



Baby Check Transmitters

User Guide



Compliance

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance can void the user's authority to operate the equipment.

The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

- FCC: KXU-MBTX 2
- IC: 2719A – MBTX 2



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WARNINGS AND CAUTIONS

It is important for your facility to implement and enforce the following WARNINGS and CAUTIONS in order to keep all equipment functioning properly. Disregarding the information and instructions in this document is considered abnormal use and may result in injury or system failure.

Warnings



ACCESSORIES (SUPPLIES)—To ensure resident safety and proper operation of equipment, use only parts and accessories manufactured or recommended by RF Technologies, Inc. Parts and accessories not manufactured or recommended by RF Technologies, Inc. may not meet the requirements of the applicable safety and performance standards.

Failure to use the components and supplies specified by RF Technologies, Inc. may result in equipment and/or system failure.

EXPLOSION HAZARD—These devices should not be used in the presence of flammable gas mixtures. It should also not be used in oxygen enriched atmospheres.

STATIC DISCHARGE—Do not touch the conductor portion of any conductor or port. Damage to the device may result.

SYSTEM WIRING—All permanent supply connections must be done in accordance with National Electric Code, NFPA 70.

INSTALLATION AND CONFIGURATION—It is the responsibility of the facility to follow the installation instructions carefully, as outlined in the applicable system guides, and to use the components and supplies specified by RF Technologies, Inc. for all installations.

Failure to use the components and supplies specified by RF Technologies, Inc. may result in equipment and/or system failure.

INSTRUCTIONS FOR SET UP AND USE—It is the responsibility of the facility to follow the instructions for set up and use carefully, as outlined in this manual, and to use the components and supplies specified by RF Technologies, Inc. for set up and use. Do not attempt to use extension cords or other equipment not supplied by RF Technologies, Inc.

Failure to use the components and supplies specified by RF Technologies, Inc. may result in equipment and/or system failure.

SYSTEM INSPECTION—It is the responsibility of the facility to establish and facilitate a regular inspection schedule for your system. RF Technologies, Inc. recommends quarterly inspections of your system for safety and performance by a qualified RF Technologies, Inc. representative.

To arrange for a quarterly inspection by RF Technologies, Inc., call our Technical Support Department at (800)-669-9946 or (262) 790-1771.

Failure to provide regular inspection of these products may result in equipment and/or system failure.

SYSTEM MAINTENANCE AND TESTING—It is the responsibility of the facility to establish and facilitate a regular maintenance schedule for your system, as outlined in the applicable system guides. This includes regular inspection, testing, and cleaning. RF Technologies, Inc. recommends monthly maintenance and testing of your system. It is also recommended that your facility keep records of maintenance and test completions.

Failure to provide regular maintenance and testing of these products may result in equipment and/or system failure.

USER TRAINING—Only users who have received adequate training on the use of the system, as outlined in this manual, should use the system. It is the responsibility of the facility to ensure all users have been trained.

Failure to adequately train employees may cause system failure due to user error. In addition, incorrect use of the equipment may also result in system failure.

All RF Technologies transmitters, pendants and banding material “PRODUCT” have been determined to be MR Unsafe as defined by ASTM F 2503-05. Use of “PRODUCT” in a Magnetic Resonance Imaging system will cause injury to residents and staff, MR system malfunction or “PRODUCT” malfunction. Do not bring “PRODUCT” into the MR system area and follow your facilities policies to classify and label “PRODUCT” as MR Unsafe.



MR UNSAFE

Bio-Incompatibility Notice

Do not use Pendants with people that have sensitivities or allergies to device materials. The device materials include Acrylonitrile butadiene styrene (ABS), Silicon, Rubber, and Neoprene.

Cautions



DISPOSAL—At the end of their service life the products described in this manual, as well as accessories (i.e. lithium batteries, banding material, disposable pads, etc.), must be disposed of in compliance with all applicable federal, state and local guidelines regulating the disposal of products containing potential environmental contaminants. Dispose of the packaging material by observing the applicable waste control regulations

RESIDENT GENERATED ALARMS—Do not rely exclusively on resident generated alarms for resident care and safety. The alarm function of equipment in the possession of residents must be verified periodically and regular resident surveillance is recommended.

