Fortress Security Store S02 Alarm System

User Manual

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Foreword

Thank you for choosing the S02 series alarm system from Fortress Security Store. For your safety, please read the operations manual before using the system.

This manual gives detailed steps for common operations. The reference section of the manual will be most helpful if changes need to be made to the preprogrammed system.

If you are familiar with alarm systems, you should go directly to the Quick Start section.

ATTENTION!!!

Your S02 series alarm system is preprogrammed, except for those items detailed in Step 4-7 of the Quick Start section. If you get additional sensors, motion detectors, smoke alarms, etc., please follow the instructions for installing those. DO NOT re-program the Main Panel or return it to the factory settings without first consulting Fortress Security Store.

Copyright Information

The product, including but not limited to granted or pending patents, is under protection of the patent laws of the United States or other countries.

We reserve the right to modify the specification or price of the product.

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Safety Precautions

- Use the power supply that is shipped with the product. Use of any other power supply may damage the alarm system.
- Maintain air flow around all surfaces of the system.
- Keep the surfaces of the product clean and dry.
- Operate the Main Panel in a dry, dust-free environment.
- Operate the alarm in areas where there are no combustible materials and flammable gasses.
- Use minimal force on the keys. Extreme pressure will shorten the life of the keypad and alarm.

Conventions

When discussing programming, registering, or other events that require using the keypad, the following conventions are used.

PASSWORD	4-digit password, default is 1234
ZONE	2-digit zone (01-32) – in most cases this is the sensor number
NNN-NNN-NNNN	Telephone number (can be more or less than 10 digits if needed)
XX	2-digit setting, could be "minutes" "ring count" or any variable
* # 0-9	keys on the Main Panel keypad
out/home/disarm/return	function keys on the Main Panel

Note: To enter programming mode, pressing the Program button or pressing # are equivalent commands. This manual will use # to represent pressing the Program button.

The terms programming and registering are used in this manual. Programming uses the keypad to enter information in the Main Panel to change how the alarm system as a whole operates. Registering (or registration) connects sensors, detectors, remotes, and sirens to the Main Panel. Once a device is registered, the Main Panel communicates with it as a part of the alarm system.

Description of the Alarm System

Major features

- Tactile keypad with physical and audible feedback
- LCD display panel which shows triggered zone
- All functions available from the Main Panel
- Arming and alarm features accessible from a key fob remote or phone
- 99 detectors/sensors supported
- Zones 01-08 can be selectively armed, delayed, active despite armed status, and disabled
- Multiple remote controls supported, each with its own "code pairing"
- Intercom microphone for remote monitoring and communication
- 72-hour backup battery when home power is not available
- Expandable with additional sensors, detectors, smoke alarms, etc.
- One touch arming from Main Panel and key fob remote

- Arming/disarming/audio monitoring from telephone
- Chime feature to signal when a door has been opened
- Versatile alarm programming, features, and notifications
  - Home and Away arming methods with programmable delay
  - 32 Wireless Zones and 7 Wired Zones
  - Siren and remote siren
  - Phone Alerts (up to 6 numbers notified)
  - Beep alert for the "Telephone Line Cut" and siren alert for "control frequency interference" function

Refer to the rest of the manual for additional major and secondary features.

Front of Main Panel - Fortress Security Store S02

1-Main Panel display and status indicator

2-Tactile keypad
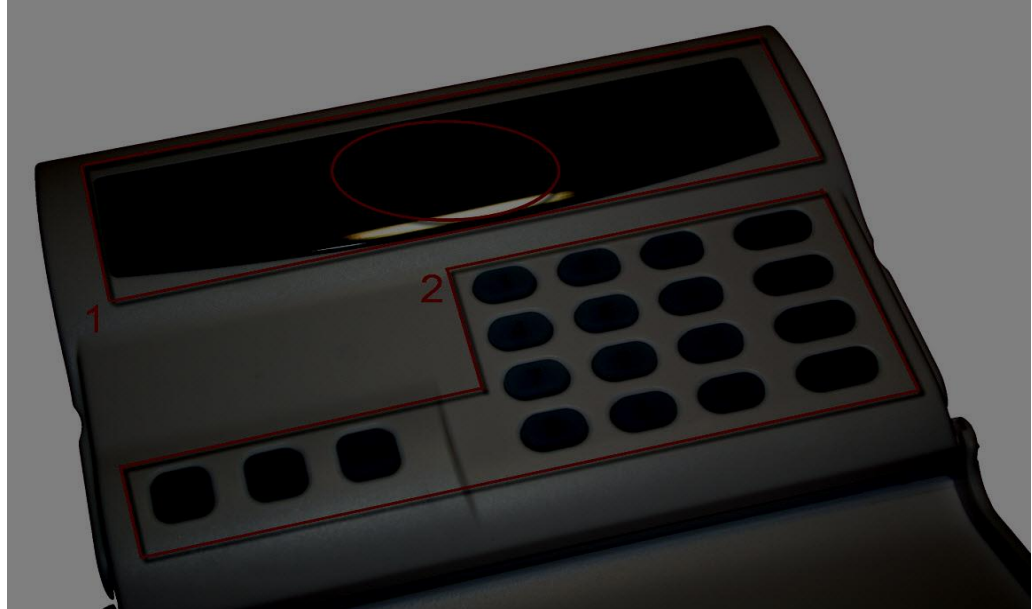
Main Panel Display and Status Indicators

The display shows the status of the alarm system during operation and provides information during the programming and alarm process.

1-LED is on when either the battery or wall power is present.

2-LED is on when a sensor or detector is triggered.

3-LCD gives zone number for triggered alarm and visual feedback during programming

4-LED is on when Away Armed (unoccupied)

5-LED is on when Home Armed (occupied)
Tactile Keypad

Action & Programming Buttons

1&2-These keys are not used.

3-Escape/back button for canceling actions or returning to "normal" status

4&5-Different functions according to what action is being performed. See rest of manual for actual usage. The * is called **star** or **asterisk**. The # key is called **pound**.

6-Arms the system for unoccupied premises [Away Arm]

7-Arms the system for occupied premises [Home Arm]

8-Disarms the system

9-Panic Button-Triggers an alarm even if the system is disarmed.

