

GAUDIO SPATIAL AUDIO DEMO GUIDE*

This document is based on GAUDIO SPATIAL AUDIO DEMO for Android v2.1.1.

INTRODUCTION



This is an app for Android smartphones to evaluate GAUDIO SPATIAL AUDIO V2.0 technology.

The GAUDIO SPATIAL AUDIO is the head-tracking sensed interactive spatial audio technology portable for any smartphone, TWS, HMD, or any similar devices

Compatibility range for this app*

File format	.mp4, .mov, .wav, .mp3
Video	h.264
Audio	AAC, MP3, PCM
Audio Channel	Stereo, 5.1

*It is made based on the exoplayer framework and so has the same basic compatibility range of it.

CAUTION)

- Please understand that it is limited to have ideal listening because of the inherent motion-to-sound latency caused by the constraints of the app production environment of Android framework.
- This demo app (exoplayer-based) only supports up to 5.1 channels, but Gaudio Spatial Audio itself provides rendered output without format restrictions and can support 7.1.4 channels and objects.
- Please switch off any audio effects that are running on your device for appropriate evaluation.

Preparation

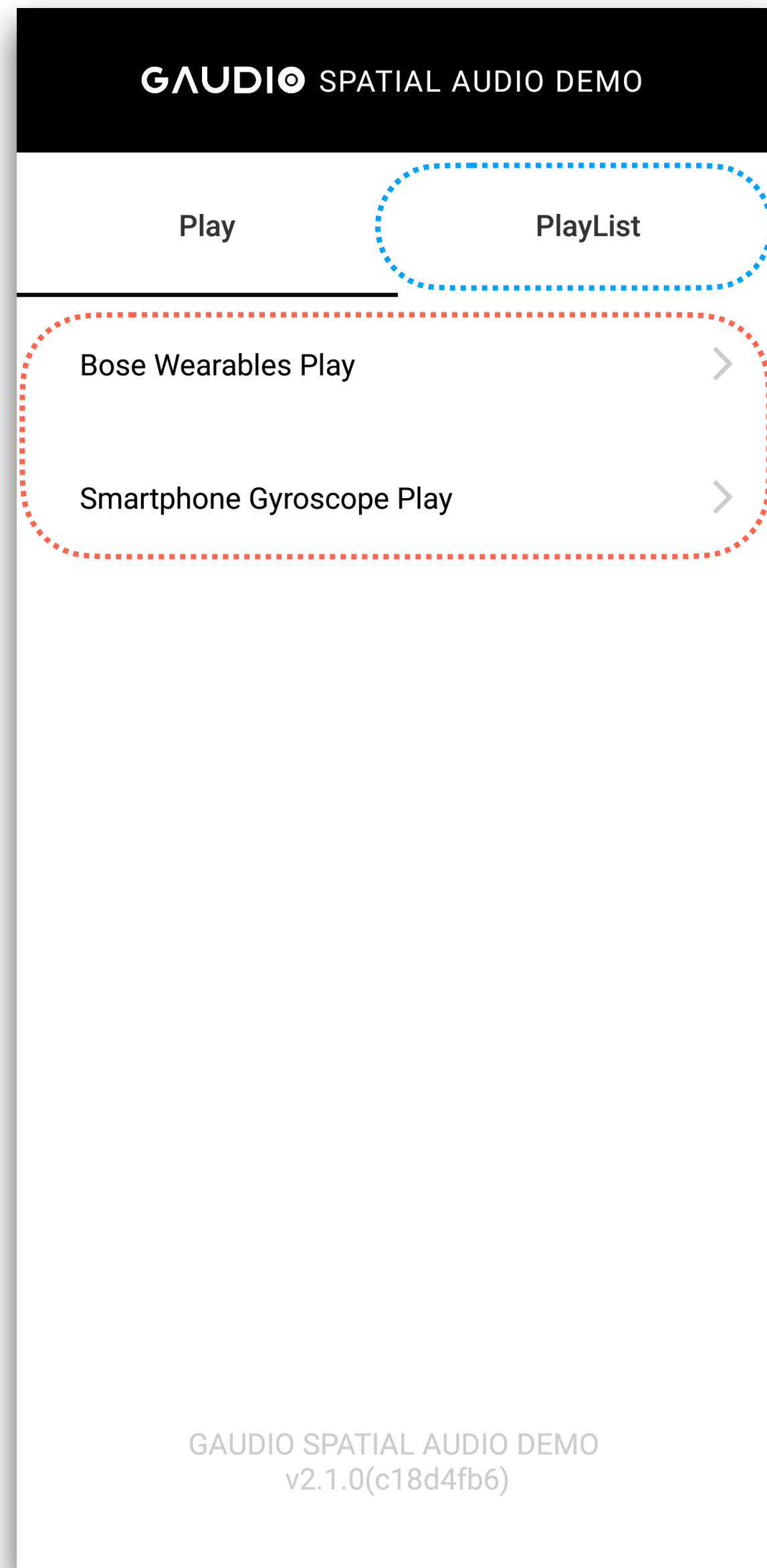
Please prepare the followings before evaluation:

