

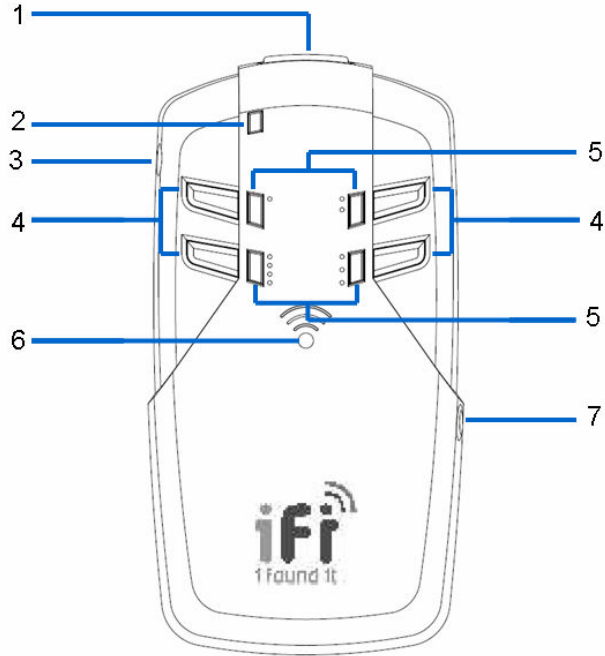
User's Manual & Quick Reference Guide

Child Tether

Smart & Superior Electronic Tether

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Master



1. Tag OFF button
2. BAT-LOW LED
3. Charger Input
4. Locator Buttons
5. Locator LEDs
6. Buzzer
7. Master ON/OFF Button

Tag



1. Buzzer
2. LED
3. Safety Clip (removal sensor)
4. ON/OFF Button

Welcome

Child Tether is a wireless device designed to help locate children when are out of the sight of their parents. It's ideal for use when you take your children out for shopping, parks, malls and such other places. The visual and audio alarms on the Master help you to realize that the child has wandered from the safety region. The Tags are even tamper-proof and alert you of intentional removal of Tags from the child.

Whether you are at home or out and about, Child Tether gives your peace of mind!

Declaration of Conformity

This equipment has been tested and found to comply within the limits for a Class C 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 these 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 increasing the separation between the equipment and receiver.

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Protected by US and International patents. Additional patents pending.

Child Tether User's Guide

Child Tether, the Smart & Superior Electronic Tether, is designed to give you Peace of Mind when it comes to keeping track of your loved ones. Before using Child Tether, read this guide in its entirety to become familiar with its components and operation. If you need any further help, please visit our website, at <http://www.ifisystems.com>.

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For Your Safety

Switch on Safely

Do not switch on the units where wireless units use is prohibited or when it may cause interference or danger.

Interference

All wireless units may be susceptible to interference, which could affect performance.

Switch OFF in aircraft

Follow any restrictions. Wireless devices can cause interference in aircraft.

Switch OFF near blasting

Follow any restrictions. Do not use the units where blasting is in progress.

Use Sensibly

Use only in normal position as explained in the product documentation. Don't touch the antenna.

Enhancements and Batteries

Use only approved enhancements and batteries. Do not connect incompatible products.

Water Resistance

Child Tether units are not water-resistant. Keep it dry.

Connecting to other devices

When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.

Safety Pin

Tag has a pin provision to connect (pin) to child's clothing. Take care not to hurt the child while clipping the Tag to child.

Accessories and Enhancements

Warning: Use only batteries, chargers, and enhancements approved by IFI Systems LLC with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous.

For availability of approved enhancements, visit <http://www.ifisystems.com>. When you disconnect the power of any enhancement, hold and pull the plug, not the cord.

Introduction

Child Tether is developed to track children in a wide variety of environments inside and outside, in places like malls, supermarkets and other shopping areas, parks, playgrounds, campsites, amusement parks, airports, subways and more. They are meant to be used by parents, grandparents, babysitters and anyone else who has to look after children.

With Child Tether, parents can monitor up to four children, and are alerted immediately by audio and visual alarms when a child strays out of range. Then, using the audio signals generated by the tags and master unit, parents are guided to their child instantly, before they wander into places that can be dangerous. Alternately, parents can activate the finder mode even if the child is still within safety zone, locating them very easily.

Child Tether master and tag units are lightweight, compact and easy to use, allowing maximum portability and comfort in nearly every condition. Simply clip a tiny Child Tether tag to your child's belt or clothing and the corresponding tag LED on the master blinks, letting you know that you have a second pair of "electronic" eyes watching your little one. If the Tag is removed from the child or tampered with, an alarm will sound, alerting you.

