



Accutech™
RFID-ENABLED SECURITY PRODUCTS

ES 2100 / ES 2200 / IS 3200 / BR 4200

User Manual



800-356-2671 | **Accutech** | www.AccutechSecurity.com



ES 2100 / ES 2200 / IS 3200 / BR 4200

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Version 2.5

ICS/ACCUTECH LIMITED WARRANTY

Innovative Control Systems, Inc. (ICS) warrants its Accutech™ equipment (Product) against defect in materials and workmanship under normal use for one (1) year from the date of product shipment.

Defective equipment will be either repaired or replaced at ICS' discretion, free of charge to the Customer during the warranty period. ICS will supply labor depending on contract to repair or replace defective equipment, free of charge, during the warranty period only if ICS or an ICS-certified subcontractor hired by ICS installed such equipment.

In addition, ICS warrants its Accutech™ LC 1200 / ES 2200 / IS 3200 / BR 4200 System Tags against defects in materials and workmanship under normal use and service for a period of one (1) year from the date of shipment.

If a Tag fails during the warranty period due to defects in material and workmanship, ICS will at its sole discretion, repair or replace the Tag with like quality product free of charge, although overnight shipping charges may apply. Broken BR Tag clasps or broken LT/SB/CB Tag strap slots are not covered by warranty.

Returned merchandise will only be accepted **within 30 days of shipping** with a valid Return Merchandise Authorization (RMA) number that is requested for full credit towards your account (less a 25% restocking fee) if the product is returned unused, in its original packaging, and not damaged. No product will be accepted for credit after 30 days from shipment date. All Tag sales are final.

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Computers and monitors provided by ICS shall not be submitted for repair to ICS but instead shall be submitted directly to their respective manufacturer and serviced under their inherent manufacturer warranty policy present at the time of purchase. Customer shall be responsible for registering any and all warranty requirements.

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- Abuse or misuse of the Product or failure to operate the Product in accordance with operating instructions or specifications.
- Improper preventive maintenance of the Product.
- Alteration or modification of the Product not specifically approved in writing by ICS.
- Improper installation, repair, modification, or servicing the Product performed by any unauthorized service personnel.
- Equipment or cabling damaged by unauthorized personnel knowingly or unknowingly.
- Use or operation of the Product in conjunction with any accessories or auxiliary equipment not specifically approved in writing by ICS.
- Acts of God, including, but not limited to, natural disaster, fire, explosions, flood, accidents and the like.

24-hour, 7-days-a-week, 365-days-a-year over the phone technical support at 1-800-356-2671

IMPORTANT FCC & DOC INFORMATION

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an output on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canadian D.O.C. Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites appliquées aux appareils numériques de Class B prescrites dans le règlement sur le brouillage radioélectrique dicté par le ministère des Communications du Canada.

FCC ID/DOC for the ES Sensor:

FCC ID: JM7-IGWT-662002
Canada IC: 2683A-662002

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.

FCC ID/DOC for the ES Controller:

FCC ID: JM7-ITYS-700035
Canada 2683 102 312

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.

FCC ID/DOC for the Zone/Auxiliary Receiver:

FCC ID: JM7-IGWT-660076
Canada IC: 2683A-660076

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.

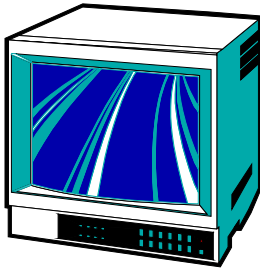
FCC ID/DOC for the S-TAD:

FCC ID: JM7-IGWT-662008
Canada IC: 2683A-662008

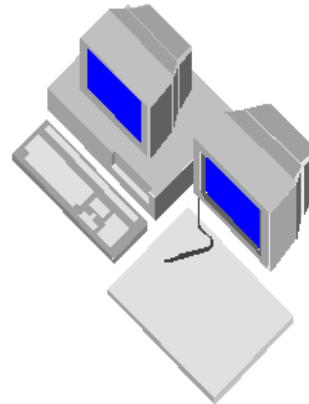
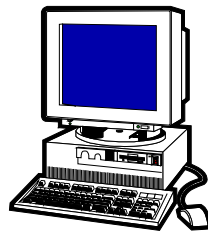
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT:

Keep all Televisions, Computers, X-ray equipment, etc. **at least 10 feet** away from the ES Receiver. This includes equipment located on the other side of walls and doors.



Picture the area around the monitored zone as a big globe with the receive antenna as the center. Keep all sources of interference outside this globe.

**IMPORTANT NOTICE:**

Do not store ES Sensor(s) within 3 feet of ANY of the sources of electrical noise listed on this page. These sources can reduce sensor activation. This activation can lead to possible undesirable responses from the system.

Common Sources of Interference Include:

- Television Sets
- Computer Monitors
- Medical Monitoring Equipment
- Electric Motors
- Electrical Distribution Panels and Transformers
- Fluorescent Lighting
- Some Electronic Washers and Dryers
- X-ray and other Imaging Equipment
- Unshielded Computer Cables

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User Manual

Chapter 1:

The Accutech Systems

IMPORTANT:

No Security System can replace human vigilance. Creating a safe environment requires the combined efforts of nursing, physicians, security, and patients. Global policies, procedures, and processes on patient care should be discussed and disseminated. Education, communication, and coordination are key. No level of security can replace an informed and knowledgeable staff. Any electronic or physical security system should be considered as a supplemental deterrent, but by no means an end-all.

The Accutech Systems

- ES 2200 System
- IS 3200 System
- BR 4200 System
- Cut Band System
- Alarms
- How Accutech Systems Work
- Addressing Alarms
- Escorting

Throughout this manual, when referring to the various applications of the system, the term “Tag” is used to represent all possible applications of the system (i.e., a resident, a patient, an infant, pediatrics, or an asset).

Furthermore, the terms “ingress” and “egress” will be encountered. They are another way of saying “coming and going” or “entering and exiting” respectively.

The ES 2200 System is our platform system from which all Accutech System’s are built. Each subsequent system adds on to the system before. Each system can be easily upgraded as facility needs change and technology advances.

ES 2200 System

The function of the ES 2200 System is to alert facility personnel of the possible egress of a monitored resident.

The ES 2200 can be utilized for special care residents suffering from wandering malady or tendencies of straying into unauthorized areas or leaving a facility, pediatric patients, asset security, and/or infant security. The system is designed so that each monitored zone is a stand-alone system.

The ES 2200 System works with ES 2200 System Tags (LT/SB22) and consists of:

- a Controller
- a Transmit Antenna*
- a Receiver
- a Magnetic Switch (door zones) *or* a Passive Infrared Reader (PIR) (hallway and elevators zones)
- a Keypad
- a Local Alarm*

* Multiple options are available for these components. In most cases a Tx Wand Antenna is used for the Transmit Antenna, however, in special circumstances a variation of the Tx Wand antenna can be used. Furthermore, there are various options available for a Local Alarm.

When a Tag enters a monitored zone, the system can automatically:

- lock doors
- deactivate elevators
- sound alarms
- flash strobe lights
- trigger visual displays (e.g., SAPs, GDPs, as well as PCs in IS 3200 and BR 4200 Systems)

The Controller can be mounted on the wall near the point of egress or can be mounted out of sight in an utility or equipment closet.

A Tx Wand Antenna is mounted on the wall at the point of egress.

The Receiver is mounted internally (inside the Controller) when the Controller is located at the zone or externally (near the monitored zone) when the Controller is located remotely.

Virtually any hallway, doorway, stairwell, or elevator can be made to sense a Tag and then trigger audial and/or visual alarms to prompt a staff response.

All cable used in Accutech Systems is plenum-rated.

By adding options, most egress opportunities can be eliminated without restricting staff, visitors, and non-monitored residents movement.

Additional options that further enhance your ability to prevent unescorted egress include:

- Magnetic Lock(s)
- Elevator Deactivation Unit(s)
- Central Alarm
- Door Ajar alarm
- Loiter alarm
- Staff Alert Panels (SAPs)
- Graphic Displays Panels (GDPs)
- Secure Tag Activator/Deactivator (STAD)

STADs are capable of reading a Tag's low battery indicator and can assist in finding lost Tags. However, ES 2200 Tags and/or VP conversion Tags do not support the low battery indicator.

IS 3200 System

The IS 3200 System is the ES 2200 System plus:

- a computer(s)
- the Accutech Software
- a Tag Test Station
- a Multiplexer(s)
- a Power Supply(s)

The IS 3200 System uses IS 3200 System Tags (LT/SB32) that are placed on the monitored resident or asset. Once assigned, the computer associates a name, room number, and any other pertinent information about the resident/asset with that Tag.

BR 4200 System

The BR 4200 System is intended for infant security.

The function of the BR 4200 System is to alert facility personnel of the possible abduction of an infant.

The BR 4200 System is the IS 3200 System plus:

- BR 4200 Auxiliary Receivers (as needed)

The BR 4200 System uses BR 4200 System Tags (BR42) that are placed on infants. In addition to the functionality of IS 3200 System Tags, BR 4200 System Tags feature Intelli-Band Technology, which will trigger alarms (audial and/or visual) if the band is removed or tampered with. Additional optional alarms (local or central) can announce when a band alarm incident has occurred.

Cut Band System

The function of the Cut Band System is to alert facility personnel of the possible abduction of a child. The Cut Band System is the BR 4200 System with Cut Band Tags, which will trigger alarms (visual and/or audial) if the band is cut.

Alarms

- Egress
- Door Ajar (Optional)
- Loiter (Optional)
- Supervisor
- Band Alarm (BR 4200 systems only)

NOTE: In this manual, Egress alarms are referred to as “Alarms.” Other alarm types are referred to by name (i.e., Door Ajar, Loiter, Supervisor, Band Alarm).

Egress

An alarm (i.e., an Egress alarm) occurs whenever a Tag enters a monitored zone *and* the door is opened *or* a PIR is tripped.

Door Ajar (Optional)

A Door Ajar alarm occurs when a door is open for longer than the preset time (adjustable).

Loiter (Optional)

A Loiter alarm occurs when a Tag lingers in a monitored zone for longer than the preset time (adjustable).

Supervisor

A Supervisor alarm occurs when the TX or RX performance of the system has been altered due to tampering or inadvertent acts such as cut wires, antenna damage.

Band Alarm (BR 4200 systems only)

A Band Alarm occurs when a BR42 Tag band is loosened, cut, saturated, removed, or tampered with.

How Accutech Systems Work

- Double-conditioning
- Door zones
- Elevator zones
- Hallway zones

This section explains how Accutech Systems react to a Tag entering a monitored door, elevator, or hallway as well as alarm definitions.

Double conditioning

At most zones, two conditions are required to generate an alarm. For example, at a door zone, a Tag must be detected in the zone *and* the door opened or, in hallway zones, a Tag must be detected in the zone *and* PIR detection to generate an alarm. Double conditioning (set during installation) helps prevent nuisance alarms.

Door zones

When a Tag enters a monitored door zone, the system will detect the Tag. At that moment (provided the door is closed, has a Magnetic Lock(s), and the Lock is unobstructed) the Magnetic Lock will energize, locking the door. The Lock will remain locked for as long as the Tag is in the monitored zone. When the Tag leaves the monitored zone, the door will unlock after an adjustable period of time (unless it is set to latch when an alarm occurs).

Egress

If a Tag enters a monitored door zone with or without a Magnetic Lock(s) and the door is already open (or is opened while the Tag is in the zone), the Accutech System will go into alarm.

Loiter

An optional Loiter function is available to alert staff personnel if a Tag is lingering in a monitored zone. The time setting is adjustable (10-110 seconds) and is factory set for approximately 15 seconds.

Door Ajar

An optional Door Ajar function is also available to alert staff personnel if the door in a monitored zone has been held open for too long. The time range can be set for immediate or from 10 to 110 seconds and is factory set for approximately 15 seconds.

Elevator zones

Elevator Deactivation Circuitry restricts the wearer of a Tag from using an elevator.

Egress

If a Tag enters a monitored elevator zone, the elevator's call button on that floor will be deactivated (Call buttons on other floors are unaffected and no one is restricted from coming to the floor).

When a Tag is in the zone and the elevator doors are closed, the doors will remain closed.

When a Tag is in the zone (or approaches the zone) and the elevator doors are open, the doors will remain open and an alarm will sound.

If the elevator car is en route to the floor when a Tag approaches the zone, the elevator will arrive on the floor, the door(s) will open, and the system will alarm.

Hallway zones

Egress

If a Tag enters a monitored hallway zone, the system will detect the Tag and the PIR will detect motion. The system can then sound alarms, trigger visual displays and, in special circumstances, lock nearby doors.

Addressing Alarms

- Addressing Egress alarms
- Addressing Door Ajar alarms
- Addressing Loiter alarms
- Addressing Supervisor alarms
- Addressing Band Alarms (BR 4200 systems only)

NOTE:

Whenever an alarm occurs, always **go to the alarm location** to address the alarm.

Addressing Egress alarms

An Egress alarm occurs whenever a Tag enters a monitored zone *and* the door is opened *or* a PIR is tripped.

When an Egress alarm occurs:

1. Go to the alarm location and take appropriate action.
2. After taking appropriate action, you may clear the alarm by entering a valid code into the zone Keypad and, if necessary, clear the alarm on the PC.

Addressing Door Ajar alarms

A Door Ajar alarm occurs when a door is open for longer than the preset allotted time.

When a Door Ajar alarm occurs:

1. Go to the alarm location and check to see if the door is propped open or not completely closed.
2. Close the door completely.
3. The system may automatically reset or, if necessary, enter a valid code into the zone Keypad and/or clear the alarm on the PC.

Addressing Loiter alarms

A Loiter alarm occurs when a Tag lingers in a monitored zone for longer than the preset allotted time.

When a Loiter alarm occurs:

1. Go to the alarm location and check the following:
 - a. If a person is loitering in that zone's Tx Activation Field?
 - b. Is a Tag from an adjacent room being activated by this zone? If so, call your service technician for help in addressing this issue.
 - c. Is there is a misplaced Tag in the zone?
2. After removing the cause, the system may automatically reset or, if necessary, enter a valid code into the Keypad and/or clear the alarm on the PC.

Addressing Supervisor alarms

A Supervisor alarm occurs when the performance of the system has been altered due

to tampering or inadvertent acts such as cut wires, antenna damage, or interference.

When a Supervisor alarm occurs:

1. Go to the alarm location and look for visible damage to the Accutech equipment.
2. Check for and remove any objects near the zone equipment that may be causing interference (metal carts, monitors or other medical equipment as well as personnel using wireless communication devices).
3. If you locate and correct the cause, the Supervisor alarm will cease. If necessary, clear the alarm on the PC.
4. If not, call your service technician for further assistance.

NOTE: Receiver-related supervise events can be reset by the Keypad for the duration of the supervise interval. This will silence the alarm for up to 16 hours.

Addressing Band Alarms (BR 4200 systems only)

A Band Alarm occurs when a BR42 Tag band is loosened, cut, saturated, removed or tampered with.

When a Band Alarm occurs:

1. **Locate and assure the safety of the infant.**

2. After locating the infant, if you can find no obvious reason for the alarm, check the following:
 - a. Is the band snug around the infant's extremity and the conductive fiber stripes are in good contact with the infant's skin? If not, snug up the band.
 - b. Is excess band material properly trimmed? If not, trim appropriately.
 - c. Is the band wet? If so, replace the band.
 - d. Is the Cam Lock completely closed? If not, snap it closed.
3. After verifying the above, enter a valid code into any Keypad and, if necessary, clear the alarm on the PC.

Escorting

DISCLAIMER:

The following instructions are intended as a guidance document only. Each facility should review these recommendations and modify as necessary to meet their own unique security requirements.