- An Android Smartphone for installing APK (Confirmed with Galaxy S8 or later versions)
- Video or music files for testing*
- Earphones for listening (3.5pi wired earphones or TWS)
- *(Optional)* Bose Wearables device (if test with the corresponding input sensor is necessary)

*Following test materials (videos) are included in the demo kit to check and evaluate the basic operation.

- Akmu_Fish_5.1.mov (5.1 channels, portrait view live music)
- Akmu_Fish_STEREO.mov (Stereo, portrait view live music)
- Parasite1_Plan_5.1aac.mp4 (5.1 channels, dialogue-oriented movie, landscape view)

Play tab - the first screen of app launch



0

0

When running the app for the first time, select a sound source for testing from PlayList

→ see page 5

4

4

Bose Wearables or your smartphone's gyroscope can be used as an inertial sensor (IMU) for operating the interactive (head-tracking) function of the Spatial Audio.

Select the desired sensor device and play it.

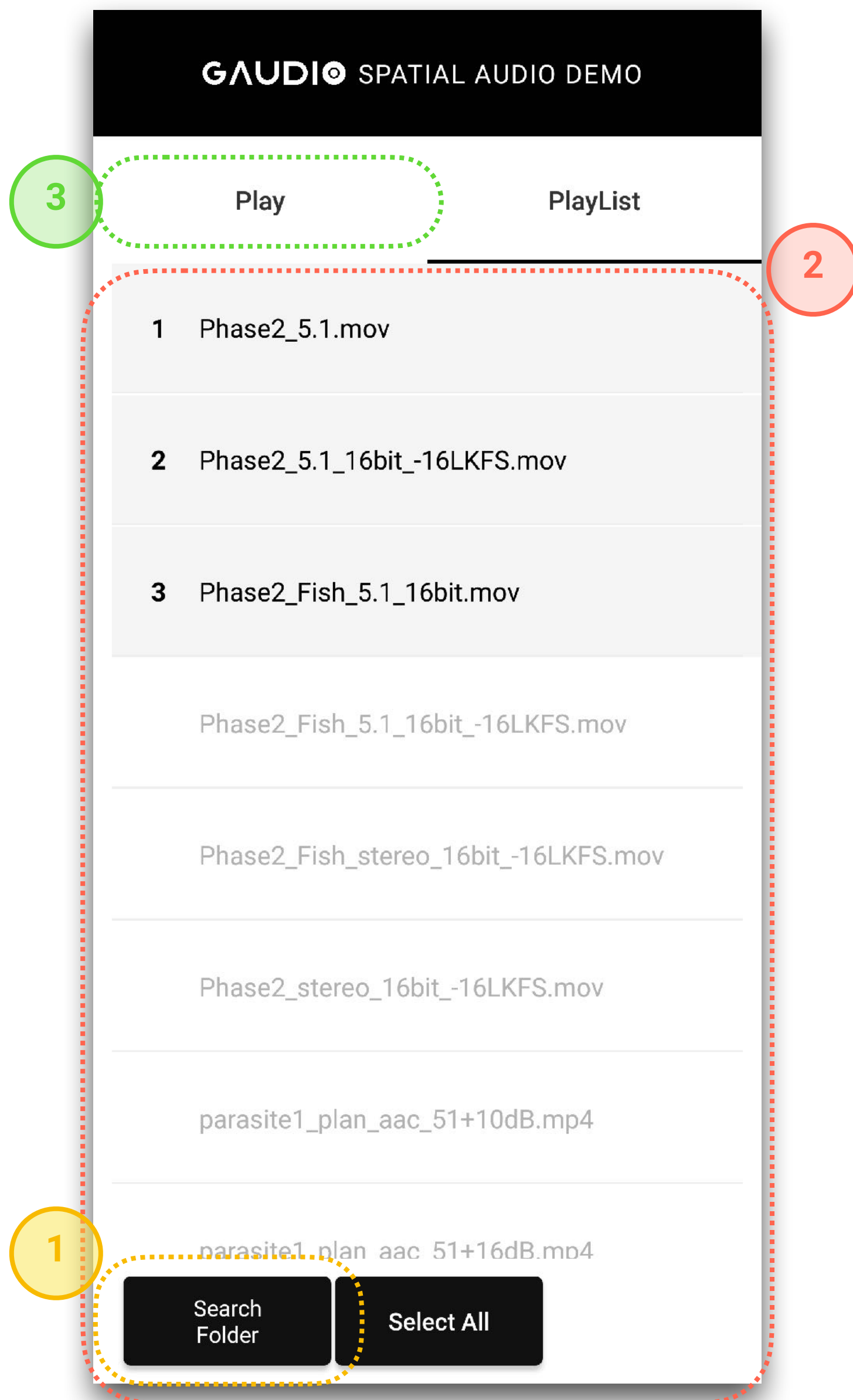
- Bose Wearables Play

→ see page 6

- Smartphone Gyroscope Play

→ Go directly to the Playback screen (see page 7)

PlayList tab



As a default, files in the (root)\Gaudio folder are displayed.

1

Click "Search Folder" to set the folder containing the sound source to be tested. (If you create a "Gaudio" folder and add a sound source, a correct list automatically appears without having to select a folder each time.)

