

# Sapphire T651-1X1 TAG User's Guide

## Introduction

The Multispectral Solutions, Inc. (MSSI) Sapphire *Precision Asset Location System*<sup>™</sup> enables the real-time tracking and identification of assets and personnel with a range and precision unmatched by conventional RFID solutions. Utilizing ultra wideband technology for unprecedented reliability and accuracy in difficult electromagnetic and multipath environments, and superb battery life, Sapphire can meet the most demanding industrial requirements.

The T651-1X1 tag is one of a number of FCC certified tags which can be utilized to track and identify assets or personnel when utilized with any Sapphire system (e.g., DART, DIMENSION or VISION).

## Operation

The T651-PT tag is shipped disabled using an insulating tab that isolates the battery from applying power to the electronics inside the enclosure. To activate the tag, simply pull the insulating tab out and the tag will immediately start transmitting with its tag ID.

The unit should only be dismantled in the case that the user wishes to change the battery. The battery should be replaced following the following battery replacement procedure:

Wipe down the unit with a damp cloth to remove any potential electrical discharge. Make sure that battery replacement is performed in a static free environment with a grounded static mat.

By depressing the clips on the side of the plastic tag housing, remove the printed wiring assembly from the case and place the assembly on an anti-static mat with component side up.

The coin cell battery is installed in BH1, the coin cell retainer on the component side. Using a flat head screwdriver, carefully push the coin cell battery from the back until it is partially out of the coin cell retainer. Using a pair of needle nose pliers, grab the coin cell battery and pull to remove from the coin cell retainer.

Take a fresh coin cell battery and insert with the “+” side up until it is completely inserted into the coin cell retainer.

Replace the printed wiring assembly on the bottom part of the case, place the top part of the case on top, and snap the housing together.

Verify that the case is closed. Verify operation of the tag.

## **Maintenance**

The Sapphire *Precision Asset Location System*<sup>™</sup> reports battery status on every tag transmission. A T651-BDG operating at or below the low indicator value may exhibit decreased performance so it is recommended that users change the battery before this time.

## **Installation**

With the proper Sapphire infrastructure in place, the installation of the T651-1X1 is complete when it is activated by pulling out the insulating tab.

## **Adjustment**

No adjustment is necessary once the T651-1X1 is activated.

## **FCC ID: QCJSAFR217E**

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

This device may not cause harmful interference; and

This device must accept any interference received, including interference that may cause undesired operations.