

Mission Machines

The miDoor™ Opener Quick Installation Guide

This guide is a set of instructions for the physical installation of the miDoor garage door opener, which is also referred to as the miDoor opener. Once the installation is complete refer to *The miDoor Opener Quick Configuration Guide* for instructions on configuring the miDoor opener.

It is recommend that a professional garage door installer install the miDoor opener. These instructions are tailored for such a professional.

Minimum Tools Required:

- Screw drivers (standard and Philips)
- Wire cutters and strippers
- Needle nose pliers

Additional tools may be required depending on your installation requirements and existing garage door opener controller.

The installation requires that the original garage door opener controller be replaced by the miDoor opener or that the miDoor opener be “spliced” into the existing circuit between the garage door opener and the existing controller. In addition to the installation of the miDoor opener it is required that a proximity sensor (supplied) be installed on and next to the garage door with a wire (supplied) ran back to the miDoor opener.

Regulatory Requirements

United States of America

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canada

Industry Canada (IC) Radio Standards Specification (RSS) “RSS-210” and “RSS-Gen”.

NOTE: Compliance of a module in its final configuration is the responsibility of the applicant. A host device will not be considered certified if the instructions regarding antenna configuration provided in the original description, of one or more separately certified modules it contains, were not followed.

Europe

The Wi-Fi module has been certified for use in European countries. The following testing has been completed:

Test standard ETSI EN 300 328 V1.7.1 (2006-10):

- Maximum Transmit Power
- Maximum EIRP Spectral Density
- Frequency Range
- Radiated Emissions

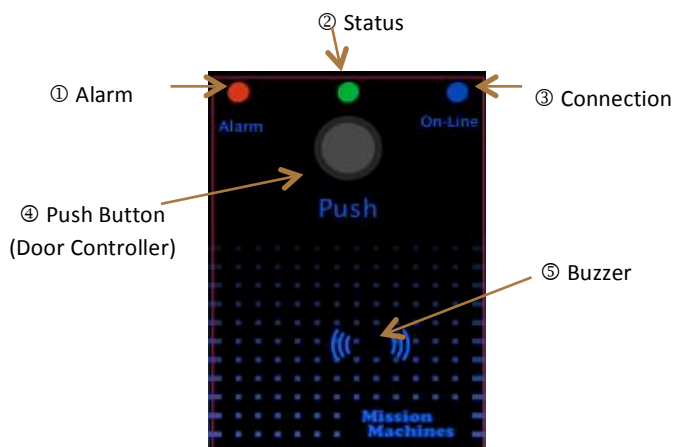
Test standards ETSI EN 301 489-1:2008 and ETSI EN 301 489-17:2008:

- Radiated Emissions
- Electro-Static Discharge
- Radiated RF Susceptibility

The modules are fully compliant with

- Radiated Emissions EN55022
- Electrostatic Discharge EN61000-4-2
- Radiated Immunity EN61000-4-3
- EN60950-1
- CE-Mark
- RoHS

The miDoor Opener



① Alarm Indicator

Flashing red indicates active alarm. Solid red indicates inactive alarm.

② Status Indicator

A green indicator that the miDoor opener is operational.

③ Connection Indicator

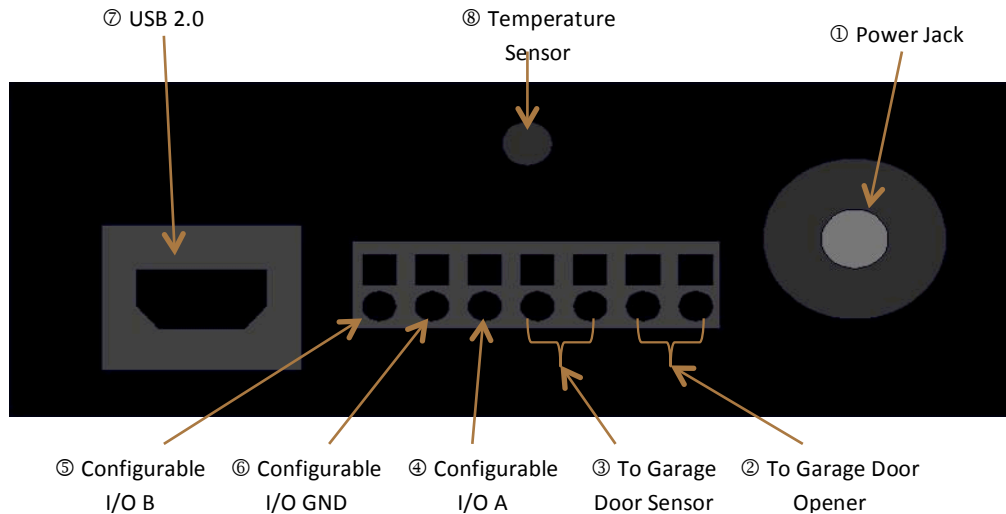
Solid blue indication that remote device is connected to the miDoor opener. Flashing blue indicates loss of connection to Wi-Fi network.

