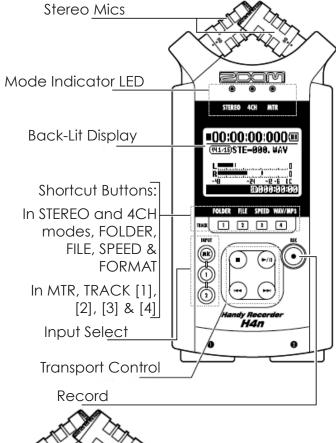
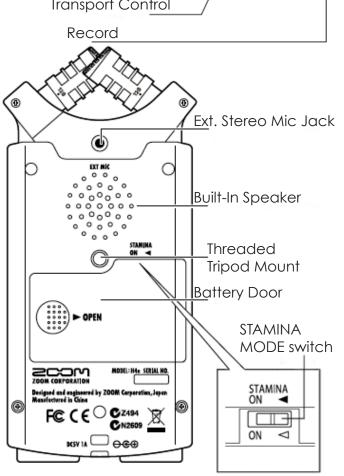


# **ZOOM H4N RECORDER**

Media Loan Operating Guides are available online at www.evergreen.edu/medialoan/



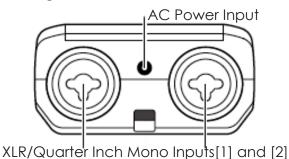


### SAFETY PRECAUTIONS

- DO NOT use in or subject unit to extreme temperatures, near heat sources, high humidity or moisture, excessive dust or sand, excessive vibration or shock.
- DO NOT insert foreign objects into or allow liquid to enter the unit.
- DO NOT exert undue pressure on the keys or other controls.
- DO NOT put the H4n speaker next to other precision instruments, such as a computer, or next to magnetic cards.
- ALWAYS power down the H4n and all attached equipment before unplugging any cables. Unplug cables before moving the H4n unit to avoid jarring the jacks.
- NEVER open the casing of the H4n or attempt to modify it in any way. Bring the unit to Media Loan for service immediately if it is not functioning correctly.
- DO NOT use the H4n at loud volumes for extended periods of time, as it may cause hearing impairment.
- REMEMBER that you are 100% financially responsible for all equipment you check out from Media Loan!

It is highly recommended that you consult the complete H4n manual for detailed information regarding recording, modes and all further H4n details. There is simply too much information to be included in a simple guide such as this. The complete H4n manual is available at

### www.evergreen.edu/medialoan

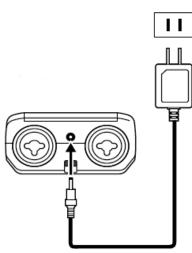


Media Loan 360.867.6253 The Evergreen State College Olympia, WA 98505 MEDIA LOAN ZOOM H4N RECORDER

## SUPPLYING POWER TO THE H4N

Since power consumption of this unit is fairly high, we recommend the use of an AC power adapter whenever possible. If using batteries is necessary, make sure to use Alkaline or Nickel-Metal Hydride (NiMH) batteries.

- Use only the AC adapter provided by Media Loan. Use of any other adapter could damage the H4n.
- During lightning or when not using the recorder for an extended period, disconnect the recorder from the AC outlet.
- When powering with batteries, use two conventional size AA
  1.5 volt batteries of the same type.
- When not using the recorder from an extended period, remove the batteries.
- When using the recorder, the battery cover should be closed.
- Before plugging in or unplugging, inserting or removing batteries, make sure the H4n is powered down, otherwise, any data on the recorder may be destroyed.
- The H4n can be powered by USB, but ONLY when it is being used as a USB audio interface or to transfer files.



#### SD CARD

Media Loan provides a 1GB SD card with the H4n recorder, This should provide a large amount of recording time, even while recording in very high definition formats. If you need longer recording times than the 1GB card can provide, the H4n will accept SD and SDHC cards.

- Do not remove the SD card unless absolutely necessary.
- Make sure the recorder is turned off before attempting to change the SD card.
- SD cards are expensive. Always remember to return your recorder with the SD card it came with from Media Loan.
- If the SD card does not seem to fit or you are having difficulty removing it, please return to Media Loan for assistance. Do not exert any excessive force on the SD card or the recorder.

#### POWER / HOLD SWITCH



The power switch to the H4n is a two-way slider switch. To power on the H4, push the switch toward the power logo, then release it. The switch will return to its original position, and the H4n will begin to boot up. To power off the recorder, pull the switch

towards the power logo and hold it there until the screen displays "Goodbye See You!"

