



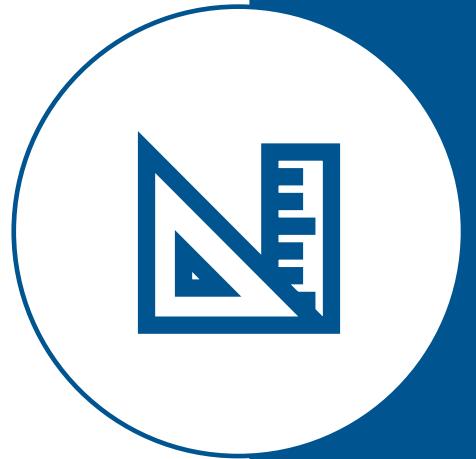
# Asset Tagging Implementation Overview

For All Asset Tag Types



# Agenda

- RTLS System Overview
- Asset Tag Location Considerations
- Asset Tagging Process
- Tagging Steps
  - Tag Preparation
  - Tag Activation
  - Tag Installation
- Tag Documentation
- Example Locations



# RTLS System Overview

# System Hardware

## The Parts & Pieces

### Location Designation Hardware

#### Monitor

Installed in rooms where **room-level** location is desired. Also used in hallways for **zone-level** location. Battery operated.



#### Virtual Wall Monitor

Installed where **bed-level** location is desired (ED, PACU, semi-private rooms, etc.). Also used in hallways. Battery operate.



### Network Components

#### Star

Acts as an Access Point. Collects location data and passes it on to the server.



