



Art Guard RF Wireless Instructions

Art Guard, Votner Goushe LLC
(212)989-1594 | info@artguard.net | www.artguard.net

AG RF INSTRUCTIONS

OVERVIEW

The Art Guard RF (Radio Frequency) Security Module for hanging art is manufactured with an industry standard GE (UTC Fire & Security) wireless transmitter and powered by a 3-volt DC Lithium coin cell battery that provides five to eight years of battery life. **The AG RF sensor/modules are pre-programmed to the GE Simon XT Control Panel in an easy-setup configuration.** The modules can also be integrated into most any security system as add-on sensors without the Simon panel. These instructions provide complete guidelines for installation and expansion in either situation. If you lack familiarity with the terms used here or have difficulty with the directions, we recommend that you contact a professional installer in your area. An installer can also recommend a security service to provide 24 hour system monitoring and can activate the Simon's telephone and online capabilities. (Go to www.GESecurity.com and click on **Where to Buy** for the nearest installer or contact Art Guard).

The Simon XT panel and its broad range of GE sensors are often deployed to provide building security for doors, windows and motion detection, as well as a host of other security measures. These are referred to as the primary group or "loop" and may be turned off during the day. The Simon also supervises a secondary loop that can be armed independently of the primary loop's status and remain on continuously. AG's sensor modules have been pre-programmed into the

Simon XT for the same security loop used for gun cabinets and jewelry cases, requiring 24/7 protection. This is designated in the Simon XT as **Group 8**. This allows all hanging works equipped with Art Guard's sensor modules to remain armed, even while door, window and motion sensors are "**disarmed**" or de-activated to allow public access. It is not until these Group 8 units are "**sub-disarmed**" that they can be uninstalled and moved.

Easy Setup is explained in Sections 1 – 4, but understanding how the AG RF units operate on a separate, secondary security loop programmed with the Simon XT's Group 8 settings is important for continued operation of the AG RF System. Detailed instructions are in Section 5.

The panel monitors battery conditions every 64 minutes, and, in the case of a low battery, the panel will notify the user of a sensor's power needs.

Note: Art Guard does not manufacture the Simon XT Control Panel, but we can answer any questions regarding the use of our wall sensors with this panel.

INSTRUCTION STEPS

EASY SET UP

1. Hanging pieces/objects with AG sensors modules
(Important to install module before connecting battery)
2. Connecting the Simon XT Control Panel battery
3. Activating the Simon Panel
4. Setting Time and Date

FURTHER INFORMATION

5. Terminology and routine control panel operation
6. Customizing User and Installer access codes
7. Modifying panel alerts
8. Additional sensor information
 - a. Deleting sensors
 - b. Programming (re-learning) sensors
9. Additional hanging methods/information
 - a. "D" rings
 - b. Perimeter molding
 - c. Heavier objects
 - d. Capture clips

Note: Each Art Guard RF is shipped from the factory with a black plastic strip inserted in the wire slot on the top of the module. Its purpose is to depress the module's pressure button, deactivating the transmitter and preserving the battery. This also prevents the sensor module from communicating with the control panel, thereby directing the panel's supervision only to the remaining active modules. Carefully note how the strips are placed in the module so they can be reinserted to store unused modules. (See diagram in Section 8a). Place the unused strips in a safe place, e.g. taped to the front of the module.

MOUNTING SENSOR MODULES ON THE WALL

Each module is a completely independent hanging system and supports up to 25lbs (11.3kg) of hanging weight (see Section 9c for tips on hanging heavier pieces). As with any hook used for hanging objects, the mounting of the AG sensor module is only as secure as the manner in which it is attached to the wall. We recommend that AG modules be installed as follows:

- Hollow gypsum walls: use appropriate plastic expansion anchor or screw directly into the supporting wood or metal studs.
- Plywood-backed gypsum walls: screw directly into the plywood.
- Wood walls of 3/4" (20mm) or greater: screw directly into the wall.
- Plaster or masonry walls: use appropriate plastic expansion anchor.