10-Keypad used in programming and using the system.
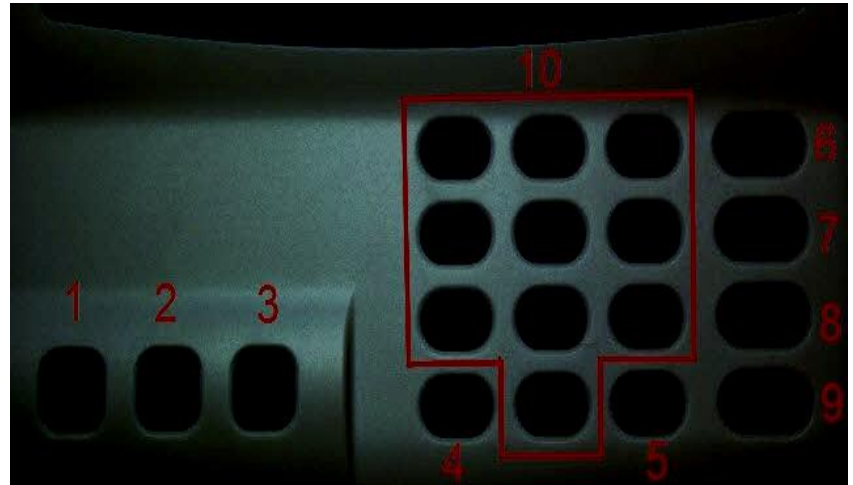
Back and Side of Main Panel - Fortress Security Store S02

DBUS Bar and Connections

Physical connections, such as wired sensors, are connected here. This is an advanced application for the S02 and should be considered only after determining that wired sensors are needed and that you have a basic understanding of electrical connections.

Main Panel Physical Connections

1-Main Panel On/Off Switch. "Off" turns off power from both wall jack and battery.

2-Siren or other speaker.

3-Line to an external telephone.

4-Line from a telephone wall jack.

5-Not a physical connection. This is a microphone used to monitor the interior of the house or record a message to be sent out by telephone when an alarm is triggered.
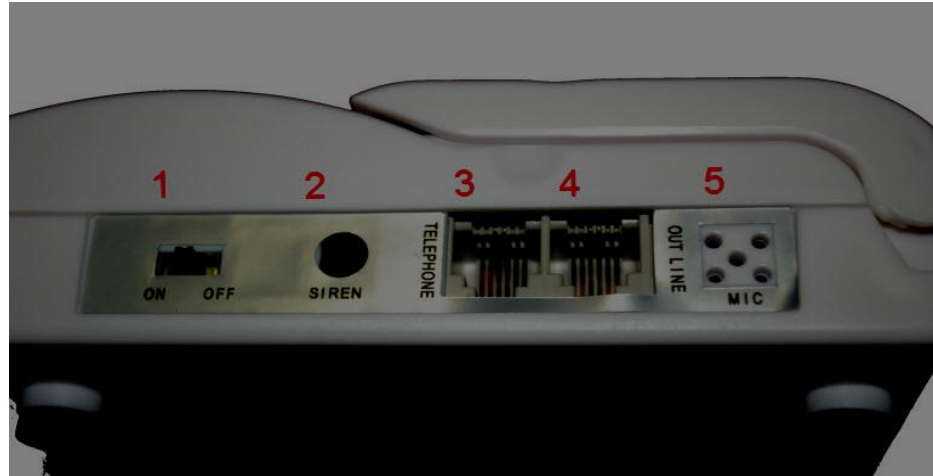
Power/Antenna Panel

1-Power – Use the power cord packaged with the S02 for best results.

2-Antenna – Extending the antenna allows sensors and other alarm devices to be mounted further from the Main Panel.

Quick Start

Your Fortress Security Store alarm system is preprogrammed before shipping, so a minimal amount of programming will be needed before operation. This section is here so you can "plug and play" if you do not want to do a lot of reading first. For any problems, re-watch the videos in Step 1, or use the information below to contact Fortress Security Store.

CALL   (253)468-0196
EMAIL   Support@FortressSecurityStore.com

ATTENTION!!!

Your S02 series alarm system is preprogrammed, except for those items detailed in Step 4-7 of the Quick Start section. If you get additional sensors, motion detectors, smoke alarms, etc., please follow the instructions for installing those. DO NOT re-program the Main Panel or return it to the factory settings without first consulting Fortress Security Store.

Remember: The Default Program Password is 1234

Change this password to a four digit number you can remember but not one others can easily guess. This is the password used to program any devices or services. In addition, it is used to turn off sirens and alarms at the Main Panel, so it should be a number easily remembered under stress.

While it makes no difference whether it is changed before or after setting up the system, changing it first so it is used frequently will help you remember the password.

Step 1 – Unpack

Use the chart and photos on this and the next page to be sure all system items are included. The contents of the box should look something like the examples here. Call or email Fortress Security Store if something is missing.

Packing List

Components	S02A	S02B	S02C	S02D	S02E	S02F	Custom / Additional
Main Panels	1	1	1	1	1	1	
Motion Detectors	2	3	0	3	3	4	
Pet Motion Detectors	0	0	2	0	0	0	
Panic Buttons	1	1	1	1	1	1	
Door/Window Sensors	5	10	10	10	10	10	
Key Fob Remotes	2	3	3	3	3	3	
Sirens	1	1	1	1	1	1	
Outdoor Sirens	0	1	0	1	1	1	
Strobe Sirens	0	0	1	0	0	0	
Solar Sirens	0	0	0	0	0	0	
Glass Break Detectors	0	0	0	0	1	1	
Smoke Detectors	0	0	0	1	0	1	
Gas Detectors	0	0	0	0	0	0	
Water Detectors	0	0	0	0	0	0	
Extra number pad	0	0	0	0	0	0	

Step 2 – Watch Videos

If possible watch the following videos. They are very helpful in understanding the S02 system. All videos are available at www.fortresssecuritystore.com/s02videos. Below is a listing for each individual video. Click on the title to view it.

Installation Videos	
Introduction Video	Demonstration of Window & Door Contacts
Unboxing	Motion Sensor
Main Panel	Remote Control
Window Door Contact	Panic Button
Window Door Contact Applying Tape	

Programming Videos	
Main Panel Operation	Door Chime
Main Panel Programming	Phone Line Cut
Change Password	Change System Zone Setting
Phone Numbers	Remote Control System
Recording Message	Outside Alarm
Alarm Chirp	Wireless Strobe
Alarm Delay	Additional Accessories
Alarm Sounding	Reset System
Set Ring Time	

Step 3 – Install the Main Panel

The Main Panel should be installed near a power outlet and, if phone capabilities are desired, near a telephone connection. It should be centrally located if sensors are distant or on the other side of multiple walls.

1-Plug the system's power cable into the wall, then attach the other end to the Power jack next to the antenna.