The power switch also functions as a key hold switch to prevent any unwanted changes during recording. To put the H4n into key hold mode, push the power switch into the hold position. The screen will show that the H4n is in key hold mode, and all buttons



HOLD

will not respond until key hold mode is deactivated. To switch out of key hold mode, simply pull the power switch back to the center position. The screen will display that the keyguard has been released.

## MAIN MENU & CONTROLS

To access the main menu, press the MENU button on the right side of the recorder. Once inside the main menu, turn the dial to select the desired option and press the dial to select. To go back to the previous menu screen, press the MENU button again.

ZOOM H4N RECORDER MEDIA LOAN

#### MENU OPTIONS

**[FOLDER]** - The H4n offer 10 folders to keep recorded files separate and organized. When in the menu, the current folder will display at the bottom of the screen.

**[FILE]** - File Management within the selected folder.

**[INPUT]** - Fine tune controls for different inputs.

**[REC]** - Controls for file format/quality, and prerecording/volume activated recording.

[MIXER] - Controls volume and pan settings for recording.

**[MODE]** - Use to select a recording mode.

All modes can be changed from the mode menu EXCEPT stamina mode! For complete details on using stamina mode, see the 'RECORDING MODES' section of this manual.

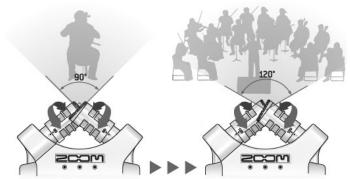
## RECORDING SOURCES

The H4n can record from several different sources, including the built in stereo microphone, an external stereo microphone, and external microphones or instruments attached with XLR or 1/4" jacks. Recording sources can be chosen with the input buttons on the face of the

recorder.

Built in Stereo Mic - The H4n features a versatile built in XY stereo microphone, capable of recording in a 120° or 90°

spread. Behind the built in stereo mic, there is a stereo mini jack to plug in an external stereo mic. an external mic is plugged into this jack, it will supersede the built in microphone. To record from this source, press the MIC button. When the source is active, the MIC button will glow.



·Dial

**MENU** 

button

**Input Jacks [1] and [2]** - The input jacks on the bottom of the recorder accept both XLR cables for microphones, and 1/4" cables for instruments. The input jacks are controlled by the [1] and [2] buttons on the input panel. In 2CH and 4CH modes, the two input jacks operate as a stereo pair. If you select one jack input button, both will glow to indicate that they are both active. IN MTR mode, the two jacks can be used independently.

To record one microphone onto both sides of a stereo track, select the input jacks as the recording source, then make sure the MONO MIX setting of the INPUT submenu is ON. When MONO MIX is active, the H4n will record both stereo channels from one of the mono input jacks.

#### RECORDING MODES

The H4n has several different recording modes, which change the way the recorder operates, and which inputs can be used. All recording modes except for stamina mode can be chosen in the MODE submenu.

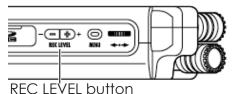
**Stamina Mode** - Stamina mode is designed for the sole purpose of conserving battery life, and should only be used if it is necessary to record for extremely long periods with no access to fresh batteries or AC power. Stamina mode will increase battery life from about 6 hours to about 11 hours. In stamina mode, the H4n operates exactly like stereo mode with several limitations:

- 1. In stamina mode, the zoom cannot record in any format other than the lowest quality WAV.
- 2. In stamina mode, the MODE submenu is locked out. To turn stamina mode on or off, the user must power down the recorder, and hit the stamina mode switch inside the battery door, then restart the recorder.

MEDIA LOAN ZOOM H4N RECORDER

**Stereo Mode** - Stereo mode uses either the H4n's built in stereo microphone or inputs [1] and [2]. The input select buttons will illuminate to reflect which source the H4n is recording from. While recording in stereo mode, the sources can be switched at any time, including while the recorder is capturing audio. To change the recording volume, simply hit the REC LEVEL (+) or (-) button.

**4CH Mode** - Simultaneously uses the H4n's built in stereo mic and inputs [1] and [2]. Recording volumes are controlled by source. Before using the REC LEVEL (+) or (-) button, you must first choose which source you wish to modify the volume for by pressing the corresponding input select button.



The REC LEVEL (+) or (-) button should not be confused with the VOLUME (+) or (-) button found on the other side of the recorder. The VOLUME button controls the levels of audio output (the speakers or headphones).

MTR Mode - MTR mode is designed to record onto 4 separate tracks. Each of the tracks can be recorded and modified independently from any of the others. Additionally, tracks 1 & 2 or 3 & 4 can be recorded together. Each track can record from any of the input sources.