EASY SET UP

1. HANGING PIECES WITH AG SENSOR MODULES

The AG modules are pre-programmed and ready for use. Before installation, we recommend that a location chart be constructed that notes each module's number, its location in the room, and the title or description of the work being protected. We also advise that the sensors be installed in numerical order to maintain a logical tracking by the system.

TRADITIONAL HANGING METHOD

Use only the appropriate length steel screws. Gypsum wallboard screws of 2" (50mm) in length are ideal. NEVER USE A NAIL. Place the screw through the hole in AG and into the wall and tighten, but not completely. While an electric screw gun may be used, the last few rotations of the screw should be made by hand, using a screwdriver. Before final tightening, make sure that the module is in a vertical position. A tilted unit may affect the hanging wire's pressure on the pressure button. Tighten the screw until the module can no longer be manually rotated in any direction. The small peaks on the back of the metal plate are designed to prevent the module from twisting, once it is snug against a wall. Hang the work by placing the hanging wire securely in the 2 mm wide slot at the top of the AG module. **IMPORTANT: DO NOT USE LESS THAN A #4 BRAIDED WIRE.**

A heavier wire is ideal. Braided wire is recommended because of its flexibility and strength and its ability to have full contact along the arc of the module's hanging slot. Be sure to remove any crimp in the wire at its point of contact with the pressure button in the slot.

On the front edge of the hanging wire slot is a safety hook to further prevent "grab and run" actions. The hook prevents the normal motion of lifting the frame/object up and away from the wall by catching the hanging wire. The hook requires the user to make an upward motion parallel to the wall to remove the piece. (See diagram in section 8a)

For additional hanging methods and use of the optional capture clips, refer to Section 9.

2. CONNECTING THE SIMON XT CONTROL PANEL BATTERY

The Simon XT Control Panel comes with an installed backup battery and charger in case of power outages. To prevent the panel from possibly announcing an audible but false "low battery alert" during shipping, the red (+) terminal has been disconnected from the battery. This must be replaced before plugging in the Simon charger.

- Open the back of the Simon XT Panel by pressing the two raised buttons on the top of the unit's case while pushing open the back of the panel. Notice the way the hinges attach the back of the panel to the case for reattachment. Disengage the hinges and completely remove the back section. Place the panel face down on a soft surface.
- Slightly separate the white plastic retainer clips securing the battery and lift the battery up—**but not completely out**—from the white clips, just enough to expose the red terminal.
- Connect the red wire to the red terminal. In case the battery is lifted completely out, the white lettering on the battery should face up with the red terminal to the upper left of the case.

Pressing buttons on the front of the panel while connecting the battery should be avoided if possible. If a button is inadvertently pressed, it may cause the panel to sound once the battery is connected. If this occurs, once the case is closed press the DISARM button and enter access code 1234 on the number keys. The system will announce and display “disarmed”. Press the STATUS button, and the panel will announce “System OK”.

- Once the wire is connected to the terminal, push down evenly on the lettered face of the battery until the bottom slides back down into its seat and both retainer clips snap over the edges of the battery. Make sure the black and red wires are resting in the slot above (outside) the upper white clip.
- Replace the back of the case by first connecting the hinged bottom at a 90 degree angle to the panel, and close the case until the raised buttons have snapped close. If the back does not easily snap close, make sure the wires are tucked in and recheck the hinge connection.
- Choose the location for the panel and plug in the charger.
- Press the STATUS button until the panel announce’s “System OK”

3. ACTIVATING THE SIMON CONTROL PANEL

To complete the following steps, there are two default codes supplied with the Simon XT Panel.

- The **access/user** code is exclusively for arming and disarming the panel. **The default user code is 1234.**
- The **installer** code is used exclusively for programming and changing the way the panel functions. **The default installer code is 4321.**

Placing the panel in neutral mode for programming

- Press the **DISARM** button on the panel. The system will announce either “disarmed” or “enter user code”.
- In either case, using the numbered keypad enter the user **code** 1234 until the system displays and announces it is **sub-disarmed**, and the **DISARM** button is blinking.
This may require entering the user code twice to reach the sub-disarm mode.