NOTICE:

While escorting Tags, be aware of "tailgating." Tailgating is the practice of Tags lingering near a monitored zone (usually an exit point) until an authorized escort passes through the zone then immediately following behind through the zone.

To prevent tailgating, be aware of all traffic near a monitored zone and once you are through the monitored zone wait until the escort time has timed-out before proceeding.

To escort Tags through a monitored zone, use the following instructions:

1. Enter a valid code into the zone's Keypad. This will invoke the Keypad's Escort function. The Keypad's Escort function will allow the Tag to pass through the monitored zone for the designated Escort time. The duration of the Escort function is adjustable from 0 to 98 seconds (factory set at 15 seconds).
2. Escort the Tag through the zone.
NOTE: For slower moving residents, you may have to invoke the Escort function again. However, if this is the case, an alarm may sound. Therefore, take into consideration the Escort time duration at that zone. If the door handles slow moving residents often, consider extending the Escort time or using a wheelchair to escort residents.
3. To prevent tailgating, once you are through the zone wait until the escort time has timed-out before proceeding (the green LED will extinguish).

User Manual

Chapter 2:

System Components

System Components

This section contains a brief description and a simple graphic (not to scale) for each component and its role in the Accutech System.

NOTE: Accutech reserves the right to substitute comparable components.

Since each facility's system is unique to its particular needs, check off the components that your system has.

ALL SYSTEMS COMPONENTS:

- Controller
- Receiver
- Keypad
- Magnetic Switch (with Door zones)
- Passive Infrared Reader (PIR)
(with Elevator and Hallway zones)

TRANSMIT ANTENNA:

- Tx Wand Antenna
- Tri-Axis Antenna

TAGS:

- ES 2200 System Tags (LT/SB22)
- IS 3200 System Tags (LT/SB32)
- BR 4200 System Tags (BR42)
- Cut Band Tags

TESTERS:

- Secure Tag Activator/Deactivator (S-TAD)
- Tag Activator/Deactivator (TAD)

IS 3200 and BR 4200 COMPONENTS:

- PC
- Tag Test Station (TTS)
- Accutech Software
- Multiplexer
- Power Supply
- Auxiliary Receivers (BR 4200 only)

ALERT PANELS:

- Graphic Display Panel (GDP)
- Staff Alert Panel (SAP)

RESTRAINTS:

- Magnetic Lock, 3000 Series
- Magnetic Lock, 3101 Series
(Delayed Egress)
- Elevator Deactivation
- Automatic Door Deactivation
- Band Alarm Lockdown
- Fire Panel Interface (FPI)
(required for systems with Magnetic Locks
and/or Elevator Deactivation)

ALARMS:

- Local Alarm
- Multi-Tone Local Alarm
- Central Alarm
- Speakers
- Voice Alarm
- Strobe Light

ADDITIONAL OPTIONS:

- Push Button Override (PBO)
- Timer



Figure 2.1 The Controller

Controller

The Controller (Figure 2.1) coordinates and controls all of the devices and functions of the Accutech Security System.

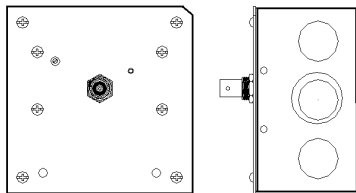


Figure 2.2 Receiver

Receiver

The Receiver (Figure 2.2) picks up the signal from an activated Tag and relays it to the Controller and the Multiplexer. Receivers can be internally or remotely mounted near a monitored zone.

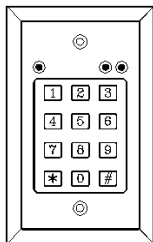


Figure 2.3 Keypad

Keypad

The Keypad (Figure 2.3) is used to escort residents or infants through a monitored zone and to reset zone equipment once an alarm has occurred.

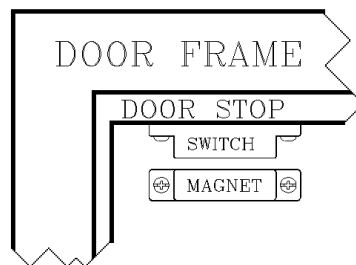


Figure 2.4 Magnetic Switch

Magnetic Switch

The Magnetic Switch (Figure 2.4) is used on a door when alarm activation is not desired unless the door is opened.

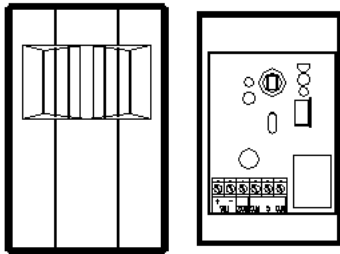


Figure 2.5
Passive Infrared Reader (PIR)

Passive Infrared Reader (PIR)

A Passive Infrared Reader (PIR) (Figure 2.5) is a device that uses a infrared sensor to monitor doors, hallways, corridors, and passageways.

Like the Magnetic Switch, the PIR is used in areas where alarm activation is not desired immediately upon Tag detection. It can also be used in hallways or other areas where a Magnetic Switch would not be feasible.

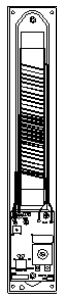


Figure 2.6
Tx Wand Antenna

Tx Wand Antenna

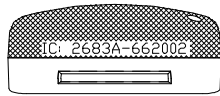
The Tx Wand Antenna (Figure 2.6) generates a Tag-activating signal near a monitored zone. This signal is referred to as the “Tx Activation Field.”



Figure 2.7
Tri-Axis Antenna

Tri-Axis Antenna

The Tri-Axis Antenna (Figure 2.7) is a variation of the Tx Wand antenna.

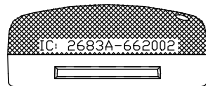


LT22
or



SB22

Figure 2.8
ES 2200 System Tag
(band not shown)



LT32
or



SB32

Figure 2.9
IS 3200 System Tag
(band not shown)

ES 2200 System Tags

The ES 2200 System Tag (Figure 2.8) is a small wristwatch-sized device that is worn by a resident or attached to an asset.

Two models are available:

LT = Long Term resident care

SB = Slotted Back; to be used on infants and assets

When the Tag enters a monitored zone, the system detects the Tag and responds by sending a signal via the Receiver to the Controller. This information is processed by the Controller for appropriate control action or response at the zone.

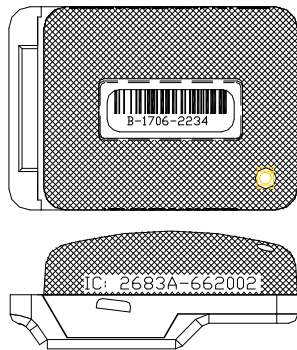
Tags are attached to residents/assets with a nylon-mesh-reinforced vinyl band.

IS 3200 System Tags

In addition to the look and functionality of ES 2200 System Tags, IS 3200 System Tags (Figure 2.9) are assigned to a specific resident or asset (via the Tag Test Station and a computer with the Accutech Software). The computer then associates a name, room number, and any other helpful comments about the resident or asset with that Tag.

When the Tag enters a monitored zone, the system detects the Tag and responds by sending a signal via the Receiver to the Controller and the Multiplexer. This information is processed by the Controller for appropriate control action or response at the zone while the Multiplexer sends the information to a computer with the Accutech Software and/or to Graphic Display Panels (GDPs). This information is processed by the Controller and the Multiplexer for appropriate control action or response at the zone.

Tags are attached to residents/assets with a nylon-mesh-reinforced vinyl band.



BR42

Figure 2.10
BR 4200 System Tag
(band not shown)

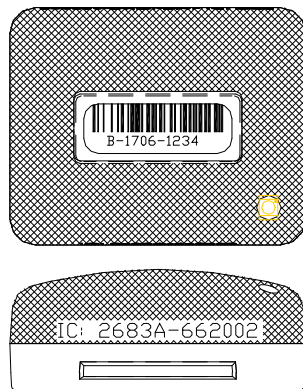


Figure 2.11
Cut Band Tag

BR 4200 System Tags

In addition to the functionality of an IS 3200 System Tag, the BR 4200 System Tag (Figure 2.10) will alarm if the band is loosened, cut, saturated, removed or tampered with.

BR 4200 System Tags are attached to infants with a conductive-fiber-striped cloth band.

Cut Band Tag

Similar to the functionality of a BR 4200 System Tag, Cut Band Tags (Figure 2.11) will alarm if the band is cut and is designed for use in pediatrics applications.

Cut Band Tags are attached to patients with a band (Figure 2.13) and plastic covers (Figure 2.14), are activated/deactivated using an S-TAD unit, and contain a visual pulse LED. Using plastic covers with a Cut Band Tag will significantly reduce the need for sanitizing the Tag between applications.



Figure 2.13 Cut Band band

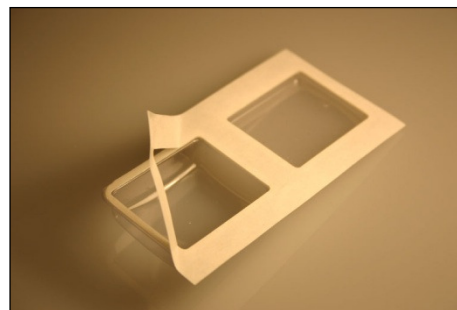


Figure 2.14 Plastic Covers



Figure 2.15
S-TAD

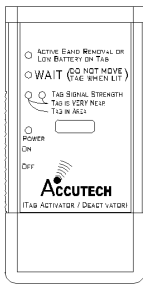


Figure 2.16
The TAD



Figure 2.17 PC

Secure Tag Activator/Deactivator (S-TAD)

The S-TAD (Secure Tag Activator/Deactivator) is used to check the functionality of an Accutech Tag. Accutech Tags operate by internal battery. Over the course of normal operation, Tags eventually lose battery power and the Tags will need to be replaced. The S-TAD is used to determine if a Tag has sufficient battery power to respond to an activating signal.

Tag Activator/Deactivator (TAD)

TAD (Tag Activator/Deactivator) is used to check the functionality of an Accutech Tag. Accutech Tags operate by internal battery. Over the course of normal operation, Tags eventually lose battery power and the Tags will need to be replaced. The TAD is used to determine if a Tag has sufficient battery power to respond to an activating signal. The TAD was replaced by the S-TAD in late 2008.

PC

A PC (Figure 2.17) is required for IS 3200 and BR 4200 Systems. The Accutech Software is installed on each monitoring PC and is used to display incoming event information. Using the facility's floor plan as the background, zone-specific icons (i.e., doors, elevators, stairwells, hallways, and BR 4200 Auxiliary Receivers) are placed at each monitored zone's location and become animated when an alarm occurs.

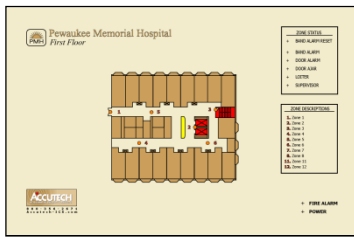


Figure 2.23
Graphic Display Panel (GDP)

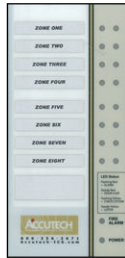
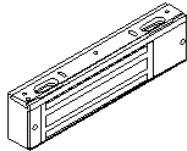
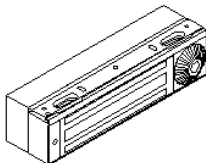


Figure 2.24
Staff Alert Panel (SAP)



3000 Series Magnetic Lock



3101 Series Magnetic Lock

Figure 2.25 Magnetic Locks

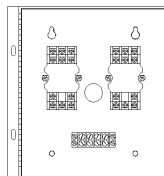


Figure 2.26 Elevator Deactivation Circuitry

Graphic Display Panel (GDP)

The Graphic Display Panel (GDP) (Figure 2.23) provides the staff with a visual representation of the floor being monitored. GDPs are custom-made to a facility's floor plan and notify staff when an alarm or event occurs in a monitored zone through a piezo buzzer and alarm-specific LEDs.

Staff Alert Panel (SAP)

The Staff Alert Panel (SAP) (Figure 2.24) notifies staff when an alarm condition occurs in a monitored zone through a piezo buzzer and alarm-specific LEDs.

Magnetic Locks

Magnetic Locks (Figure 2.25) prevent unescorted egress.

The 3000 Series Magnetic Lock features:

- 1500-pound holding force
- 12V to 24V AC/DC
- Unlocks instantly if the facility's fire panel is activated

The 3101 Series Magnetic Lock features:

- 1200-pound holding force
- 12V AC/DC
- Unlocks instantly if the facility's fire panel is activated
- NFPA101 Life Safety Code conformity (Delay Egress Circuitry)
- a selectable nuisance delay
- an Accutech-exclusive electromagnetic coil
- an Accutech-exclusive firmware chip

Elevator Deactivation Circuitry

Elevator Deactivation Circuitry (Figure 2.26) is designed to prevent someone (or an asset) wearing an Accutech tag from using an elevator to leave a monitored floor. Using Relays enclosed in the Elevator Deactivation Relay Cabinet, the Elevator Company is able to interface with the Accutech System.

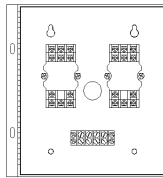


Figure 2.27
Automatic Door Deactivation



Figure 2.28
Band Alarm Lockdown

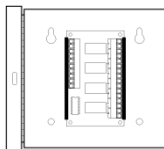


Figure 2.29
Fire Panel Interface (FPI)

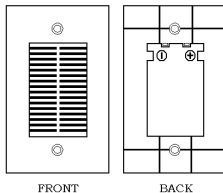


Figure 2.30 Local Alarm

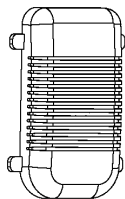


Figure 2.31
Multi-Tone Local Alarm

Automatic Door Deactivation

In automatic door applications (doors that open via a motion sensor or push paddle) (Figure 2.27), the Accutech System can deactivate this feature when a Tag enters a monitored zone's Tx Activation Field.

Band Alarm Lockdown

Band Alarm Lockdown (Figure 2.28) can engage specific facility Magnetic Locks when a Band Alarm occurs.

Fire Panel Interface (FPI)

The Fire Panel Interface (FPI) (Figure 2.29) ensures that in the event of a fire alarm, the Magnetic Locks and Elevator Deactivation Circuitry will disengage. Although the restraint systems are disengaged, the system's visual and audial alarms will remain active.

Local Alarm

The Local Alarm (Figure 2.30), a sounder, is intended to attract attention near the monitored zone.

Multi-Tone Local Alarm (MTLA)

The Multi-Tone Local Alarm (MTLA) (Figure 2.31) can use 8 tone variations to attract attention near the monitored zone.

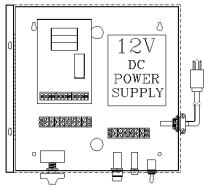


Figure 2.32 Central Alarm



Figure 2.33 Speakers

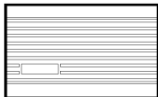


Figure 2.34 Voice Alarm

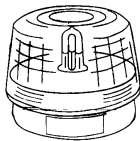
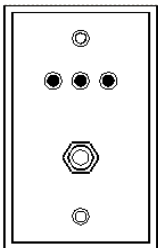


Figure 2.35 Strobe Light



**Figure 2.36
Push Button Override (PBO)**

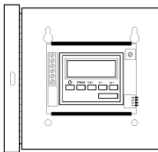


Figure 2.37 Timer example

Central Alarm

The Central Alarm (Figure 2.32) is a multi-tone alert. It consists of a tone generator that drives Speakers (up to 5) located throughout a facility. There are eight different tones available. You may choose to assign a separate tone for each zone, share the same tone for adjacent zones, or use one tone for all zones.