2

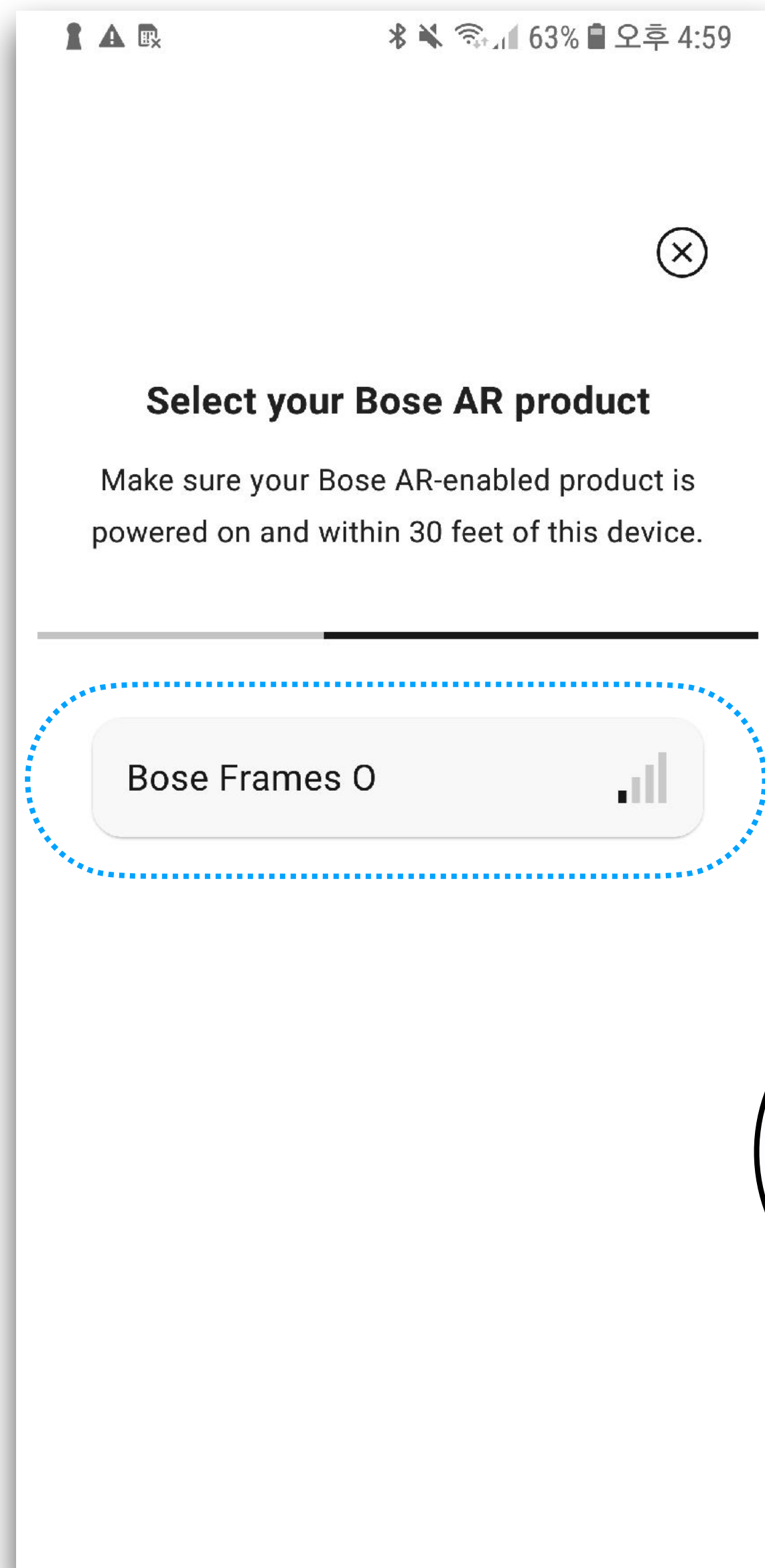
Select a sound source to be played from among the sound sources displayed in PlayList. (Press the selected sound source again to deselect it.) (To select all sound source, press 'Select All'.)

3

When you finish selecting the sound source, go to Play tab again.

→ See page 4

When using Bose Wearables



5

When Bose Wearables Play is selected, as the Bose device (e.g. Bose Frames) is turned on and on standby, the UI screen that guides the BLE (Bluetooth LE) pairing of the Bose device as shown on the screen is displayed.

Click the selected area as shown in the Figure, the play screen will automatically be navigated as soon as the BLE connection is complete.

