Appendix A: Troubleshooting

Feature	Problem	Action/Solution
Panel Power		
	Panel does not power up and does not display or respond.	
		1. Check that panel is plugged into an unswitched outlet. 2. Check the AC circuit breaker to be sure the circuit is live. 3. Check that the backup battery is installed correctly and the AC power transformer is plugged in. 4. Check for proper panel and transformer wiring. 5. Measure the incoming AC voltage at panel terminals 1 and 2. It should read between 8.0 and 12.0 VAC.
	No incoming AC voltage at panel terminals 1 and 2.	
		1. Unplug the AC power transformer and disconnect the wires from the transformer and the panel. 2. Check transformer to panel wire for short or open circuits. 3. Plug in the transformer and check for 8.0 - 12.0 VAC at the transformer unconnected terminals. If zero (0) volts, replace the transformer. If transformer is good, call Tech Support.
	Panel display indicates *Low CPU Battery.*	
		Note *During initial installation or when the AC power was out for an extended period of time, the battery may not be fully charged yet. The battery may take up to 24 hours to charge.* 1. Perform a battery test by entering and exiting sensor test. 2. Check that the backup battery is installed correctly and the AC power transformer is plugged in. 3. Measure the incoming AC voltage at the panel terminals 1 and 2. It should read between 8.0 and 12.0 VAC. 4. Remove the backup battery power by disconnecting the battery and replace the battery. ***Note*** *If AC power is present, the battery voltage is only monitored during a backup battery test. The panel automatically runs a two minute backup battery test under the following conditions: (1) during user sensor test, (2) once every 4 hours, (3) when the back cover is closed. In order for the panel to update the battery status, a backup battery test must be run. (4) Power up.* ***Note*** *With the AC power transformer plugged in, the panel automatically charges the battery. While the battery is charging for the first time it is normal for the system to indicate Low CPU Battery. Charging the battery can take a number of hours depending on the battery's initial charge. Once the battery reaches 4.8 VDC (full charge as measured while in battery test), the condition clears. If the trouble condition persists after 24 hours, replace the backup battery. A Low Battery report to the central station will not be made for the first 24 hours after power up.*
	After pressing **STATUS** the panel flashes *AC Fail*, (panel continues to operate from backup battery).	
		1. Check the AC circuit breaker to be sure the circuit is live. 2. Check for proper panel and transformer wiring. 3. Check that the transformer is supplying AC to the panel. 4. Check that the transformer is plugged into a nonswitched outlet and secured with the provided screw.  ***Warning*** **Be careful when securing the transformer to an outlet with a metal cover. Hold the cover tightly in place. You could receive a serious shock if the metal outlet cover drops onto the prongs of the plug while you are securing the transformer and cover to the outlet box. If the panel does not display anything, immediately unplug the transformer and disconnect the backup battery.**
Access Code		
	Customer cannot remember access code(s).	

Feature	Problem	Action/Solution
		1. Check your records to see if you have the customer's access code(s) on file. 2. Verify the access code(s) using the Downloader. 3. Use Apartment Manager code to enter user program mode and view the primary and user codes. 4. Clear memory and reprogram the panel locally.
Access Code (Continued)		
	Installer cannot remember install code.	
		1. Check your records to see if you have the install code on file. 2. Verify the install code using the Downloader. 3. Use the Dealer Code to enter program mode and view the installer code.
Arming/Disarming		
	System protests and will not arm immediately.	
		1. Press **STATUS** for an indication of the problem. 2. Make sure all monitored perimeter doors and windows are closed. 3. Make sure all perimeter and interior sensors are closed.
Bypassing		
	Sensor to bypass is not listed.	
		1. Attempting to bypass a 24-hour sensor (a sensor that is active in all levels) that cannot be bypassed. 2. Sensor is not active in the current arming level. 3. Sensor is not learned in.
Wireless Sensor/Touchpad Battery		
	System indicates *Sensor/Touchpad low battery*.	
		To avoid a false alarm, initiate a sensor test and then replace the indicated device battery. After replacing the battery, perform another sensor test to test the sensor/touchpad. ***Note*** *If the sensor/touchpad is not tested after battery replacement, the system continues to show a low battery condition, since that was the last signal it received from the device. Testing the sensor/touchpad with new batteries allows the panel to receive a signal with good battery information.*
Central Station Reporting		
	Central station is not receiving reports.	
		1. Check that the premises phone line is working. 2. Perform a phone test. 3. Check for correct phone line wiring between the DTIM and RJ-31X Jack (see DTIM Installation Instructions). 4. Verify that central station phone number is programmed into the panel. If necessary, reprogram the phone number and retest. 5. Verify that the correct phone format (SIA or CID) is being used. 6. Perform a sensor test to test panel and DTIM communication.
Hardwire Zone		
	System doesn't go into alarm when zone is tripped.	
		1. Sensor is not active in current arming level. Verify sensor group and retest. 2. Zone is not learned into panel memory. Enter installer program mode. Go to Devices, then Add and learn zone into memory. 3. Verify wiring.
	System indicates trouble and open.	