Child Tether is unlike GPS devices – it doesn't require a cellular phone, computer or monthly subscription, it even has rechargeable batteries! Using Sarnoff Corporation's patented RF technology - "Wireless Tether", Child Tether ensures ongoing, reliable operation as your child grows and explores their world.

Product Features

- Ability to associate new Tags to old Master and vice-versa
- Both visual and audio alarms
- Works through walls, doors and is omni-directional (maximum of 2 floors – upstairs and downstairs)
- Rechargeable batteries

What's in the box?

The product package contains:

- 1 Master
- 2 Tags, each with R-clip sensor
- Loop strap
- 1 LIR 3048 Lithium-Ion coin cell battery for Master
- 2 LIR 2430 Lithium-Ion coin cell batteries (1 cell per Tag)
- Battery Charger
- Quick Reference Guide
- User's Guide
- Product Registration Form

Should anything be missing upon purchase, contact our Customer Care Department by visiting <http://www.ifisystems.com>.

Product Specifications

	Master	Tag
No. of units	1	2
Weight	1.3 oz (including battery)	0.6 oz (including battery)
Dimensions	83x43x19 (H x W x D) mm	60 mm dia 13 mm height
Buzzer Loudness	Up to 80 dBA	Up to 80 dBA
No. of LEDs	5	1
No. of Buttons	6	1
Rechargeable Coin Cell Lithium-Ion Batteries	1 LIR 3048 (250 mAh)	1 LIR 2430 (65 mAh)
Operating RF Frequency	915 MHz	915 MHz
Operating safety zone	164 ft (50 meters line of sight)	
Temperature	32° to 130°F (0° to 55°C)	

Master Unit:

6 Buttons:

- 4 locate buttons – one for each of the 4 Tags*
- 1 ON/OFF button to turn the Master ON or OFF
- 1 TAG-OFF button to turn OFF a Tag from the Master or to turn OFF the Tag Alerts on the Master

5 LEDs:

- 4 LEDs – one for each of the 4 Tags*, indicating visual alerts
- 1 Battery Low LED for indicating a low battery state in the Master

Tag Units:

1 Button:

- ON/OFF button to switch the Tag ON or OFF

1 LED:

- indicating visual alerts

Buzzer

- Audio Alerts

**The starter package contains 1 Master Unit and 2 Tags. Additional Tags are available for purchase.*

Getting Started

Charging the Batteries

The battery in the Master Unit is factory installed and cannot be removed. Batteries for the Tags are found separately in the product package. Before using Child Tether for the first time, charge the batteries for 4-8 hours. You can charge batteries for 3 units at one time (1 Master and 2 Tags).

WARNING: Use only the charger that was provided with this product. Do not use any other charger to charge the units.

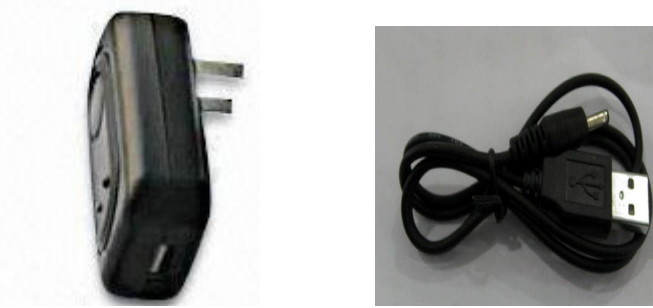


Figure 1 Charger provided with product package

1. Slide the battery chamber door on the back of the Master downward to open the battery chamber.
2. Insert the two LIR 2430 Lithium-Ion coin cell batteries of the 2 Tags into the battery chamber. Using the guide located inside the chamber, place the batteries in the chamber with the positive side facing up.
3. Close the battery chamber door.
4. Connect the charger to the Master and into a reliable power outlet.
5. The Battery Low LED on the Master and the LEDs for Tag 1 and 2 on Master glow continuously during charging. (Note: If any of the Tag's batteries are not placed in the battery chamber in the Master, then the corresponding Tag LED will blink, indicating there is no battery.)
6. When the units are fully charged, the Battery Low LED on the Master and Tag's LEDs on Master will be OFF.
7. Disconnect the charger from Master and power outlet.
8. Remove the two charged LIR 2430 Lithium-Ion cell batteries of the 2 Tags from the battery chamber in the Master.
9. Close the battery chamber door.