2-Turn on the unit using the on/off switch on the left side panel. This will begin charging the battery, which should be near full charge already.

> Note: The Main Panel is only ON when the switch is on. The battery backup does not work if the device is switched off.

3-If the Main Panel will be wall-mounted rather than have it sitting on a flat surface, mount it now, but do not make the final attachment. Keeping it unattached for now allows moving around with it while installing and testing devices.

> *Note: If the Main Panel can be installed so it is removable, it will make maintenance and sensor checks easier later on*.

Step 4 – Change Your Password and Program Essential Information in the Main Panel

Sensors, motion detectors, etc. are already programmed, but the Main Panel must have certain information programmed for a specific home or small business. This and the next three steps perform the initial programming needed to:

    1-Change your password.
    2-Program at least one phone number into the system.
    3-(Optional) Record a message to be sent to the telephone numbers entered for notification
    4-Mount the indoor siren and (temporarily) plug the siren into the Main Panel.

1-Change your password.
    A-Think of a 4-digit number, PASSWORD, you can remember easily
    B-Change the default password to PASSWORD
        1-Enter the old password   1234 #
            Main Panel emits two beeps
            Out and Home LEDs turn on

2-Enter   10 * PASSWORD #

> A small **L** appears in the second digit of the display after the * is pressed
> Main Panel emits two beeps after the # is pressed

3-Press RETURN to exit programming mode.

> Main Panel emits two beeps
> Out and Home lights turn off

Note: If RETURN is not pressed, the Out and Home light will turn off approximatel y 30 seconds later.   In programming mode [Out and Home lights are both on], if no keypad entry is made within 30 seconds, the Main Panel exits programming m ode and the Main Panel emits two beeps. It is the functional equivalent of pressi ng RETURN.

2-You have changed your password to PASSWORD and 1234 will no longer function as a password.

Note: It is wise to keep your new password somewhere it can be retrieved if necessary.

Step 5 – Program Telephone Numbers

When a sensor or detector is triggered, the Main Panel calls up to six (6) telephone numbers that are programmed into its memory. This can alert you, your family, the police station, or designated individuals that something has happened at your location. At least one phone number must be programmed into the Main Panel. If there is no plan to have the Main Panel call out to any number, use 555-555-5555 as a number and make sure no telephone line is connected to the **out line** telephone jack on the Main Panel. If no phone line is connected, the Main Panel must be programmed so that it will disable the Phone Line Cut feature. This feature, when enabled, will beep when it does not sense a telephone connection.

1-Program the first number into the Main Panel.
      A-Enter   PASSWORD #
           Main Panel emits two beeps
      B-Enter   31 * [telephone number] #
           Enter another number [see next step], press RETURN, or wait for the time out
2-Enter another number   32 * [telephone number] #
           Numbers can be entered as long as there is no time out or RETURN is not pressed
           Use 33-36 for the remaining phones.

3-If no phone line is attached, use the following command to keep the Main Panel from warning it does not have a phone connection.

    A-Enter PASSWORD #

        Main Panel emits two beeps

    B-Enter 22 * 0 #

        Press RETURN or wait for the time out and Main Panel will emit two beeps.

*Note: The system is designed to use a 10-digit North American phone number, but international and other numbers are also supported. Experiment If your number does not work. For example, if the 10-digit number does not work, add a **1** in front of it (**1**-123-456-7890.) Likewise, if your number is only 8 digits long, add two zeros at the end (8-765-4321-**00**)*

Step 6 – (Optional)Record a voice message to be distributed by phone in case of an alarm trigger

Note: When an alarm is triggered and the Main Panel calls the listed phone numbers, one pre-recorded voice message will be played for anyone who answers. The message can be up to 10 seconds long and can be as descriptive as "Alarm" repeated twice or "This is Bob's alarm system saying there has been an alarm triggered at 1234 Stone St., Smalltown, Wisconsin. Please call 911."

1-Record the message.

    A-Enter   PASSWORD #

        Main Panel emits two beeps

    B-Enter 6 #

        LCD panel begins countdown from 10 seconds

    C-Record a message, speaking into the MIC on the left side panel of the Main Panel.

        LCD panel displays 00

        Main Panel emits two beeps

        Press RETURN or wait for the time out and Main Panel will emit two beeps

2-Listen to the message. [Requires a telephone connected to the same line as the Main Panel]

      A-Enter   PASSWORD   #

           Main Panel will emit two beeps

      B-Enter 6 *

           LCD panel will display count-up from 1-10

      C-Listen to the message on the connected phone. If desired, go through the programming steps again and the new message will overwrite the old one.

Step 7 – Install and Prepare Sirens, External Sensors, and Detectors

There is a separate section on mounting sensors, motion detectors, and other components, but the directions in this step allow getting started quickly.

The PIR (Passive Infrared) motion detectors in the package are designed to trigger an alarm when they "see" motion. They are not active when using the Home (Home Arm) function. The door/window sensors in the package are already programmed so they are active when using the Out (Away Arm) or Home (Home Arm) function.
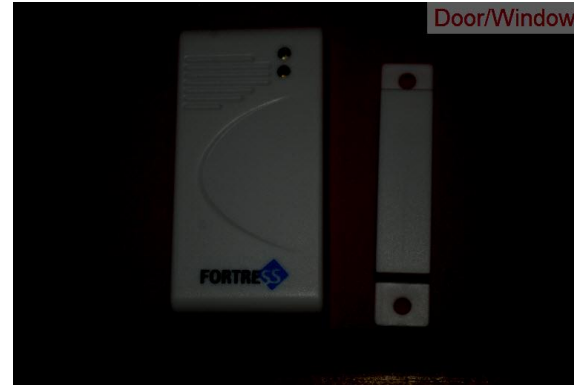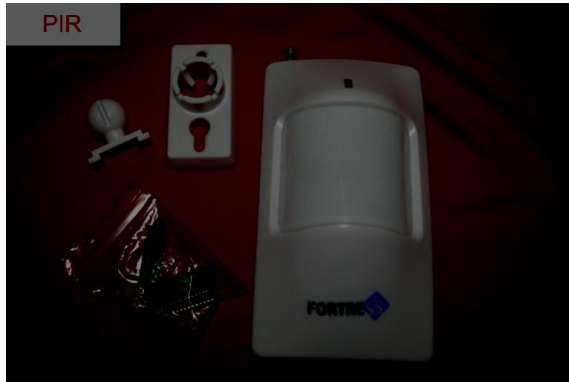
To test devices at this point, disconnect the siren since it will be very loud. There will be enough feedback from the LCD display and status lights.