Feature	Problem	Action/Solution
		1. For a normally closed contact, verify the 2 k Ohm EOL resistor is installed and a short circuit does not exist between ZCOM and ZONE. 2. For a normally open contact, verify the 2 k Ohm EOL resistor is installed and there is not an opening between ZCOM and ZONE. 3. For a normally open contact that is open, the contact has not been enrolled correctly. Delete and enroll it again.
	System indicates zone is open.	
		1. Close the contact. 2. With the sensor closed the voltage between ZONE and ZCOM should be between 2.0 and 3.0 VDC. If this voltage is not measured, verify the 2 k Ohm EOL resistor is installed and verify wiring. 3. Verify the hardwire contact/sensor is operating properly.
Wireless Sensor Zone		
	Panel indicates sensor open condition.	
		• The sensor is open. Close the sensor to clear condition. • The magnet may be too far from the reed switch or the sensor is not installed properly. • If using external contact, the sensor may have been enrolled incorrectly. Delete and enroll the sensor following instructions.
	System doesn't respond (in sensor test or when armed) when sensor is tripped.	
		1. Check that the wireless sensor battery is installed. 2. Check the sensor battery for low voltage. Replace batteries, if necessary. 3. Use an RF Sniffer (60-401) to verify that sensor is transmitting. 4. Constant beeps from the RF Sniffer indicate a runaway (faulty) sensor. Remove the sensor's battery and replace the sensor. 5. Sensor is not learned into panel memory. Enter installer program mode—Devices, Add, and learn sensor into memory (maximum zones = 20). 6. Sensor may be out of range. Move sensor to another location.
	Sensor reports trouble and open condition.	
		1. Sensor tamper switch is tripped—sensor cover is off, not latched securely, spring is missing, or sensor is not mounted securely. Secure sensor mounting and/or cover, then trip sensor to clear the condition. 2. Check the sensor battery for low voltage. Replace batteries, if necessary.
	Panel indicates sensor trouble condition.	
		1. The sensor has reached its supervisory limit.Use an RF Sniffer (60-401) to verify that sensor is transmitting. If sensor is not transmitting, check battery for low or no voltage and replace. 2. Change mounting position of sensor (from horizontal to vertical or vice versa) and test sensor several times for consistency. 3. Sensor signal is not reaching panel/receiver because sensor is too far away or there is too much interference. Remove sensor from mounted location and test from other locations. Mount sensor in area where signal can reach panel/receiver.
	Panel indicates sensor trouble and alarm	
		Smoke detector is dirty or there is a small amount of smoke in the chamber.
	Smoke sensor beeps once every minute.	
		Sensor batteries are getting low. Replace batteries. ***Note*** *System Sensor smoke sensors do not transmit a low battery signal to the panel/receiver until battery voltage drops to within a range of 7.0 to 7.8 VDC. The sensor sounds beeps to notify occupants that the sensor's batteries need replacing, but the sensor does not transmit a low battery signal to the panel until the next supervisory signal (69 minutes later).*
Wireless Touchpad		
	System doesn't respond to commands entered from wireless touchpad.	

