MiCo 2026 Microphone and Communications Deployment Guidelines For Audio Enhancements

OVERVIEW

For the 2026 Olympic Games, multiple equipment options are available to support audio enhancements across venue productions. This document provides guidelines and best practices for selecting and deploying appropriate equipment in various production scenarios, along with a basic overview of all available equipment types. The NBC Audio team strongly recommends following the outlined workflows to ensure consistent and reliable results.

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AUDIO ENHANCEMENT EQUIPMENT OVERVIEW

A range of audio enhancement tools are available at each venue, tailored to meet the specific needs of the production level. Equipment setups and available resources are coordinated by the Audio and Comms teams and include the following:

* **Venue LiveU Cameras (*Camera #61 at all Venues)* provide the following resources:**
  + 2x RF Microphones received directly at the Camera (auto) and ENG A2 mixers for backup recording (manual mix)
  + VLink cellular-based PLs for Camera Operators, Producers, and Audio Operators
  + 1x VLink IFB with , fixed for use with Camera #61 (Friends & Family) 2x pairs of airpods included (IFB)
* **Venue RF Mics / IFBs / PLs**
  + Larger venues are equipped with two or more venue-based RF microphones, IFBs, and radio-based PLs for communication.
* **Tieline Report It App with Lark Mic and Airpods**
  + A mobile-based audio option, where a phone, microphone, and AirPods are handed off to an athlete. This setup is not
  + directly tied to any specific camera but can connect to any production or mobile until.
* **Facetime Interviews**
  + iPhones used for Facetime cannot separate mic and IFB equipment. For single-guest interviews, AirPods may be used to handle both mic and IFB duties. For multiple guests, the iPhone's built-in microphone and speaker will be used for both.

LiveU CAMERA ATTACHED WORKFLOWS

Each LiveU camera has designated resources that are expected to be used in any scenario where the visual accompaniment to an audio enhancement is a LiveU camera.

**LiveU-dedicated RF microphones**.

There are **two RF microphones** associated with every LiveU camera, which are received directly on the camera and transmitted as **embedded audio signals** with the RF camera video. Any NBC talent, athlete, coach, or family member required to have audio while being covered by a LiveU camera should be wired with one of these. 2x ENG receivers will be attached to the camera directly (Ch. 3 & 4 in Auto) while the Venue ENG A2 mixer will also have 2x receivers which he/she will record via a ENG mixer to a backup SD card

Communication to operators assigned to LiveU cameras will be managed through **VLink iPhone-based PL systems**. A VLink PL will be assigned for the Camera Operators, Producer, and Audio Operators working with LiveU Cameras. In addition to the PL units, there will be a **single IFB VLink** for any NBC talent, athlete, coach, or family member who needs to be part of an interview.

If any of these personnel are being shot directly and solely on a LiveU camera, any **Mic / IFB / PLs should be handled by the resources listed above.**

VENUE RF MICS and IFBS

When working with standard cameras, most venues also offer **‘Venue RF Mics and IFBs’** — high-quality, locally deployed resources intended for use with any non-LiveU camera. As the name suggests, these resources function within the designated RF coverage zones of each venue. Provided there is adequate RF coverage, they are compatible with any NBC camera.

To ensure proper usage, please coordinate with the Engineering and RF teams at each venue to understand the available resources and confirm their functionality within the specified RF zones.

Some specific use cases for this equipment would be:

* Reporters at the top of the Alpine Hills
* Mic and IFB for any NBC talent away from a wired location
* Micing Coaches
* Mic and IFB family members in the crowd for 2 way communication with talent being covered with non LiveU cameras.

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TIELINE REPORT IT APP WITH LARK MIC AND AIRPODS

Also available for use is the Tieline App, which uses Wi-Fi or cellular data over raw internet to transport microphone and IFB signals. To achieve the highest quality signal, a very small clip-on external 2.4ghz microphone pairs with the phone, and AirPods can be used as an IFB for two-way communication.

A very important note when using this equipment is that this audio is **asynchronous** to any video sources and must be manually timed in before use, as these signals travel outside traditional audio and video paths from each venue. While it is possible to use this setup for on-site productions, these resources work best with **Stamford-based productions**, as it is easier to sync audio and video there. Each phone and application setup provides a single microphone and IFB, but it is recommended that only one setup be used at a time due to the asynchronous nature of the audio signals.

The subject wearing the microphone and AirPods **must have the phone application on their person**.

It is preferable that the equipment is handed over to the coach or athlete already connected, with the phone screen locked

Specific use cases for this equipment would be:

* Athletes in practice or warm-up areas, being covered by NBC cameras
* Family members in the crowd for reactions or interviews
* NBC talent mic’d up for any demos outside of normal RF coverage zones
* Chairlift or snowmobile rides being covered by NBC cameras
* Voiceover only of any subject outside of normal coverage zones

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FACETIME

Facetime is another simple and straightforward resource available for use in more **behind-the-scenes type scenarios**. If a **single subject** is being covered, AirPods can be used with the phone and Facetime application. If there are **multiple subjects**, the onboard microphone and speaker of the phone should be used.

Specific use cases for this equipment would be:

* Chairlift interviews
* Backstage interviews
* Any interviews from non technical areas