RESIDENT MONITORING—The most reliable method of resident monitoring combines close personal surveillance with correct operation of monitoring equipment. It is the responsibility of the facility to periodically check on residents in possession of RF Technologies, Inc.'s equipment (i.e. Pendants, Pull Cords, Control Units) to mitigate risk of inappropriate use of equipment or strangulation and stumbling hazards from cables and cords.

PRODUCT WARRANTIES—Failure to follow the Warnings and Cautions in this guide voids any and all Product Warranties.

WORN OR DAMAGED PARTS—If the devices or cables are worn or damaged, you must have the product serviced. For more information, see the section entitled “Service and Return.”

PREFACE

Overview

The Baby Check transmitter is a component of the 9450 System which monitors doors, elevators, hallways, and stairwells to assist staff in monitoring patients and assets in a facility.

When used with Safe Place Infant transmitters, the Baby Check transmitters reduce the risk of mother-baby mismatches and provides an extra layer of protection to ensure the correct baby is taken to the right room.



WARNING: The 9450 System is designed and intended to work in conjunction with a facility's overall patient security program, including reasonable operating policies and procedures. The 9450 System, by itself, cannot prevent abductions or the elopement of patients.

Intended Audience

The Baby Check Transmitters User Guide is intended for caregivers who use the Baby Check transmitters. It includes detailed information about using the transmitters, care and cleaning, testing the transmitters, and transmitter specifications.

This guide should only be used by persons who have read the Software User Guide and received training on the use of the System. It is not intended as a substitute for reading the Software User Guide.



Always refer to the Software User Guide for complete instructions and warnings.

Contact Information

For more information about RF Technologies, Inc. products, go to www.rft.com.

Technical Support

For technical support, contact the Technical Support Team at:

(800) 669-9946, option 5 or (262) 790-1771

tech@rft.com

Customer Care

For questions on part replacement or for ordering new parts, contact the Customer Care Team at:

(800) 669-9946, option 2

customercare@rft.com

Sales

For questions regarding system add-ons, contact your Sales Manager.

Product Warranty

Product Warranty information can be found on the system's CD-ROM or with your original system proposal and invoice.

GENERAL INFORMATION

Introduction

This chapter provides general information about the transmitters. It includes:

- Using the transmitters
- Warranty dates
- Transmitter testing and care

Baby Check Transmitter



The Baby Check transmitter is used in conjunction with the Infant transmitter (see Safe Place Transmitter User guide for additional details).

The transmitter is lightweight and compact and although portable, is placed in its wall mount cradle in the hallway just near the door to the mother's assigned room.

How do the transmitters work?

Whenever someone needs to verify that the infant is being returned to the correct mother, one just needs to bring the Baby Check transmitter in proximity to the Infant transmitter and a one button push will indicate a correct match.



RADIO FREQUENCY: The radio frequency (RF) characteristics of certain metal crib carts may interfere or block the Infant transmitter's signal during transport, preventing detection by the system's Exit Receiver.



WARNING: The Baby Check transmitter does not link to an Infant transmitter when the Baby Check transmitter's battery is low. To verify low battery, press the button. If the battery voltage is deemed too low for reliable operation, the red LED will blink five times.

The software will notify you of this if and when the battery voltage drops beneath its threshold. When this occurs, the red LED on the front of the Baby Check transmitter flashes every 32 seconds. Discard the Baby Check transmitter and replace it with a new one.

Warranty Expiration Date

Each transmitter is stamped with a warranty expiration date. This date indicates the date that RF Technologies' warranty on that transmitter expires. If the warranty period has expired, discard the transmitter immediately.



WARNING: Using a transmitter beyond the printed expiration date can result in system failure, mismatch, and/or abduction.



Transmitters have a 2 year, non-replaceable, life expectancy.

Mounting

The Baby Check transmitter resides outside the Mother's room near the doorway and is mounted using a wall bracket.

Mounting with Screws

If a bassinet is to be used, it is recommended that the mounting height be no more than 8-12 inches from the top of the bassinet mattress pad.

To mount the transmitter using screws:

1. Determine a desired location near the doorway. The mounting height should be no higher than 44 inches from the floor.
2. Once the location is determined, place the mounting bracket on the wall and mark the four mounting holes found on the mounting bracket.
3. Center punch each hole and install nylon wall anchors in each hole. If the mounting bracket is to be attached to a concrete or masonry wall use the wall anchors designed for these substrates.
4. Attach the mounting bracket to the wall with the four screws provided.