④ Push Button (Door Controller)

Operates the door.

⑤ Buzzer

Generates sound on active alarm.



① Power Jack

Requires DC +5V 1A power supply.

② To Garage Door Opener

This is the interface to the garage door opener.

③ To Garage Door Sensor

Connection point for the proximity sensor.

④ Configurable I/O A

This allows the unit to be connected to other home automation devices that support Configurable I/O Ports. This is an advanced feature. The port generates DC +3.3V and is DC +5V tolerant. Never connect to anything higher than DC +5V.

⑤ Configurable I/O B

This allows the unit to be connected to other home automation devices that support Configurable I/O Ports. This is an advanced feature. The port generates DC +3.3V and is DC +5V tolerant. Never connect to anything higher than DC +5V.

⑥ Configurable I/O GND

Used as common ground for the Configurable I/O Ports. Never connect any power source to this port.

⑦ USB 2.0

USB 2.0 port; available for future enhancements.

⑧ Temperature Sensor

Ambient temperature sensor for measuring garage temperature.

Installing the miDoor Opener

Locate the existing garage door opener controller. This device is used to open or close the garage door when not using a remote and is generally located next to the door that leads to the residence.



Figure 1 (Sample Garage Door Opener Controller)

Typically there is a pair of wires that lead to the controller from the garage door opener. Sometimes these wires are routed on the surface of the wall and sometimes they are routed within the wall. Connecting the miDoor opener to the garage door opener requires that the installer make a connection to these wires by either replacing the existing garage door opener controller with the miDoor opener or by making a connection from the miDoor opener to the wires.

In either case, it is recommended to detach the original garage door opener controller from the wall and to find the location where the wires attach to the controller. Most likely the wires attach to screw-terminals (See Figure 2 (Wires w/Screw Terminals).)



Figure 2 (Wires w/Screw Terminals)

Once the connection point is determined, remove the wires from the existing garage door opener controller or, to keep the existing controller and splice into it, add two wires to these connection points. These wires can come from the supplied wire by cutting a short length from it.

To replace the existing controller remove the controller from the wires and straighten the leads; wire cutters may be required to shorten the leads to approximately $\frac{1}{4}$ inch. See Figure 4 (Bare Wires).



Figure 4 (Bare Wires)

After the wires are prepared insert each wire into one of the right-most two holes on the miDoor terminal block. See Figure 5 (Terminal Block To Garage Opener). It doesn't matter which wire goes into one of the two right-most holes.

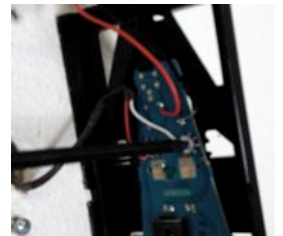


Figure 3 (Remove Terminal)