Activating the Panel Alarm

- To the right of the display panel, press either triangular scroll button until the display shows “System Programming”. Press OK.
- The display should say “Enter Code.” Promptly enter the default installer code **4321**. Press OK. *(If the code is not entered promptly, the panel display will reset. Simply repeat the process and scroll to “System Programming”, press OK and enter the installer code).*

- Press either scroll button and scroll through the displayed options until “Siren Option” appears. Press OK.
- Scroll through the options to “Panel Piezo Alarm Off”. Press OK.
- The word “Off” should be blinking. Press the scroll button once, and the “Off” will turn to a blinking “On”. Press OK to stop the blinking.
- To exit the system programming, press the **STATUS** button until the panel announces “System OK”.
- Within several seconds the display should say “**sub-disarm**” and the **DISARM** button should be blinking. Press the blinking **DISARM** button once to remove the system from the **sub-disarm** mode to activate the AG RF security system. (See Section 5 for more information)
- The AG RF system is now ready and armed.

4. SETTING THE TIME AND DATE

- Press either scroll button, and scroll to “Set Clock” in the display. Press OK.
- Enter the default **installer** code **4321**. Press OK.
- Press OK again and the hour number should blink. Scroll to the current hour. Press OK.
- Repeat the process for minute and AM (a) or PM (p).
- When finished, press the **STATUS** button until the panel announces “System OK”.
- To set the date scroll to “Set Date” and press OK.
- Enter the default **installer** code **4321** and press OK.
- Press OK again and the year should be blinking. Scroll to the current year and press OK.
- Repeat the process for month and day.
- When finished press the **STATUS** button until the panel announces “System OK”.

*Testing the system - Test the system by lifting any of the protected hanging works. Be aware that the alarm is loud. To stop the alarm press **DISARM**, and enter the user code, 1234, twice*

FURTHER INFORMATION

5. TERMINOLOGY AND ROUTINE CONTROL PANEL OPERATION

Disarm and Sub-disarm

As discussed in the Overview, the Simon control panel is configured to supervise two distinct security groups or loops—a primary loop for doors and windows and a secondary loop for Art Guard and any other sensors in Group 8 that remain on and armed 24/7. These two loops can be armed or disarmed independently of one another. The operator should be familiar with both.

When the **DISARM** button is steadily lit the primary loop sensors are deactivated or **disarmed** and public access is available. However, the sensors in the secondary loop (Art Guard and other Group 8 sensors) are

still armed. The term **sub-disarm** in the instructions or on the panel display refers only to the secondary loop. Works should only be hung, moved or stored when the system is **sub-disarmed**. When in **sub-disarm** mode, the **DISARM** button is blinking.

*Reminder: If the panel alarm sounds, signaling theft or tampering, press the **DISARM** button and the alarm will stop momentarily and ask you to enter your user code 1234. Enter the code and then enter it again to place the panel in sub-disarm mode.*

Status report

Pressing the **STATUS** button prompts a report on the state of all sensors that have been configured into the panel. The panel screen also provides a history of past events noted with the word "History". In the event of a genuine alert, the screen provides the alarm information, as well as the sensor number producing the alert. After the panel has been disarmed and the cause determined, this report remains in history until reset. The history and status can be cleared and reset by holding down the **DISARM** button while pressing the **STATUS** button once. Pressing the **STATUS** button a second time will confirm that a correction has been made, and the panel will announce "System OK".

In the event of genuine tampering or a module performance problem, the status report indicates an open sensor. Performance problems may be caused by (a) the hanging wire improperly placed in the slot, (b) the module being out of transmitting range of the control

panel, or (c) existence of steel in the building construction hindering sensor transmission. If any sensor reports a problem, the panel will announce the sensor module number, and that sensor should be checked. Transmission problems can usually be solved with the addition of a "repeater" module, which can simultaneously boost and extend the range of one or more sensors. Any remaining problem will continue to report to the system status until it is corrected. When corrected and reset, the panel will announce "System OK".