1-Mount the motion detector bracket between 6 and 8 feet above the floor. The bracket has a ball and socket mount which allows the detector to be aimed optimally. Turn on the power switch.

 A-To test the detector, arm the system (Away Arm) by pressing the **Out** key for two seconds
   Main Panel emits a beep
   Out LED blinks for 30 seconds
   After 30 seconds, the Main Panel emits another beep and the Out LED will turn on
   1-Create motion in front of the motion detector.
    The alarm LED will turn red
    The zone number will appear in the LCD display
    Main Panel will emit a click

Note: If you test a motion detector, wait 30 seconds before testing it again. To protect its battery, a motion detector will not light its LED more than once in 30 seconds even if it detects something during that period.

2-Door/Window sensors detect the opening of a door or window. Two objects, one a wireless transmitter and the other a magnet, make up a door/window sensor. They should be mounted within 1/2" of each other, one on the moveable side of the door/window. The magnet should be mounted on the same side as the LEDs on the transmitter.

       A-To test the detector, arm the system (Away or Home Arm) by pressing the **Out** key for two seconds.

              1-When the alarm is ready (immediately for Home, 30 seconds for Away), separate the two objects until the wireless transmitter's LED turns on.

                  The alarm LED will turn red
                  The zone number will appear in the display
                  Main Panel will emit a click

3-(Optional) Install the outdoor siren close to an electrical outlet so that the power cord will reach. Before actually mounting it, make sure it can communicate with the Main Panel by programming it or testing it according to the video Outside Alarm. If programming it for the first time without access to the video, see the section Outdoor Sirens, which details the steps for programming.

      A-To test the detector without programming/testing, connect the siren.

            Siren emits a two-toned chirp

            Approximately 5-15 seconds later, the siren emits two beeps

            1-Press the Panic Button on a key fob (see next section) or the Emergency key on the Main Panel.

                  The siren sounds

                  The Alarm LED turns red

                  The zone number appears in the LCD display

                  Main Panel will emit a click

Step 8 – Learn and Use the key fob for Remote Control

The key fob is the easiest way to perform day-to-day tasks with the S02 system.

It has four buttons.

     1-Disarm – Disarm the system

     2-Away Arm (Out) – Arm the system when all are outside the protected area.

     3-Home Arm – Arm the system when anyone is inside the protected area.

     4-Panic – Immediately set off sirens and phone calls, even if the system is not armed.
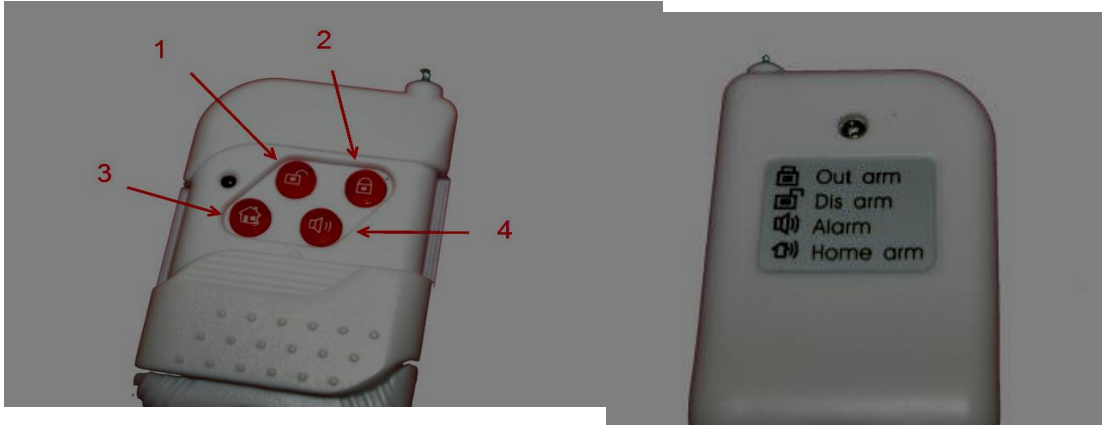
Slow Start - Introduction

This section covers the setup, start, use, and programming of your Fortress Security Store S02 alarm system in detail. If you are ready to get started with your system, use the Quick Start section and refer to this section as a resource when needed.

ATTENTION!!!

Your S02 series alarm system is preprogrammed, except for those items detailed in Step 4-7 of the Quick Start section. If you get additional sensors, motion detectors, smoke alarms, etc., please follow the instructions for installing those. DO NOT re-program the Main Panel or return it to the factory default without first consulting Fortress Security Store.

Slow Start – Unpack, Setup & Install Your S02 System

Step 1 – Check the contents of the Fortress Security Store System box.

Packing List

Components	S02A	S02B	S02C	S02D	S02E	S02F	Custom / Additional
Main Panels	1	1	1	1	1	1	
Motion Detectors	2	3	0	3	3	4	
Pet Motion Detectors	0	0	2	0	0	0	
Panic Buttons	1	1	1	1	1	1	
Door/Window Sensors	5	10	10	10	10	10	
Key Fob Remotes	2	3	3	3	3	3	
Sirens	1	1	1	1	1	1	
Outdoor Sirens	0	1	0	1	1	1	
Strobe Sirens	0	0	1	0	0	0	
Solar Sirens	0	0	0	0	0	0	
Glass Break Detectors	0	0	0	0	1	1	
Smoke Detectors	0	0	0	1	0	1	
Gas Detectors	0	0	0	0	0	0	
Water Detectors	0	0	0	0	0	0	
Extra number pad	0	0	0	0	0	0	

Step 2 – Plan the Installation

Using a worksheet like the one below, prepare a plan for placing detectors, sensors, and sirens in your house or small business. Door/window sensors and motion detectors have numbers on the back that identify the zone they are in. It may be handwritten or printed. By keeping a chart of where each device is placed, alarms and locations can be identified by the devices that trigger them.