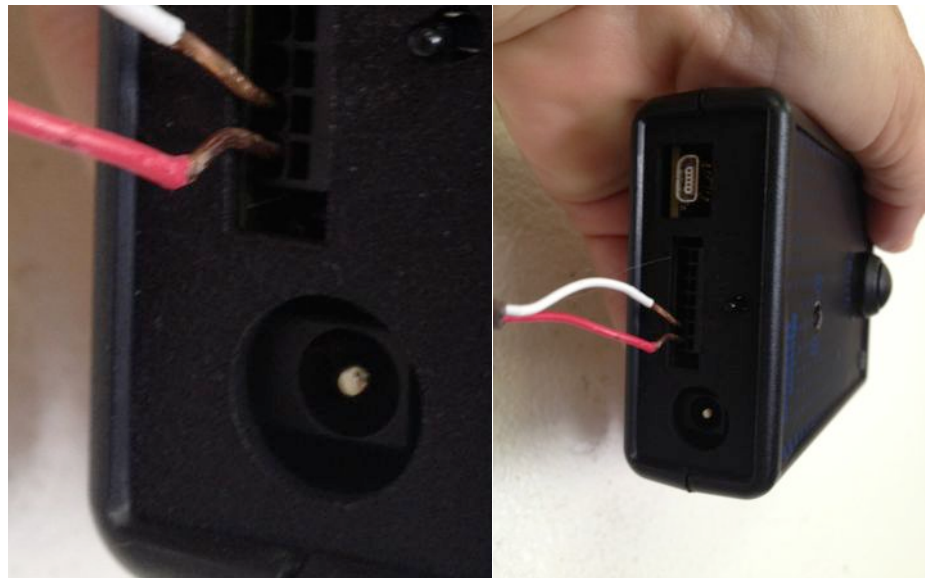


Figure 5 (Terminal Block To Garage Opener)

If you decide to “splice” into the existing connection without removing the existing garage door opener controller then you will have to connect two wires from the connection point on the existing garage door opener controller to the miDoor opener. This is easily

accomplished by cutting a short length of wire from the supplied wired and attaching one end to the miDoor opener and the other end at the connection point from the garage door opener to the existing controller.

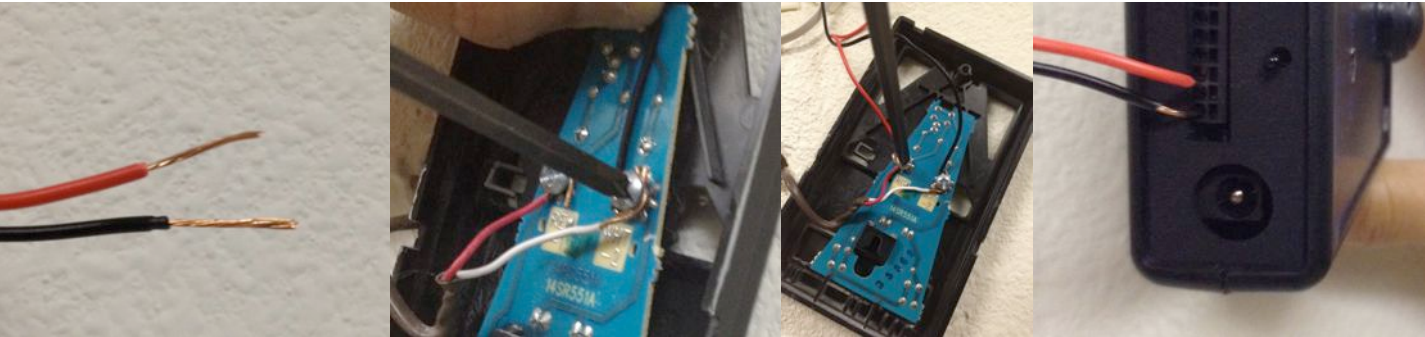


Figure 6 ("Splice" existing controller)

Once the wires are attached and secured the next step is to attach and secure the miDoor opener to the wall. The miDoor opener attaches to the wall by using a heavy duty Velcro strip (included).

Peel one side of the Velcro strip and attach it firmly to the bottom of the miDoor opener. Next, peel the other side of the Velcro strip and place the miDoor opener at the location of the wall where you would like it to reside and press firmly and hold for a few seconds to insure that the Velcro adheres to the wall.

Heavy duty Velcro is used because it makes it easy to remove the miDoor opener.



Figure 7 (Velcro Strip)



Figure 8 (Attached)

Installing The Proximity Sensor

The proximity sensor is used by the miDoor opener to determine if the garage door is opened or closed. The sensor consists of two pieces. One of the pieces has attachments for a pair of wires that are routed back to the miDoor opener and the other piece attaches to the garage door.

Locate a suitable location where the proximity sensor can be mounted. The location must allow for wires to be routed back to the miDoor opener unobstructed by the movement of the garage door. In addition, the location must allow one piece of the sensor to be mounted on the garage door frame and the other piece to be mounted on the garage door. The location must allow, when both sensors are mounted, that they are within $\frac{1}{2}$ of an inch from each other when the garage door is closed.