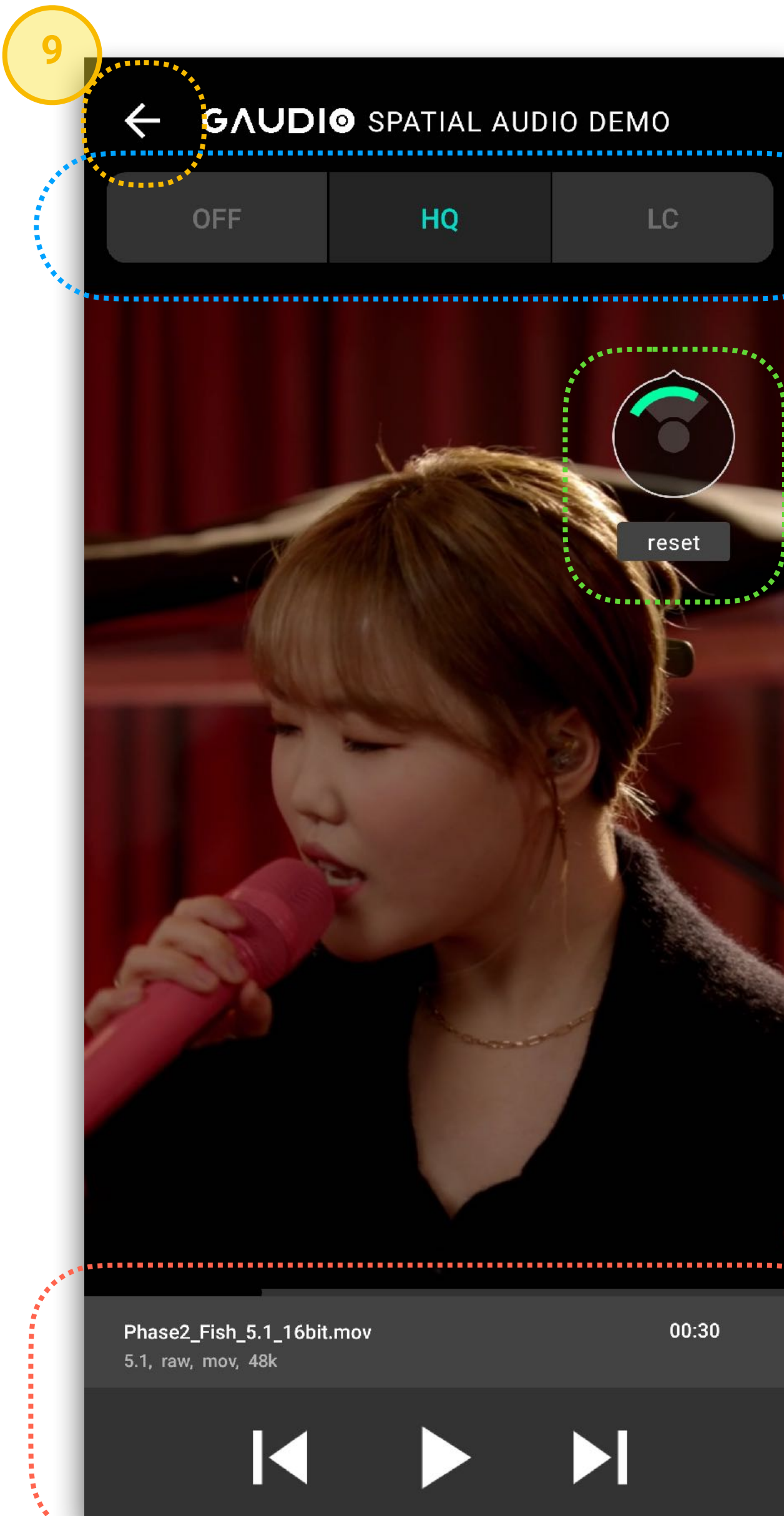
5

CAUTION)

In this process, the BLE pairing retrieves the IMU (Gyroscope) from the Bose device, and the audio output may be played on other audio devices (TWS, wired earphones, etc.) connected to the smartphone.

(If Bose device is connected as a Bluetooth audio device in the smartphone settings, the audio is also played out to the Bose Wearables.)

Playback



6

OFF, HQ, and LC mode settings can be changed during playback.

- **OFF:** Bypass Stereo with Gaudio Spatial Audio **OFF**
(For 5.1 channel input, a default downmix of exoplayer sounds out)
- **HQ:** Rendered in Gaudio Spatial Audio **High Quality** mode.
- **LC:** Rendered in Gaudio Spatial Audio **Low Complexity** mode.



(Landscape view)

7

Guiding the real-time direction of the input IMU Sensor. In case of smartphone Gyro mode, the position of the phone is displayed in green, and in case of Bose mode, the direction of head orientation is displayed in green. **Press “reset” to initialize the IMU sensor to the front direction.**

8

Providing basic Trickplay features as a typical video/music player.

By touching any of the video screen, the Trickplay UI can be hidden/shown.

9

Returning to the initial setup screen (Play tab).

THANK YOU

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