HE7200 PORTABLE TROUBLESHOOTING

PREPARE

The procedures Identified in this document will help to determine if the HE7200 is powering on and the software is functioning as expected. Before performing the tests please ensure that:

- The device is activated; you can verify this in your SkyRouter account on the Manage > Devices page. If the device is not activated on a valid service plan you will need to activate service.
- The device is assigned to your SkyRouter account; the device should appear listed on the Manage > Device page of the SkyRouter Administrator account. **NOTE: If this device is new or has not reported to SkyRouter in over 6 months it will not appear on the Track page until it reports to SkyRouter again.**

CHARGE

When the HE7200 device is not getting sufficient power from the battery it will turn itself off, this is identified by all LEDs flashing rapidly for a number of seconds and then turning off. Prior to testing the HE7200 should be charged until the charging LED is solid green. To charge the HawkEye 7200:

1. Attach the circular 12 pin connector end of the charging cable to the HE7200 Power Port, the connector is a screw down type and must be screwed down all the way to ensure proper contact.
2. Plug the charging cable into an appropriate power source. The Charging LED is RED when the HawkEye 7200 is charging.
3. To completely charge the internal battery the device will need to be charged for at least 4.5 hours, once the battery is fully charged the Charging Indicator LED will be GREEN.

As a troubleshooting measure we recommend performing two back-to-back charging cycles; after the first charging cycle is complete (charging LED turns green) disconnect and reconnect the charger and attempt to charge the device again until the LED again turns green.

- If the device fails to charge; check the connections of the charger to the HE7200 and power source, verify that power is being delivered to the device. For testing purposes the provided charger should be plugged into a regulated 110-240V outlet. The provided charger delivers 12V at 1.5A. If available try using another HE7200 charger to eliminate the possibility of problems with the charger itself.

PLACEMENT

For troubleshooting purposes we recommend performing troubleshooting with the HE7200 located outdoors and away from any vehicles, aircraft or tall buildings. For optimum performance, the device must be placed in a position where the antenna is facing upwards and has an unrestricted view of the sky down to eight degrees above the horizon.

NOTE: In circumstances where the HawkEye 7200 has been powered off for long periods of time or has travelled considerable distances while powered off; it may take up to 30 minutes for the device to acquire a GNSS fix, this is referred to as a ”Cold-Start”.

Unobstructed sky view for optimal performance.

TEST

POWER-ON PERFORMANCE PROCEDURE

For all procedures outlined in this section the HE7200 must be placed in a position where the antenna is facing upwards with an unrestricted view of the sky. It is recommended that the device is placed outside and as far away as possible from buildings or other structures or equipment that could potentially cause signal issues, see the "Placement" section of this document for further information.

1. Ensure that the HE7200 is in a position where it will be able to acquire good signal strength.
2. While all the LEDs on the device are off; press down the Power button firmly and then release it, all the LEDs will turn on for 2 seconds before turning off again, the Signal LED will turn on and begin to flash rapidly.
3. After a few seconds the Signal LED enters begins operation and blinks as follows:
    a. Constant blink – searching for Iridium & GPS signals
    b. 2 blinks – searching for Iridium signal
    c. 3 blinks – searching for GPS signal
4. After a number of minutes the HE7200 should acquire signals, at which point the signal LED should be solid green.
5. Check SkyRouter for position reports after 5-10 minutes; if the device is reporting to SkyRouter this means that it is ready to track and troubleshooting is complete.

TROUBLESHOOTING

If the HE7200 fails at step 2 or 3, or powers down by itself:

- It's possible the battery needs charging, perform the charge procedure detailed earlier in this document.

If the HE7200 fails at step 4:

- The device may need relocating, refer to step 1 and "Placement" section of this document for guidance.

If the HE7200 fails at step 5:

- The device may not be activated or assigned to your account, see "Prepare" section of this document for guidance.
- It is possible that device parameters are preventing the device from reporting; Try sending a Quick Position Event to SkyRouter by pressing the QPOS button on the HE7200. If the Quick Position test is successful you may need to revise the parameters on the HE7200 device.

If the Message LED blinks red:

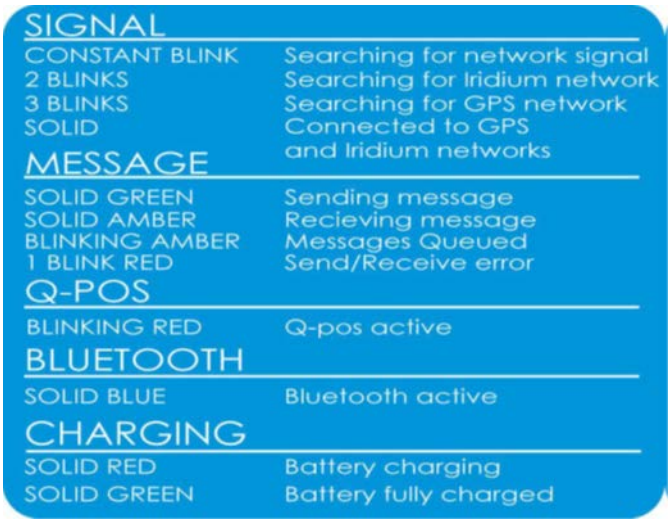
- This indicates a send/receive error, this can be a normal condition if the device has poor or no signals, if the HE7200 indicates a solid green signal LED and the message LED is blinking or solid red this could indicate an internal failure of the device.

If the procedures above have been performed and you still experience issues; please don't hesitate to forward a list of your observations to support@blueskynetwork.com so that we may further evaluate the issue and provide additional troubleshooting if necessary.

LED BEHAVIOR

The legend (right) describes the behavior patterns of the various LEDs that appear on the HawkEye 7200.

When submitting troubleshooting notes to Blue Sky Network Support please note the LED behavior on the device as this will help us to determine what problem(s) may exist with the device.



QUESTIONS AND ANSWERS

We've put together a list of our most frequently asked questions and answers, if you still can't resolve your issue please contact Blue Sky Network Technical Support and we'll be happy to help!

Q. The HawkEye 7200 won't turn on.

A. Try fully charging your HawkEye 7200 (at least 4.5 hours) and then attempt to Power On again. When charging you will want to make sure that the power cable is securely connected and screwed down, the Charging LED is RED when charging and GREEN when fully charged.

Q. The HawkEye 7200 turns on briefly, all LED's flash and then it turns off.

A. Try charging your HawkEye 7200 device. When the HawkEye 7200 battery is too low it will turn itself off automatically.

Q. The HawkEye 7200 doesn't get signals.

A. Revise the positioning of the device; for optimal performance the HawkEye 7200 should be placed with the antenna facing upward and with an unrestricted view of the sky down to eight degrees above the horizon. See the "Placement" section of this document for more information.

Q. The HawkEye 7200 battery is draining quicker than I expected.

A. Using the HawkEye Link Application and the Bluetooth feature of the HawkEye 7200 device will affect the amount of time that your HawkEye 7200 will last after a full charge. We recommend disabling Bluetooth features of the HawkEye 7200 when you are not using them.

Q. Quick Position mode is disabled but we still see Quick Position events in SkyRouter.

A. In order to disable Quick Position at SkyRouter the HawkEye 7200 must send a Normal Position Report to SkyRouter. Power on your device, make sure that the QuickPosition LED is NOT on and allow the device to send a Normal Position Report to SkyRouter.