With a suitable location determined and the garage door closed, mount the two pieces of the proximity sensor. Remember to mount the piece with the connection for wires to the door frame and not the garage door. Keep the two sensors within $\frac{1}{2}$ of an inch from each other. **BE SURE TO UNPLUG THE GARAGE DOOR SO THAT IT CAN'T BE ACTIVATED BY ANOTHER USER UNTIL THE JOB IS COMPLETED.**

Once the sensor is mounted, attach the wires to the sensor and route them back to the miDoor opener. Route the wires so that they will not interfere with the operation of the garage door or be in the path of any vehicles or other traffic that will use the garage.

You may find it necessary to use staples or other mounting means to secure the wires to the garage door wall or ceiling.

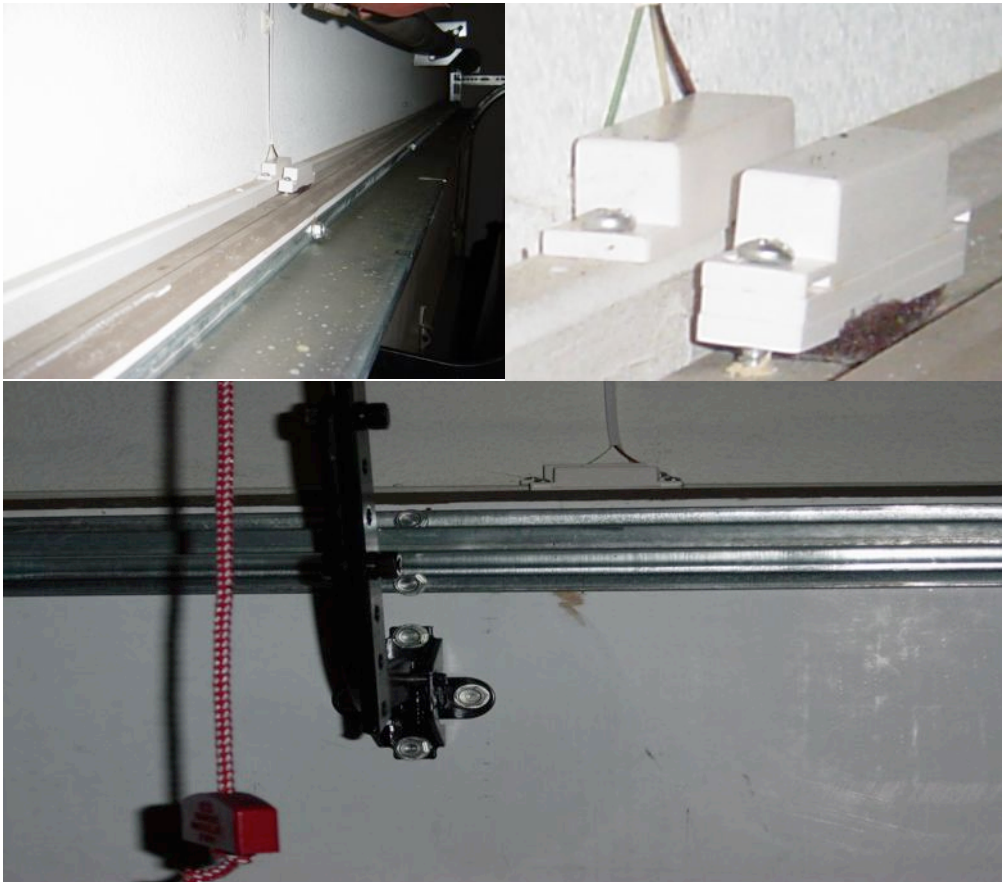


Figure 9 (Mounted Proximity Sensor)

Finally attach the wires to the miDoor opener. The wires connect to the two terminals that are next to the terminals that were used to connect the miDoor opener to the garage door opener (i.e. the wires installed in the section above.)

Power on the miDoor opener and refer to *The miDoor Opener Quick Configuration Guide* to configure the miDoor opener.

Additional Material

The miDoor Opener Quick Configuration Guide

The miDoor App Quick Configuration Guide

miDoor Installation and Reference Manual

miDoor Limited Warranty

Important Safety Message



NEVER OPERATE THE GARAGE DOOR UNLESS YOU CAN VISUALLY INSPECT THE DOOR FOR CLEARANCE FROM ANY PERSONS OR OBJECTS. FAILURE TO DO SO CAN CAUSE INJURY, DEATH OR PROPERTY DAMAGE. MIDOOR HAS NO SENSORS TO PREVENT ANY PERSON OR OBJECT FROM BEING HARMED BY THE OPERATION OF THE DOOR.

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