

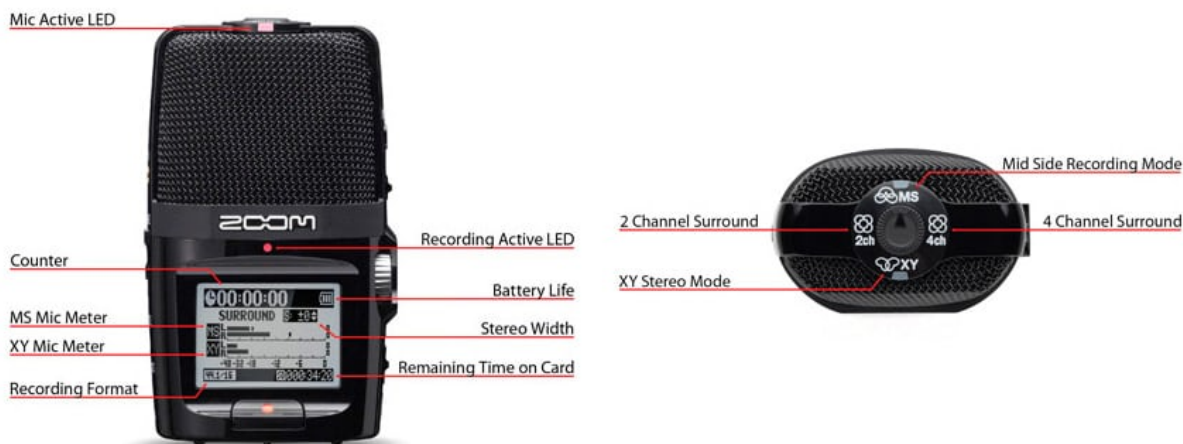
Brahma Ambisonic Recorder Tutorial

The Brahma Ambisonic Recorder is a modified Zoom H2n recorder with an Ambisonic microphone. The Ambisonic microphone contains 4-capsules that are arranged in tetrahedral format in order to record a full sphere of sound around the recorder. This provides maximum flexibility in post-production. In contrast, most consumer field recorders have two microphones; these traditional setups give the device a specific, fixed perspective.

Recording Identification

At the beginning of each recording, it is important to include a verbal recording identification to provide critical information for subsequent data processing and organization. Please include the following information:

Your name, the date and time, your GPS coordinates, information regarding the current weather conditions and surrounding environment; that you are recording on a Brahma A-Format Ambisonic Recorder, the number associated with the Brahma recording device you are using¹, the sample rate and bit-depth of your recording², the setting of the mic gain for your recording³.



Microphone Recording Mode

On top of the Brahma recorder (above, right) there is a small dial with which you select the microphone pattern for your recording. In the image above, the MS or Mid-Side recording mode is selected; for your recordings, please select 4 Channel Surround.

¹ This number can be found by removing the battery cover on the back of the device.

² The sample rate and bit-depth can be found on the LCD screen (recording format, in the image below). It should be set to 48/24.

³ The mic gain is set using the knob on the right side of the Brahma recording device (see image on following page). Please set the mic gain at either 8 or 9.



Powering On

As you pull this down and then let go of the power switch, the device will turn on. After you have turned it on, adjust the switch up to the hold position to ensure that the recording will not be interrupted.

Microphone Gain

The microphone gain is accessed via a dial on the right side of the device which you can adjust from 0-10. Adjusting this knob turns up microphone input to the recorder. For your recordings, set this somewhere between 8 and 9. Generally speaking, your goal in adjusting this dial is to have a decent amount of movement in the MS/XY meters found on the LCD screen but not so much movement that it hits the end of the scale. That said, when you are recording in these very quiet environments there will probably be very little movement on these meters at all; this demonstrates how quiet these environments really are. The reason that we don't turn the gain up to 10 is because the amplifier will make everything louder—both the signal and the noise—and so if you put it all the way up to 10 you will hear a lot of hiss in the recording which we don't want. There is always a fine balance between how much noise we are introducing into the recording and how much gain or amplification of the sound occurs in the recording.

Menu button

You can use the menu button to set the date and time if it needs to be adjusted and also to format and delete all items off of the SD card in order to free up space for new recordings. To navigate through the menu items, first press the menu button and then use the 'jog lever' to move up or down through the various options and press the jog lever in to make selections. The date and time can be adjusted using the System menu.

Playback button

When you are not in menu mode, the jog lever functions as a playback button and also lets you navigate through existing recordings.

Volume

The volume buttons on the left side of the device adjust the levels of the audio in the headphones only; these do not affect the levels of the actual audio recordings. To adjust the levels of the recording itself, use the microphone gain.

Changing Batteries

To replace the batteries, hold the recording with the microphone facing your body and the LCD screen facing down towards the ground. Push down on perforated area on the back of the device and push it away from you. The Brahma takes two AA batteries.

SD Card

The SD card is in the bottom of the device. To take it out, open the flap and press down on the card.

Other important notes:

- Be sure to always use your wind shield. Place the furry wind-shield over your 3D-printed plastic component or foam inner wind shield and place these items over your Brahma microphone.
- Use a tripod for your recorder to avoid handling noise. Place your recorder on its tripod either on the ground or in a tree.

Transferring Files

You can transfer the files directly from the Brahma by connecting it to a computer using a USB cable, selecting storage mode, and then dragging and dropping the files onto your computer. You can also remove the SD card from the machine and transfer the files from the SD card to your computer. After you have saved the files onto a new device, you can delete them from the SD card.