Speakers

The 8-ohm Speakers (Figure 2.33) provided by Accutech are used in conjunction with the Central Alarm.

Voice Alarm

The Voice Alarm (Figure 2.34), located at a monitored zone, will repeat a recorded message (up to 20 seconds) continuously when an alarm occurs.

Strobe Light

A Strobe Light (Figure 2.35) can be used as another alarm notification device.

Push Button Override (PBO)

The Push Button Override (PBO) (Figure 2.36) triggers the Keypad's Escort function; this option allows free access through a monitored door from the non-Keypad side of the door.

Timer

A Timer (Figure 2.37) allows the user to engage or disengage certain system functions on a time schedule.

User Manual

Chapter 3:

Tags

Tags

- ES 2200 System Tags
- IS 3200 System Tags
- BR 4200 System Tags
- Cut Band Tags
- Tag barcodes
- Visual Pulse LED
- Tag base color chart
- LED Tag
- Attaching Tags
- Tag and Band Maintenance

Note: The Tag Model CB's Pod (plastic covers) has not been evaluated by UL.

ES 2200 System Tags

ES 2200 System Tags (Figure 3.1 and 3.2) are small wristwatch-sized devices worn by a resident or attached to an asset. When a resident or patient enters a Tx Activation Field, the Tag sends a signal to the zone Controller, via the Receiver. The zone Controller processes this information for appropriate control action or response (such as sounding alarms, locking doors, and/or deactivating elevators).

ES System 2200 Tags also contain a visual pulse LED. Tags are activated/deactivated with an S-TAD unit. Available in SB (slotted back) or LT (long term) tag case styles.

The ES 2200 System Tag band is made of nylon-reinforced vinyl with nylon mesh. The band is designed to resist tearing caused by pulling or chewing on the band. However, if the band becomes frayed or torn it will need to be replaced. In long-term applications, the band should be replaced periodically for cleanliness.

IS 3200 System Tags

In addition to the functionality of an ES 2200 System Tag, IS 3200 System Tags (Figure 3.1 and 3.2) are preprogrammed with a number and assigned to a specific resident or asset (via the Tag Test Station and Accutech Software). Once assigned, the computer associates a name, room number and any other pertinent information about the resident/asset with that Tag number.

IS 3200 System Tags also contain a visual pulse LED. Tags are activated/deactivated with an S-TAD unit. Available in SB (slotted back) or LT (long term) tag case styles.

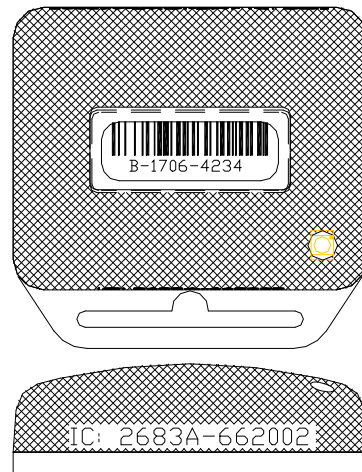


Figure 3.1 SB Tag case style

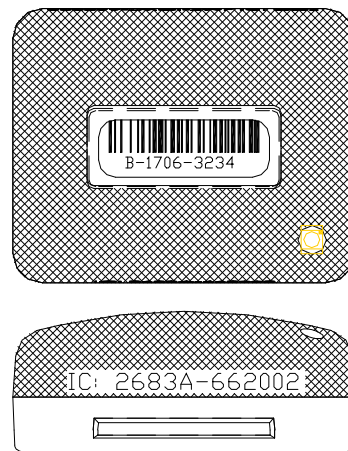


Figure 3.2 LT Tag case style

BR 4200 System Tags

In addition to the functionality of an IS 3200 System Tag, BR 4200 System Tags (Figure 3.3) will alarm if the band is removed or tampered with in any way.

BR 4200 System Tags also contain a visual pulse LED. Tags are activated/deactivated with an S-TAD unit.

BR 4200 System Tags are attached to infants with a conductive-fiber-striped cloth band.

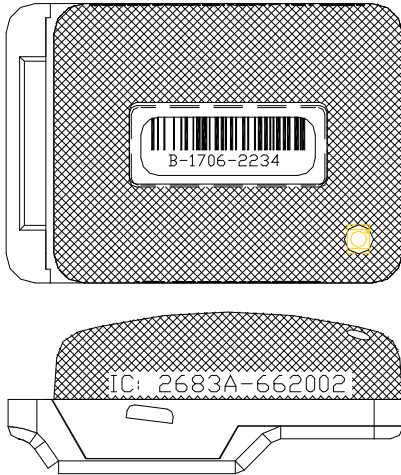


Figure 3.3 BR 4200 System Tag

Cut Band Tags

Similar to the functionality of a BR 4200 System Tag, Cut Band Tags (Figure 3.4) will alarm if the band is cut, removed, or tampered with in any way and is designed for use in pediatric applications. Cut Band Tags also contain a visual pulse LED.

The band (Figure 3.5) accommodates various wrist/ankle lengths.

Using a pod (Figure 3.6) with a Cut Band Tag will significantly reduce the need for sanitizing the Tag between applications and is water-resistant during use.

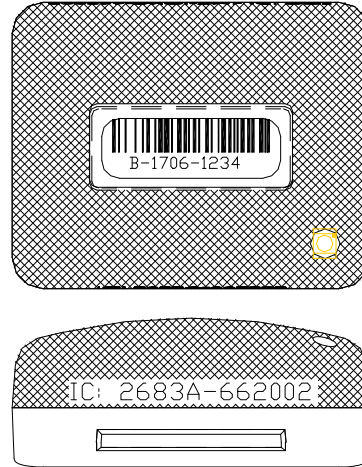


Figure 3.4 Cut Band Tag



Figure 3.5 Cut Band Band

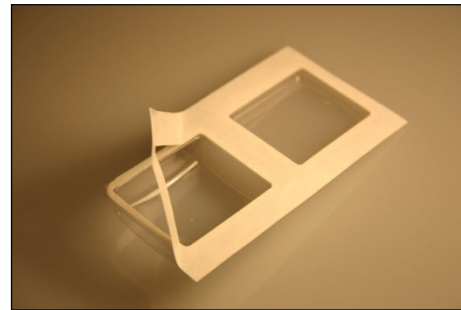


Figure 3.6 Cut Band Pod

Tag barcodes

Tag barcodes (Figure 3.7) contain a Tag’s manufacturing history.

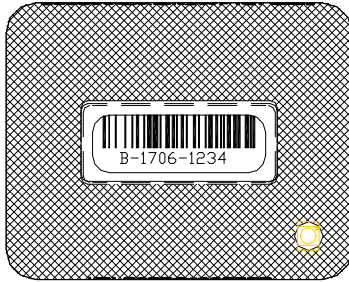


Figure 3.7 Tag barcode example

The coding scheme is as follows:

M-WWYY-TSSS

”M” is the manufacturer designator.

”WWYY” is the date code.
 (“1706” would mean the 17th week of 2006)

”T” is the tag type designator.

- 1 is for CB (Cut Band)
- 2 is for BR (Band Removal)
- 3 is for LT (Long Term)
- 4 is for SB (Slotted Back)

”SSS” is the serial number for that tag type manufactured during that week.

Visual Pulse LED

The Visual Pulse LED indicates the Tag’s current mode (see Table 3.1)

Table 3.1 Visual Pulse LED status

LED Light Pattern	○ off ● on	Tag LED Status
LT, SB Tags		
None		Tag is off.
○●○●○●○●○●○●○●○●○ ●○●		Active, not in zone
●●●●●●●●●●●●●●●●●●●● ●●●		Active, in zone
BR, CB Tags		
None		Tag is off.
○●○●○●○●○●○●○●○●○ ●○●		Active, not in zone, non-Band Alarm
●●●●●○●●●●●●○●●●●● ●●○		Active, in zone (may be in Band Alarm)
○●○●○●○●○●○●○●○●○ ●○●		Active, not in zone Band Alarm mode,

Tag base color chart

Tag tops are smoke-colored while the Tag base color will vary based upon Tag type (see Table 3.2).

Table 3.2 Tag base color chart

Tag Type	Base Color
CB	White
SB	Gray
LT	Gray
BR	Yellow

Test Tag

- Verifying Proper Zone Coverage
- Identifying Foreign Tag-Activating Sources

DISCLAIMER: Due to each facility's unique environment, an LED Tag cannot give an *exact* measurement of zone coverage; it can only give an *estimation* of zone coverage.

Verifying Proper Zone Coverage

An LED Tag (Figure 3.8) is used to verify proper zone coverage during installation, adjustment, or testing of a monitored zone.

Proper zone coverage fully protects the intended area (door, elevator, hallway, or any other passageway) without extending into other areas (in front, in back, on sides, above, and beneath the intended area).

Monitored zones emit a Tag-activating signal called the Tx Activation Field. When a Tag enters a zone's TX Activation Field, the system will detect the Tag and take appropriate action response.

A Test Tag can detect a zone's TX Activation Field without causing alarms making it a quick and easy way to verify proper zone coverage. This is not only useful in ensuring complete zone coverage but also in locating areas where a TX Activation Field may be extending into common areas and causing nuisance alarms.

To verify proper zone coverage with an Test Tag, use the following instructions:

1. Using an S-TAD, activate the Test Tag.
NOTE: Once activated the Test Tag's LED will change state when it is in a Tx Activation Field. Therefore, to verify the Test Tag is active, turn on the TAD and place the Test Tag near it. The Test Tag's LED will change state since an S-TAD has a small TX Activation Field associated with it.
2. With the Test Tag in your hand, slowly approach each zone at various angles and orientations. The Test Tag's LED will change state when it detects the zone's TX Activation Field.



Figure 3.8 The ES/IS (top) and BR Test Tag

3. If you find that a zone's coverage is at unacceptable levels (too small, too big, extends too far in one direction), look for factors that may be affecting the zone (food carts, medical equipment, and/or building construction).
4. If you cannot locate any immediate causes, contact your system maintenance technician for further assistance.
5. When finished, deactivate the Test Tag using an S-TAD.

Identifying Foreign Tag-Activating Sources

In addition to verifying proper zone coverage, an LED Tag (Figure 3.3) can be used to identify foreign Tag-activating sources to help preserve your Tags' battery life and prevent nuisance alarms.

Monitored zones emit a Tag-activating signal called the TX Activation Field. When a Tag enters a zone's Tx Activation Field, it is activated. The system detects the activated Tag and takes appropriate action response.

However, there are sources that can activate a Tag other than a TX Activation Field. When Tags are activated by these "foreign" sources, battery life is depleted and/or nuisance alarms can be caused. Therefore, identifying these sources will prolong Tags battery life and prevent nuisance alarms.

To identify activating sources with a Test Tag, use the following instructions:

1. Using an S-TAD, activate the Test Tag.
NOTE: Once activated the Test Tag's LED will change state when it is in a TX Activation Field. Therefore, to verify the Test Tag is active, turn on the TAD and place the Test Tag near it. The Test Tag's LED will change state since an S-TAD has a small TX Activation Field associated with it.
2. With the Test Tag in your hand, slowly investigate each area for possible activating sources*. The Test Tag's LED will illuminate when it detects an activating source. Note each activating source and keep Tags away from those sources.
3. When finished, deactivate the Test Tag using an S-TAD.

*Some activating sources can be:

- Computer Monitors
- Unshielded computer cables
- Television Sets
- Medical Monitoring equipment
- X-ray and other imaging equipment
- Fluorescent Lighting
- Wireless Communication Devices

Attaching Tags

- Attaching LT/SB Tags
- Attaching BR42 Tags
- Attaching Cut Band Tags with Pod
- Removing a Cut Band Tag with Pod

Attaching LT/SB Tags

Note:

LT (Long Term) Tags are used for resident care.

SB (Slotted Back) Tags are used on small infants and assets.

All Tag bands are for one-time use only. For cleanliness and sanitary reasons, Accutech recommends replacing applied bands on a semi-monthly basis with a maximum of one month between changes.

1. For LT Tags, with the snaps pointing in the same direction as the Accutech logo, slide the plastic band through the Slot.
(see Figure 3.9)
2. Adjust the band length to the nearest accommodating hole for a comfortable fit around the patient's extremity.
Note: Once the band is secured it cannot be adjusted.
3. Put the male part of the Snap through the selected hole (see Figure 3.10).
4. Fold over the female part of the Snap and secure to the male part by squeezing until they snap together.
5. Using scissors, carefully trim any excess band material (see Figure 3.11).
6. Using an S-TAD, activate the Tag.
7. Follow the same procedure for SB Tags.
(see Figure 3.12)



Figure 3.9: LT Tag with band



Figure 3.10: LT Tag with band



Figure 3.11: LT Tag with band secured



Figure 3.12. SB Tag with band secured

Attaching BR42 Tags

NOTE: The Soft Bracelet has conductive fiber stripes (Figure 3.13) that must be in contact with both the infant's skin and the gold contacts on the Tag (Figure 3.14). The band must be routed properly through the Tag case for the system to function properly. Tags are typically attached to a wrist or ankle. For smaller infants, placing the Tag around the thigh is also acceptable.

All Tag bands are for one-time use only. For cleanliness and sanitary reasons, Accutech recommends replacing applied bands on a semi-monthly basis with a maximum of one month between changes.

1. Unsnap the Cam Lock (Figure 3.14).
2. Hold the Tag in your left hand with the Slot to the right and the Cam facing up.
3. With the conductive fiber stripes facing the Tag, slide the pointed end of the band up through the Slot from underneath until the folded end is snug next to the Slot (Figure 3.15).
4. Push the pointed end of the band (with the conductive fiber stripes facing the gold contacts on the Tag) through the Cam Lock opening and form a 2-inch loop with the band (Figure 3.16).
5. Slip the 2-inch loop over the infant's extremity and cinch the band until it is snug around the infant's extremity.
6. Make sure the conductive fiber stripes are in good contact with the infant's skin.
7. Snap the Cam Lock closed.
NOTE: Make sure the band is still snug around the infant's extremity. If necessary, gently pull the band snug while the Cam Lock is closed. Be careful not to overtighten; the Cam Lock must be opened to loosen the band.
8. Using scissors, carefully trim any excess band material so that the band does not protrude beyond the end of the Tag case (Figure 3.17).
9. Using an S-TAD, activate the Tag.

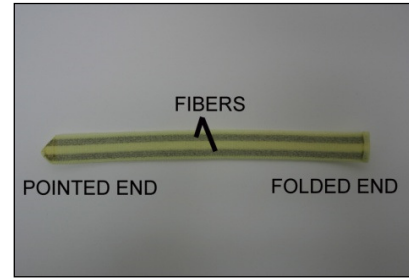


Figure 3.13 The Soft Bracelet



Figure 3.14 Tag with Cam Lock open

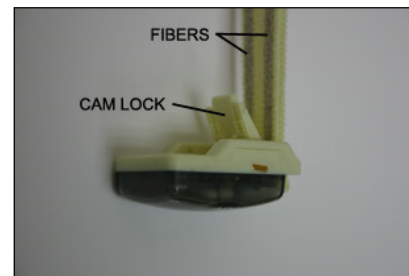


Figure 3.15 BR42 Tag with band inserted

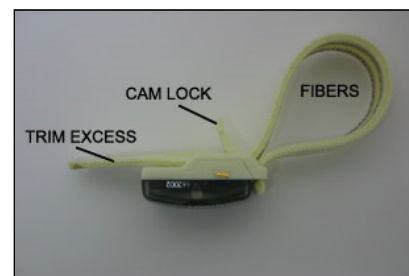


Figure 3.16 BR42 Tag with band in place



Figure 3.17 BR42 Tag with band in place

Attaching Cut Band Tags with Pod

Note: All Tag bands are for one-time use only. For cleanliness and sanitary reasons, Accutech recommends replacing applied bands on a semi-monthly basis with a maximum of one month between changes.

