

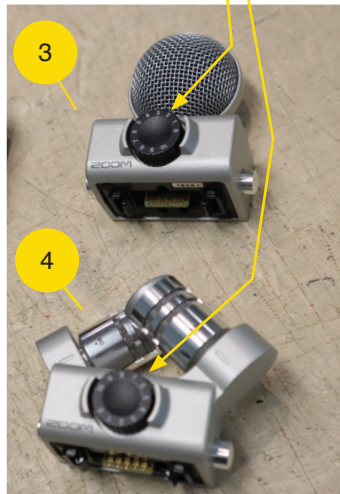
HANDBOOK 02 — ZOOM H6





LEGEND

1. XLR point
2. Direct entry point
3. Mid-side Microphone
4. XY-microphone
5. Power switch
6. Control knobs for channel sensitivity
7. Record button
8. Channels (1 - 4, L/R)



1. DESCRIPTION

So, first things first: the Zoom H6 is a field recorder that works on 4x AA batteries. It has four XLR points on the sides **(1)** and one direct entry point on top **(2)**. You can forget about the XLR points for now, we'll deal with those later.

The Zoom H6 kits in the WdKA.Rental are all outfitted with two direct-to-device microphones which can be plugged into the slot on top of the recorder **(2)**. One looks like a ball **(3)** and another has two bits sticking out **(4)**. The ball-like mic is a **mid-side mic** and the one with the bits sticking out is called an **XY mic**.

We could write an amazing in-depth article about the specifications of both mics but frankly, we don't have the time and neither do you (probably). On a baseline what you should know about these two is this: the mid-side mic records a broad spectrum of sound from the middle and the sides (hence the name). The XY mic records a more

Alrighty then! So you've rented a Zoom H6. Maybe because your terrifying teacher told you to do so or because your overenthusiastic classmate kept banging on about it.

Whatever the reason, you're now stuck with an alien device covered with buttons, dials and strange microphones - and now you'll have to deal with it. Fear not! This quick start guide will get you up and running in no-time.

deep sound in front of it and has less emphasis on sounds from the sides. What mic to use depends on the thing you want to record. Basically, the mid-side is more well suited for surround sounds (performances, music, crowds and conversations) and the XY mic is more well suited for sounds you want more isolated (voiceovers, sound effects, instruments, wildlife, that kind of stuff).

Obviously, there's no real right way to use these mics, so the above should be seen as a guideline and not as a rule. In the end it's all up to you and your preferences. I would even say it's a good idea to experiment with both on your subject so you can hear the difference and you get a better understanding of how these mics work.

2. LETS GET STARTED

Okay, so lets do this. You've chosen your subject and you've picked your weapon of choice.

1. Snap the mic of choice on top of the Zoom H6 and switch the recorder on by sliding the switch **(5)** to the right and releasing it.
2. Provided you put in fresh batteries, the screen should go on, showing you a bunch of volume indicators. These indicators stand for the volume of sound coming into each channel. The H6 has six channels: 1, 2, 3, 4 and L/R, which you can also see on the buttons above the screen. The numbers 1-4 denote the XLR points and L/R the direct point on top.
3. As we're using the mic on top we'll have to open up L and R channels which, conveniently, are linked together.

4. So push the button that says L and you'll see that both the red lights underneath L and R will flick on. This means that the L/R channels are now opened and the recorder is picking up sound coming in through that channel. You can see the indicator on the screen jumping up and down as it's picking up sounds from its surroundings.

Great. Now you're technically ready to start recording. However, to make sure that you don't get awful results that will plunge you into the unending depths of audio hell, we have to set the sensitivity correctly. The sensitivity of the mic can be set with the dial **(6)**, which 0 denoting no sound and 10 full sensitivity.

[...] So what should be the setting?

Again, this depends on the situation you're recording in and the indicators on the screen are your best friend. Simply put: if the indicators show too much yellow then the sensitivity is too low and

you'll need to crank it up a bit, if the indicators show too much red, then your sensitivity is too high and you'll need to decrease the sensitivity

Depending on your subject, try and turn the dial slowly and see what happens on the screen. Once the indicators stay green most of the time you've found the right setting. If you want want the numbers: it should stay around the -12 dB

GOT THE SENSITIVITY RIGHT?

Awesome, then it's time to record. To record hit the record button **(7)** and the Zoom H6 will do its job. Hit the button again and the recording will stop.

If you want to listen back to whatever you just recorded, just plug in your headphones (on the side) and press play. Once you hit play the Zoom H6 will let you hear whatever you recorded last.

RECORDING COMMANDMENTS

Thou shalt always use a windbreaker when recording outdoors. Really, please do, because even the slightest breeze will sound like a chainsaw ripping through a Texan front door. Even better: avoid wind completely.

Thou shalt always wear headphones while recording. If you don't, it's like you're driving a car with opaque windows.