Layout Worksheet

Device	Zone	Location
Motion Detector 1	1	Dining Room
Window Sensor 4	7	Kitchen window above sink
/\/\/\/\/\/\/\/\	/\/\/\/\/\	/\
Key Fob Remote 1	30	Automobile
Key Fob Remote 2	31	Kitchen Table
Outside Siren	N/A	Eave of Garage

Zone Assignments   [Zones 01-08 have additional features]

Device & Number	S02-A Zones	S02-B Zones	S02-C Zones	S02-D Zones	S02-E Zones	S02-F Zones
Main Panel	N/A	N/A	N/A	N/A	N/A	N/A
Motion Detector 1	01	01	01	01	01	01
Motion Detector 2	02	02	02	02	02	02
Motion Detector 3	N/A	03	N/A	03	03	03
Motion Detector 4	N/A	N/A	N/A	N/A	N/A	04
Panic Button	03	04	03	04	04	05
Smoke	N/A	N/A	N/A	05	N/A	06
Glass Break	N/A	N/A	N/A	N/A	05	07
Door/Window Sensor 1	04	05	04	06	06	08
Door/Window Sensor 2	05	06	05	07	07	09
Door/Window Sensor 3	06	07	06	08	08	10
Door/Window Sensor 4	07	08	07	09	09	11
Door/Window Sensor 5	08	09	08	10	10	12
Door/Window Sensor 6	N/A	10	09	11	11	13
Door/Window Sensor 7	N/A	11	10	12	12	14
Door/Window Sensor 8	N/A	12	11	13	13	15
Door/Window Sensor 9	N/A	13	12	14	14	16
Door/Window Sensor 10	N/A	14	13	15	15	17
Key Fob Remote 1	30	30	30	30	30	30
Key Fob Remote 2	31	31	31	31	31	31
Key Fob Remote 3	N/A	32	32	32	32	32

Step 3 – Finish programming the Main Panel

Programming the S02 Main Panel is not difficult, but there are a few things to learn and remember.

1 - Programming Hints

A-All programming begins with entering your password and a # [pound or number key]

B-A programming "session" ends when the RETURN key is pressed or a time out occurs   approximately   30 seconds after the last key press

C-The * (asterisk or star) key is used for certain tasks, including deletion. Be careful with any command that includes * so that programming is not accidentally deleted.

D-Beep codes give audible hints about what is happening.

Every keystroke gets a beep for audible feedback.

Two beeps mean "success" or "RETURN," such as a timed out command

Four beeps generally mean failure, such as an illegal entry

Two or four beeps when pressing RETURN mean "Programming Mode Off"

2 - Change your password.

Use the directions in **Step 4 – Change Your Password and Program Essential Information in the Main Panel** of the Quick Start Guide. The default password for the Main Panel is 1234. The password may be changed as often as you like, but you MUST remember what it is. If it is forgotten, no actions can be performed until you reset your system to the factory default. That will destroy ALL the sensor settings and individual programming.

3 – Enter telephone numbers to be notified on alarm triggers

Use the directions in **Step 5 – Program Telephone Numbers** of the Quick Start Guide to enter telephone numbers to be notified when an event triggers an alarm. The system can also dial monitoring facilities, but this requires the monitoring facility - and perhaps Fortress Security Store – to help set up the system.

> *Note: Some locales allow direct notification to a police department phone number while other locales strictly forbid it, often with a hefty fine attached. It is worthwhile to find out what the local ordinance is where the system is used.*

4 – (Optional) Record and Playback a Message to be distributed when an alarm is triggered.

Use the directions in **Step 6 – (Optional)Record a voice message to be distributed by phone in case of an alarm trigger** to record a message to be sent when the automatic dialer calls the numbers in the notification phone list. Anyone who answers will hear the message.

5 – (Optional) Program the External Siren

The external siren is a penetrating noise maker that extends the distance an alarm is heard. It requires an external power source, 110/220 volts (typical household voltage), and it ships with its own power cable. It communicates wirelessly with the Main Panel. It has an additional wire attached which is the antenna. The antenna allows the siren to work further away from the Main Panel.

Before actually mounting it, make sure it can communicate with the Main Panel by programming it and/or testing it according to the video Outdoor Alarm. If you do not have access to the video, use the directions in Outdoor Sirens.

Slow Start – Use the S02 System

Step 1 – Learn about Features and Applications of the S02 System

There are several features of the S02 system that may not be apparent at first. This section explains those features and how you might use them, including the information for programming them.

The conventions for using this section are

PASSWORD	4-digit password, default is 1234
ZONE	2-digit zone (01-32) – in most cases this is the sensor number
NNN-NNN-NNNN	Telephone number (can be more or less than 10 digits if needed)
XX	2-digit setting, could be "minutes" "ring count" or any variable
* # 0-9	keys on the Main Panel keypad
out/home/disarm/return	function keys on the Main Panel

Note: Some commands work just on Zones 01-08. Later in this section an example shows how to move a sensor into Zones 01-08 if necessary. Additional information about these features may be found in the appendices.

Step 2 - Definition of Key Terms, such as Zones, Sensors/Detectors, Alarms, Triggers

Physically, the S02 system consists of the Main Panel and a variety of peripherals – sensors, detectors, sirens, controllers, panic buttons, etc. The primary classification of peripherals are

sensors/detectors [mounted on surfaces to "protect/detect" physical events]
controllers [key fobs, phones, Main Panel that affect the system's state]
alarms [sirens, flashing lights, Main Panel visual/aural displays, telephone notifications]

Basically, the class sensors/detectors detect "something," and **trigger,** or cause, an alarm. So, for example, a glass break device detects broken glass and causes multiple alarms (zone number on Main Panel display and lit LED, sirens, telephone notifications).

This detect->trigger->alarm sequence defines an alarm system. The Fortress Security Store S02 uses the concept of "Zones" to organize the detection part of the system.   You can think of a zone as a "bucket" of defense in the Main Panel. It identifies the wireless location of devices, how they should work, and when they should work.

The S02 has 32 wireless and 7 wired zones available. Zones 01-08 of the wireless zones are special in that they can be programmed with more functionality than 9-32. Ignore the wired zones for now. When programming the Main Panel, you are actually setting up the zones, then adding the devices to the zone by activating them while that zone is being programmed. You will see how this is done in the

programming examples.

> *Note: To enter programming mode, pressing the Program button or pressing # are equivalent commands. This manual will use # to represent pressing the Program button.*

By default, all the devices that ship with the system are in a different zone. When an alarm is triggered, the Main Panel shows the zone number, and that number also refers to a single device.

A device cannot belong to more than one zone at a time; however, a zone CAN have multiple devices assigned to it. This is desirable if, for example, your location needs 50 sensors. There are only 32 zones, so something has to give. One solution is to group the devices in a single room into a zone. So Zone 11, for example, may have 6 window sensors. If the alarm is triggered, the display still shows Zone 11, just not which of 6 sensors caused it.

Keep in mind how zones work as you read further.

Step 3 – Arm/Disarm State of the System

The only alarms that can be triggered when the S02 is disarmed are emergency zones and panic button presses.

There are two armed states and each has different characteristics.