1. **OPTIONAL:** Write the date when the band was applied on the provided date lines / / located next to the Accutech logo on the Cut Band. For cleanliness and sanitary reasons, Accutech recommends replacing applied bands on a semi-monthly basis with a maximum of one month between changes. Writing the date will aid in this schedule.
 2. Using safety scissors, remove the coupon from the snap band along the perforated line. Retain the coupon (Figure 3.18).
 3. With the Accutech name facing up, slide the 3-hole tab section of the snap band through the Tag slot until the Tag is against the Tag stops (Figure 3.19).
- If not using a Pod, skip steps 3 & 4 and proceed to Step 5.
4. **OPTIONAL:** Remove the top pod cover (the large cover) from the cover strip and align it with the top of the Tag (the side of the Tag that has the Accutech logo) so that the two arrows on the top pod cover point in the direction of the 3-hole tab section. Being careful not to touch the adhesive on the gasket, push the Tag into the cover until the Tag is completely inside the cover and the snap band is touching the adhesive gasket.
 5. **OPTIONAL:** Remove the bottom pod cover (the smaller cover) from the cover strip and place it over the bottom side of the Tag so that the two arrows on the bottom cover point in the direction of the 3-hole tab section. Using your thumb and forefinger, squeeze and run them along all four sides of the two pod pieces to ensure a tight gasket seal.
 6. Using the coupon, thread the male snaps through the selected snap band holes (with pod or no pod) of the 3-hole tab section from the bottom side up (Figure 3.20).



Figure 3.18 Remove the coupon along the perforated line and save for later use.



Figure 3.19 Slide the snap band through the Tag slot. Determine which holes to use (with or without pod)



Figure 3.20 Determine band length needed and select holes. Position the coupon.

7. Wrap and overlap the band around the patient's wrist/ankle to determine the band length needed and the holes to use by lining up the two male snaps from the 3-hole tab section with two overlapping holes from the band length section. A properly fit snap band will not fall off the patient nor will it restrict movement or blood flow.
8. Fold over the coupon's female snaps onto the male snaps to secure the band. Press firmly on each snap. Once locked together, the coupon snaps cannot be adjusted. (Figure 3.21)
9. Carefully cut any excess band length material and discard it.
10. Using an S-TAD (Secure Tag Activator/Deactivator), activate the Tag. The Tag's red LED will blink rapidly to indicate that the Tag is active.

Removing a Cut Band Tag with Pod

1. Turn off the Tag with an S-TAD.
2. Carefully cut off the band from the patient's extremity.
3. If present, separate and remove the top and bottom plastic covers from around the Tag.
4. Remove any residue left over from the plastic cover gasket before pulling the band out of the Tag slot. Failure to remove residue may result in residue buildup inside the Tag slot rendering the Tags unusable.



Figure 3.21 Secure the snap band by folding over the female snaps onto the male snaps. Carefully cut any excess band length material. Using an S-TAD activate the Tag.

Tag and Band Maintenance

Testing Tags

Accutech Tags operate by internal battery. Over the course of normal operation, Tags eventually lose battery power and the Tags will need to be replaced. The Tag battery is not replaceable. For maximum protection of residents or assets, Accutech recommends that Tags be tested on a weekly basis. There are many ways that you can test Tags:

- Enter a monitored zone (Software will report.)
- With a S-TAD
- The Keypad's Auxiliary LED (Yellow) will light when a Tag is detected (Optional; additional wire required).
- Check Visual Pulse LED if present
- BR and CB Tags only - Remove Band Alarm band or Cut Band band (alarm will sound).

Cleaning Tags

All Tags are reusable but they **must** be cleaned and sanitized between applications. In long-term applications, periodically replace the bands and clean the Tags. There are a few methods that can be used to clean and sanitize Tags:

HOWEVER, DO NOT:

- **DO NOT** submerge Tags in water
- **DO NOT** soak Tags in water
- **DO NOT** submerge Tags in cleaning solutions
- **DO NOT** soak Tags in cleaning solutions
- **DO NOT** use solvents
- **DO NOT** use abrasive cleaners or cloths
- **DO NOT** put Tags in an *AutoClave*
- **DO NOT** put Tags in a dishwasher
- **DO NOT** steam clean Tags
- **DO NOT** put Tags in a washing machine or dryer

Acceptable Tag Cleaning Methods:

- Seek guidance with your Infection Control representative for approved cleaners that can be used on plastics
- Wipe down with 3% hydrogen peroxide with water solution then rinse with a water-dampened cloth towel and wipe dry. (wipe only, **DO NOT** soak.)
- Antibacterial wipes then rinse with a water-dampened cloth towel and wipe dry (wipe only, **DO NOT** soak.)

Cleaning Bands

All Tag bands are for one-time use only. For cleanliness and sanitary reasons, Accutech recommends replacing applied bands on a semi-monthly basis with a maximum of one month between changes.

Storing Tags: To preserve battery life, Tags **must be turned off** with an S-TAD during storage or periods of non-use. BR and CB Tags **must** be deactivated to prevent alarms when not use. In addition, Tags should be stored away from sources of electrical noise (see example list below) and stored in a metal container with lid.

Do not store Tags within 3 feet of any of the following sources of electrical noise:

- Computer monitors
- Unshielded computer cables
- Television sets
- Medical Monitoring Equipment
- X-ray and other imaging equipment
- Fluorescent Lighting

Storing Bands

Extra Tag bands should be stored in clean and dry environment.

User Manual

Chapter 4:

The S-TAD

The S-TAD



- Powering the S-TAD On/Off
- Unlocking the S-TAD
- Activating/Deactivating Tags
- Programming Mode

Note: The S-TAD has not been evaluated by UL.

The S-TAD (Secure Tag Activator/Deactivator) is used to check the functionality of an Accutech Tag. Accutech Tags operate by internal battery. Over the course of normal operation, Tags eventually lose battery power and the Tags will need to be replaced. The Tag battery is not replaceable. The S-TAD is used to determine if a Tag has sufficient battery power to respond to an activating signal. The S-TAD requires a 9-volt lithium battery to operate.

Powering the S-TAD On/Off

The S-TAD includes a built-in power saving feature that automatically turns off the S-TAD after a period of inactivity.

1. Press the Power/Clear button
The Power/Clear LED illuminates (solid **green** with wink).

The LED will remain lit for 1 minute. While nearing the 1 minute mark, the LED will begin to pulse until the LED turns faster pulsing **red** and then extinguishes while powering off the S-TAD.

To extend the length of time, press the Power/Clear button again anytime before the LED turns off. Each press will extend by 1 minute (up to 5 minutes maximum).

2. Conversely you may manually power off the S-TAD by pressing and holding the Power/Clear button until the LED turns solid **red** then let go and the Power LED will extinguish.

Unlocking the S-TAD

For added security, access to activating/deactivating Tags is locked via 4-digit user codes. See Programming Mode for more information about user codes.

1. Press the Power/Clear button.
The Power/Clear LED illuminates (solid **green** with wink).
2. Using the number keypad, enter a valid 4-digit user code. Entering a valid code will illuminate the Enter LED (solid **green**) for about 5 seconds. Once the Enter LED illuminates, press the Enter button again. The WAIT LED will illuminate (**red**) for 2 seconds to confirm activation/deactivation action.

The Enter LED will then remain lit for 1 minute for the purpose of activating/deactivating Tags.

Notes:

- The default user code is 7139. See the Programming Mode section to change the default user code.
- Entering an invalid code will illuminate the Enter LED red. Verify your user code is valid. Press Power/Clear before reentering your code to clear any inadvertent previous entries.
- Once lit, each time you press the Enter button will extend the Enter LED life briefly (up to 1 minute by default).
- Pressing the Power/Clear button will clear out the user code. Otherwise, after 1 minute of inactivity the Enter LED will extinguish automatically.

Activating/Deactivating Tags

The S-TAD can activate and deactivate Tags preserving Tag battery life and preventing nuisance alarms.

ACTIVATING

1. Unlock the S-TAD using your unique 4-digit user code.
2. On the back of the S-TAD, place the inactive Tag in the correct orientation within the Tag receptacle. On the front of the S-TAD, the Tag graphic's LED is off (just like the physical Tag's LED is off).
3. Press the Enter button (**green** LED lit). The Wait LED will illuminate (**red**) for 2 seconds. The Tag graphic's LED on the S-TAD will illuminate (pulsing **yellow**) indicating the Tag is active (just like the physical Tag's LED will illuminate).
4. If a Low Tag Battery condition is detected, the Low Tag Battery LED will illuminate **red**.
5. If a band alarm condition is detected, the Band LED will illuminate **red**. Likewise, if a band compromise condition is detected, the Band LED will illuminate half **green** and half **red**.
Note: Band alarm, band compromise, and cut band conditions always take precedence over a Low Tag Battery condition, therefore, be sure to handle the band-sensing Tag appropriately to truly check for a Low Tag Battery condition.

6. The S-TAD will still detect active Tags and Low Battery conditions in the area even after the Enter LED extinguishes. However, you will have to unlock the S-TAD again to be able to activate/deactivate a Tag. Remember the S-TAD will automatically lock after 1 minute of inactivity (by default).

DEACTIVATING

1. Unlock the S-TAD using your unique 4-digit user code.
2. On the back of the S-TAD, place the active Tag in the correct orientation within the Tag receptacle. On the front of the S-TAD, the Tag graphic's LED will be pulsing **yellow** (just like the physical Tag's LED will be pulsing).
3. Press the Enter button (**green** LED lit). The Wait LED will illuminate (**red**) for 2 seconds. The Tag graphic's LED on the S-TAD will extinguish indicating the Tag is deactivated (just like the physical Tag's LED will extinguish).

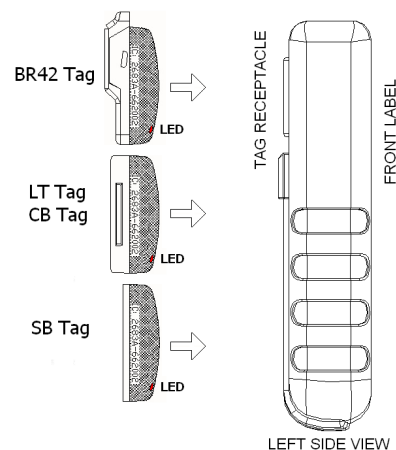


Figure 6.9 S-TAD Tag Orientation

Programming Mode

While in programming mode, the Enter button's LED winks quickly. In addition, the Enter button LED will also indicate if a programming step was completed successfully.

If the Enter button LED flashes green slowly the operation completed correctly. 3 flashes on the first entry, 5 flashes on the verify entry.

If the Enter button LED flashes red or yellow, an entry error has occurred. If an entry error occurs, press the Power/Clear button to cancel out and start over.

To enter programming mode:

1. Press: Enter, Enter, Master Code, Enter, Enter
Note: 198237645 is the default master code.
2. While in programming mode, the Enter button's green LED winks quickly.

To exit programming mode:

1. Press: Power/Clear
2. Press: 0, Enter, 0, Enter
Programming mode exits and the Enter button LED extinguishes.

Enable/Disable Sounders

(Band Alarm and/or Mother/Baby Match sounder):

1. Enter Programming Mode
2. Press: 4, Enter, 4, Enter
(3 slow green flashes)
3. Press desired number (0 through 3) for preferred S-TAD sounder option.

Press: 0 to disable **both** Band Alarm and Mother/Baby Match sounder

Press: 1 to enable **only** Band Alarm sounder,

Press: 2 to enable **only** Mother/Baby Match sounder

Press: 3 to enable **both** Band Alarm and Mother/Baby Match sounder

4. Then press Enter
(5 slow green flashes confirms)
5. Exit Programming Mode

Set Unlock Timeout:

1. Enter Programming Mode
2. Press: 5, Enter, 5, Enter
(3 slow green flashes)
3. Press: 1 through 5 for 1 to 5 minute timeout
(5 slow green flashes confirms)
4. Exit Programming Mode

To change the master code:

1. Enter Programming Mode
2. Press: 1, Enter, 1, Enter
(3 slow green flashes)
3. Press: The current 9-digit master code to change, then Enter
(1 slow green flash if correct)
4. Press: New 9-digit master code, then Enter
(1 slow green flash if correct)
5. Press: Same new 9-digit master code to verify, then Enter
(5 slow green flashes confirms)
6. Exit Programming Mode

To add a user code:

1. Enter Programming Mode
2. Press: 2, Enter, 2, Enter
(3 slow green flashes)
3. Press: 4 digit user code to add, then Enter
(1 slow green flash if correct)
Note: Maximum 121 codes.
4. Press: same 4-digit user code to verify, then Enter
(5 slow green flashes confirms)
5. Repeat steps 3 & 4 to add another code. When finished, exit Programming Mode.

To delete a user code:

1. Enter Programming Mode
2. Press: 3, Enter, 3 Enter
(3 slow green flashes)
3. Press: 4 digit user code to delete, then Enter
(1 slow green flash if correct)
4. Press: same 4-digit user code to verify, then Enter
(5 slow green flashes confirms)
5. Repeat steps 3 & 4 to delete another code. When finished, exit Programming Mode

Summary of LEDs**WAIT LED**

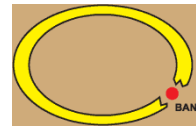
Tag is in the process of being turned on or off or during S-TAD unlocking.

**LOW TAG BATTERY LED**

A low tag battery is detected. Replace Tag.

**TAG LED**

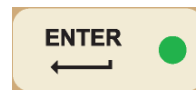
An active Tag is nearby.

**BAND LED**

A Band Alarm condition is detected.

**POWER/CLEAR LED**

S-TAD is powered.

**ENTER LED**

S-TAD unlocked.

Cleaning and Care

The S-TAD should be cleaned periodically using antibacterial wipes (wipe, do not soak).

Do not use any abrasive cleaners or cloths.

When not in use the S-TAD should be stored in a clean and dry environment.

The S-TAD requires a 9-volt lithium battery to operate. Remove the protective boot to access the battery compartment. Using the embossed orientation guide, replace the 9-volt lithium battery as needed.

User Manual

Chapter 5:

The Keypad

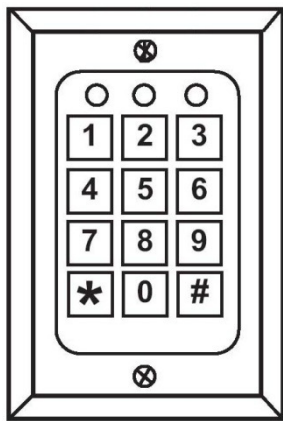
The Keypad (KP-103)

- Programming

Programming

- Initiating a Keypad Reset/Escort
- Programming
- How to enter user codes
- How to delete user codes
- How to set the relay time
- How to set the installer code

The Keypad (Part # 650209) provided by Accutech (the KP-103) is used to escort residents through a monitored zone and to reset zone equipment once an alarm has occurred.



The Keypad (KP-103)

Programming the Keypad is, in simple terms, providing it with a set of instructions on how to react in various contingencies. The Keypad must be programmed as soon as all installation and wiring have been completed. Later on, as changes take place, partial or full reprogramming may be carried out as many times as necessary.

The Keypad has three LED indicators. See Table 5.1 for their functions during normal operation.

Table 5.1 Keypad LED Indicators

LED	Status	Function
Green	On	Output relay is active
Yellow	On	Monitors power input
Red	On	LC Unit is in alarm

* During programming, the green LED functions differently.