Note: Prior to arming the panel, unused modules should have the black plastic strips installed; otherwise they will continue to report as OPEN. See instructions for installing the black turn-off strips in Section 8a.

6. CUSTOMIZING INSTALLER AND USER CODES

After completing the entire system installation, it is recommended that the **user** and **installer** codes be changed for security purposes.

The **installer** code is used exclusively for programming and changing the way the panel functions. The default **installer** code is **4321**. To change the code:

- Scroll to "System Programming". Press OK.
- When "Enter code" appears in the display window, press **4321** on the number keys.
- When "Access codes" appears press OK.
- Scroll to "Installer code 4321". Press OK.

- While the numbers are flashing enter a new 4-digit number and press OK.
- Press the **STATUS** button until the panel announces “System OK”.

The **user** code is exclusively for arming and disarming the panel. The default **user** code is **1234**. To change the code:

- Scroll to “System programming”. Press OK.
- When “Enter code” appears enter your new **installer** code or the default code, **4321**, on the number keys
- When “Access codes” appears press OK.
- Scroll to “User code 1”. The **user** code appears as asterisks for security purposes. Using the keypad enter a new 4-digit number and press OK.
- Press the **STATUS** button until the panel announces “System OK”.

7. MODIFYING PANEL ALERTS

The alarm sound from the panel is sufficiently loud to be heard in any large space. An installer can reduce the sound for comfort level by installing a smaller piezo alarm. Exterior remote alarms are available from the installer, as well. The system can also be programmed to completely eliminate the panel alarm. Refer to the Simon XT Instruction manuals for all available information relating to the panel or call the GE tech support number listed in their instructions.

8. ADDITIONAL SENSOR INFORMATION

8a. Deleting Sensors

If sensor modules are not being used, they can be temporarily removed from the memory of the panel and taken out of service. However, rather than deleting a sensor from the control panel memory, Art Guard recommends deactivating a sensor using the black plastic strips that have been included. (See below) This avoids the inconvenience of having to later re-learn a sensor into the system.

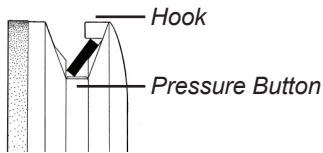
Deleting a sensor:

- Press either scroll button until the display shows “System Programming”. Press OK.
- You will be asked to enter your **installer** code. Enter **4321** or your new code. The display shows each digit as an asterisk to protect your code information. Press OK
- Scroll to “Sensors”. Press OK
- Scroll to “Delete Sensor”. Press OK.
- Scroll to the “Sensor #” you wish to delete. Press OK
- Scroll to “Delete”. Press OK
- Press the **STATUS** button until the panel announces “System OK”.

Note: Once a sensor is deleted it must be reprogrammed or “learned” back into the system in order to re-use it. (See Programming the Art Guard Sensor in Section 8b).

If you wish to take a sensor out of service but do not wish to delete it from the panel memory, re-insert the black plastic strip. While holding the

AG module sideways so that you can see the small pressure button in the hanging wire slot on the top of the module you will notice a small overhang (safety hook) slightly above the pressure button. This is designed to further prevent grab-and-run theft by preventing the hanging wire from being pulled away from the wall. Slide in the black plastic strip, wedging it between the button and the hook on an angle and depressing the button into a closed position. Make sure one edge of the strip is under the hook.



Placement of turn off strip as viewed from the side of the wire slot

Place these units in an unused space or drawer within reasonable distance of the control panel where they won't be disturbed. The panel will notify if the button is not fully depressed.

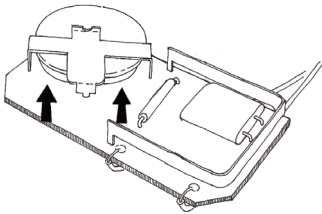
8b. Programming (Learning) the Art Guard Sensor

When returning deleted sensor modules to service or purchasing additional modules, they must be programmed or re-learned into the system.