> Home Armed – Designed to be used when people are inside the protected zone
>> No motion detectors (with a couple of exceptions)
>> Armed at the Main Panel or a Key Fob Remote
>> Arming is done without delay

> Away Armed (Out) – Designed to be used when people are not inside the protected zone
>> All detectors/sensors are used
>> Armed at the Main Panel, a Key Fob Remote, or a telephone
>> Arming is delayed to allow leaving the premises after arming

Arming Procedure

> Main Panel – Press **out** (Away Arm) or **home** (Home Arm) button for approximately 3 seconds
> Key Fob Remote – Press House icon (Home)or Closed Lock icon (Away) for about 2 seconds
> Telephone – Use telephone key [see Use a telephone to control the Main Panel remotely]

Disarming Procedure

      Main Panel – Enter <small>PASSWORD</small> , then press **disarm** button

      Key Fob Remote – Press Unclosed Lock icon for about 2 seconds

      Telephone – Use telephone key [see Use a telephone to control the Main Panel remotely}

It is unusual to have to do anything but arm and disarm your system and perform periodic maintenance as described in the appendix. Practice arming and disarming until they are second nature. When an alarm is triggered, sirens are blaring, you should know how to disarm the system.

Step 4 – Features, Including Programming

Use a telephone to control the Main Panel remotely

If the Main Panel is connected to a telephone line, some features of the system are accessible by any telephone, whether it is a cell phone or landline. Calling in only works if there is no device which picks up the call first, such as a fax machine or answering machine. If the Main Panel calls out, a fax or answering machine does not matter.

Calling the Main Panel

1-Dial the number of the S02's phone line

2-The Main Panel system will answer and emit a beep

3-Enter PASSWORD #. The Main Panel will emit a beep to confirm each keystroke.

4-Press a key on your phone to perform actions

1	"Away Arms" the system immediately [equivalent to **out** button]
2	Disarms the system immediately
*	Listens to sounds using the microphone in the Main Panel, can be repeated
#	Hangs up.

Answering When the Main Panel Calls Out
If the Main Panel calls out and you answer the call, the process is the same as calling in except you do not have to enter a password and you have only two options.

Stops the Main Panel from making any more calls.
Leaves the Main Panel armed and with the alarm LED lighted.
Any activated sirens are turned off.

* Allows you to listen to the microphone in the Main Panel for 30 seconds.
If you press nothing while listening for 30 seconds, the phone call terminates.
The Main Panel continues making calls, and all sirens continue.

*Note: Pressing * then # while listening to the microphone stops the Main Panel from making any more calls and leaves the Main Panel armed and with the alarm LED lighted. Any activated sirens are turned off.*

Add/Delete/Move Sensors and Detectors

If you need more devices than came with your kit, you will need to program them when they arrive. To put a new unit in service, (1) turn off all motion detectors (or make sure they are NOT triggered during the install), (2) designate the physical location, (3) select a zone [either in their own zone or sharing a zone with another device], (4) program them, (5) mount them in their physical location, and (6) test them per instructions in the appendix.

For most devices, to get them registered, have them near the Main Panel and enter

PASSWORD #	2 beeps – out and home LEDs on
7 # ZONE #	Zone number in LCD
activate the device^	2 beeps
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

^(pull sensors apart or move in front of motion detectors)

To delete a device just remove the battery or power source and physically remove it. If you want to have it function in a new location or zone, that is considered a move. A move is really just an add to a new zone, so the directions are the same as above.

Change Delay/Zone Type Setting

Zones 01-08 are special in that they have more attributes than 09-32.   Zones 01-08 have the following zone type possibilities.

1	Instant Zone (Default)	Alarms are immediate
2	Delay Zone	Alarms are delayed 0-90 seconds (default 30 seconds)
3	Emergency Zone	Alarms always on – armed or disarmed system
4	Disable Zone	Alarms are disabled
5	Away Armed Zone	Alarms only active when Away Alarm (out) is on

To change a Zone Type setting enter

PASSWORD #	2 beeps – out and home LEDs on
* ZONE 2 ZONE TYPE #	2 beeps
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

To change an Entry Delay setting for Type 2 Zones enter

PASSWORD #	2 beeps – out and home LEDs on
28 * XX #	2 beeps (xx is 01-90 seconds)
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

To change an Exit Delay setting for Type 2 Zones enter

PASSWORD #	2 beeps – out and home LEDs on
27 * XX #	2 beeps (xx is 01-90 seconds)
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

The S02 kits are programmed to take advantage of these settings and normally do not need changing.

Description of Zone Types
Zone Type 1 - Default type. Any device with this zone type will trigger an alarm under any armed condition and will not trigger an alarm when the system is disarmed. All door/window sensors are programmed Type 1 as a default. Remember, zones 09-32 are Zone Type 1 and cannot be modified. So it is a good idea to save zones 01-08 for devices you may want to modify.

Zone Type 2 - By default, this zone type delays triggering an alarm for 30 seconds. The delay time can be set from 0-90 seconds. The delay can be set differently for entry and exit. An entry delay allows time for entering a protected area while the system is armed and taking 0-90 seconds to disarm the Main Panel. Once triggered, there is no way to stop the "count down" other than disarming the Main Panel. For example, opening the door while the system is armed starts the countdown (the Main Panel beeps every second), and closing the door so the sensor is "reset" does not halt the counter.

An exit delay is the amount of time you have to leave a protected area once you have pressed the Armed Away button before delayed zones start triggering alarms.

Zone Type 3 – Devices with this zone type always trigger an alarm, whether the system is armed or not. It is used for devices like Panic Buttons, gas, water, and smoke detectors.

Zone Type 4 – This zone type disables the device assigned it. It is handy for temporarily disabling a malfunctioning device, preparing it to be moved, or allowing a battery change.

Zone Type 5 – This zone type works only in the Armed Away (out) mode.   Motion detectors are most commonly assigned this zone type.

Use the Door Chime/System Arm Reminder Function

Turning this feature on or off for a particular door/window sensor zone causes the Main Panel to emit three beeps if the sensor is triggered while the system is disarmed. It can be used to remind you to arm the system when you leave by a specific door. It can also act as a bell, such as when a customer opens a door and enters.

To turn on this feature, press

PASSWORD #	2 beeps – out and home LEDs on
* ZONE 7 1 #	2 beeps
RETURN	2 beeps – out and home LEDs off

To turn off this feature, press

PASSWORD #	2 beeps – out and home LEDs on
* ZONE 7 0 #	2 beeps
RETURN	2 beeps – out and home LEDs off

Note: For this command to work ZONE must be Zone 01 through 08. If the device is in any other z one, you must first register it in zones 01-08 using the devices regular registration procedure.