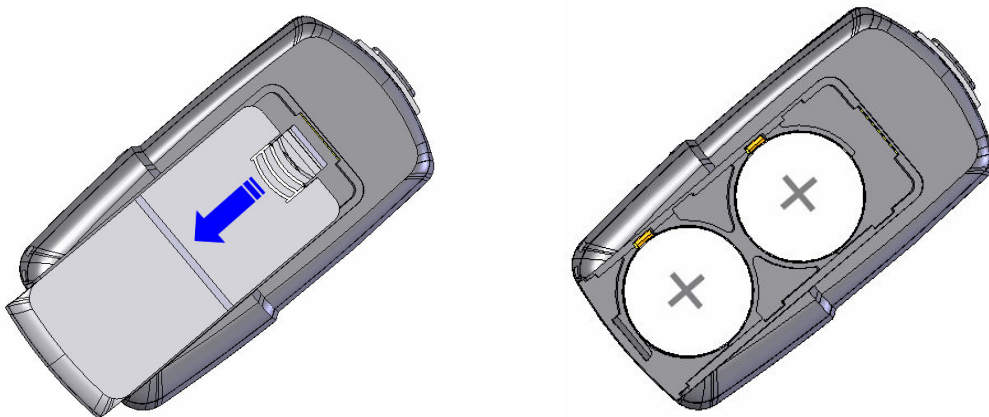


Figure 2: Removing the battery cover of the Master for inserting and charging Tag batteries

Inserting Batteries into a Tag

1. Slide the battery chamber door on the back of the Tag to open the battery chamber.

2. Place one fully charged LIR 2430 lithium-Ion coin cell battery into the battery chamber of the Tag. Using the guide located inside the chamber, place the battery in the chamber with the positive side facing up.
3. Close the battery chamber door.



Figure 3 removing battery cover of the Tag and inserting the battery.

Basic Functions

Turning ON the Master and Tags

Turning ON the Master:

1. Press the ON/OFF button on the Master.
2. All LEDs on the Master will blink once and the buzzer will emit one short beep.

Turning ON a Tag:

1. Press the Tag's ON/OFF button.
2. The Tag's LED will blink once and the buzzer will emit one short beep.

Child is in Safety Zone

When a tagged child is in the Safety Zone (60 to 100ft), that Tag's corresponding LED on the Master blinks once every 5 seconds.

Tracking a Child Inside the Safety Zone

To track a missing tagged child within the safety zone, you can activate the finder mode: (Note: For this example, we will assume the missing child is using the Tag associated with the #1 button on the Master.)

1. Switch ON the Master. All LEDs on the Master blink once and the Master buzzer emits short beeps.
2. Press and hold down the Tag 1 locate button on the Master. Turn around in all directions until Tag 1's LED on the Master starts blinking.
3. If the Master is getting closer to Tag 1, Tag 1's LED on the Master blinks once every second as long as you hold down Tag 1's locate button. Conversely, if the Master is moving away from Tag 1 (or Tag 1 is getting farther away), Tag

- 1's LED on the Master blinks twice every second, again as long as you hold down the Tag 1 locate button.
4. Release Tag 1's locate button on the Master when you are able to see the tagged child.

Child Outside of the Safety Zone

If the Tag is crossing Safety zone, the Tag's LED on the Master will continuously blink slowly and the Master buzzer emits short beeps.

If the Tag has crossed Safety zone, the Master will show the panic pattern. The corresponding Tag's LED blinks and beeps periodically for 2 minutes and then blinks once every minute.

Note: The above pattern will continue even if that particular Tag gets switched OFF after the Master has started tracking it.

Belt-Clip Changes Status on Tag 'x'

If a clipped Tag is removed by the child or intentionally by an unknown person the Master shows the panic pattern. Tag LED on Master blinks and buzzer emits beeps for 2 minutes. This event can also be triggered if the R-clip sensor of any Tag goes from contact to no-contact or vice-versa (removed and clipped back on or just removed).

Note: The R-clip sensor only works when the Tag is within the safety zone. If a Tag is tampered outside of the safety zone, there will be no indication. If this Tag later comes into the safety zone, the units show the Panic Pattern.

Muting the Buzzer

To mute the Master buzzer under any of the above circumstances:

1. Press and release Tag 'x' locate button on Master.
2. The buzzer beeps for Tag 'x' on the Master is muted.

The Master will continue emitting beeps for other Tags. Repeat the same process to mute the Master buzzer for other Tags.

Turning OFF the Tags and Master

Turning OFF a Tag:

1. Press the ON/OFF button on the desired Tag continuously for 5 seconds.
2. That Tag's LED shows one long blink and the buzzer emits one long beep.
3. The corresponding Tag's LED on the Master blinks and the buzzer emits periodic beeps, continuously, until you mute the pattern.