Mounting with Tape

To mount the transmitter using tape:

1. Determine a desired location near the doorway. The mounting height should be no higher than 44 inches from the floor.
2. Once the location is determined place the mounting tape on the rear side of the mounting bracket.
3. Attach the mounting bracket to the wall with the mounting tape.

Linking

Keep 24 inches of separation between the Baby Check transmitter and any infant transmitter other than the one that will be linked.

To link a Baby Check transmitter to an Infant transmitter:

1. When ready to Link the Baby Check transmitter with the Infant transmitter bring the Baby Check transmitter 10-12 inches from the Infant transmitter and press the button on the front of the Baby Check transmitter.
2. The amber LED on the front of the Baby Check transmitter will begin flashing as it attempts to link to the Infant transmitter. It will attempt to Link for two minutes.
3. Once the Baby Check transmitter Links with the Infant transmitter the Green LED on the front of the Baby Check transmitter will flash three times.
4. The amber LED on the front of the Baby Check transmitter will begin flashing again as it attempts to look for a second Infant transmitter (a twin).
5. If a twin exists, bring the Baby Check transmitter 10-12 inches from the second Infant transmitter. Again, once the Baby Check transmitter Links with the Infant transmitter the Green LED on the front of the Baby Check transmitter will flash three times.
6. If a twin does not exist, press the button on the front of the Baby Check transmitter and it will stop attempting to link.
7. Repeat the previous steps if a triplet exists.
8. Return the Baby Check transmitter to its bracket outside the mother and infant's room.

Matching

To determine if a Match exists between a Baby Check transmitter and an Infant transmitter:

1. When ready to verify a Match between the Baby Check transmitter and the Infant transmitter, bring the Baby Check transmitter 10-12 inches from the Infant transmitter and press the button on the front of the Baby Check transmitter.
2. The amber LED on the front of the Baby Check Transmitter will double flash as it attempts to determine if it is a Match with the Infant Transmitter. It will attempt to match for 15 seconds.
3. Once the Baby Check transmitter matches with the Infant Transmitter the green LED on the front of the Baby Check transmitter will flash three times and return to idle.
4. If the Baby Check transmitter does not match the Infant transmitter, the red LED on the front of the Baby Check transmitter will flash three times.



NOTE: In the event of a mismatch, follow your facility's established procedures.

5. Repeat for twins or triplets.
6. When finished return the Baby Check transmitter to its bracket outside the mother and infant's room.

Discharge

NOTE: A Infant / Baby Check link will be required if “Confirm Discharge” and “Require Mom/Infant match before discharge” are both enabled during configuration (refer to the Software Administrator Guide for your system).

To discharge a Baby Check and Infant transmitter:

1. Discharge the Infant transmitter, the transmitter is now in a discharge state but the discharge is not complete until the banding material is removed.
2. Remove the infant banding material, the discharge is now complete.
3. Clear the Baby Check transmitter. This is done by holding the Clearing Device transmitter (refer to the “Transmitter Clearing Device” section for more information) 3 to 6 inches from the Baby Check transmitter and pressing the button on the front of the Baby Check transmitter. The confirmation will be confirmed by a green, red, green, red, amber LED sequence on the front of the Baby Check transmitter.
4. Discharge events should post for both the Baby Check and the Infant transmitters.
5. Store the cleared Baby Check transmitter together with the Transmitter Clearing Device until the next use.

LED Light Guidelines

The LED lights and audible beeps on the transmitter signal various meanings. These meanings are described in detail throughout this document. The following guidelines apply to the Baby Check transmitters:

| Light Flash | Meaning | How to Respond |
|-------------------------------|--|---|
| 1 Amber | The button on the Baby Check transmitter is pressed once to verify it is ready to be linked | The amber light will blink once every second to signal that Baby Check Transmitter is searching for an Infant Transmitter to Link to |
| 1 Amber | The button on the Baby Check transmitter is pressed once to verify it is linked to an Infant Transmitter | The amber light will blink twice rapidly every second to signal that the Baby Check Transmitter is linked to an Infant Transmitter |
| 1 Amber every 30 minutes | Baby Check transmitter is operational | Every 30 minutes the LED will blink amber to indicate that the transmitter is operational |
| 3 Green | Baby Check transmitter recognizes an Infant transmitter and links to it | Transmitter is successfully linked so no action required; operates as designed. |
| 3 Red | An Infant transmitter comes into contact with a Baby Check transmitter and they do not match | Follow your facility's established procedures to secure and separate the infant from the mismatched Baby Check transmitter Clear the alarm at the Client computer (you must select an event cause) |
| Green, Red, Green, Red, Amber | With the Transmitter Clearing Device 10" to 12" in front of the Baby Check transmitter, the button on the Baby Check transmitter is pushed | The Baby Check transmitter is cleared and all linked activity is removed Store the cleared Baby Check transmitter together with the Transmitter Clearing Device |

