



EMAIL: support@triglobal.net

PHONE: 706-410-2372

Overview of the Asteri GNSS Receiver



Overview of the Asteri GNSS Receiver

Table of Contents

Asteri GNSS Receiver breakout.....	3
Determining the model.....	4
Additional benefits of the new Asteri MFi model.....	5
Understanding the LED indicators.....	5
Understanding the Battery Level status indicator.....	6
The GPS Status indicator on the Asteri X4i.....	7
Charging the Asteri GNSS receiver.....	7
Inserting the battery.....	8
Connecting the Charging cable.....	8
Vehicle Charging Options.....	9
Related Resources.....	10

Asteri GNSS Receiver breakout



Exploded view of the Asteri GNSS receiver

Determining the model

The Asteri Xi-Series is a MFi receiver that is "Made for iOS" and is designated by a **GOLD** label.

The Asteri X-Series is a BLE receiver that is "Bluetooth Low Energy" and is designated by a **BLACK** label.

Understanding the difference will help in troubleshooting Bluetooth issues, and compatibility with software options.

Aside from the label color the receivers are identical in size, weight, appearance, and function.

The MFi edition is compatible with Orbitas Field and 3rd party iOS software using Integrated Location Services.

The BLE edition is compatible with Orbitas Field and UtiliPad. The BLE edition can also be paired to a Windows laptop or tablet.

For technical specifications of each receiver check out the [Asteri GNSS](#) page.



The Gold labeled MFi model compared to the Black labeled BLE model

Additional benefits of the new Asteri MFi model

- Potential damage while being charged with the device "on" has been resolved in the MFi model
- More robust housing mounts, prevent the housing halves from breaking as easily when dropped
- More robust battery contacts prevent battery movement from breaking contacts
- Same lightweight, portable feel as the BLE model

Understanding the LED indicators

The Asteri GNSS Receiver has several LED light indicators that show various statuses on the device. All models include a **Battery Level status** indicator, a **Power status** indicator, and a **Bluetooth status** indicator.

The X3 and X4 models also have a **GPS Satellite status** indicator.



The different LED status indicators on the Asteri GNSS receiver

Understanding the Battery Level status indicator.

The battery level status indicator is located on the bottom of the device and is represented by (4) LED lights.

4 LED's indicates **100%** battery power remaining *or more than 75%*

3 LED's indicates **>75%** battery power remaining

2 LED's indicates **>50%** battery power remaining

1 LED indicates **>25%** battery power remaining

1 flashing LED indicates **<10%** battery power remaining (consider charging soon)

The GPS Status indicator on the Asteri X4i

1. The LED will flash the same number of times as the number of satellites currently tracked. Then it will pause for 5 seconds without flashing, and repeat the flashing pattern.
2. When it cannot detect any satellites at all, it will flash once, pause for 5 seconds, then flash once again...
3. When it has detected satellites but has not yet calculated the position coordinates, the LED will flash rapidly and continuously. This situation is typically observed only after a cold start, because it transitions from satellite acquisition to positioning fix very quickly—usually within 3 to 4 seconds.



Asteri X4i GNSS receiver with LED status indicators

Charging the Asteri GNSS receiver

Tri-Global Technologies recommends only charging the device while **OFF**. Always make sure to fully charge your battery before use.

Inserting the battery

On the backside of the receiver is the battery door. Lift the tab and turn counter-clockwise to release the door.

Insert the battery gently into the housing with the contact tabs facing down. Replace the door and turn the tab clock-wise to secure the door shut.

Connecting the Charging cable

Connect the two-piece power cord and insert the LEMO connector end into the power port on the Asteri device ensuring the RED DOT on the cable is in line with the bottom of the Asteri power port.



Connecting the 2 part power plug for the Asteri GNSS receiver

This is a "pin" connection, so be careful not to force the connection. If lined up properly, the connection will be easy.

Plug the AC adaptor into a power source and you will notice the battery LED's begin to pulse. After the battery has achieved a certain level of power, that LED will stay lit.



Lining up the Red Dot with the pin connection on the inside of the Asteri GNSS receiver

Vehicle Charging Options

WARNING: Tri-Global does not recommend charging an Asteri GNSS receiver in an environment that is not temperature controlled.

WARNING: Charging an Asteri X-Series (BLE) model receiver while the device is powered on. Charging while in a vehicle may result in power surges that damage the circuitry.

Tri-Global does offer a [vehicle charger](#) that can be purchased at the Tri-Global Marketplace. However, Tri-Global recommends the use of an external battery charger.

The Asteri [external battery charger](#) can be used with a DC adapter or inverter to charge a spare battery while the primary battery is in use.

Alternatively, a universal charger may be used. Tri-Global recommends the Re-Fuel Universal Charger by DigiPower.



Vehicle adaptor charger for the Asteri GNSS receiver

Related Resources

- [Warranty Information](#)