Turning OFF a Tag from the Master:

1. Press the Tag OFF button on the Master while simultaneously pressing the corresponding Tag's locate button (on the Master).

2. The Tag LED shows one long blink and buzzer emits one long beep.

NOTE: You can only switch OFF a Tag from the Master if the Tag is in range.

NOTE: You can switch OFF 2 Tags at a time. Follow the same procedure but hold the locate buttons of both Tags.

Turning OFF the Master:

1. Press the ON/OFF button on Master continuously for 5 seconds.
2. All LEDs on the Master will show one long blink and the buzzer will emit one long beep.

Note: This is convenient for when you intend to switch OFF the units when the system is not used.

Turning OFF the Master when Tag 'x' is in the safety zone:

To switch OFF the Master, press the ON/OFF button continuously for 5 seconds. All LEDs on the Master show one long blink and the buzzer emits one long beep. The LED on Tag 'x' blinks fast for 5 seconds and then once every 1 minute.

Note: If you turn the Master ON again and Tag 'x' is out of range, then you will get the Tag 'x' out of safety zone indication on the Master.

Turning OFF Tag 'x' pattern on the Master:

The pattern on Tag 'x' can be turned OFF from the Master only when Tag 'x' is out of the safety zone. For this, simultaneously press the Tag-OFF button and the Tag 'x' locate button on the Master.

Battery Information

Master Battery Low:

The BATTERY LOW LED on the Master blinks once every second continuously.

Tag 'x' Battery Low:

When Tag 'x' is in range and its battery is weak, the Tag 'x' LED on the Master blinks continuously.

Battery Critical for Tag 'x':

When the battery of Tag 'x' is critical, the following pattern is observed:

1. Tag 'x' LED on the Master blinks and the buzzer will emit periodic beeps, continuously.
2. Tag 'x' LED shows one long blink and the buzzer emits out one long beep.

Note: You may only have a matter of minutes before a critical battery will be fully drained.

Genuine Enhancements

Associating (Identification of) New Tags to New Master

You can associate up to 4 Tags to the Master. When you are using Child Tether for the first time, associate the Tags to the Master, before attaching the Tag to your child.

Important Notes:

- Only associate only one Tag to the Master at a time. Keep the other Tags away from the Master.
- Do not use one locate button on the Master for two Tags or two locate buttons for one Tag.
- Before associating a Tag to the Master, ensure that the Master is switched OFF.

1. Place the Tag you want to associate within an inch or two of the Master.
2. Turn ON the Tag by pressing the ON/OFF button. The Tag's LED will blink fast for 6 seconds, stop for 2 seconds, then glow continuously for 4 seconds, and then finally emit one long blink.
3. Just after the Tag's LED stops blinking for 2 seconds and during the 4 second period when the Tag's LED glows continuously, simultaneously press and hold a locate button on the Master and turn ON the Master.
4. This Tag is now associated with the Master.
5. Upon successful association, the Tag and Master should show the Tag OFF and Master OFF pattern respectively & simultaneously. If it isn't successful, the Tag and Master will show the Tag OFF and Master OFF pattern respectively, but at different times. Try associating again starting with Step 1.
6. To associate other Tags, repeat steps 1 to 4.

Disassociation

To associating an already used or already associated Tag to a new Master, that Tag will need to be disassociated first:

1. Press the Tag's ON/OFF button 5 times in 2 seconds.
2. The Tag's LED will display one long blink and the buzzer will emit one long beep.
3. The Tag is now ready for association again. Follow the procedure under *Associating new Tags to new Master*.

When an Unassociated Tag is ON

If an unassociated Tag gets turned ON, that Tag's LED blinks fast for 6 seconds, then stops blinking for 2 seconds, blinks again for 4 seconds, and followed by one long blink and beep.

When the Master has Unassociated Tags

The Master is designed to tether with 4 Tags. Unused Tag LEDs on the Master will blink continuously for 2 seconds when the Master is powered up and then indicate no patterns.

When a Master or Tag Gets Lost

Lost Master

When you have lost the Master and you need a new one, you have to purchase the entire set again. You can use old Tags with new Master, but the old Tags are associated to the old Master. You will need to first disassociate old Tags. For more information on disassociating old Tags, follow the procedure under *Disassociation*.

Lost Tag

When you lose one or more Tags or if you need additional ones, you can purchase just the Tags. Associate these Tags to your existing Master by following the steps under the *Associating New Tags to New Master* in the *Operation* section.

