

## Recommendations for Balloon Live Sensor operations with the Balloon Live app

The Balloon Live Sensor (BLS) and Balloon Live App (BLA) are designed to track your competition flight tracks and store all user input like marker drops and goal declarations in a safe and tamper proof way.

This is achieved by continuous communication between the two sides through a Bluetooth connection. GPS data is sent from the BLS to the BLA, while any declaration or marker drop executed in the app will be copied to the BLS for signing and safe storage. For that reason, it is essential that the communication should not be interrupted once a flight has been started in the app.

If communication is interrupted while the app attempts to interact with the BLS, especially when dropping a marker or finalizing a goal declaration, this can result in unwanted behavior depending on the type of phone/tablet being used. In the worst case it could make the app unresponsive. If it hangs, force stop and restart the app, e.g. for Apple double tap the home button and swipe the app to the top.

To have the best experience with Balloon Live and avoid any unnecessary stress in the basket, we recommend following these tips:

- 1. At around briefing time, make sure to refresh the flight information in the Balloon Live App while you still have good mobile data or wireless signal. This may not be the case later at the launch site, if you decide to take off from a deep valley or when huge crowds of people are around.
- 2. As soon as you begin setting up your equipment at the launch area, take your BLS out of the car to have a clear view of the sky and turn it on, so that it has sufficient time to find a GPS signal. Usually, a position fix will be acquired fairly quick, but depending on the satellite positions and antenna orientation this could take up to two minutes.
- 3. Start the flight in the app before you declare goals or latest before hot inflation. Make sure that the app is connected to the BLS when starting the flight. Do not stop the flight recording anymore until take off.
- 4. While declaring a goal, make sure that the BLS and the device running the app are in proximity so that a GPS signal can be received and the declaration can be copied to the BLS. The app should NOT show "BLS disconnected". Don't attempt to declare a goal when you are at the other end of the launch area while your BLS stayed at the basket. Either take the BLS with you, or better, make your declarations when you're back at the basket.
- 5. During the flight avoid switching away from the Balloon Live app to other apps, as the operating system of your phone/tablet could take away processing priority from the app, which can result in interrupted communications with the BLS. This is especially risky if the BLA is in the background for an extended period of time.
- 6. After the landing and deflation of the balloon, please stop the flight in the app. Do NOT turn off the BLS until after the flight has been stopped. A signature will be written to the BLS as well when stopped. Think of it like you should not take the keys out of your ignition and lock before you have finished your parking .
- 7. Once the flight is stopped, make sure that the phone/tablet has sufficient mobile data coverage so that any remaining track data can be sent to WatchMeFly as soon as possible. If all data has been transferred successfully, you will see a white A and arrow in the app status bar at the top. Only then you can use the phone for other stuff or turn it off.
- 8. Don't forget to fill in your flight report form in WatchMeFly as soon as possible after the landing. This helps your scoring team in quick debriefing and scoring of your results.