

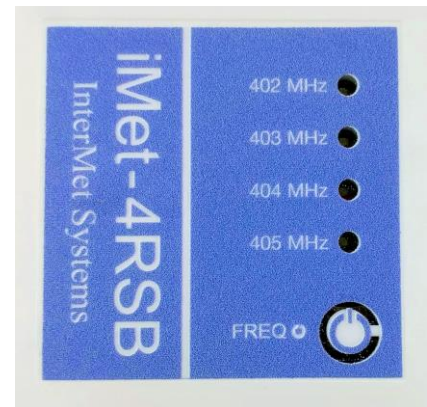


Refer to 200650.0004 for iMet-4RSB holster instructions.

1. Remove the radiosonde from its shipping container.
2. Press and hold the "FREQ" button until the LED begins to flash wait for the LED to blink for at least two seconds.
3. Press the Freq button to set the desired frequency.

NOTE

The iMet-4RSB includes seven transmission frequencies. Whole frequencies are indicated by a single flashing LED, while intermediate (half-step) frequencies will have two flashing LEDs. For example, when the 402 and 403 lights are both lit, the sonde is transmitting at 402.5 MHz.



4. Place the radiosonde outdoors in clear view of GNSS signals. Eliminate any obstructions. The LED will be solid after acquiring 4 satellites.
5. Start Skysonde or iMetOS-II and proceed with the launching procedure.
6. Attach the radiosonde to your XData package (e.g., Ozonesonde styrofoam box) so that the radiosonde hangs in a vertical position and the button is able to be pushed. See the picture to the right for an example. It is also recommended that the top of the radiosonde is mounted slightly above your XData package. This gives the radiosonde a better view of the sky and does not interfere with the XData cable.
7. Verify that pressure, temperature, humidity, GPS data, and XData are displayed on the PC.
8. Carefully bend the sensor probe to a 45° angle using the locking tabs as shown. Do not touch the sensors.



PRODUCT UPDATES:

Previously, the iMet-4 had a cap over the RH sensor. This has been removed for performance reasons.

There is now a single locking tab on the probe. This will make it easier to place the probe into the correct position.

9. Complete the software steps so that you are ready for launch. Release the balloon.

To turn off the radiosonde, press and hold the "Freq" button until the LED turns off. The sonde can be re-started by repeating the procedure. Note that the sonde has a nominal battery life of 165 minutes and it is recommended that you not activate it more than 30 minutes prior to launch. Extended activation will shorten the profile duration.

The NWS (National Weather Service) does not recommend launching radiosondes in a thunderstorm environment. The following information is taken from the NWS Manual on radiosonde observations (<http://www.nws.noaa.gov/directives/sym/pd01014001curr.pdf>).

13.3.5 Thunderstorms. The radiosonde will not be launched into thunderstorms. If a thunderstorm is occurring at the time of balloon release, the observer will wait until the storm passes before releasing the balloon. Three important reasons not to release during a thunderstorm are:

a. The observer increases the likelihood of being killed by a lightning strike as he/she proceeds to release the balloon. During a storm, the balloon train can become a lightning rod with the observer holding the lower end.

b. The data collected inside or near thunderstorms are erroneous and not useful for weather forecasts. The observation does not represent the synoptic scale environment and NCEP does not use such observations for ingestion into numerical weather prediction models.

c. Thunderstorms typically terminate an observation early owing to balloon icing or strong downdrafts. A thunderstorm is defined as ending when at least 15 minutes have passed since the last clap of thunder was heard...

Warranty Information

From time of delivery, radiosonde performance is guaranteed for 1 year. If properly stored, sonde performance should remain within specifications for two or more years.

If a radiosonde is not able to complete the pre-flight process due to sensor or GPS failures, please select a new sonde and contact InterMet for a replacement. If a failure occurs after launch, please email the data folder along with a description of the event to info@intermetsystems.com and mboit@intermetsystems.com for review. If a sonde fails in flight and we can identify an internal fault, it will be replaced. Sondes launched into thunderstorms for research purposes may be subject to failure and may not be covered by the warranty.