General Care

- Child Tether Master and Tags are not waterproof. Take care not to get them wet.
- Do not clean the units with wet or damp cloth or with any cleaning agents. Use only a dry cloth.
- Tag and Master operational temperature is 32°F to 130°F (0°C to 55°C). Storage temperature is between 14°F and 140°F (-10°C and 60°C).
- Do not strike or knock the units.
- Do not attempt to open the units except the battery chamber.

Changes

The contents in this User Guide are for operational information only and is subject to change without notice. While IFI Systems, LLC has prepared this guide to help prepare Child Tether for accurate functioning, the company takes no liability resulting from errors or omission in this User Guide or from the use of information contained herein. IFI Systems, LLC reserves all rights to make changes to product design without reservation and without notification to its users.

Warranty

IFI Systems LLC warrants this product against defects in materials and workmanship for a period of one year from the date of purchase, with the exceptions stated below. This warranty does not cover damage caused by misuse or use other than intended and described in this User Guide, or loss or damage to batteries or removable parts.

This warranty does not apply to any product that has been subject of abuse, misuse, negligence, tampering or if it has been modified in any way.

When repair is not practical, IFI Systems LLC will have the option to replace the defective product with one that is the same or has similar functionality.

No other warranties, express or implied are made. IFI Systems LLC shall not be liable for any special, incidental or consequential damages, whether or not the purpose for which you purchased the product was made known to IFI Systems LLC, the retailer or otherwise.

How to Obtain Service?

Contact IFI Systems LLC prior to returning any product. Returns without a Return Merchandize Authorization (RMA) will be ignored and discarded. Contact our Customer Care department via our website: <http://www.ifisystems.com> or by calling: (704-814-0930). Once an RMA is obtained, return the product and copy of purchase receipt along with description of the problem to:

IFI Systems, LLC
 2301 Crown Point Executive Drive, Suite D
 Charlotte, NC 28270

Registration Information

This product may be registered electronically by visiting our website at: <http://www.ifisystems.com>, then click the Customer Care or Registration button.

Quick Reference to Patterns

The table below gives a quick reference to patterns on Tag and Master for various operations.

Operation	Pattern on Tag	Pattern on Master
While charging the batteries of Units	-	BAT LOW LED on Master and Tag's LED on Master glows continuously
When batteries are fully charged	-	BAT LOW LED on Master and Tag's LEDs on Master will be OFF
When association of new tag to master is completed	1 long beep 1 long blink	1 long blink on all LEDs
Master turned ON	-	1 short blink and 1 short beep
Tag turned ON	1 short beep and 1 short blink	-
When Child is in the Safety Zone	-	LED of that Tag blinks once in 5 seconds
Tracking a child inside Safety Zone	Blinks and beeps once in 1 second as long as Tag button on Master is pressed	If Master is getting closer to Tag, the LED of Tag on Master blinks once in 1 second as long as Tag button on Master is pressed; If Master is getting

		farther away from Tag, the LED of Tag on Master blinks twice in 1 second as long as Tag button on Master is pressed
Belt-Clip Changes Status on Tag	Fast beeps for 2 mins Fast blinks for 2 secs	Continuous beeps and blinks, until you mute the pattern
Child Outside of the Safety Zone (Short distance)	-	Continuous short blinks and beeps
Child Outside of the Safety Zone (Long distance)	Periodic blinks and beeps for 2 mins and then blinks once in 1 minute.	Continuous fast blinks and beeps, until you mute the pattern
Turning OFF Tag from Tag itself	1 long blink and beep	Continuous fast blinks and beeps, until you mute the pattern
Turning OFF Tag from Master (when units are not in use)	1 long blink and beep	No pattern
Turning OFF Master [when Tag(s) is(are) in safety zone]	Fast blinks and beeps for 5 seconds. After this LED on Tag blinks once in 1 minute.	LEDs show 1 long blink and buzzer beeps once Special scenario: when Master is turned ON again and Tag is out of range, Master shows out of safety zone indication
Master battery low		BAT LOW LED blinks once in 1 sec continuously
Tag battery low	-	LED of the Tag on Master glows continuously
Battery Critical for Tag	1 long blink and 1 long beep	Continuous fast beeps and blinks
Disassociation	Blinks and beeps once followed by Tag OFF pattern.	-
Unassociated Tag is ON	LED blinks fast for 6 seconds and stops blinking for 2 seconds and continuously blinks for 4 seconds followed by one long blink and beep.	LED of the Tag on Master blinks continuously for 2 seconds followed by pattern OFF
Master has Unassociated Tags		LEDs of those Tags

		on Master blink continuously for 2 seconds when Master is ON. After this they show no pattern
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