- Place the control panel in the **sub-disarm** mode prior to programming by entering your **user** code (1234 or new code). The system will announce "sub-disarmed".

- Return to the module that you are adding to the system. Note its number on the front face disk. Modules are shipped with sequential numbering. When adding modules, it is important to maintain the sequencing. Place the module face down on a soft surface. Using the small Phillips screwdriver provided, remove the four (4) screws in the back of Art Guard. Note: Do not remove the screws securing the battery doors. These are used only for the battery operated, stand-alone Art Guard.
- Carefully lift the back of the case, making sure that the semi-circular switch in the housing at the top and the green transmitter board at the bottom remain with the front section of the case.
- Return to the control panel and press the scroll button until the panel displays "System Programming". Press OK.
- The system prompts for the **installer** code. Enter **4321** or the new installer code. The panel displays this access code in asterisks for viewing protection. Press OK.
- Press the scroll button until the panel displays "Sensors". Press OK.
- Scroll through the sensor options until the panel displays "Learn Sensor". Press OK.
- The panel displays "Trip Sensor #" with the number signs flashing. Using the scroll button, scroll to the number of the sensor that you are programming. The number will continue to flash. (We recommend the modules be programmed in numbered sequence.)

- Return to the open module and slightly lift the battery end of the green transmitter board. Holding the transmitter board by its edges, use your thumb or thumbnail to slide the battery slightly forward in its holder. Stop when you hear the Simon panel beep. The beep indicates that the sensor module has successfully communicated with the panel.



- Carefully push the battery back into its holder and reseat the transmitter board in the case. It should sit snugly on the floor of the case with the wires in the open slot on the right side. Make sure the switch housing is also snugly in place at the top of the case.
- Replace the back of the casing, making sure the edges are aligned. Moderate pressure should be applied to ensure tight closure. Replace the four screws – larger screws through the backing plate and smaller screws on the lower back.

- The panel now displays “SN # GRP 10...<front door>”. The “GRP 10” is flashing. Press the scroll button to change the Group 10 to Group 8. Press OK to accept the group number displayed. Reminder: The designation Group 8 is very important since it allows the module to remain armed even when the rest of the panel is disarmed and provides an instant response.
- The sensor name “front door” begins flashing. To change this to “module”, simply enter the module code **041** on the keypad. When the word “module” appears press OK. You have now completed the learning of this sensor. Press OK again.
- The display will show “Trip sensor #” (with the next available sensor number). This allows you to repeat the process with the next sensor.
- When you have completed the programming, or if you wish to stop programming, press the **STATUS** button repeatedly to exit.

AG TRANSMITTER SPECIFICATIONS

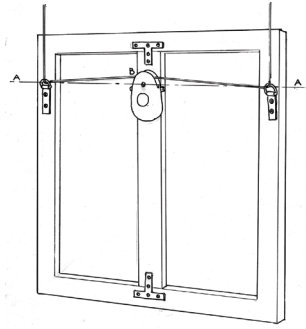
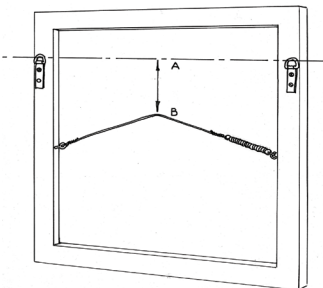
Model no.	GE 60-688-95
Power	3 volt lithium coin cell battery (CR2032)
RF Frequency	319.5 MHz
Compatibility	All GE learn mode panels/receivers
Transmission Range	500 ft. outdoor free range; 100 ft. interior from panel

When activated the sensor transmits an open (trip) or closed (restore) signal to the panel every 64 minutes.