Initiating the First Relay (Reset/Escort)

To initiate the first relay, enter a valid user code and press the [#] key. The green LED will light.

Accutech Default is .

Keypad Resets are used to reset zone equipment after an alarm has been addressed. When you initiate a Keypad Reset, all zone equipment and alarms will be reset. However, if the alarm condition is not properly corrected, the alarm will resume.

The Keypad's Escort function is used to escort Tags through a monitored zone without triggering alarms. When you initiate the Escort function, for the duration of the Escort time, you will be able to escort the Tag through the door, hallway, or use an elevator without triggering alarms.

Initiating the Second Relay (Anti-Tailgate)

To initiate the second relay, enter a valid user code and press the [#] key. The green LED will light.

Accutech Default is .

The second relay is an anti-tailgate feature that will allow unimpeded passage through the exit point without triggering an alarm; however, any banded tailgater attempting to subsequently pass-through will trigger an alarm event.

How to enter user codes (First Relay)

Note: First Relay user numbers are two digits and range from 01-99.

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [1] to select relay 1
3. Then enter the desired user number (for example 02) then enter the new user code (for example 5555) followed by the [#] key. You will hear two beeps.
4. Continue programming for additional user codes as desired (for example 03, 9999, #).
5. When finished, enter [*] to exit program mode and return the Keypad normal operation mode.

1 1 1 1 *

(enter programming mode)

1

(selects relay 1)

0 2

(selects user code 02)

5 5 5 5 #

(selects 5555 as the code)

*

(exits programming mode)

How to delete user codes (First Relay)

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [1] to select relay 1
3. Then enter the desired user number (for example 02) then the [#] key. You will hear two beeps.
4. Continue deleting additional user codes as desired (for example 03, #).
5. When finished, enter [*] to exit program mode and return the Keypad normal operation mode.

1 1 1 1 *

(enter programming mode)

1

(selects relay 1)

0 2

(selects user code 02)

#

(deletes user code 02)

*

(exits programming mode)

How to set the relay time (First Relay)

Note: The relay time is factory set to 15 seconds by Accutech.

To change the relay time:

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [4][0] then the desired relay time (1-999 seconds), then the [#] key. You will hear two beeps.
3. Enter [*] to exit program mode and return the Keypad normal operation mode.

1 1 1 1 *

(enter programming mode)

4 0

(selects timer for relay 1)

1 5 #

(sets timer to 15 seconds)

*

(exits programming mode)

How to enter user codes (Second Relay)

Note: Second Relay user numbers are one digit and range from 1 to 9.

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [2] to select relay 2
3. Then enter the desired user number (for example 2) then enter the new user code (for example 5555) followed by the [#] key. You will hear two beeps.
4. Continue programming for additional user codes as desired (for example 03, 9999, #).
5. When finished, enter [*] to exit program mode and return the Keypad normal operation mode.

1 1 1 1 *

(enter programming mode)

2

(selects relay 2)

2

(selects user code 2)

5 5 5 5 #

(selects 5555 as the code)

*

(exits programming mode)

How to delete user codes (Second Relay)

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [2] to select relay 2
3. Then enter the desired user number (for example 2) then the [#] key. You will hear two beeps.
4. Continue deleting additional user codes as desired (for example 03, #).
5. When finished, enter [*] to exit program mode and return the Keypad normal operation mode.

1 1 1 1 *

(enter programming mode)

2

(selects relay 2)

2

(selects user code02)

#

(deletes user code 2)

*

(exits programming mode)

How to set the relay time (Second Relay)

Note: The relay time is factory set to 15 seconds by Accutech.

To change the relay time:

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [5][0] then the desired relay time (1-999 seconds), then the [#] key. You will hear two beeps.
3. Enter [*] to exit program mode and return the Keypad normal operation mode.

[1][1][1][1][*]

(enter programming mode)

[5][0]

(selects timer for relay 2)

[1][5][#]

(sets timer to 15 seconds)

[*]

(exits programming mode)

DAP Instructions

Note: DAP (Direct Access Programming) should only be used if the Keypad programming has become unstable (that is, if during programming steps you continually receive 5 beeps between steps). DAP programming will reset the KP-103 keypad to Accutech factory settings.

1. Remove power and keypad faceplate from back box.
2. Move DAP jumper from OFF position to ON position.
3. Apply power to keypad.
4. Move DAP jumper back to OFF position.
5. Enter [8][9][0][1][#] to Initialize (2 beeps)
6. Enter [0] (to select User Code 0)
7. Enter [1][1][1][1][#] to designate the new Installer Code (2 beeps)
8. Enter [4][0] then [1][5] (to set to 15 seconds), then [#] (2 beeps)
9. Enter [5][0] then [1][5] (to set to 15 seconds), then [#] (2 beeps)
10. Enter [1], then [0][1] (to select User Code 01), then [1][2][3][4][#] (2 beeps)
11. Enter [2], then [1], then [7][1][3][9][#] (2 beeps)
12. Enter [*] to exit (2 beeps)

How to change the installer code

Note: The original installer code is 0000. If the installer code is unknown (or differs from the Accutech preprogrammed 1111) and you need to revert back to this code, go to the DAP instructions section.

1. Enter the installer code [1][1][1][1][*] to enter program mode. You will hear two beeps.
2. Enter [0] then the new desired installer code number (4-8 digits) then the [#] key. You will hear two beeps.
3. When finished, enter [*] to exit program mode and return the Keypad normal operation mode.

Changing the Installer Code:

1 1 1 1 *

(enter programming mode)

0

(selects user code 0)

5 5 5 5 #

(sets 5555 to be the new code)

*

(exits programming mode)

User Manual

Chapter 6:

The Accutech Software

The Accutech Software

Accutech Security Systems are NOT computer –dependent. The software is for notification and reporting purposes only and does not affect nor control the physical Accutech Security System components.

The following chapter details Accutech Software 7.0.

Software features will vary depending upon your version number, build, and system settings.

The Accutech Software is installed on each monitoring computer and is used to display incoming active event information.

Using the facility's floor plan as the background, zone-specific icons (i.e., doors, elevators, stairwells, hallway, and band removal receivers) are placed at each monitored zone's location and become animated when an alarm event occurs.

Floor plans can be monitored locally or remotely.

Customizable event handling (displaying, logging, and clearing)

Tags are assigned to specific patients, residents, infants or assets.

Customizable savable/printable Reports

(sort by start date/end date, event type, zone location, and or Tag number)

Automatic daily database backup.





Login

A valid login is required to open the Accutech 7.0 User Interface for a specified server. Valid logins (User Name and Password combinations) are created within Accutech 7.0 from the Operators menu. The options available to each Operator within the Accutech 7.0 User Interface are determined from the Operator Privileges menu.

These instructions assume the Database Server and Comm Server Windows Services are installed and running.

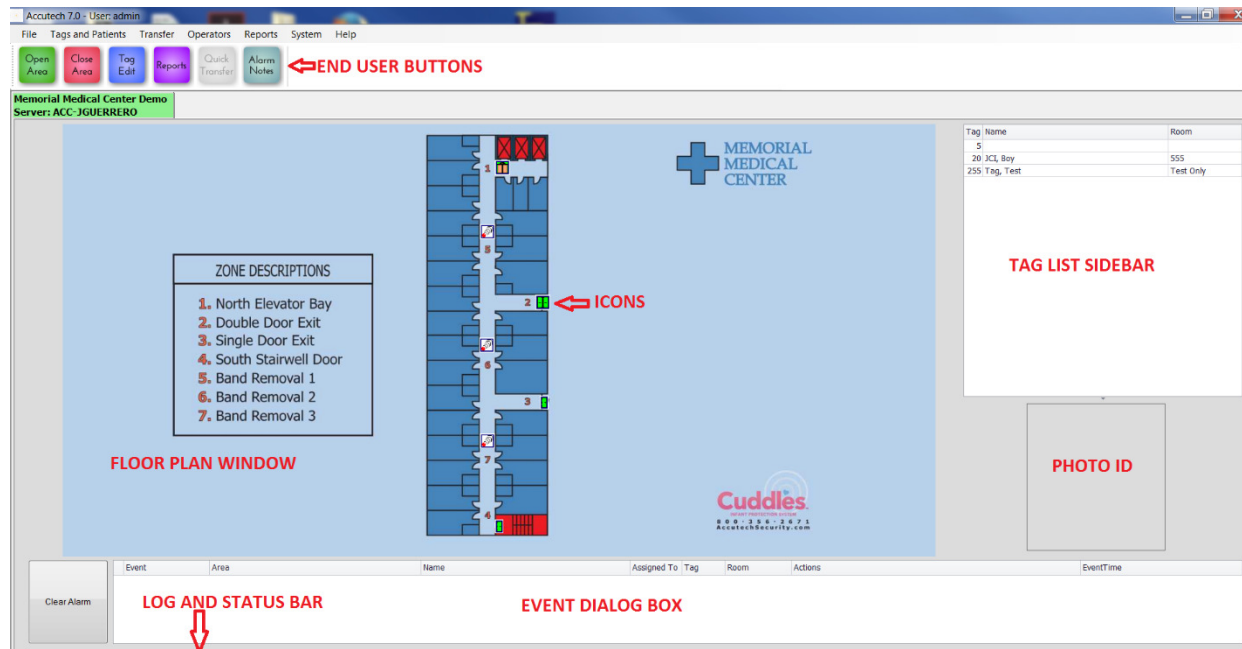
To login the Accutech Software, use the following instructions:

1. Double-click the Accutech icon (1) on the Desktop.
The Login dialog appears.
2. Select the desired server from the Server pull-down list (2)
The Server is the name of the computer where the SQL database resides.
3. Complete the User Name and Password text fields (2) then select the Login button.
Default User Name is **admin**
Default Password is **admin**
4. Select the  button.
The Accutech 7.0 user interface appears.
5. For view additional servers, from inside the Accutech software user interface, select the  button and repeat the process.
6. When viewing multiple areas, areas will be displayed in a tabbed view.

Logout

For security reasons, it is strongly advised that the Accutech Software never be closed (or minimized). Closing the Software in no way disables the system or alarms. However, alarm events will not be logged when the software is closed.





7.0 User Interface

User Interface

1. End User buttons – quick access to the most commonly used software operations
2. Floor plan window – displays monitored exit points and Band Alarm Receiver locations
3. Tag List sidebar – displays the area's currently assigned Tags (Tag number, name, and room)
4. Photo ID – displays Photo ID of the Tag assignment upon alarm event
5. Event Dialog box – displays incoming alarm event information (user action required to clear)
6. Log and Status bar – display incoming alarm event information in YELLOW (no user action required)

Icons

The Accutech Software uses architectural-specific icons to represent monitored zones in the Floor plan window. Icons are dormant until an event triggers them into active state. When alarming, icons cycle between dormant, transitional, and active state. If a dormant icon is clicked on, the zone number and name will appear in a dialog box; this is the ID state. If an active icon is clicked on, the *Alarm Information* dialog box appears.

Event Groups

Event Groups define how alarm events are displayed, cleared, and alerted (sound files) within the Accutech Software.

To set the Event Groups, use the following instructions:

1. From the System menu, select Event Groups.
The Event Response dialog appears.
2. Expand the Group tree to display Accutech Zone, then highlight Zone Responses (the Event Responses and Response Details become accessible).
3. The Event Responses section displays all alarm events and their current priority setting.
4. To change a priority setting, from the Event Responses section, select the desired alarm event, then from the Response Details section set the desired parameters.
5. The color an event appears in the Event Dialog box is determined by the Severity pull-down list. High is red, Medium is yellow, and Low is green.
6. The method an alarm can be cleared from the software is determined by the Alarm Clearing radio buttons and checkboxes.

Remember the Accutech software does not control nor affect the physical exit point equipment. Clearing an alarm from the software does not clear or reset the exit point equipment. Address the causing condition of the alarm event at the exit point before clearing the alarm event from the software.

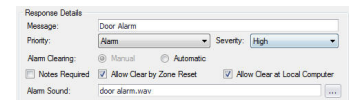
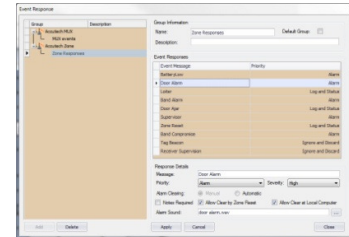
Manual – User action is required to clear the alarm from the software (i.e., select the alarm event, then select the Clear button).

Automatic – The alarm is cleared from the software after a user-defined duration of time.

Allow Clear by Zone Reset – A valid Keypad reset code entered at the exit point Keypad will clear the alarm from the software.

Allow Clear at Local Computer – enables/disables the Clear button from the software user interface.

7. The alarm event sound is determined by the Alarm Sound setting. Use one of the Accutech provided alarm-specific .wav files or another compatible sound file as desired. During multiple alarm events, the alarm sounds will cycle.
8. Select the button to save all settings before exiting the Response dialog box.



Priority Alarm Options

Ignore and Discard

The event does not appear.
The event is not logged.

Just Log the Event

The event does not appear.
The event is logged.

Log and Status

The event is displayed yellow in the Status Bar for 20 seconds.
The event is logged.

Alarm

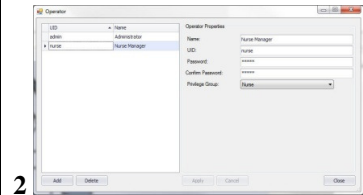
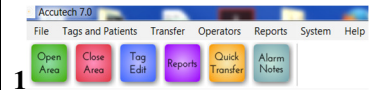
The event is displayed red in the Event Dialog box.
The event is logged.

Operators

A valid login is required to open the Accutech 7.0 User Interface for a specified server. Valid logins (User Name and Password combinations) are created within Accutech 7.0 from the Operators menu. The options available to each Operator within the Accutech 7.0 User Interface are determined from the Operator Privileges menu. The default User Name is **admin** and the default Password is **admin**.

To create a new Operator, use the following instructions:

1. From the Operators (1) file menu, select Operator
The Operator dialog box (2) appears.
2. Select the button
3. Complete the Operator Properties section as desired then select the button.
4. The Privilege Group is the rule set the Operator will follow.
Privilege Groups are set from the Operator Privileges

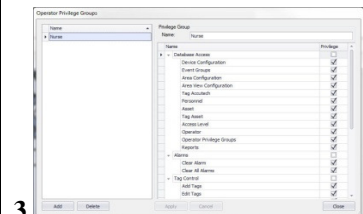


Operator Privilege Groups

A Privilege Group is the rule set the Operator will follow either allowing access or denying access to specific software functions.

To create a new Privilege Group, use the following instructions:


1. From the Operators (1) file menu, select Operator Privileges
The Operator Privilege Groups dialog (3) box appears.
2. Select the button
3. Complete the Privilege Group section as desired then select the button.

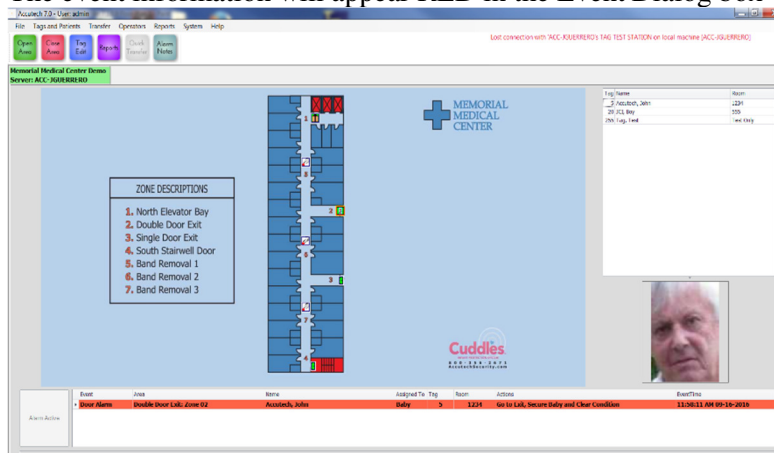


Alarm Events

How an alarm event is displayed in the Accutech 7.0 software is determined by the Event Response setting under Event Groups. The most common Event Responses settings are *Alarm* and *Log and Status*.