Thou shalt never touch the microphone whilst recording. Same as with wind, even the smallest fingers will leave you with tinnitus.

Thou shalt not move the recorder whilst recording. Touching and moving the recorder itself will be loud as hell so avoid doing that. Best advice would be to put the H6 on a tripod.

Thou should use markers. A marker is a way with which you can identify your recorded file quickly. The Zoom H6 has an option to add markers in the recorder itself, but the easiest and most reliable way is to name the subject in the first few seconds of recording followed by a number. For example, say you're recording the sound of a running tap, you would hit record, then say "Running tap 1" and proceed with recording your subject.

Thou shalt always prepare. This seems somewhat of a no-brainer, but it's very important and it rings especially true for recordings in the field: bring enough batteries, enough memory, check the weather forecast and wind speeds, and decide ahead what type of mic you're going to use.

Thou shalt always format the SD card before recording. To avoid any issues with the saving of files it's best to format the SD card beforehand.
To do this: Menu > SD CARD > Format

3. USING EXTERNAL MICROPHONES

Okay, so that was pretty easy, right? So let's explain those XLR points we were talking about earlier. Without going into too much detail, XLR is a type of audio cable most commonly found on microphones, mixers and instruments. You can recognize them by their metal jackets and three pins (or three holes). The Zoom H6 has four channels for use with XLR-cables (the channels 1

Please note that you can also plug jack 6.3 into the XLR inputs!

through 4) located on the sides of the device **(1)**. The number of the channel can be found next to the dial of the respective channel.

If you have an external microphone (like a clip-on mic or a dynamic mic) you can plug the attached XLR-cable into the Zoom H6. Depending on what channel you plugged it in (say channel 1) you can now open that channel in much the same way you opened the L/R channel on top.

In our case click the button that says 1. Once it goes red, the Zoom H6 is picking up sound through the attached device and you can start recording. Obviously, this same method applies to all other channels as well. Use the control knob of the corresponding channel to adjust the sensitivity. Again, make sure the indicator doesn't jump into the red or fall too far into the yellow.

The great thing about the Zoom H6 is that it can record all four (six, strictly speaking) channels simultaneously. To do this, just repeat the previous process for each channel used. The Zoom H6 will subsequently save each channel as a separate file allowing for full control over the various tracks upon editing. Please note that this only works with WAV-format files.

There's also a switch next to each channel that says PAD 0 -20. Switch this on when the sound you're recording is uncontrollably loud. To be honest, you probably won't need it so it's best to just leave it.

4. TRANSFERRING THE FILES

Okay! So what now? You've recorded all the stuff you want but now you gotta edit the whole thing.

Worry not, the Zoom H6 records all of its files on an SD card so transferring the files is super easy (unless you're a MacBook user without a card reader or USB-hub, but in that case nothing in life will be super easy for you). Alternatively you can also use the USB cable to transfer the files to your computer.

Maybe this is a good place to touch upon formats, briefly. The Zoom H6 is capable of recording in both WAV and MP3. Basically, WAV is a more detailed format with a higher quality but it also has a greater file size. MP3 is lower quality, but smaller in size. We won't bother you with all the ins and outs of kHz and kbps but the main thing you should take away from this is that the higher the kHz (kilohertz) and the higher the kbps

(kilobytes per second) the higher the overall quality, but also the greater the file size will be.

Generally speaking we'd advise you to stick with the standard WAV 44.1 kHz 16bit, but if you want to up your game you can switch to a higher standard as following: click on the menu button, scroll to the RECORDING tab, click on the scroll button to enter the tab, and click it another time to select REC FORMAT.

Again, please note that recording in MP3 will result in one track, regardless of the amount of channels used. Basically, the Zoom H6 will merge all the sounds into one file as opposed to WAV. While recording in WAV the recorder saves the sound of each channel separately on the SD-card allowing far greater creative control in the editing process.

Also, please note that these separately saved WAV-files can only be seen on the computer, not on the Zoom H6 itself.

5. AUDIO EDITING

For the actual audio editing there are a bunch of programmes you can use, in a variety of price ranges. Here's a list of the most common sound editing software, in no particular order:

Adobe Audition

Ableton Live

Logic Pro X

Sound Forge

REAPER

Of course, you can also just use the audio-side of Premiere Pro to mix in your sound or play around in the sandbox of Garage Band.

If you wanna know more about these apps, just ask Rob at the Image & Sound Station. If you're interested in further training, you can also ask him about possible courses or trainings. I'd also advise you to watch a bunch of tutorials on YouTube about sound mixing and editing.

*One app we would like to specially mention is **Audacity**. Audacity is a pretty good - and free - app for audio editing. It's ugly as hell, but it's been around for years now and it has loads of options.*



Written by S.D. van Gelderen
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