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Client: Sequel Technologies, LLC
Model: STWS-KF5
Standard: FCC 15.231
FCC ID: V4X-KF5X01
Report #: 2008037

#### Appendix G: Manual

Please see the following pages.

# **General Description**

The 5-Button Keyfob (KF5) is a multifunction keychain transmitter compatible with the ST8 and ST Express security systems. The KF5 provides a convenient way to arm and disarm the system. It also includes the ability to activate a panic alarm and control X10 lights and appliances (X10 PSC-04 Module required).

### **Additional Information:**

- User-replaceable lithium battery
- Six functions: disarm, arm-perimeter, arm-all, light control, panic alarm
- Recessed buttons to minimize inadvertent activation
- · LED indicates signal transmission
- Ability to control X10 lights and appliances

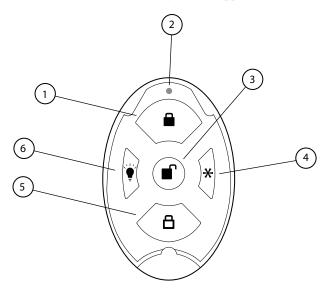


Figure 1: KF5 Layout

1: Arm All	Arms perimeter and interior burglary zones
2: LED	Blinks when a button is pressed
3: Disarm	Disarms the burglary portion of the system and cancels alarms
4: Star Button	Reserved for future use
5: Arm Perimeter	Arms the perimeter burglary sensors
6: Lights	Toggles lights on/off

# **User Operation**

### To arm/disarm the system using the KF5:

- Press the ARM PERIM \( \text{\text{0}} \) button to arm the system to the Arm Perimeter level.
- Press the ARM ALL button to arm the system to the Arm All level.
- Press the DISARM of button to disarm the system.

Note: The system will automatically bypass open zones upon arming. The system will sound a short tone from the interior sounders when the system is armed using the KF5.

## To activate a panic alarm using the KF5:

Press and hold the ARM ALL 
 and ARM
 PERIMETER 
 buttons simultaneously for three seconds.

# To turn lights on/off using the KF5 (requires X10 PSC-04 Module):

• Press the LIGHTS \* button.

# **Programming**

The following instructions provide a guideline for enrolling the KF5 into system memory.

### **Enrolling the Keyfob**

- 1. Enter program mode (NEXT + NEXT + NEXT + <Prog> + Installer PIN)
- The LCD keypad will display "Devices Available." Select <Learn>. The display shows "Auto Enroll On."
- 3. To enroll the KF5, press ARM ALL and DISARM simultaneously for three seconds.
- 4. Upon enrollment, the LCD keypad emits one beep and the display shows the zone number and sensor ID.
- 5. Press <Done> on the LCD keypad to exit the programming menu.

Note: The KF5 is viewed by the system as a bus device. A maximum combination of 15 bus devices (LCD keypad, HWX, EIM, KF5) may be enrolled into the system.

#### **Configuring the Lights Button**

Device 16 is the default X10 unit controlled by the lights button. To change this setting see option "X-10 Output" in the "ST - InOu" programming menu.

# **Deleting the Keyfob**

- 1. Enter program mode (NEXT + NEXT + NEXT + <Prog> + Installer PIN).
- 2. The keypad will display "Devices Available." Press the appropriate function key to select ST (control panel).
- 3. Press NEXT until the display shows <Modl>.
- 4. Select <Modl> and press NEXT until the display shows "Delete Device."
- 5. Press # to scroll to the appropriate device to delete. I.e. If you wish to delete device 5 press # until the display shows "Delete Device #5."
- 6. Enter 1 followed by # or NEXT.
- 7. Press EXIT to exit the programming menus and save the changes.

Note: If the KF5 device # is not known, the complete list of bus devices is viewable at option "Bus Device Type" in the "ST - Modl" programming menu. All keyfobs are identified as bus device type 128.

# **Maintenance**

## **Low Battery Indication**

A low battery is indicated when the LED fails to blink when a button is pressed.

### **Replacing the Battery**

- Remove the screw from the back of the Keyfob and remove the cover.
- 2. Remove the old battery and dispose safely.
- 3. Insert the new battery (observe polarity + and -).
- 4. Replace the cover and tighten screw.

# Cleaning

Clean the KF5 with a cloth moistened with water and a mild detergent. Do not submerge in water.

# **Troubleshooting**

Problem	Action
The panel does not respond to key presses.	Verify that the EXT is enrolled. This can be done by checking option "EXT Module" (60401) in the "ST - Modules" menu in programming. If this option is 0, the EXT is not recognized by the system. Remove the EXT and see if a trouble occurs. If not, replace the EXT.
	Bring the KF5 closer to the EXT and test again. If signals are properly received, the issue may be related to environmental noise or interference.
	If the LED does not blink when a button is pressed, replace the battery.
	Distance from the receiver and installation environment will affect the sensor signal strength. Reposition the EXT if necessary.

Problem	Action
The LED does	<ul> <li>Replace the sensor's battery. Test the</li></ul>
not blink when a	sensor after replacing the battery. <li>Testing the device allows the control</li>
button is pressed	panel to receive a signal with the
on the KF5.	new battery information.

# **Specifications**

- Compatibility: Sequel Technologies ST8 and ST Express Security Systems
- Power: 3.0V CR2032, lithium battery (average battery life is 3-5 years)
- Transmitting Frequency: 319.5 MHz and 345 MHz
- Transmit Range: 500 feet, open air
- Material: High-Impact ABS
- Operating Temperature: 40°F to 100°F (0° to 38°C)
- Storage Temperature: -30°F to 120°F (-34° to 49°C)
- Max. Humidity: 90% relative humidity, non condensing
- Regulatory Approvals: FCC 15, UL (Pending)

# FCC Notice

This device complies with Part 15 of the FCC Rules. 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. Changes and/or modifications not approved by Sequel Technologies, LLC could void the user's authority to operate the equipment.

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