To begin recording in MTR mode:

- 1. Choose which track (or pair of tracks) you would like to record to.
- 2. Choose the inputs you would like to record onto that track.

To change the recording volume in MTR mode:

- 1. Press the track number and input source buttons that you would like to change the recording level for.
- 2. Use the REC LEVEL (+) or (-) button to change the recording levels. This will only change the recording levels for the selected inputs on the selected track. Setting for the same inputs on other tracks will remain unchanged.

#### RECORDING FORMATS

The Zoom H4n is capable of recording in both Mp3 or WAV file formats. WAV is an uncompressed and lossless file formal, while Mp3 is compressed and lossy. This means that WAV files are larger, but retain more detail than Mp3s, which trade audio resolution for much smaller file sizes. The H4n's highest recording quality is 24 bit / 96 khz WAV, which is higher

RECORDING TIME PER 1 GIGABYTE (GB)		
MP3	128 Kbps	17 Hrs 21 Mins
	320 Kbps	6 Hrs 56 Mins
WAV	16 Bit / 44.1 Khz	1 Hr 34 Mins
	16 Bit / 48 Khz	1 Hr 26 Mins
	24 Bit / 96 Khz	28 Mins

quality than CDs, but may be unreadable by many applications due to its large file size. Zoom recorders from Media Loan are provided with a 1GB SD card. Total recording time per GB will change depending on format and quality.

#### FILE TRANSFER

Transferring audio files from the H4n to a computer is simple, and much like using an external hard drive. To connect the H4n to a computer, make sure the recorder is off, then connect the recorder to your computer via USB. When this is done, turn on the recorder and allow it to boot up. Once the recorder has started, it will give you options for connection modes. Choose 'STORAGE,' and the H4n will show up like an external hard drive plugged into your computer. You can now drag and drop files or folders off of the zoom recorder onto your computer's hard drive. Make sure to eject the USB connection before disconnecting the H4n.

ZOOM H4N RECORDER MEDIA LOAN

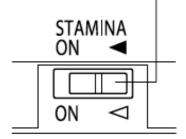
## BASIC RECORDING QUICK START GUIDE

- 1. Insert batteries or plug in AC power adapter. If you are using batteries, make sure the STAMINA MODE switch is off.
- 2. Make sure there is an SD card with enough space for your project in the SD card slot of the recorder.
- 3. If you are using an external microphone, plug it in to the XLR inputs or the stereo mini input.
- 4. Turn on the 700m recorder.
- 5. Press the MENU button and turn the dial until MODES is selected. Press down on the dial to enter the MODES menu. Inside the MODES menu, use the dial to select STEREO MODE, and press the dial once more to enter your selection. Press the menu button to return to the home screen.
- 6. Press the input select button for the input source you have chosen to use.
  - If you are using a single XLR microphone as your input source, you should make sure you have the H4n is set to MONO MIX. If you are using a stereo pair of XLR mics, or the built in stereo mic, make sure the H4n is NOT in MONO MIX. To change this setting, Press the MENU button, then select INPUT and press the dial to confirm the selection. Turn the dial again to select MONO MIX, and press the dial again. Choose ON or OFF, and press the dial once more to enter in your selection. Press the MENU button until you have returned to the home screen.
- 7. Choose the recording quality by pressing the WAV/MP3 button on the face of the recorder. Use the menu wheel to scroll though the options, and press the dial to confirm the highlighted option. The format that you choose is dependant on the quality of the recording that you need.
  - Remember that you can always convert a high quality file to a low quality file, but never a low quality file into a high quality file. Suggested file format is 48khz/24bit WAV.
- 8. Press the record button on the face of the H4n. The ring around the record button will begin to blink. The Zoom is not yet recording, but the inputs are active. This is a good time to make sure you can hear your subject well enough, and that the recording levels are not too high or distorted.
- 9. Press the record button again. This will begin recording on a new file.
- 10. To stop recording press stop or pause. If you press stop, the recorder will finalize the file you were recording and begin a new file next time you begin recording. If you press pause, the recorder will stop recording, but

it will keep the file active. Press the pause button again to continue recording on the same file.

11. When you are done recording, make sure to turn off the zoom recorder before unplugging the microphones and AC power adapter or removing the batteries.

The Stamina mode switch should not be in the left position.



When in the correct mode, the light labeled 'STEREO' under the logo will glow.



If you are using a single XLR microphone, the MONO MIX setting will record it to both sides of a stereo track. Make sure this setting is off if you are recording with a stereo mic or a pair of mics.