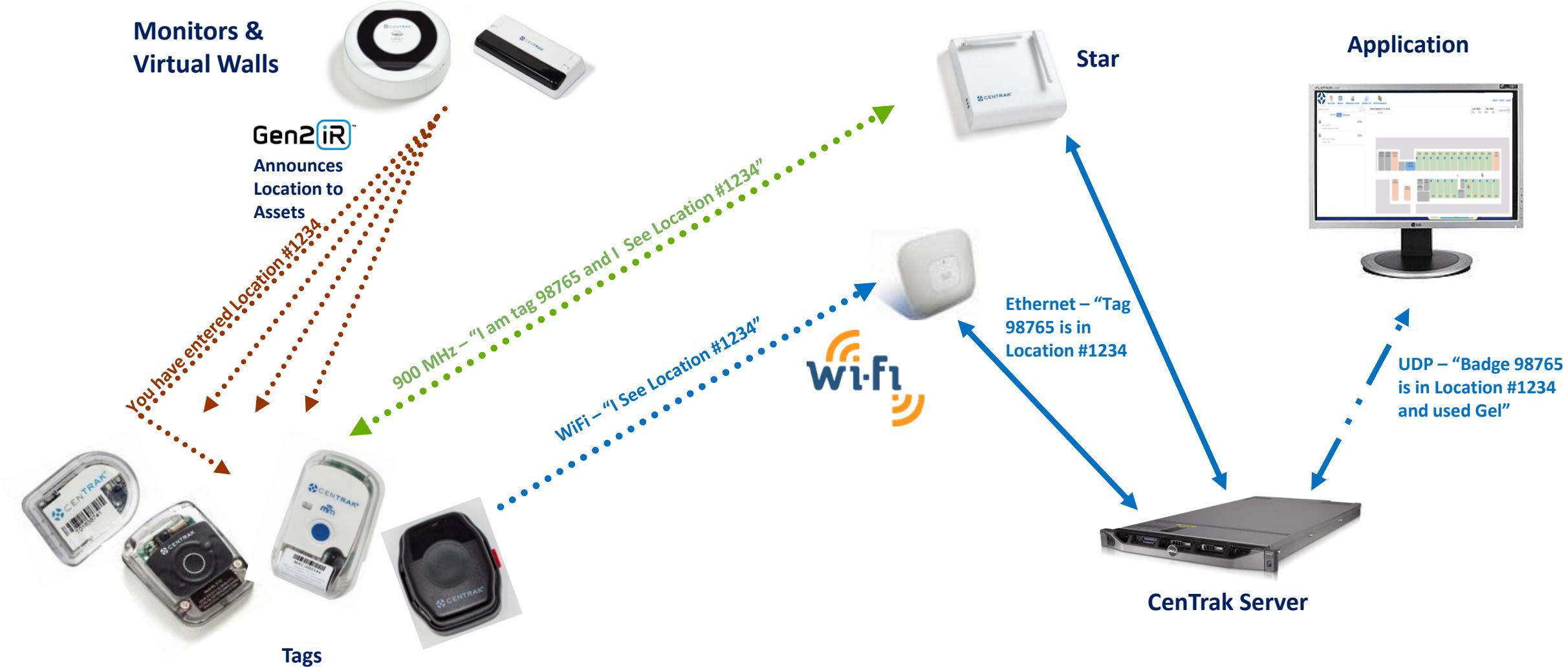
#### Location Server

Consolidates location data and integrates with third-party locating applications



# Communication Path

How does a tag know where it is?



# Asset Tags

Multiple Options



900MHz Asset Tag



Orion MultiMode Asset Tag



900 MHz Micro Asset Tag



900 MHz Mini Asset Tag



MultiMode Asset Tag

# Asset Tag Location Considerations

# Infrared Visibility

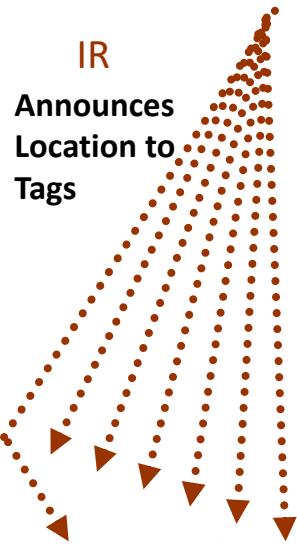
Identify Location

Monitors  
& Virtual  
Walls



IR

Announces  
Location to  
Tags



Tags



Placement Consideration for IR

- Moderate visibility to ceiling
- Can work through thin material

# Radio Frequency Communication

Identify Location

## Placement Consideration for RF

- Metal blocks RF
- Poles and posts
- High up on the device



Asset reports location

900 MHz



Star

# Tag Adhesion Potential

## Identify Location

- Asset surface
    - Flat
    - Smooth
    - Top / High on piece of equipment
  - Tamper Detection ability ONLY with flush bracket application



# Process Overview

# Step 1 - Identify Equipment

Where's My Stuff

- Decide assets to be tagged. i.e. IV pumps, telemetry boxes, wheelchairs, patient beds, etc.



Anesthesia Machines



Surgical Lights



Surgical Tables & Chairs



Monitors



Defibrillators



Electrosurgical



Stretchers



Microscopes



Infusion Pumps



Stainless Medical Equipment



Imaging



Respiratory Ventilators



Sterilizers



EKG Machines



Endoscopy Systems

# Step 2 - Prepare Documentation

## Tagging Tracking

- Prepare list of devices to be tagged or blank spreadsheet with appropriate column headers

Owner	Department	Make/Model	Serial Number	Site Asset ID	CenTrak Tag ID	Tag Date	Tagger Initial	Tagger Notes

# Step 3 - Create Tagging Guide

Where does the tag fit?

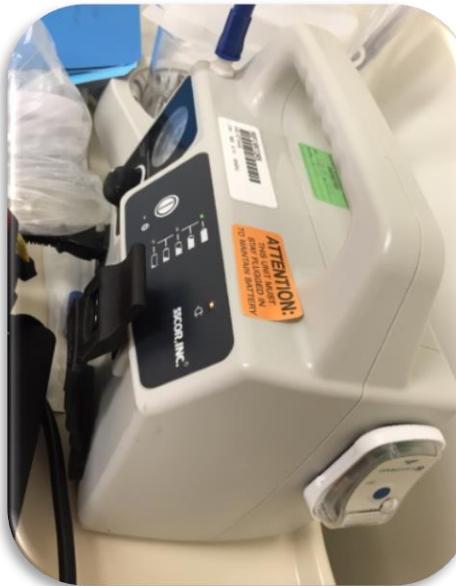
- Standardize tag locations across the hospital
- Quick Reference Guide for use in the future as well.
- Tag location document will help taggers as a tool for device identification as well as exact tag placement.