| Light Flash | Meaning | How to Respond |
|------------------------|---|--|
| 1 Red every 32 seconds | Baby Check transmitter experiencing low battery voltage | Every 32 seconds the LED will blink red to indicate the battery voltage has dropped beneath its threshold. Transmitter can no longer function reliably at this point Discard transmitter and call RFT Tech Support for replacement |
| 5 Red | Baby Check Transmitter indicates low battery | Verify low battery by pressing button. If battery voltage is deemed too low for reliable operation, the LED will blink red five times Discard transmitter and call RFT Tech Support for replacement |
| No LED activity | Baby Check transmitter battery is expired | When an unexpired Baby Check transmitter's button is pressed and the LED indicator exhibits no flashes, the battery voltage is too low for the Baby Check transmitter to function Discard transmitter and call RFT Tech Support for replacement |

Transmitter Clearing Device



The Transmitter Clearing Device is lightweight and compact. It is water resistant; however, complete submersion should be avoided.

SUBMERSION—Prolonged submersion may result in equipment and/or system failure and voids any and all Product Warranties.



The Transmitter Clearing Device is available with a two year life expectancy. Each Transmitter Clearing Device is stamped with a warranty expiration date. This date indicates the date that RF Technologies' warranty on that Transmitter Clearing Device expires. If the warranty period has expired, discard the Transmitter Clearing Device immediately.



WARNING: Using a transmitter clearing device beyond the printed expiration date can result in system failure, mismatch, and/or abduction.

Clearing a Transmitter

1. With the Transmitter Clearing Device within 10-12" in front of the Baby Check transmitter, push the button on the front. The LED flashes green, red, green, red, than amber indicating that the transmitter is cleared.
2. Store the cleared Baby Check transmitter together with the Transmitter Clearing Device until the next use.

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TESTING AND CARE

Transmitter Cleaning and Care

This section provides detailed information about cleaning and caring for a transmitter.

For an up-to-date list of approved cleaning solutions, visit:

[www.rft.com/Resources/Manuals & Specs/Transmitters/Transmitter Approved Cleaning Solutions](http://www.rft.com/Resources/Manuals%20&%20Specs/Transmitters/Transmitter%20Approved%20Cleaning%20Solutions)



CAUTION: Use of non-approved cleaners on transmitters can cause permanent damage to the transmitter and the piercing contacts and will void any and all warranties.

To clean a transmitter after use:

1. Disinfect the transmitter with an approved cleaner.



CAUTION: Using an approved cleaner does not confirm the suitability of the cleaner to meet your infection control standard; it only indicates that the transmitter will not be harmed by the cleaner.

The transmitters may be sprayed or rinsed with water or the approved cleaners during cleaning, but must not be soaked. Soaking transmitters may result in equipment and/or system failure.

NOTE: In order to avoid nuisance alarms, cleaning procedures must be performed at least 100 feet from any Alarming Band Zone.

2. Allow the cleaner to remain on the transmitter for the amount of time specified by the manufacturer. When using surface disinfectants and decontaminant cleaners, always follow the manufacturer's instructions.
3. Wipe the transmitter with a clean cloth or towel, and then allow the transmitter to air-dry. The transmitter can also be rinsed with water, if required in the manufacturer's instructions.
4. Place the clean transmitter in a storage container for future use.

Testing

Do not use the transmitter tester on a transmitter or clearing device with an expiration date that has expired as the results may not be accurate (the printed expiration date on the device takes precedence over the transmitter tester results).



CAUTION: You must test all transmitters and clearing devices prior to use to verify proper operation. Failure to test the transmitters before use can result in system failure, mismatch, and/or an abduction. In addition, failure to test transmitters voids the RF Technologies Product Warranty.