Phone Line Trouble or Cut Line Reminder

This function warns you if your phone line is cut or phone service is disrupted. If the system is armed, the wired siren sounds (wireless sirens will not sound). If the system is disarmed, the Main Panel emits 3 beeps every 10 seconds or so. If you do not have a telephone line connected to the Main Panel, be sure this is turned off. It should be turned on only if you have stable telephone service.

To turn on this feature, press

PASSWORD #	2 beeps – out and home LEDs on
22 * 1 #	2 beeps
RETURN	2 beeps – out and home LEDs off

To turn off this feature, press

PASSWORD #	2 beeps – out and home LEDs on
22 * 0 #	2 beeps
RETURN	2 beeps – out and home LEDs off

Ring Count Before Main Panel Answers

The Main Panel will accept phone calls (see Use a telephone to control the Main Panel remotely) from any cell phone or landline if the ring number is greater than 00. The permissible values are 00-12. As stated elsewhere in the manual, this function will not work in conjunction with answering machines, modems, and most fax machines.

To change the number of rings before the Main Panel answers the telephone

PASSWORD #	2 beeps – out and home LEDs on
1 2 * XX #	2 beeps [XX is rings, from 00 - 12]
RETURN	2 beeps – out and home LEDs off

Siren Alert Time

You can adjust how long your siren sounds when an alarm is triggered. The default is 1 minute. The permissible values are 00 – 30 minutes.

To change the length of time the siren sounds on a triggered alarm

PASSWORD #	2 beeps – out and home LEDs on
2 9 * XX #	2 beeps [XX is minutes, from 00 - 30]
RETURN	2 beeps – out and home LEDs off

Siren Chirp

With this function enabled, arming or disarming the system is followed by chirps or beeps from system

sirens. This is handy for getting feedback on whether the remote control's signal actually reached the Main Panel. Most commonly, it allows a person to press disarm while outside and use the siren's beep/chirp as confirmation the system is disarmed and the area can be entered without triggering an alarm.

To enable the siren echo of remote control key presses

PASSWORD #	2 beeps – out and home LEDs on
8 #	2 beeps
RETURN	2 beeps – out and home LEDs off

To disable the siren echo of remote control key presses

PASSWORD #	2 beeps – out and home LEDs on
8 *	2 beeps
RETURN	2 beeps – out and home LEDs off

Change Password

For security or convenience you may want to change your password. It must be a 4-digit number and is changed by this sequence.

PASSWORD #	2 beeps – out and home LEDs on [old password]
10 *	L appears in LCD display
PASSWORD #	2 beeps – out and home LEDs off [NEW password]
RETURN	2 beeps

Factory Reset

This function removes ALL programming from the system and resets the password to the default 1234. All sensor and detector registrations, ring settings, zone settings, . . . everything. Please do not use this function without consulting Fortress Security Store.

To completely reset your system

PASSWORD #	2 beeps – out and home LEDs on
0000 #	2 beeps
RETURN RETURN	2 beeps – out and home LEDs off

Slow Start - Registering or Re-registering Devices with the Main Panel

The process of taking an alarm system device and getting it to be recognized by the Main Panel is called registration, or coding. Each S02 system ships with all registration done. If new devices are added, if a device loses registration or needs to be re-assigned, registration must be performed.

> *Note: If a device has an on-off switch or method of turning it off, it is best to turn it off while programming a different new device. If active it can accidentally re-register to the new zone. This is particularly important with motion detectors.*

PIR Motion Detector

Turn on the switch on the side of the motion detector.

PASSWORD #	2 beeps – out and home LEDs on
7 # ZONE #	ZONE between 01-08
Create Motion in front of detector	2 beeps
RETURN RETURN	2 beeps – out and home LEDs off

Since you will want this device to be active only in Away Alarm mode, change it's zone settings

PASSWORD #	2 beeps – out and home LEDs on
* ZONE 2 5 #	2 beeps - X is 5, Away Armed Zone
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

Door/Window Sensors

Place the magnet and transmitter side by side

PASSWORD **#**	2 beeps – out and home LEDs on
7 **#** ZONE **#**	ZONE between 01-32, usually 09-29
Separate magnet and transmitter	2 beeps
RETURN RETURN	2 beeps – out and home LEDs off

If this is a door that you want to use for access without triggering an alarm, you must set the zone type to delay. To set it to delay, it must be in Zone 01-08.

PASSWORD **#**	2 beeps – out and home LEDs on
* ZONE 2 **2 #**	2 beeps - X is 2, Delay Mode
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

If this is a door and you want to have it "chime" when someone enters/exits and the Main Panel is disarmed, you will need to

PASSWORD **#**	2 beeps – out and home LEDs on
* ZONE 7 1 **#**	2 beeps
RETURN	2 beeps – out and home LEDs off

Key Fob Remote Controls

PASSWORD #	2 beeps – out and home LEDs on
7 # ZONE #	ZONE is usually 30-32
Press Remote's Alarm (speaker icon)	2 beeps
RETURN RETURN	2 beeps – out and home LEDs off

Panic Buttons

PASSWORD #	2 beeps – out and home LEDs on
7 # ZONE #	ZONE is usually 03-05
Press large red button	2 beeps
RETURN RETURN	2 beeps – out and home LEDs off

Outdoor Siren (Black Siren)

The video Outside Alarm is the best source for registering the siren with the Main Panel. If it is not available, read through these steps and then perform them. Although it appears there are many steps and the process is difficult, it is actually easy to perform if you read through the steps carefully.

1-Ensure Main Panel is powered and press Disarm (open lock symbol) on a remote control

2-Unplug the Main Panel's attached siren (to avoid noise)

3-Press the Alarm button (speaker icon) on the remote control

      The Main Panel LCD display shows the remote control's zone and the alarm LED is on

4-Power on the remote siren

      The siren will make a two-toned chirp then beep twice after a couple of seconds.

      The siren is now powered up correctly.

5-Disconnect the siren power cable, wait 1 second, then reconnect it

      The siren emits one beep

    Disconnect the siren power cable, wait 1 second, then reconnect it

      The siren emits one beep

    Disconnect the siren power cable, wait 1 second, then reconnect it

      The siren emits three beeps

6-Press the Disarm (open lock symbol) on the remote

      The remote siren emits two beeps

7-Immediately disconnect the siren's power cable for 3 seconds then reconnect

The remote siren emits two beeps

Pet Immune Motion Detectors

Registering a Pet Immune motion detector is much like a regular motion detector except that the Pet Immune detector has a code switch. You will need a paper clip or ball point pen tip to depress the code switch and register the device.