Inside a Patient Room	
	
<b>Device: Alaris IV Pump</b> Tip: Put the tag on top of the pump so the bump is close to the handle to allow a hand to easily grasp the handle. Also, if the only area to attach a tag covers a label, note what type of label so that it can be added later in another location on the device.	<b>Device: Wall TV</b> Tip: If there is a flat area large enough for the tag to be on the SIDE of the TV, attach the tag on the side. If the sides are too curved, the back will do since the IR will bounce off the walls into the eye of the tag.
	
<b>Device: Vitals Machine with Temp and Blood Pressure</b> Tip: Flat area + not covering labels + battery pack facing bottom = good!	<b>Device: Patient Bed</b> Tip: If the foot of the bed is occupied, the side rail underneath the bed will work too. Make sure the tag does not protrude enough that it could be knocked off by wheelchairs

# Step 4 - Tag Devices

Scavenger Hunt!

- Prepare tags
- Methodically cover every unit searching for equipment of the type you are tagging
- Apply tags to equipment



# Step 5 - Document!

What was that ID again?

- Match Equipment Description, Hospital Asset ID #, and CenTrak Tag # for future reference and import into Asset Management Software

	A	B	C	D	E	F	G	H
1	Name	Model	Manufacturer	Serial Number	Asset ID	CenTrak Tag	Tagger Initial	Tagger Notes
2	Stretcher	Narrow	Stryker	0809 102048	1000MMP	T01514202	RN	
3	DOPPLER	D900	HUNTLEIGH HEALTHCARE INC	KADF3-08617	1001385			
4	Stretcher	Wide	Hillrom	0304AQ8394	1001ACC	T01514181	TH	
5	Stretcher	Wide	Hillrom	M144AQ5527	1003ACC			
6	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646472	1004810			
7	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646783	1004815			
8	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646784	1004818			
9	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646851	1004819			
10	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646476	1004820			
11	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646288	1004831			
12	MICROTEMP HEATER	TP-200	GAYMAR INDUSTRIES INC	A1K50188	1005318			
13	WOW	HP HP EliteDesk 800 G2 DM 35W	HP	MXL6130QJ7	100536			