Feature	Problem	Action/Solution
		• Check for dead batteries. • Perform a sensor test.
	Touchpad reports trouble condition.	
		Check the touchpad battery for low voltage. Replace battery, if necessary.
DTIM		
	Panel displays TEL MOLDULE INITIALIZING	
		After panel power up, the panel and the DTIM need to synchronize their communication. This could take approximately 5 minutes. To eliminate the 5 minute wait, remove and replace the DTIM cover. The message should go away within 10 seconds. • If the panel continues to display TEL MODULE INITIALIZING, continue with the procedure for Telephone module failure.
	Telephone Module Failure	
		The DTIM's signals may not be reaching the panel • Using an RF Sniffer, verify the DTIM is transmitting by removing the cover. The DTIM will transmit whenever its cover is removed/replaced. If the DTIM is not transmitting 1. Check the DTIM battery for low or no voltage. Replace if necessary 2. Call technical support for assistance. If the DTIM is transmitting • Use an RF Sniffer to verify the panel is transmitting. Power down and then power up the panel. Place an RF Sniffer next to the panel's antenna (right side). You should hear beeps immediately after applying power. If the panel is not transmitting. • Contact technical support for assistance. If the DTIM and the panel are transmitting. The DTIM's signal may not be reaching the panel because it is too far away from the panel or there is too much interference. 1. Remove the DTIM from its mounted location and test from other locations. 2. Mount the DTIM in an area where the signal can reach the panel. If easier, the panel can also be moved. 3. To increase range, install the panel's antenna in a wall. 4. Delete and enroll the DTIM to insure proper programming.
	Panel displays PHONE MODULE LOW BATTERY.	
		1. Replace the DTIM's battery. 2. Replace the DTIM's cover. 3. Perform a phone test to clear the low battery condition. The DTIM performs a battery test when calling out.
	Panel displays TEL MODULE MEMORY FAIL	
		• Contact technical support for assistance.
	Panel displays TELEPHONE MODULE TAMPER.	
		1. Verify the DTIM's cover is on and latched securely. Install the cover securely to clear the condition. 2. Remove the cover and inspect the DTIM's tamper switch. The switch should have a spring installed. If the spring is missing the tamper switch will not function correctly. 3. Contact technical support for assistance if spring is missing.
	Panel displays PHONE MODULE SERVICE REQUIRED.	
		Inconsistent communication between the panel and DTIM. 1. Remove the DTIM from its mounted location and test from other locations. 2. Mount the DTIM in an area where the signal can reach the panel. If easier, the panel can also be moved. To increase range, install the panel's antenna in the wall. To clear the condition, cycle the panel power off and on.

Feature	Problem	Action/Solution
	Panel displays TEL MODULE VERSION ERROR.	
		The DTIM software or EEPROM may not be compatible with the panel software. 1. Contact technical support for assistance.
Phone		
	Constant dial tone, preventing dial-out on premises phones.	
		One or more polarity-sensitive phones exist on-site.
	Panel displays *phone 1 fail, phone 2 fail, or phone failure*.	
		1. Check DTIM wiring (see DTIM installation instructions). 2. There may be a problem with the central station.
Phone Test		
	Panel does not display option to perform a phone test.	
		• The central station phone number is not programmed in. • DTIM has not been enrolled. • Phone test option is off.
	Alarm report is not called into central station.	
		1. Perform a phone test. 2. Check to make sure the phone test option is on. 3. Verify that high and/or low level reporting option is on. 4. Perform a sensor test to verify communication between the DTIM and panel. See “Phone Test (2nd Tier)” on 25
Downloader		
	Download/upload session fails on a pre-programmed panel.	
		1. Verify Downloader Phone Number matches ToolBox setting. 2. Verify Downloader CODE matches ToolBox setting. 3. Verify Dealer CODE matches ToolBox setting. 4. Verify panel Account Number matches ToolBox setting.
	Download/upload session fails on an unprogrammed panel.	
		1. Verify Downloader Phone Number matches ToolBox setting. 2. Verify Downloader CODE matches ToolBox setting. 3. Verify Dealer CODE matches ToolBox setting.
Receiver		
	Panel displays RX JAM.	
		There may be a “runaway” transmitter - a transmitter that is constantly transmitting. 1. Use an RF Sniffer to identify the runaway transmitter. Place the RF Sniffer next to each RF sensor until you find the sensor that is transmitting. 2. Remove the battery from the sensor. 3. Replace the sensor.
	Panel displays RX FAILURE.	
		The panel has not heard an RF signal for 4 hours. 1. Contact technical support for assistance.