PASSWORD #	2 beeps – out and home LEDs on
7 # ZONE #	ZONE between 01-08
Turn on the detector's switch	Located on top of unit next to Code button
Depress the Code switch	Detector's LED blinks rapidly, then stops
Release the Code Switch	Detector's LED quits blinking
Depress the Code switch	2 beeps
RETURN RETURN	2 beeps – out and home LEDs off

Since you will want this device to only be active in Away Alarm mode, change it's zone settings

PASSWORD #	2 beeps – out and home LEDs on
* ZONE 2 5 #	2 beeps - X is 5, Away Armed Zone
RETURN or RETURN RETURN	2 beeps – out and home LEDs off

Appendices

Appendix A - Command Summary

Appendix B – System Maintenance

Appendix C – Technical Information – Selected System Components

Appendix A – Command Summary		
Action	Command	Notes
Change password	10 * PASSWORD #	Default password is 1234
Away Arm the system (OUT mode)	Press **out** key until beep	All sensors and detectors are armed
Home Arm the system (HOME mode)	Press **home** key till beep	All sensors and detectors except motion detectors are armed

Action	Command	Notes
Disarm the system	Press PASSWORD then **disarm** key	default **1234**
Enter Programming Mode	PASSWORD #	default **1234**
Exit Programming Mode	Press RETURN key twice	Return to operational mode
Add phone number to alarm notification list	Program mode, then [31-36] * NNN-NNN-NNNN #	NNN-NNN-NNNN is a 10-digit phone number
Record outgoing voice message	6 #	Message played to notification list after alarm
Replay outgoing voice message	6 *	Review message played to notification list
Code a wireless detector to ZONE	7 # ZONE #	01-08 zones are for detectors and devices that need to set a zone type or delay 09-29 are "instant alarm" zones and cannot be modified. 30-32 are usually reserved for remote controllers

Action	Command	Notes
Change delay mode or zone type	* ZONE 2 X #	ZONE 01~08 09-32 are instant zone only X is zone type: 1: instant 2: delay 3: emergency, such as fire/smoke/water/panic 5: Away Armed (motion detectors, etc.) 0: disabled
Delete all wireless sensors	7 *	**Danger!** This is a drastic action that should be avoided unless advised by Fortress Security Store
Window/Door Chime: Pick the zones you want to chime when the windows/doors are opened in disarm mode. Only zones 1-8 can be programmed to chime.	* ZONE 7 1 #	ON
	* ZONE 7 0 #	OFF (System Default)

Action	Command	Notes
Loud siren chirp when arming/disarming alarm system.	8 #	ON (System Default)
	8 *	OFF
Telephone line cut or short-circuit alert	22 * 1 #	ON (System Default)
	22 * 0 #	OFF
Siren Alarming Time	29 * MM #	MM: 00-30 minutes; default: 01 minute
Factory Reset	0000 #	**Danger! Danger!** All Sensors and remotes will be deleted. Do not use without consulting with Fortress Security Store
Ring number Main Panel answers on when called from remote phone	12 * RR #	RR=rings: 00-12, default 00, answer immediately
Options when communicating with Main Panel via telephone	1 key -Arm 2 key -Disarm * key – Monitor	Arming type is Away Arm * Listen through Main Panel Mic for 30 seconds or until you press another

Action	Command	Notes
	# key -Stop notification and call	valid option (1, 2, #) # If you were called by device and press #, no more notification calls are made

Appendix B - System Maintenance

Both the Main Panel and the sensors, detectors, remote controls, and other devices need to be checked periodically for complete functioning.

While there is no hard and fast rule, it is wise to check every device at least once in a three month period. For greater safety and reliability, check more often.

Much of the periodic maintenance is satisfied by the normal operation schedule. For example, if you use the arming timer, you will be able to see if the arm and disarm function is working at the Main Panel.

When testing/troubleshooting malfunctioning components that use batteries, replace the battery first to see if that solves the issue.

The following table lists periodic maintenance tests.

Maintenance Tasks and Suggested Frequency		
Task	Frequency	What/How
Arm/Disarm	Quarterly	Arm in all modes (Away Arm, Home Arm) and disarm
Triggered Alarm Notification	Quarterly	Trigger an alarm and see if the Main Panel dials all the phones in its list and sends SMS data
Main Panel-Sensor Communication	Quarterly	Trigger all or a rotating subset of sensors/detectors to make sure they can communicate with the Main Panel
Main Panel Battery	Quarterly	Remove electrical power for 1-2 hours to see if backup battery power works
Detectors/Sensors/Remote Controls	Monthly	Check that batteries are working by inspection or triggering alarms

Appendix C – Technical Information – Selected System Components

Main Panel
Power Supply:
AC: 220V±10% DC: 12V [US 110-120V AC]
Rechargeable Backup Battery: Ni-MH DC=7.2V
Working Current: ≤50mA
Alarm Current: ≤300mA
Wireless Receiving Frequency: 433MHz±0.5MHz
Wireless Receiving Sensitivity: 5mV/m
Anti-jamming Intensity: 1V/m (frequency range: 20-1000 MHz)
Outside Alarm Siren: <110db
Working Condition: Temperature: 14-104F, Relative Humidity ≤ 90%

Wireless Window/DOOR Sensor

Battery: 12V 23A

Static Current: ≤20uA

Transmission Current: ≤15mA

Transmission Frequency: 433MHZ±0.5MHZ

Wireless Range: (No obstacle) 150feet

Transmitter/Magnet Gap Distance: 1/2 Inch

Working Condition: Temperature 14‑104F, Relative Humidity ≤ 90%

Wireless PIR Motion Detector
Battery: DC 9V

Static Current: ≤100uA

Transmission Current: ≤20mA

Transmission Frequency: 433MHZ±0.5MHZ

Wireless Range: (No obstacle) 650 feet

Detection Speed: 1-10ft/sec

Detection Distance: 15ft to 25 ft

Detection Range: Horizontal 110° Vertical 60°

Working Condition: Temperature 14-104F, Relative Humidity ≤ 90%

Remote Controller
Power Supply: DC 12V (built-in 12V battery)

Static Current: 0

Transmission Current: 15mA

Transmission Frequency: 433±0.5 MHz

Wireless Range: (No obstacle) 150 feet

Working Condition: Temperature 14-104F, Relative Humidity ≤ 90%