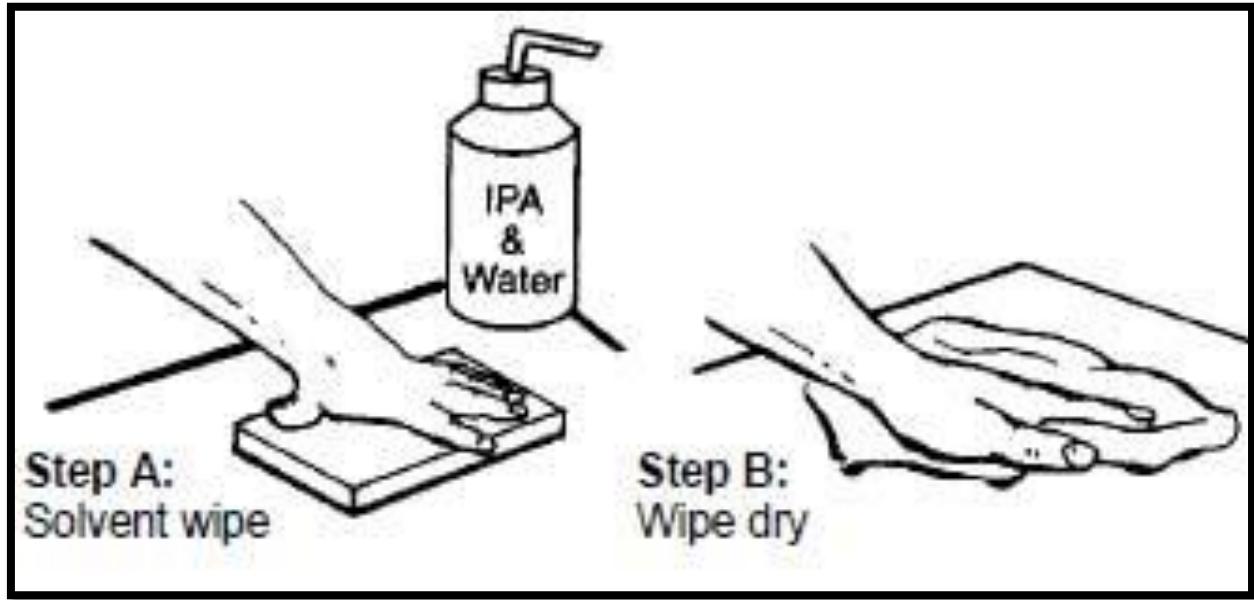
# Tag Application Deep Dive

# Surface Preparation

## 3M Instructions for application

### Thoroughly Clean Target Areas

- Use a 50/50 Isopropyl Alcohol & Water solution remove dirt, grime, oils residues from target area.
- Wipe dry with a clean lint free cloth.



# Activate Micro & Mini Asset Tags without buttons

## Tag Activation

- Tag must be in 900MHz coverage area to activate
- Slowly peel the outer sticker off
- Verify LED Flashes
- Allow the tag to communicate with the RTLS equipment for about 30 seconds before applying



### \*\*Note\*\*

Execution of the Tagging efforts must start within 6 months of shipment date.

# Tag Orientation

## Mini and Micro Tag

- Activated tags are ready for orientation and placement
- Order of optimal Mini & Micro tag orientation on equipment
  - 1. On top of equipment, tag flat facing ceiling
  - 2. On side of equipment, curved part of tag facing floor
  - 3. On side of equipment, tag horizontal, able to read CenTrak name
  - 4. On side of equipment with curved part of tag facing ceiling



# Activate Tags with Buttons

## Tag Activation

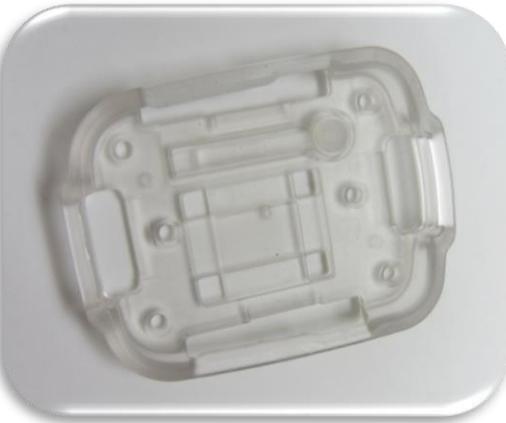
- Tag must be in 900MHz coverage area to activate
- IF activating an Orion MM asset tag, peel white sticker from the back
- Press and hold tag button for 5-10 seconds until the LED Flashes.
- Remove the clear or green sticker from the front of the asset tag.



# Attach Bracket

## Tag Preparation

- Shipped with a bracket
- May need to snap the bracket onto the back of the tag.



# Tag Application

## All Tag Types

- Peel the backing off the double-sided tape so the adhesive is exposed
- Firmly apply the tag to equipment and **hold in place for 30 seconds**
- After placement (if the tag has a button) verify the tag has been activated by clicking the middle button briefly and wait for the blink (you may need to wait up to 3 seconds for the LED to flash)
- **NOTE:** The attached tag may be moved and adjusted within 24 hours of mounting. After this time, the adhesive will set, so adjusting tag placement will require new adhesive.



**NOTE:** If a MM tag is oriented vertically, ensure that the battery is at the "bottom." This puts the IR eye at an angle toward the ceiling.



# Tag Application

## Zip Tie Attachment



\*\* Tamper Detection feature not enabled if bracket is not firmly attached to a flat surface.



# Remove from Bracket

## Tag Preparation

**\*\*For future reference\*\***

Use tag removal tool to detach the tag from the bracket for battery changes. A flat head screwdriver can be used but not preferred.