9. ADDITIONAL SENSOR MODULE HANGING METHODS

9a. "D" rings

When hanging with the 'D' ring system, a 'false hanging wire' must be installed on the frame so the wall mounted AG module senses that it is holding weight. That pressure is achieved by mounting a small spring (Primeline Extension Spring, $\frac{1}{2}$ " x $2\frac{1}{2}$ " x .016"/6mm x 6.4mm x .4mm), about 2" (50mm) in length, on one eye hook on one inside edge of the frame, attaching a braided wire to the other end of the spring and to an eye hook on the opposite inside edge of the frame. The eye hooks can be placed anywhere on the frame, but the lower they are, the easier it will be to set the wire on AG module and deactivate it when moving the piece. There should be some slack in the wire as it hangs naturally. Place a straight edge (A) between the "D" rings of the frame. Then, by placing your finger under the middle of the wire (B), lift it without stretching the spring and measure the distance between A and B. Place the straight edge on the wall between the "D" ring hooks and measure down the A-B distance and place a mark. That mark aligns with the screw hole on AG module. Screw the module to the wall.

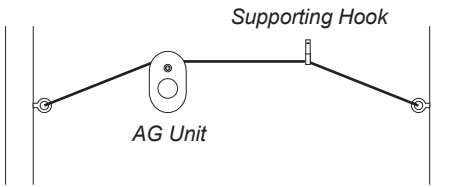


9b. Perimeter molding

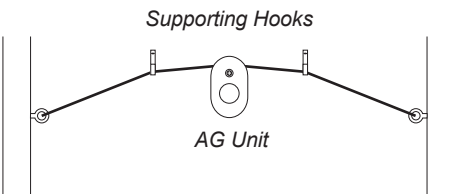
When hanging from perimeter molding, use a single length of wire from the ceiling to run down through one "D" ring, across the top of the AG module, through the opposite "D" ring and up to the ceiling again. A vertical or horizontal piece of wood is placed between the top and bottom or sides of the frame, to which the AG module is mounted. The screw hole on AG should line up directly between and on the same line (A) as the "D" rings. This will cause the wire to be raised once placed in AG's groove (B). Level the piece by sliding the wire left or right through the 'D' rings.

9c. Hanging heavier objects

A single AG module can be used to hang significantly heavier pieces than **25lbs (11.3kg)** by using multiple wall mounts or substituting one of the wall mounts with an AG module. When placed at the appropriate distance apart, the equal distribution will reduce the overall weight bearing pressure per mount, and the hanging weight capacity is doubled to **50lbs. (22.6kg)**



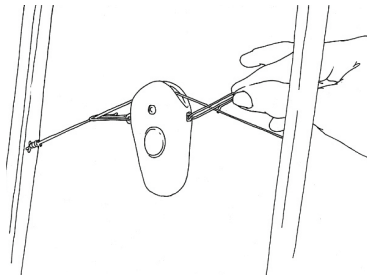
Another suggested method for even heavier pieces uses two wall mounts and an AG module between, attaching AG " " to 1 " (20 to 40mm above the height of the conventional mounts. In this manner the conventional mounts carry the weight, yet enough pressure is placed on AG's weight sensor to allow it to function in a security capacity.



9d. Installing Optional Wire Capture Clips

When using the optional capture clips, they must be clipped onto AG prior to securing it to the wall. These clips are constructed of spring steel, giving each a tensile strength of **25lbs (11.3kg)** to prevent an attempt at quick,

unauthorized removal of the hanging object. Attach the clip by inserting the outer "Y" portion through the hole on the front side of the "ears" located on both sides of the steel wall plate. When installed properly the clips should hang with the outer "Y" facing down and toward the wall. After AG has been secured to the wall and the art or object is hung, but prior to activation of AG, attach the clips to the hanging wire either by feel only or by slightly pulling the frame away from the wall and viewing them from either side. The capture clips are engaged by holding the bottom of the frame away from the wall and pushing the outer "Y" edge of the clip up and onto the bottom of the hanging wire until it snaps in. Repeat this procedure on the opposite side.



The hanging wire is secure when it is in contact with the end of the capture clip. It cannot be unclipped from the hanging wire while under tension.

Removing Wire Capture Clips

The capture clips can be disengaged by simply lifting up on each clip and engaging the interior "Y" of the clip on the hanging wire. Continue pulling down on the clip until it falls free of the wire.