If the alarm event is set to ALARM :

1. The zone icon location will flash 
2. The event information will appear RED in the Event Dialog box



3. The event will be logged
4. An audible will sound (if enabled)

If the alarm event is set to LOG AND STATUS :

1. The event information will appear in the Log and Status bar
Door Ajar; 5 South East Stairs
2. The event will be logged

Clearing alarm events

How an alarm event is displayed in the Accutech 7.0 software is determined by the Event Response setting for that alarm event type under Event Groups.

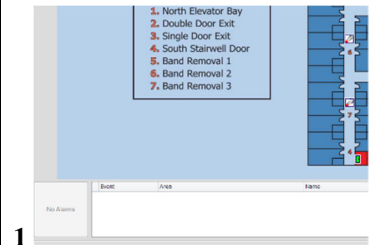
The most common Event Response settings are Manual Clear, Allow Clear by Zone Reset, and Automatically Clear.

Always go to the alarm location and take appropriate action to address the causing condition. An alarm event will continue to display on the software unless the causing condition is remedied.

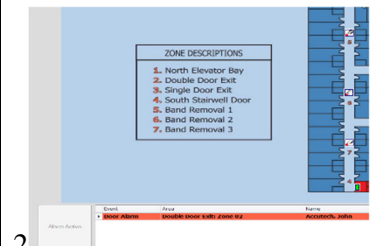
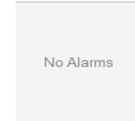
If the alarm event is set to *Manual Clear*, select the alarm event in the Event Dialog box (3) and select Clear Alarm button (**note: the alarm event must be red/white**). Alternatively, you may select the active flashing icon location (4) (which will allow for notes (4) to be associated with the alarm event in Reports) and then select the Clear Alarm button (3). If the Alarm event is solid red (2), you cannot clear the alarm event on the computer screen until the alarm is cleared at the exit point or the band alarm is addressed.

If the alarm event is set to *Allow Clear by Zone Reset*, the alarm will automatically clear when a valid Keypad reset code is entered into the zone's Keypad.

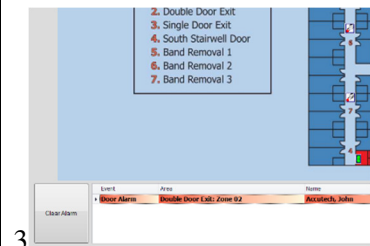
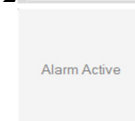
If the alarm event is set to *Automatically Clear*, the alarm will automatically clear when the user-selected time duration expires.



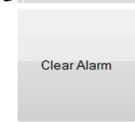
1



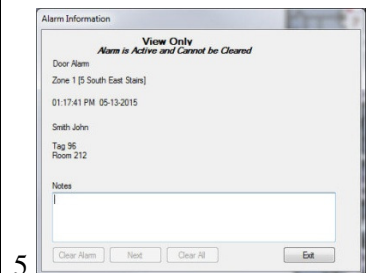
2



3



4



5

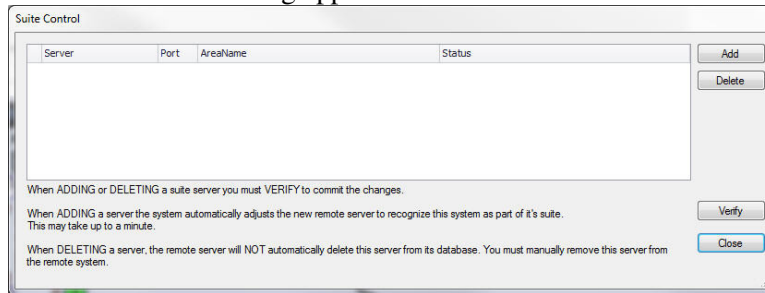
Suite Control

Suite Control allows for Tag Transfer between two Server databases.

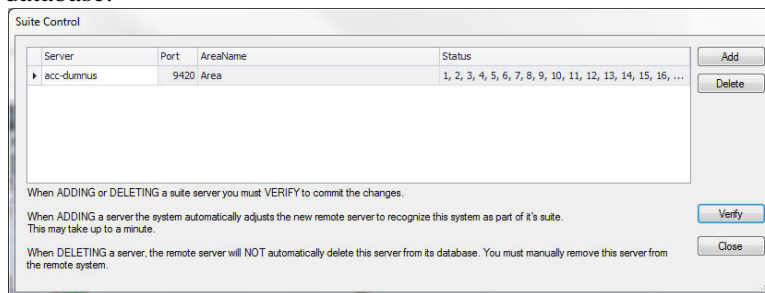
To add a Server to Suite Control, use the following instructions:

1. From the System file menu (1), select Suite Control

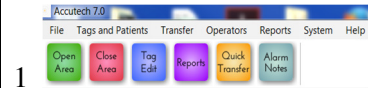
The Suite Control dialog appears.



2. Select the button
3. In the Server column, enter the computer name of a server and then select the button
4. If successful, the Area Name column and Status columns will populate. The Status column lists the current Tags in the server's database.



5. Add additional servers as desired.



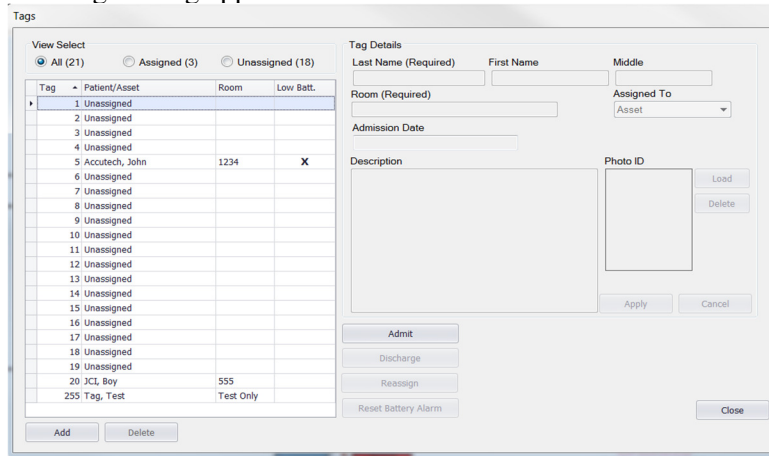
Adding Tags

Upon initial installation, add all available Tags intended for use in the monitored area into the server database.

To add a Tag to the server database, use the following instructions:

1. Select the Tags Edit (1) button

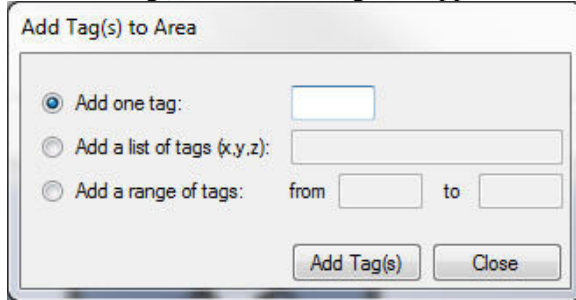
The Tags dialog appears.






1

2. Select the  button

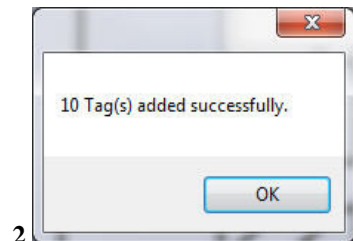
The Add Tag(s) to Area dialog box appears.



3. Enter an individual Tag, list of Tags, or range of Tags and select the  button. A confirmation window will appear (2).

Select the  button of the confirmation window then select the  button of the Add Tag(s) to Area dialog box.

The Tags appear in the Tags list.



2


Assigning a Tag

Tag assignment associated a name, room number, and photo ID for display in the Accutech 7.0 software when an alarm event occurs.

To assign a Tag, use the following instructions:

1. Select the Tag Edit (1) button.

The Tags dialog appears.

2. Highlight the desired Tag number from the Tag list and select the  button. The Tags Details section becomes accessible (2). Complete the Tag Details section:

- a. The Last Name - required
- b. First Name and or middle
- c. Room – required
- d. Assigned To – select from: Asset, Baby, Personnel, Patient, Resident
- e. Photo ID

3. The user can also associate a Photo ID (2) with the Tag assignment by selecting the Load button, then the Load Image button, browsing to the photo location, selecting the photo, selecting the Open button, cropping the photo as desired, and finally selecting the OK button.

4. When finished, select the  button.

The Tag list updates with the entered information and the assignment is listed in the Tag list sidebar of the user interface.

An admission date will automatically be associated with the tag assignment.



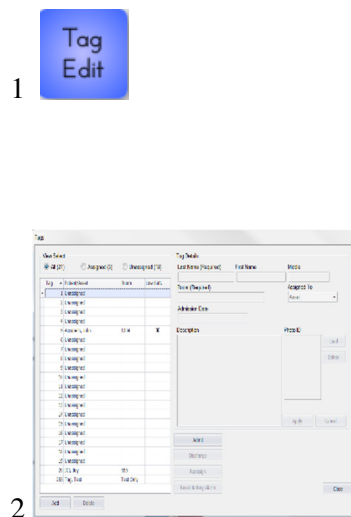
1

2

Unassigning a Tag

To unassign a Tag, use the following instructions:

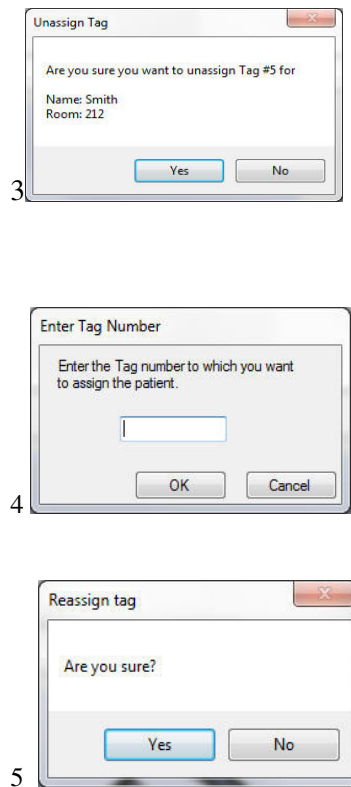
1. Select the Tag Edit (1) button.
The Tags dialog box (2) appears.
2. Highlight the desired assigned Tag number from the Tag list and select the button. A confirmation window appears (3).
3. Select the button.
The Tag is unassigned. The Tag list and Tag list sidebar updates accordingly.



Reassigning a Tag

To reassign a Tag (to another Tag number without having to re-enter Tag Details information), use the following instructions:

1. Select the Tag Edit (1) button.
The Tags dialog box (2) appears.
2. Highlight the desired assigned Tag number from the Tag list and select the button.
The Enter Tag Number dialog box appears (4).
3. Enter an available Tag number and select the button. A confirmation window appears (5).
4. Select the button.
The Tag is reassigned. The Tag list and Tag list sidebar updates accordingly.



USB Tag Test Station

The USB Tag Test Station verifies a Tags ID number, tag type, useful battery level, warranty date and manufacture date without having to activate the tag with an STAD. It will also allow you to generate a report on tags that were tested. The USB TTS will only work with Accutech 7.0 Software.

Using the Tag Test Station

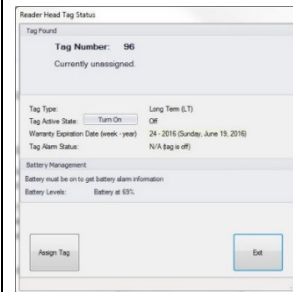
Once the TTS fully reads the data from the tag, the software will provide:

1. The tag #
2. The bar code #, which indicates the manufacture date. eg.4209 indicates week and year
3. Tag State – whether the tag is in an OFF or ON state. You can then turn the tag on for use at this time if it is an LT tag. Or if the tag is already on, you can turn the tag off for storage purposes.
4. Tag Type – LT, SB, CB, BR
5. End of Warranty Date
6. Battery Level – 1-100% indicates USEFUL tag battery life and means the tag is good. 0% indicates the tag needs to be replaced. Do not continue to use a tag with 0% indicated.

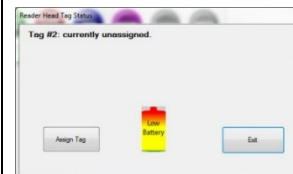
Note: you cannot activate a BR tag with the TTS. However, you can deactivate an active BR tag if placed on the TTS.

Generating a Report

Once the TTS fully reads the data from the tag, the software will log the information a report can be created for future reference.



Tag Currently assigned





Tag Low Battery

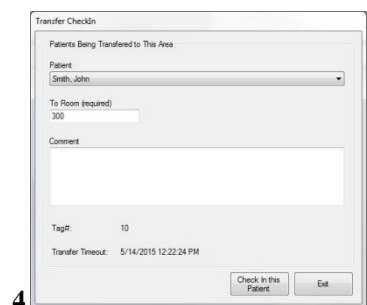
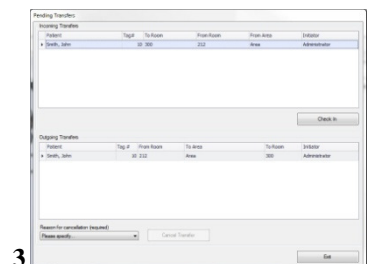
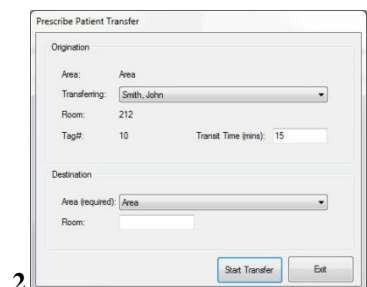
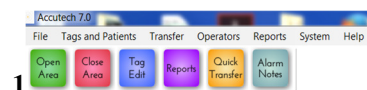
Tag Transfer

Tag Transfer is the process of transferring Tag Details between two server databases. At no time is the protection of the system compromised. Any alarm event will register and display before, during, or after a Tag Transfer. In installations with multiple servers (i.e., multiple protected areas or floors), due to floor-to-floor discrimination and potential global band removal lockdown protocol, the Accutech Software requires Tags to be designated in their respective databases where they are in use and physically reside. Utilize Tag Transfer for staff escorted transfer of currently assigned Tags. Use Quick Transfer for transfer of unassigned Tag inventory.

These instructions assume Suite Control settings are already established.

To Transfer an assigned Tag, use the following instructions:

1. From the Transfer file menu (1), select CheckOut (2).
The Prescribe Patient Transfer dialog box appears.
2. From the Transferring pull-down list, select the desired assigned Tag.
3. Adjust the Transfer Time (mins) text field as desired to allot enough time to complete the transfer. If the Transfer time is exceeded, a Transfer Timeout dialog box will appear. Once the Transfer Timeout dialog box appears, the user will need to cancel or extend the Transfer Time.
4. From the Destination Area pull-down list, select the desired area.
5. Once all Check Out parameters are set as desired, select the  button.
6. The transfer is started and moved to Pending Transfers (Transfers file menu > Pending). The Pending Transfer dialog box (3) displays all current Incoming and Outgoing Transfer in progress, allows transfer cancellation, and allows transfer Check In.
7. Once the staff escort arrives at the destination area, from the Transfer file menu, select Check In. The Transfer CheckIn dialog box (4) appears.
8. From the Patient pull-down list, select the desired Tag, edit the Room and Comments text fields as desired, and select the  button to complete the transfer.