# Tag Documentation

# Note Tag ID

Each tag and device must be associated in the asset tracking software. As you tag equipment, create a spreadsheet (or other method per your asset tracking software provider) to keep track of:

- ✓ **Tag Serial Number**
- ✓ **Item Serial Number**
- ✓ **Item Description**
- ✓ **Power ON the tag**

# Asset List Example

The screenshot shows a Google Sheets document with the title "CentTrak Hospital Asset List 4/2019". The document contains a table with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	Name	Model	Manufacturer	Serial Number	Asset ID	CentTrak Tag	Tagger Initial	Tagger Notes									
2	Stretcher	Narrow	Stryker	0809 102048	1000MMP	T01514202	RN										
3	DOPPLER	D900	HUNTLEIGH HEALTHCARE INC	KADF3-08617	1001385												
4	Stretcher	Wide	Hillrom	0304AQ8394	1001ACC	T01514181	TH										
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9	NEB																
10	NEB																
11	NEB																
12	MIC																
13	WOB																
14	WOB																
15	DOP																
16	DOP																
17	WOB																
18	Stre																
19	Stre																
20	DOP																
21	NEB	1	Name	Model	Manufacturer	Serial Number	Asset ID	CentTrak Tag	Tagger Initial	Tagger Notes							
22	NEB	2	Stretcher	Narrow	Stryker	0809 102048	1000MMP	T01514202	RN								
23	NEB	3	DOPPLER	D900	HUNTLEIGH HEALTHCARE INC	KADF3-08617	1001385										
24	NEB	4	Stretcher	Wide	Hillrom	0304AQ8394	1001ACC	T01514181	TH								
25	Stre	5	Stretcher	Wide	Hillrom	M144AQ5527	1003ACC										
26	DOP	6	NEBULIZER	5650H	DEVILBISS HEALTHCARE INC	H2646472	1004810										
27	Stre																
28	DOP																
29	Stre																
30	DOP																
31	Stre																
32	DOP																
33	Stre																
34	DOP																