WARNING: The Baby Check transmitter **CANNOT** be tested with the transmitter tester used with the Infant transmitters or Transmitter Clearing Device.

Baby Check Transmitter

The following testing is required for all transmitters in use. All steps are mandatory.

1. Test the operation of transmitters by perform a match using the Baby Check transmitter and a working Infant transmitter.
2. Visually inspect transmitters for damage or loose parts.
3. Verify that the warranty expiration date stamped on the transmitter has not expired. If the warranty period has expired, discard and replace the transmitter immediately.
4. Your facility must keep records of test and transmitter inspection.

Transmitter Clearing Device

1. Verify that the warranty expiration date that is stamped on the device is not expired. If the warranty period has expired, discard and replace the device immediately.
2. Visually inspect the device for damage or loose parts.



Test the operation of the transmitter clearing device using the Transmitter Tester (PN 9450-0050). The transmitter tester will detect whether or not a transmitter is emitting a signal, but cannot indicate the strength of the signal

1. Place the transmitter tester directly on the transmitter clearing device.
2. Press and hold the button on the left side of the transmitter tester.
3. The device beeps once when you initially press the button.

4. While holding the button in, the indicator light flashes and a tone sounds once per second.
5. Wait for at least 3 flashes of the indicator light and 3 tones from the transmitter tester to verify that the clearing device is functioning correctly.
6. If the device fails this test, check the battery in the tester. The transmitter tester requires a 9V battery.
7. Retest the device. If it fails a second time, DO NOT USE THE TRANSMITTER CLEARING DEVICE and contact RF Technologies Technical Support.
8. Your facility must keep records of test and transmitter inspection.

SPECIFICATIONS

Baby Check Transmitter



| | |
|------------------------------|---|
| Size | 2.7 x 2.0 x 0.65 inches (without bracket) 2.8 x 2.2 x 0.88 inches (with bracket) |
| Weight | 1.8 ounces |
| Color | Gray |
| Operating Temperature | 32–140° Fahrenheit 95% non-condensing, relative humidity |
| Storage Temperature | -40–140° Fahrenheit |
| Composition | Latex Free ABS Plastic |
| Battery Life | 2 year, Lithium Ion; Non-replaceable |
| Frequency | Depending on model: 66 KHz, 262 KHz, or 318 MHz |
| Regulations | FCC, Part 15.231 RSS-210 |

| Part Number | Description |
|--------------------|----------------------------------|
| 9450-7066 | Baby Check Transmitter (66 kHz) |
| 9450-7262 | Baby Check Transmitter (262 kHz) |

Transmitter Clearing Device



| | |
|------------------------------|--|
| Size | 1.6 x 2.0 x 0.70 inches |
| Weight | 1.28 ounces |
| Color | Off-white |
| Operating Temperature | 32–104° Fahrenheit (0–40° Celsius) |
| Composition | Polycarbonate / ABS Blend |
| Battery Life | 2 years |
| Water Resistance | Rated to IP-67 |
| Frequency | Depending on model: 66 KHz 262 KHz |
| Regulations | FCC, Part 15b Conforms to UL Standard 294 |

| Part Number | Description |
|--------------------|---------------------------------------|
| 9450-3066 | Transmitter Clearing Device (66 kHz) |
| 9450-3262 | Transmitter Clearing Device (262 kHz) |

Transmitter Tester



| | |
|----------------|------------------------|
| Size | 3.8 x 2.4 x 1.5 inches |
| Weight | 3 ounces |
| Battery | 9V battery |

| Part Number | Description |
|--------------------|--------------------|
| 9450-0050 | Transmitter Tester |

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REVISION HISTORY

| Revision | Change |
|----------|--|
| A | Release |
| B | Updated to include LED guidelines |
| C | Updated mounting height requirements |
| D | Added list of alarms and approved cleaning products |
| E | Updated format, updated warranty expiration date section, and updated specifications section Fixed minor document bugs |
| F | Updated approved cleaners section |
| G | Updated format and logos Removed Alerts section (information contained in the software reference guides) |
| H | Added Oxivir TB to Approved Cleaner List |
| I | Removed Approved Cleaners section and added reference to website link for most up-to-date list Updated specifications section to include the transmitter tester and remove infant banding information |

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