSMITTER CODE POSITION SETTINGS HERE									
	1	2	3	4	5	6	7	8	9
Plus Button									
Zero Button									
Minus Button									

See Page 11 for Radio System programming instructions and FCC/RSS-210 Industry Canada statement. The opener radio system is HomeLink® compatible.