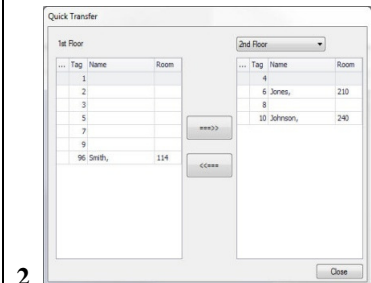
Quick Transfer

Tag Transfer is the process of transferring Tag Details between two server databases. At no time is the protection of the system compromised. Any alarm event will register and display before, during, or after a Tag Transfer. In installations with multiple servers (i.e., multiple protected areas or floors), due to floor-to-floor discrimination and potential global band removal lockdown protocol, the Accutech Software requires Tags to be designated in their respective databases where they are in use and physically reside. Utilize Tag Transfer for staff escorted transfer of currently assigned Tags. Use Quick Transfer for transfer of unassigned Tag inventory.

These instructions assume Suite Control settings are already established.

To Quick Transfer a Tag, use the following instructions:

1. Select the Quick Transfer button (1).
The Quick Transfer dialog box appears (2).
The current database is listed in the left column.
Available databases are listed in the right column.
2. From the Area Name pull-down list, select the desired database.
3. Select the desired Tag and use the right and left arrow buttons to transfer accordingly.
4. When finished, select the close button to exit.



Reports

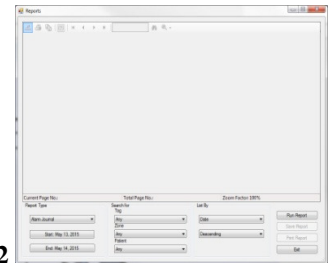
Alarm events set to log under Event Groups can be queried to examine alarm frequency, duration, and patterns. Use this information to make adjustments to zone equipment to alleviate staff alarm fatigue or during system evaluations from internal or external parties. Reports may be saved to various electronic file formats or sent to available printers.

To generate a Report, use the following instructions:

1. Select the Reports button.
The Reports dialog box (2) appears.
2. Select the desired report from Report Type pull-down list (3).
3. Select the desired Start and End Date parameters from their respective buttons (4).
4. Select the parameters desired under the Search for and List By section to further filter report results
5. Once all parameters are set, select the button.
The report is generated and displayed.
6. Save or Print the Report as desired.



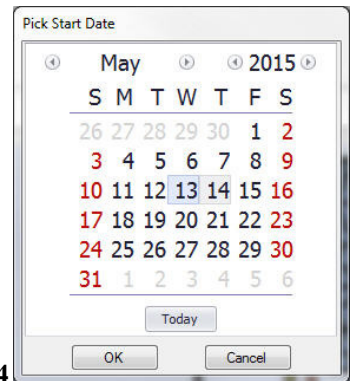
1



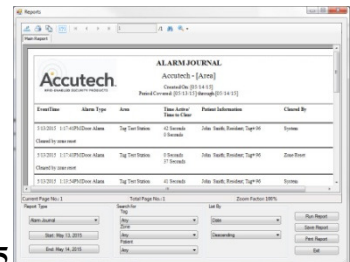
2



3




4



5

Automatic Backups

Accutech Software 7.0 will automatically backup the server database daily. To modify backup schedule and save location, use the following instructions:

1. From the System menu (1), select Settings
The System Settings dialog box appears.
2. Select the Backup tab (2)
3. Adjust the Backup Database pull-down list (Daily or Weekly) as desired
4. Adjust the Save Path location as desired
5. Once all parameters are set, select the  button to exit

Trouble Shooting

In the event the software stops generating alarms,

1. Check the Database Server and or Comm server settings. Open the Accutech Config 7.0 Icon from your desktop.



The Accutech Module Configuration dialog box appears. Check both the Database Server tab (4) and the Comm Server tab (5). The following settings should be selected in the service area:

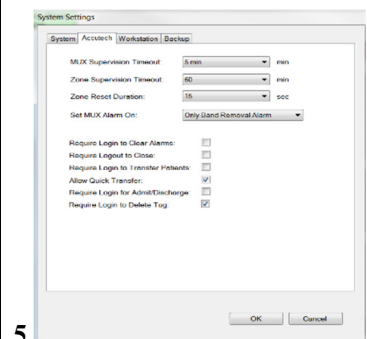
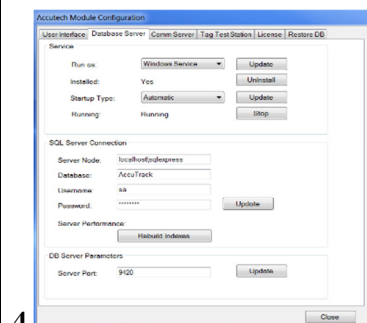
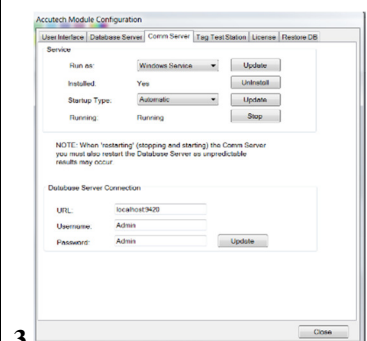
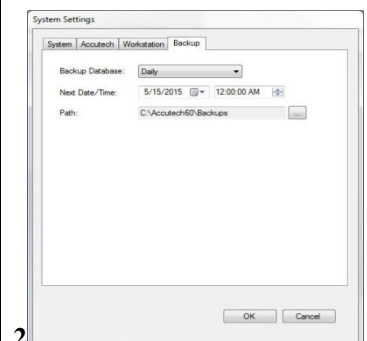
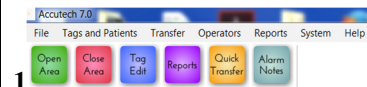
Run As: Windows Service – (change and update if it isn't)

Installed: Yes (install if it isn't)

Startup Type: Automatic (change and update if it isn't)

Running: Running (start if it is stopped)

2. Check “Only Band Removal Only Alarm”. From the System menu (1), select Settings, The System Settings dialog box appears. Select the WorkStation Tab (5). Next to Set MUX Alarm On: “Only Band Removal Alarm” should be selected.
3. Restart computer. If the problem persists contact IT, your local service provider or call 800-356-2671 for support.



User Manual

Chapter 7:

Facility Performance Testing

Facility Performance Testing

- Zone Functions Tested
- Test Equipment Required
- Zone, Lock Test
- Zone, Egress Test
(3000 and 3101 Magnetic Locks)
- Zone, Delayed Egress Test
(3101 Magnetic Locks only)
- Zone, Hallway Test
- Zone, Elevator Deactivation Test
- Door Ajar Test
- Loiter Test
- System Supervisor Test (Tx)
- System Supervisor Test (Rx)
- Fire Panel Interface (FPI) Test
- Band Alarm Test (BR 4200 Systems only)

NOTE: These tests should only be performed by trained personnel.

This document defines the recommended periodic testing procedures for the Accutech security systems. Accutech recommends that these tests be performed (at the minimum) on a monthly basis.

DISCLAIMER:

This chapter is intended as a guidance document only. Each facility should review these recommendations and modify as necessary to meet their own unique security requirements.

Periodic testing of these critical performance functions can help prevent undetected security system failures.

Zone Functions Tested

Accutech systems respond to RF signals generated by the Tags. Most conditions occur at a monitored zone, although, Band Alarms can occur anywhere. In addition, the Accutech System monitors non-Tag-related zone functions such as Door Ajar and Supervisor. The RF signals we will be concerned with during these tests are:

- **Zone** – triggered when a Tag approaches or lingers at a doorway, an elevator, or other monitored zone
- **Band Alarm (BR 4200 Systems only)** – triggered when a BR 42 Tag band is loosened, cut, saturated, removed, or tampered with.

Each exit point around the area of protection should be evaluated to determine:

- if doors lock and/or elevators disable when a Tag approaches
- if alarms are generated due to passage of a Tag through an exit point
- if Band Alarm functions are operating correctly (BR 4200 Systems only)
- if events are correctly logged in the system computer(s) when chosen in the software to do so

Test Equipment Required

You will need to designate Tags to be used solely for testing purposes only.

For ES 2200 and IS 3200 Systems, designate one Tag for testing zone alarms.

For BR 4200 Systems, you can designate one Tag for testing zone alarms and Band Alarms or designate one Tag for each alarm test.

For IS 3200 and BR 4200 Systems, Tags designated for testing purposes should be assigned on the system under the patient names “Test Tag – Zone” and “Test Tag – Band Alarm” and the numbers 255 and 254 respectively, so that it will be clear to anyone viewing the alarm pop-up messages or alarm reports that these events were related to system testing.

Zone, Lock Test

When a Tag approaches a monitored door zone equipped with Locks, the Lock should engage. When the Tag leaves the monitored zone, the Lock should disengage. This test will evaluate this operation.

NOTE: In the event of a fire, all Locks are disabled and the door can be opened immediately.

Test results should be written down and kept in a test log. Make your own, or use the included, to ensure that every monitored zone is tested. These test reports should become part of your permanent quality assurance records.

1. Notify staff and security that you will be testing zone performance and alarms *may* be generated. They should pay special attention to traffic during this time.
2. While not in a monitored zone, use an S-TAD to activate the test Tag.
3. Hold the test Tag in your hand and approach each monitored door zone.
4. Each door should lock as you approach.
NOTE: You may be able to hear the lock “click” as it changes states. Otherwise, For 3000 Series Magnetic Locks, you can push on the door to verify the Lock is engaged. For 3101 Series Magnetic

Locks, the LED will turn from green to red when the Lock is engaged.

However, do not open the door; this test is intended only for verifying that a door locks when a Tag approaches. If you wish to verify the operation of Delayed Egress Circuitry for 3101 Locks, see page 7-3.

5. As you approach each zone, try varying your approach angle (i.e., straight on, from the sides, down low, etc.). Make sure there is adequate coverage from all angles leading to the monitored zone.
6. Record the results (pass or fail).
7. If the test fails to lock the door:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment.
 - d. Have a maintenance technician verify the FPI is set properly.
 - e. Call your Accutech Representative.
8. To reset the Lock, deactivate the test Tag or leave the monitored zone. Depending upon your settings, the Lock may disengage itself automatically. Otherwise enter a Keypad Reset code.

Zone, Egress Test (3000 and 3101 Magnetic Locks)

Most monitored door zones equipped with Locks are configured to generate an alarm if a Tag is detected in the zone and the door is open. This test will evaluate this operation. For hallways zones, see page 7-4.

NOTE: In the event of a fire, all Locks are disabled and the door can be opened immediately.

This test should be conducted selectively; create a rotating schedule to test a different set of zones each time that periodic testing is conducted.

Test results should be written down and kept in a test log. Make your own, or use the included, to ensure that every monitored zone is tested. These test reports should become part of your permanent quality assurance records.

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. Prop the door open.
3. While not in the zone, use an S-TAD to activate the test Tag.
4. Approach the door. An alarm should sound.
5. Verify that the central computer correctly logged this alarm and that any networked computer also sees the alarm.
6. Record the results (pass or fail).
7. If the test fails to cause an alarm:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment
 - d. Have a maintenance technician verify the FPI is set properly
 - e. Call your Accutech Representative.
8. To reset the zone, enter a Keypad reset, deactivate the test Tag, and close the door completely, and if necessary, clear the alarm on the PC.

Zone, Delayed Egress Test (3101 Magnetic Locks only)

Delayed Egress Circuitry is a feature of the Accutech 3101 Magnetic Lock that, due to fire and life safety codes, allows free egress through a door after 15 seconds (plus a 1 to 3 second nuisance delay) of constant force is applied. This test will evaluate this operation.

NOTE: In the event of a fire, Delayed Egress Circuitry is disabled and the door can be opened immediately.

This test should be conducted selectively; create a rotating schedule to test a different set of zones each time that periodic testing is conducted.

Test results should be written down and kept in a test log. Make your own, or use the included, to ensure that every monitored zone is tested. These test reports should become part of your permanent quality assurance records.

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. While not in the zone, use an S-TAD to activate the test Tag.
3. Approach the door.
4. The Lock should engage.
NOTE: The LED on the Lock will turn from green to red when the Lock is engaged.
5. Remember once the Lock is engaged, in order to open the door, you have invoke the Delayed Egress Circuitry feature. To do this, press on the door for the duration of the nuisance delay (1 to 3 seconds) and the delayed egress countdown (15 to 30 seconds) then the Lock will disengage and you can open the door.
NOTE: During the delayed egress countdown the Lock's piezo will beep. After you open the door, the Lock's piezo will sound continuously.
6. Verify that the central computer correctly logged this alarm and that any networked computer also sees the alarm.
7. Record the results (pass or fail).
8. If the test fails to cause an alarm:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment.

- d. Have a maintenance technician verify the FPI is set properly.
- e. Call your Accutech Representative.

9. To reset the zone, enter a Keypad reset, deactivate the test Tag, close the door completely, and, if necessary, clear the alarm on the PC.

Zone, Hallway Test

Two conditions are required to generate an alarm at a hallway zone: Tag detection and PIR detection. This test will evaluate this operation.

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. Using an S-TAD, activate the test Tag.
3. Enter the monitored hallway zone and move in the path of the PIR. An alarm should be generated and an alarm may sound.
4. Verify this alarm is logged on the central computer and any other remote computers networked to it.
5. Record the results (pass or fail).
6. If the test fails to cause an alarm:
 - a. Notify staff and security of the vulnerable area.

- b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment
 - d. Call your Accutech Representative.
7. To reset the zone, enter a Keypad reset, deactivate the test Tag, and, if necessary, clear the alarm on the PC.

Zone, Elevator Deactivation Test

When a Tag approaches an elevator zone the elevator call buttons will be disabled. This test will evaluate this operation.

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. Using an S-TAD, activate the test Tag.
3. Enter the elevator zone. The zone's response will depend on the state of the elevator door(s):
 - a. Elevators with door(s) open will disable as you approach and an alarm will sound. The car will not be able to leave the floor.
 - b. Elevators with door(s) closed will have their call button(s) disabled.
 - c. Elevators en route will arrive, open, and then an alarm will sound. The car will not be able to leave the floor.
4. Verify this alarm is logged on the central computer and any other remote computers networked to it.
5. Record the results (pass or fail)
6. If the test fails to cause an alarm:

- a. Notify staff and security of the vulnerable area.
- b. Check for visible damage or tampering to the zone equipment.
- c. Have a maintenance technician verify power to the zone equipment
- d. Have a maintenance technician verify the FPI is set properly
- e. Call your Accutech Representative.

7. To reset the zone, deactivate the test Tag and, if necessary, enter a Keypad reset and clear the alarm on the PC.

Door Ajar Test

This test will evaluate the Door Ajar feature.

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. Without a Tag in the zone, prop the door open.
3. Depending upon the time delay setting, the door should register a Door Ajar alarm after the predetermined time.
4. Record and verify the time setting.

5. If Door Ajar is set in Event Preferences to “Log and Status” or “Alarm”, verify that the central computer correctly logged this alarm and that any networked computer also sees the alarm.
6. Record the results (pass or fail).
7. If the test fails to cause a Door Ajar alarm:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment
 - d. Call your Accutech Representative.
8. To reset the zone, close the door completely. Depending on settings, the system may reset automatically or, if necessary, enter a Keypad reset and clear the alarm on the PC.
6. If Loiter is set in Event Preferences to “Log and Status” or “Alarm”, verify this alarm is logged on the central computer and any other remote computers networked to it.
7. Record the results (pass or fail)
8. If the test fails to cause a Loiter alarm:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment
 - d. Call your Accutech Representative.
9. To reset the zone, deactivate the test Tag and, if necessary, enter a Keypad reset and clear the alarm on the PC.
10. Depending on settings, the system may reset automatically or, if necessary, enter a Keypad reset and clear the alarm on the PC.