# Example Locations

# Example Locations



# Example Location



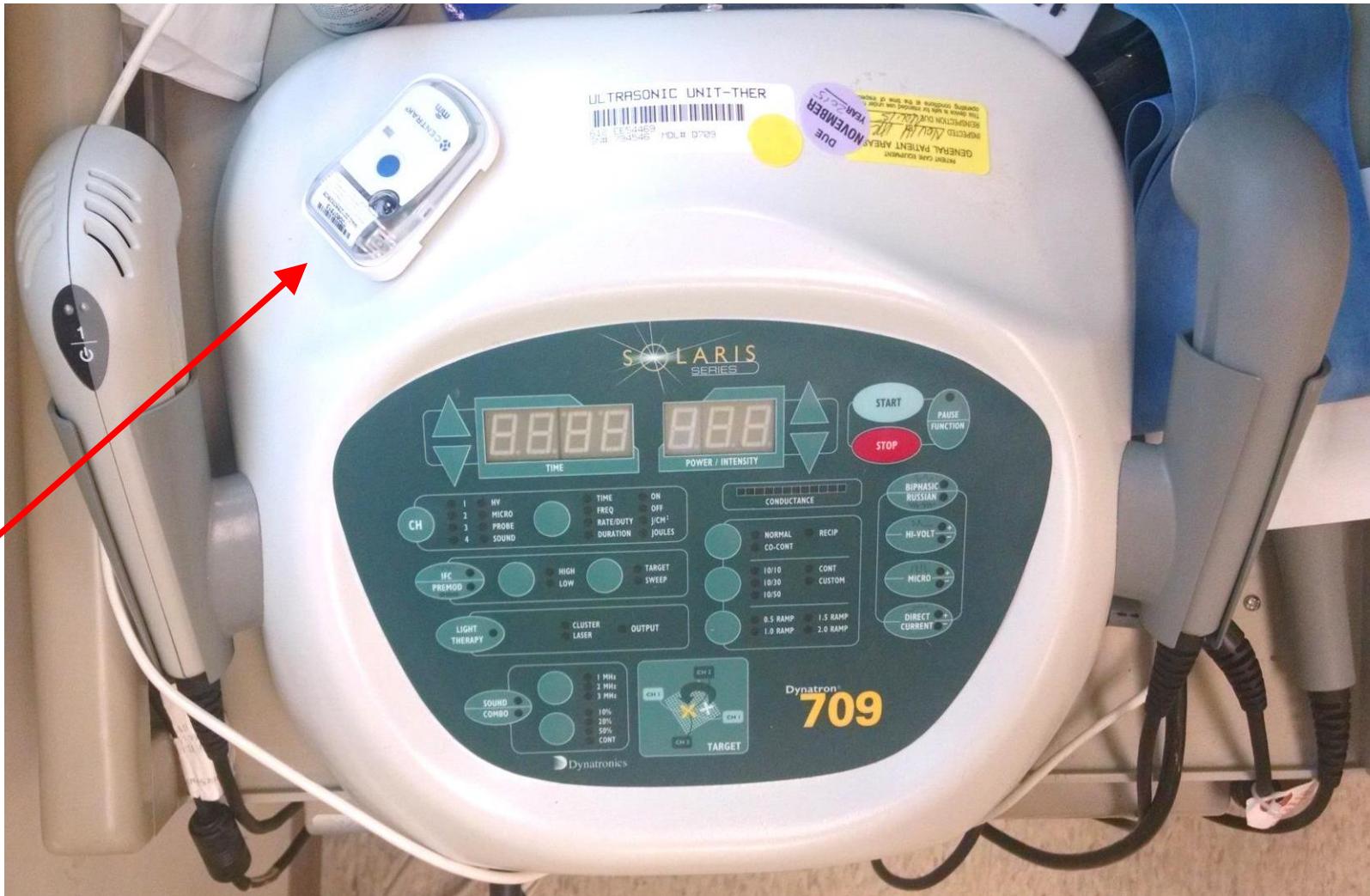
# Example Locations



# Example Locations



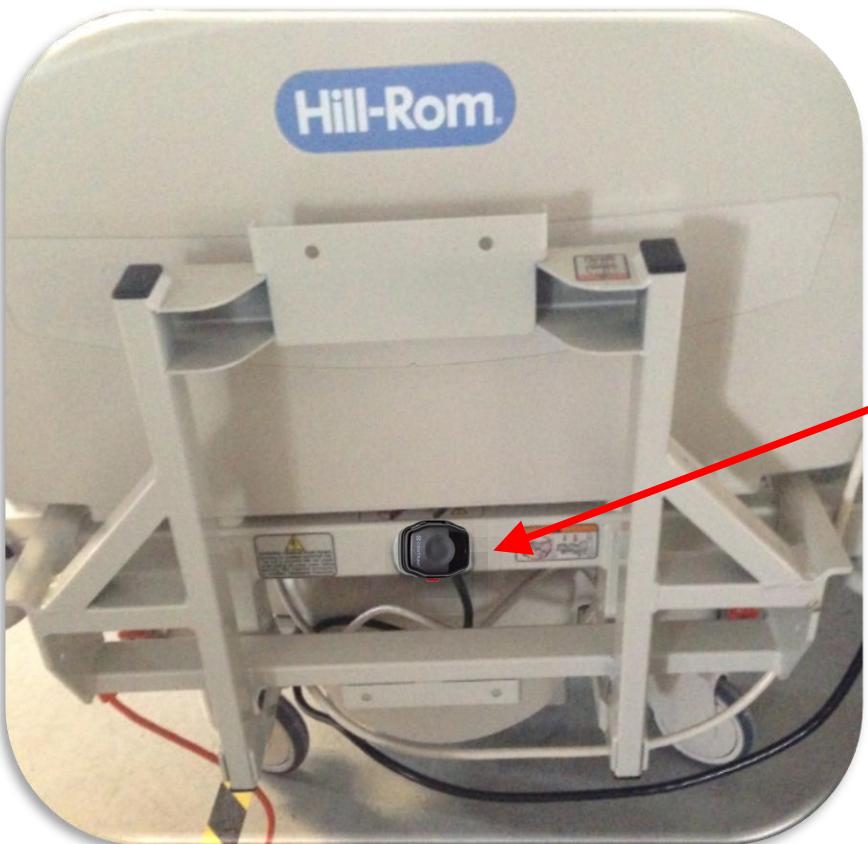
# Example Locations



# Example Locations



# Example Locations



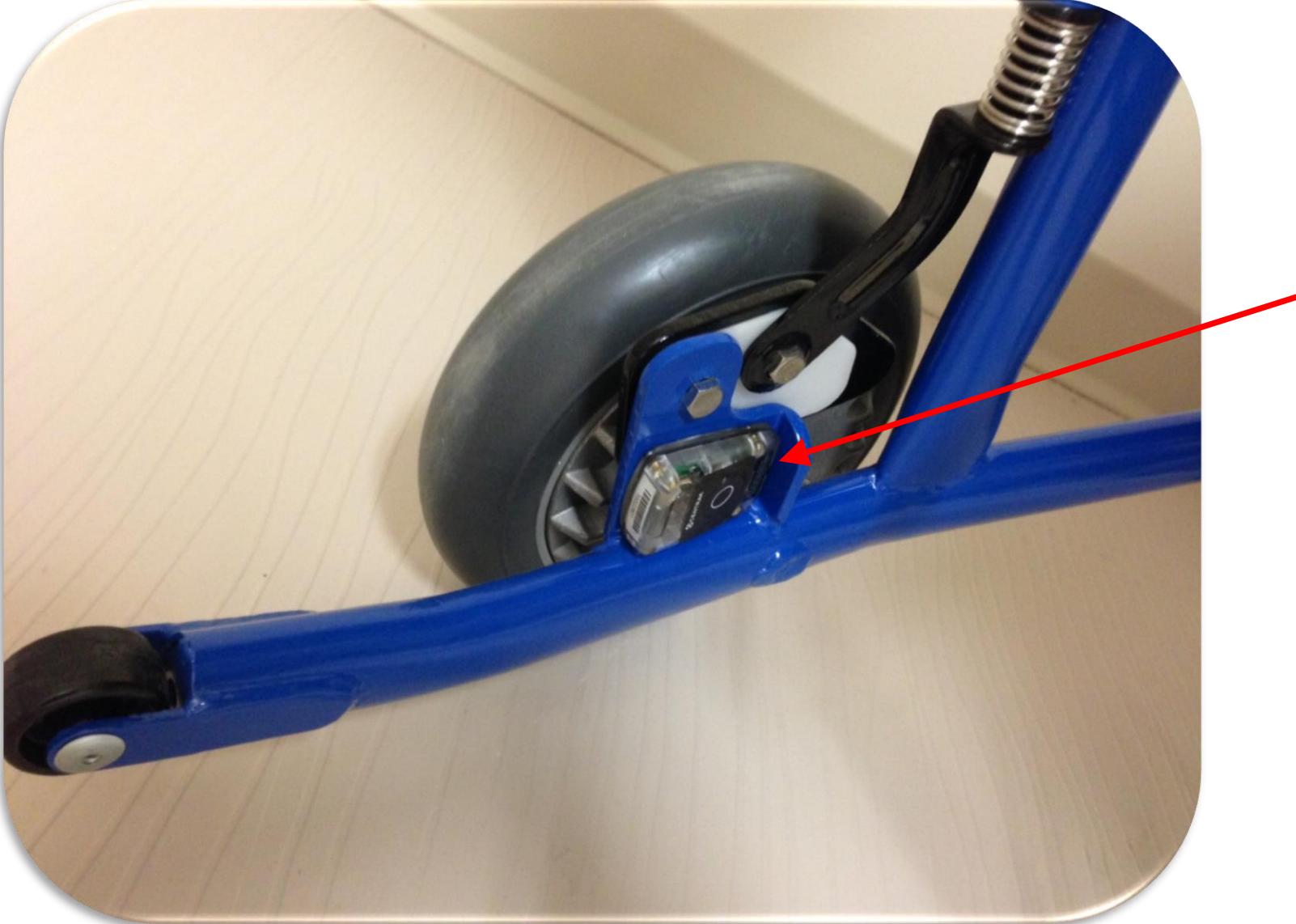
# Example Locations



\*\* Tamper Detection feature not enabled if bracket is not firmly attached to a flat surface.



# Example Locations





# Thank You!

Please contact [training@centrak.com](mailto:training@centrak.com)  
for further assistance.

