466-1506 January 1998



INTERACTIVE TECHNOLOGIES, INC.
2266 SECOND STREET NORTH
NORTH SAINT PAUL, MN 55109
T: 612/777-2690
F: 612/779-4890

Security
Automation
Access Control

ITI Technical Guide 003

UltraGard Trouble Beeps: Why They Exist and What They Mean

Defining Trouble Beeps

Trouble beeps are meant to alert users that certain conditions exist and that service may be required. Since users depend on security systems to protect life and property, alerting the user to trouble conditions is second only to an alarm condition.

Trouble beep routines can vary not just between different control panels, but between different software versions for a single control panel. Trouble beep routines are typically designed to meet the needs and requirements of Underwriters Laboratories (UL), security dealers, central monitoring stations, and end-users. In many cases, UL has the final word on how panels respond during trouble conditions.

When You Can Expect To Hear Trouble Beeps

UltraGard is designed to avoid disturbing occupants as much as possible. However, there are times when a trouble condition is considered important enough to alert persons on the premises, even if they may be asleep.

In Level 1—OFF, trouble beeps and voice messages occur anytime the system detects a trouble condition.

In Level 2—STAY, trouble beeps and voice messages occur only if the detected trouble condition affects the ability of the system to effectively warn occupants of an emergency. For example, an AC power failure that lasts less than 15 minutes won't cause trouble beeps. This helps prevent the possibility of disturbing persons that are sleeping. However, an extended AC power failure that causes a drain on the panel backup battery activates trouble beeps to alert occupants that the system is about to shut down.

In Level 3—AWAY, trouble beeps and voice messages occur only if a System Sensor Smoke Sensor RF2300 detects a dirty chamber or is in the pre-alarm state.

How Trouble Beeps Work

If the system is in Level 1—OFF and a trouble condition (not related to smoke/fire devices) exists, pressing the STATUS button to identify the trouble or changing the arming level to 2—STAY prevents trouble beeps from sounding for 10 hours. This 10-hour timer is reset each time the system arming level is changed or the STAUS button is pressed. The protection level number on alphanumeric touchpads continues blinking, indicating the trouble condition still exists. If the trouble condition is with a smoke/fire device, a 4-hour timer controls trouble beeps.

Panel programming can prevent trouble beeps under some conditions, however most trouble beep routines cannot be changed or eliminated. Exceptions to the above are determined by optional feature numbers F16, F21, and F47 as described in Table 1.

Table 1. Optional Feature Numbers Affecting Trouble Beeps

No.	Trouble Description	Default
F16	Trouble Beeps Disable —when set to off, trouble beeps occur whenever the panel detects a trouble condition. The system protests arming attempts if any sensor has reported a low battery or is in a supervisory condition. When set to on, trouble beeps never sound and the system protests arming attempts only if sensors are open. This optional feature must be set to <i>off</i> in UL Listed installations.	OFF
F21	Immediate Trouble Beeps—when set to off, trouble beeps sound within 10 hours unless the arming level is changed or the STATUS button is pressed, which resets the 10-hour timer. When set to on, trouble beeps sound immediately when a trouble condition occurs. This optional feature must be set to <i>on</i> in UL Listed installations.	OFF
F47	4-Hour Trouble Timer—when set to off, group 26 (fire) sensor trouble conditions initiate trouble beeps within 10 hours. When set to on, group 26 (fire) sensor trouble conditions initiate trouble beeps within 4 hours. This optional feature must be set to <i>on</i> in UL Listed installations. Note If F21 is on, trouble beeps occur immediately whether F47 is on or off.	ON

Conditions That Cause Trouble Beeps

Table 2 describes UltraGard system events that cause trouble beeps.

Table 2. UltraGard Trouble Routine Descriptions

No.	Trouble Description	Beeps occur in
1	Wireless sensor low battery —any wireless sensor reporting a low battery for 7 consecutive days causes trouble beeps and a voice message identifying the sensor number.	Level 1—OFF
2	Wireless sensor supervisory —any wireless sensor in a supervisory state causes trouble beeps and a voice message identifying the sensor number.	Level 1—OFF Level 2—STAY
3	Wireless touchpad low battery —any wall-mount wireless touchpad reporting a low battery for 7 consecutive days causes trouble beeps and a voice message identifying the touchpad number.	Level 1—OFF
4	Wireless touchpad supervisory —any wireless touchpad in a supervisory state causes trouble beeps and a voice message identifying the touchpad number.	Level 1—OFF
5	AC power failure—if the panel is without AC power for 15 minutes, trouble beeps sound and a voice message announces "Sensor nine five, AC power failure."	Level 1—OFF
6	Low panel (CPU) battery—if the panel backup battery voltage falls below 11.4 VDC, trouble beeps sound and a voice message announces "Sensor nine four, system low battery."	Level 1—OFF Level 2—STAY
7	Smoke sensor pre-alarm —if a System Sensor Smoke Sensor RF2300 detects a pre-alarm condition, the system sounds trouble beeps but no voice message.	Level 1—OFF Level 2—STAY Level 3—AWAY
8	Smoke sensor dirty chamber—if a System Sensor Smoke Sensor RF2300 detects a dirty chamber, the system sounds trouble beeps and a voice message identifying the sensor number.	Level 1—OFF Level 2—STAY Level 3—AWAY
9	Hardwire loop trouble —a trouble condition on any hardwire loop causes immediate trouble beeps and a voice announcement identifying the loop or zone number.	Level 1—OFF Level 2—STAY

Table 2. UltraGard Trouble Routine Descriptions (continued)

No.	Trouble Description	Beeps occur in
10	Hardwire bus failure—any SuperBus device that stops communicating with the panel causes trouble beeps and a voice message identifying the device's unit (address) number. If the device in trouble is a Hardwire Input Module (HIM), the panel responds as described above (9—Hardwire loop trouble). If upper sensor 77 is on, the panel sends a report to the central monitoring station.	Level 1—OFF
11	Energy Saver Module (ESM) failure—if the panel does not detect an ESM and upper sensor numbers 78 and/or 88 are on, the system sounds trouble beeps and a voice message identifying the unit (address) number.	Level 1—OFF
12	RF (radio) receiver failure—if the panel receiver stops working, the system sounds trouble beeps and the voice message "Sensor nine four failure."	Level 1—OFF Level 2—STAY
13	Phone test failure—any report, including a manual phone test (CODE + 8) or hourly phone test (F14 on) that fails, causes trouble beeps and the voice message "Sensor nine six trouble" if upper sensor number 96 is on.	Level 1—OFF Level 2—STAY
	Note Turning off upper sensor number 96 eliminates trouble beeps related to this failure.	
14	Memory failure —if the panel loses all programmed memory, the system causes trouble beeps and the voice message "System memory failure."	Level 1—OFF Level 2—STAY
15	Program mode indication—if the system is in Level 1—OFF, setting the RUN/PROGRAM switch to PROGRAM causes trouble beeps (but no voice message) as a reminder that the system is in program mode. If an installer code is programmed, trouble beeps begin even before entering the code.	Program Mode Level 1—OFF
16	Siren Trouble —if optional feature number F41 (Interior Siren Verification) is on and the wiring to an interior siren becomes open or shorted, other interior sirens and speakers sound trouble beeps and the voice message " <i>System trouble four one</i> ."	Level 1—OFF Level 2—STAY