Loiter Test

This test will evaluate the Loiter feature

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. Using an S-TAD, activate the test Tag.
3. Enter a monitored zone and linger there.
NOTE: Be sure the door stays closed.
4. Depending upon the time delay settings, the zone should register a Loiter alarm after the predetermined time.
5. Verify and record the time setting.

System Supervisor Test (Tx)

This test will evaluate the System Supervisor Test through a Tx wand antenna.

Notify staff and security that you will be testing zone performance and alarms **will** be generated. They should pay special attention to traffic during this time.

1. Place a 4"x4"x2" electrical box (or an equivalent piece of metal) next to the Tx Wand Antenna. This will simulate a damaged antenna.
2. A Supervisor alarm should register and an alarm may sound.
3. Verify the alarm is logged on the central computer and any other remote computers networked to it.
4. Record the results (pass or fail).
5. If the test fails to cause a Supervisor alarm:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment
 - d. Call your Accutech Representative.
6. Remove the electrical box away (or equivalent) from the Tx Wand Antenna. The Supervisor alarm will cease. If necessary, clear the alarm on the PC.

System Supervisor Text (Rx)

Each time a Tag is detected in a zone (as has been the case in each of the previous tests) the Zone Receiver functionality is tested.

In addition, Receivers are self-tested on a predetermined interval (set during installation).

Therefore, it is not necessary to perform a test dedicated to testing the System Supervisor through Zone Receivers. However, if you would prefer to do so, consult your system maintenance technician for assistance.

Fire Panel Interface (FPI) Test

State codes require that all Lock and Elevator Deactivation Circuitry be wired into a facility's fire alarm system. In Accutech Systems this is done via the Fire Panel Interface (FPI).

This is done so in the case of a fire, any Lock or Elevator Deactivation unit disengages, allowing free egress or ingress. For more information on this policy, check your local codes.

This test should be performed concurrently with your facility's fire alarm test.

1. Using an S-TAD, activate a test Tag.
2. Activate your facility's fire alarm.
NOTE: The LED on the FPI enclosure will blink.
3. Proceed to each zone to be tested and verify that doors are unlocked and egress is possible. Elevators should be inoperable due to the fire alarm.
4. Record the results (pass or fail).

5. If a zone fails to disengage during the fire alarm, call your system service technician immediately for further assistance.
6. *After your facility's fire alarm has been reset the FPI may automatically reset or press the Reset button on the outside of the FPI enclosure to reset the FPI and engage all restraints.*
NOTE: The Reset button on the FPI enclosure will **not** work during the fire alarm. You must reset the fire alarm first and then reset the FPI.
7. Return to each tested zone with the test Tag and verify that doors now lock and elevators disable as you approach.
8. Using an S-TAD, deactivate the test Tag.

Band Alarm Test (BR 4200 Systems only)

For this test you will need a BR42 Tag to evaluate the Band Alarm function. Test results should be written down and kept in a test log. Select different locations within the protected area(s) each time you conduct this test so that you will evaluate all Receivers in the system on a rotating basis. Remember to test both Auxiliary and Zone Band Alarm Receivers.

IMPORTANT:

Band Alarms can be generated anywhere within a facility, not just at exit points. Repeat this test multiple times varying your position each time within an area to assure there is no place where a BR42 Tag can be removed without being detected. This includes bathrooms, visiting areas, storage rooms, and laundry rooms.

1. Notify staff and security that you will be testing zone performance and alarms will be generated. They should pay special attention to traffic during this time.
2. With the cloth band, place the BR42 test Tag snugly around your index finger.
3. Using an S-TAD, activate BR42 test Tag.

Proceed to the area to be tested, remove the Tag from your finger and place it loosely in the palm of your hand. A Band Alarm should be generated.

NOTE: If you are testing near a Zone Receiver you may also generate Loiter alarms during this test.

4. Verify that the central computer correctly logged this alarm and that any networked computer also sees the alarm.
5. Record the results (pass or fail).
6. If the test fails to cause a Band Alarm:
 - a. Notify staff and security of the vulnerable area.
 - b. Check for visible damage or tampering to the zone equipment.
 - c. Have a maintenance technician verify power to the zone equipment
 - d. Call your Accutech Representative.
7. To clear the alarm, deactivate the BR42 test Tag, enter a Keypad reset and, if necessary, clear the alarm on the PC.

FAQ

Tag:

What can I use to clean Tags?

Use antibacterial wipes or a 3% hydrogen peroxide solution (wipe, do not soak) to clean Tags. ALWAYS RINSE WITH WATER OR WIPE DOWN WITH A DAMP CLOTH. THEN DRY TO REMOVE ANY CHEMICAL RESIDUE. UNAPPROVED CLEANERS CAN AFFECT THE PLASTIC AND CAUSE IT TO BREAK DOWN PREMATURELY.

How should I store Tags?

Ideally, to preserve battery life, Tags should be turned off with an S-TAD. However, if you do not have an S-TAD or your Tags are always activated, Tags should be stored away from sources of electrical noise and stored in a metal container with lid. BR42 Tags must be turned off when not in use.

How can I be sure the Tag is on and functioning properly?

You can test that a Tag is on and functioning properly by the testing it with an S-TAD or taking the Tag to a monitored zone (this may cause alarms).

How often should I check a Tag's battery with my S-TAD?

Accutech recommends testing a Tag's battery during assignment of the patient/infant then again during unassignment prior to cleaning and restocking of the Tag for new use. Periodic weekly testing of Tags for long-term patients is also recommended.

Can I replace or recharge the battery in the Tag?

No. Once a Tag's battery is drained, the Tag will have to be replaced.

How long will the Tags last before I need to replace them?

Accutech Tags operate by internal battery. The Tags have been engineered for greater than 1.5 years.

Tag Band:

Are Tag bands reusable?

No. Tag bands are for one-time use only.

S-TAD:

How long will the 9-volt battery last in the S-TAD?

The life of the 9-volt battery in the S-TAD is dependent upon usage.

Can I use a rechargeable battery in the S-TAD?

Yes.

System (General):

If you are locking the doors, what happens in the case of a fire?

Accutech follows NFPA codes and regulations. Therefore, in the event of a fire, all Accutech restraints will be disabled (audial and visual alarms remain active).

If the PC shuts down, is the physical security also disabled?

No. The Accutech Software is separate from and does not affect nor control the physical Accutech Security System components.

Can I adjust the Door Ajar and Loiter Times?

Yes. Door Ajar and Loiter times are adjustable. Contact your system maintenance technician for further assistance.

Why do I get Loiter alarms?

Loiter alarms occur when a Tag lingers in a monitored zone for longer than the preset allotted time. If you experience an abundance of Loiter alarms, consider that your monitored zones may be extending into common resident areas. Contact a maintenance technician for further assistance.

Why do I get a Band Alarm if the band has not been removed?

Band Alarms occur when a BR42 Tag band is loosened, cut, saturated, removed or tampered with.

- Is the band snug around the infant's extremity and the conductive fibers are in good contact with the infant's skin? If not, snug up the band.
- Is excess band material properly trimmed? If not, trim appropriately.
- Is the band wet? If so, replace the band.
- Is the Cam Lock completely closed? If not, snap it closed.

Furthermore, due to the global response of Band Alarms and possible overlapping of zones to assure complete coverage, a single Band Alarm event may register at multiple zones.

As always, make sure your Tags are handled, transported, and attached to infants properly as well as turned off when not in use.

How can I reduce nuisance alarms?

Nuisance alarms are typically caused by:

- the mishandling of Tags
- improper storage of Tags
- Loiter alarm time being too brief (passersby causing alarms or during slow-moving patient transfers)
- lost Tags

In addition, if you are experiencing an abundance of nuisance alarms, consider that your monitored zones may be extending into common resident areas and make sure your Tags are handled, transported, and attached properly as well as turned off when not in use.

System (Maintenance):How often should I test my zones?

Accutech recommends that Facility Performance Testing (Chapter 7) be performed (at the minimum) on a monthly basis. However, each facility should review and modify the testing procedures as necessary to meet their own unique security requirements.

Who do I contact if the system does not seem to be working?

If you should need assistance with any part of your Accutech Security System, contact your system maintenance technician first, then your local area Accutech Representative.

Who do I call about upgrading or adding to my system?

If you would like information about upgrading or adding to your system, contact your local area Accutech Representative.

How do I order replacement Tags/Bands/Components?

If you would like to order replacement Tags/Band/Components for your system, contact your local area Accutech Representative.

Glossary

Accutech Software	The Accutech Software displays incoming event information from monitored zones in real-time on a PC screen using the facility's custom floor plan as the background. Event information is stored in a database and can be viewed as a printable Report. The Accutech Software is separate from and does not affect nor control the physical Accutech Security System or any of its components.
Auxiliary BR Receiver	Used for complete facility-wide Band Alarm coverage, an external Receiver that only detects Band Alarm events.
Band Alarm	An alarm condition that occurs when an Accutech BR42 Tag is loosened, cut, saturated, removed or tampered with.
BR 4200 System	A complete infant security system featuring Intelli-Band Technology.
BR 4200 System Tag	A small wristwatch-sized device that is worn by an infant. In addition to the functionality of an IS 3200 System Tag, the BR 4200 System Tag features Intelli-Band Technology, which will alarm if the band is removed or tampered with.
Case sensitive	A program's ability to distinguish between uppercase (capital) and lowercase (small) letters. Programs that distinguish between uppercase and lowercase are said to be case sensitive.
Central Alarm	A tone generator than can drive up to 5 speakers.
Controller	The Controller coordinates and controls all of the devices and functions of the Accutech Security Systems.
Delayed Egress Circuitry	A feature of the Accutech 3101 Magnetic Lock that, due to fire and life safety codes, allows free egress through a door after 15 seconds of constant force. In the event of a fire alarm, the Delayed Egress Circuitry is disabled.
Door Ajar alarm	An alarm condition that occurs when a door is open longer than the preset time allowed.
Double conditioning	A characteristic of a zone that requires two conditions to be met (such as Tag detection and PIR detection) before an alarm is generated.

Egress alarm	An alarm condition that occurs when a Tag is in the Tx Activation Field and a door is opened (or PIR detection).
Elevator Deactivation Circuitry	Circuitry that deactivates an elevator's call button(s) when a Tag is a monitored elevator zone.
ES 2200 System	A complete wanderer, asset, or infant security system.
ES 2200 System Tag	A small wristwatch-sized device worn by a resident, infant, or attached to an asset.
Escort Function	A function of the Keypad used to escort Tags through a monitored zone without triggering alarms.
Fire Panel Interface (FPI)	A FPI ties Accutech Security System components into the facility's fire panel. Required if the system includes Magnetic Locks and/or Elevator Deactivation Circuitry. In the event of a fire, Magnetic Locks and Elevator Deactivation Circuitry are disabled. However, if there is still power to the system, the alarms will still sound.
Floor-to-Floor Tag discrimination	Set during installation, Floor-to-Floor Tag discrimination allows the software to be configured so that predetermined ranges of Tags can be designated to individual floors, thus when alarms occur they only appear on PCs associated with that floor (This aids in reducing nuisance alarms from bleed through especially in stacked zones). Regardless of what the PCs are configured to see, zones will function as usual (i.e., locking doors and/or sounding alarms if applicable).
Graphic Display Panel (GDP)	A display panel, which provides staff with a representation of the floor being monitored. GDPs are custom-made to a facility's floor plan and notify staff when an alarm condition occurs in a monitored zone through a piezo buzzer and alarm-specific LEDs.
Intelli-Band Technology	A feature of BR42 Tags, which will alarm if the band is loosened, cut, saturated, removed, or tampered with.
IS 3200 System	A complete wanderer, asset, or infant security system.
IS 3200 System Tag	A small wristwatch-sized device that is worn by a resident, an infant, or attached to an asset. They are assigned to a specific resident or asset (via the Tag Test Station and Accutech Software). Once assigned, the computer associates a name, room number, and any other pertinent information about the resident/infant/asset with that Tag.

Keypad	A Keypad is used to reset zone equipment once an alarm has been addressed (Keypad Reset) or to escort Tags through a monitored zone without triggering alarms (Keypad Escort). The Keypad is also capable of providing visual indicators for Tag detection, alarms, and escort time.
Keypad Reset	A feature of the Keypad that is used to reset zone equipment after an alarm has been addressed.
Test Tag	A red Test Tag designed to verify proper zone coverage (without causing alarms) during installation, adjustment, or testing of a monitored zone.
Local Alarm	A single-tone sounder mounted at a monitored zone to attract attention during alarms.
Loiter Alarm	An alarm condition that occurs when a Tag lingers in the Tx Activation Field for longer than the preset time.
LT	“Long Term”, a Tag classification
Magnetic Lock	A device using a magnetic coil and plate to lock a door when a Tag is detected in the monitored door zone.
Magnetic Switch	A device that monitors a door’s position (open or closed). A Magnetic Switch is used on a door when alarm activation is not desired unless the door is opened when a Tag in the monitored door zone.
Masking	In PIR applications, limiting the infrared beam by placing stripes of tape over the lens. In Software applications, during text insertion into a field, characters are replaced with symbols (usually asterisks “*”) for privacy.
Master Code	User Code Number 1 for the Keypad, used for Keypad programming purposes only.
Monitored Zone	Any door, hallway, stairwell, elevator, or other passageway that has a Controller, Tx antenna, and Zone Receiver associated to it.
Multiplexer	A device that relays event information from the Controller to SAPs, GDPs and/or the Accutech Software.
Nuisance Alarms	Undesired alarm activation stemming from such things as the mishandling of Tags, improper storage of Tags, slow patient transferring, and/or Loiter alarm time being too brief (passersby causing alarms).

Passive Infrared Reader (PIR)	A device that uses an infrared light to detect motion.
Push Button Override (PBO)	A switch (push button) that triggers the Keypad's Escort function.
Program Shell	An application of the Software that houses the displayed monitored area.
Receiver	A device that detects the signal of an activated Tag, usually mounted in the Controller above the drop ceiling or on the wall next to the door being monitored. For centrally located systems, the Receiver is mounted separately at the door. A short rubber duck antenna protrudes from the cover.
SB	"Slotted Back", a Tag classification
S-TAD	Used to check the functionality of an Accutech Tag. Accutech Tags operate by internal battery. Over the course of normal operation, Tags eventually lose battery power and the Tags will need to be replaced. The S-TAD is used to determine if a Tag has sufficient battery power to respond to an activating signal. Secure Tag Activator/Deactivator.
Staff Alert Panel (SAP)	A display panel used to indicate to staff where an Alarm, Door Ajar, Loiter, or Supervise warning condition has occurred; it employs bi-color LEDs, a Piezo Buzzer, and digital logic to control its outputs.
Supervisor	A built-in self-diagnostic circuit of the Controller that continuously monitors the Tx Activation Field and periodically simulates a Tag in the zone.
Tag	See ES 2200 System Tag, IS 3200 System Tag, or BR 4200 System Tag
Tag Test Station (TTS)	A TTS is used in conjunction with the Accutech Software for Tag assignments and to check the tags data information.
Tx Wand Antenna	A device that generates a Tag-activating radio frequency signal. This signal is referred to as a "Tx Activation Field."
Tx Activation Field	A radio frequency field created by a Tx antenna to detect Tags. Doors, hallways, elevators, stairwells, and other passageways that have a Tx Activation Field are commonly referred to as a "monitored zone."

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