Thank you very much for purchasing our ZOOM H4n Pro Handy Recorder. The H4n Pro has the following special features.

- **An all-in-one handy recorder.**
  The H4n Pro is lightweight (294 g) with a very compact design and is equipped with high quality stereo condenser microphones arranged in an XY pickup pattern, a built-in speaker, SD card recording, a mixer and internal effects. You can enjoy recording and creating your own music anytime, anywhere with the H4n Pro.

- **Versatile field recorder with multi-track capability.**
  The H4n Pro is capable of recording in several different operation modes. STEREO mode enables high-quality stereo recording. 4CH mode can record 2 sound sources simultaneously in stereo. MTR mode allows playback of 4 tracks and recording of 2 tracks simultaneously. You can use it as a field recorder to record melodies and band performances on-the-fly and to capture sound effects. You can also use it as a multitrack recorder to make songs by overdubbing instruments and vocals. Furthermore, in STAMINA mode you can record in stereo for up to 11 hours using batteries only.

- **New 90/120°-variable XY stereo mic**
  The H4n Pro allows you to adjust the angle of the onboard microphones to address a wider range of recording scenarios. Set the microphones to 120° for a wider area of sound, or set them to 90° for a more focused sound source. Either way, the mics retain their XY configuration, so you can record natural stereo sound with no phase cancellation.

- **Connect mics and guitars directly using combined XLR/standard phone jacks**
  The H4n Pro includes input jacks for connections that can accommodate a variety of recording styles. Microphones, including stereo mics and condensers, electric guitars, basses and keyboards can all be connected directly.

- **Use as an audio interface and SD card with a computer**
  An onboard USB 2.0 Hi-Speed port allows direct connection to a computer. You can use it as an audio interface with built-in effects (sampling rate limited to 44.1 kHz when using the effects). You can also use the H4n Pro as an SD card reader for your computer. You can transfer recorded files to your computer and use them to create audio CDs or work with them in DAW software.

- **Tuner, metronome, karaoke and various other functions**
  The tuner functions include not only a standard chromatic tuner, but also support less common tunings, such as for 7-string guitars and 5-string basses. The metronome function is convenient for practice and multitrack recording. You can also use the H4n Pro as a practice device. Use the SPEED function to adjust the playback speed from 50–150%. The KARAOKE functions include center canceling for stereo files and variable key control, making it valuable for language learning and voice training.

Please read this manual carefully to fully understand the functions of the H4n Pro so that you can make the most of it for many years. After reading this manual, please keep it with the warranty in a safe place.
The H4n Pro is ideal for these applications

- Vocal recording
- Recording acoustic guitars
- Piano recitals
- Recording live performances
- Band practices
- Transferring analog sound sources to digital
- Recording meetings
- Field recording
- Drum practice recording
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SAFETY PRECAUTIONS

In this manual, warning and caution symbols are used to highlight dangers of accidents and troubles. Users should read them to prevent accidents. The meanings of these symbols are as follows:

⚠️ **Warning**

If the users ignore this symbol and handle the device the wrong way, serious injury or death could result.

⚠️ **Caution**

If the users ignore this symbol and handle the device the wrong way, bodily injury and damage to the equipment could result.

An action that is mandatory

An action that is prohibited

Please read through the following safety tips and precautions to ensure hazard-free use of the H4n Pro.

**Power requirements**

**AC adapter operation**

Make sure to use only a DC5 center plus 1A (ZOOM AD-14) AC adapter. The use of other than the specified type could damage the unit and pose a safety hazard.

Connect the AC adapter only to an AC outlet that supplies the rated voltage required by the adapter.

When disconnecting the AC adapter from the AC outlet, make sure to grasp the adapter itself. Never pull on the cable.

During lightning or when not using for an extended period, disconnect the AC adapter from the AC outlet.

**Battery operation**

Use 2 commercially-available 1.5V AA batteries (alkaline dry cell batteries or nickel metal hydride batteries).

When not using for an extended period, remove the batteries from the unit.

If battery leakage has occurred, wipe the battery compartment and battery terminals carefully to remove all remnant of battery fluid.

When using the unit, the battery compartment cover should be closed.

Install batteries with the correct +/- orientations.

Do not use new and old batteries together. Do not use batteries of different brands or types together.

**Environment**

To prevent unexpected troubles and malfunctions, avoid using the H4n Pro in environments where it will be exposed to:

- Extreme temperatures
- Heat sources such as radiators or stoves
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock

**Handling**

The H4n Pro is a precision instrument. Do not exert undue pressure on the keys and other controls. Take care not to drop or bump it, and do not subject it to shock or excessive pressure, which can cause serious trouble.

Take care that no foreign objects (coins, pins, etc.) or liquids (water, alcoholic drinks or juice) enter the unit.

Do not place the H4n Pro speaker close to other precision instruments (watches and computers), electronic medical instruments or magnetic cards.

**Connecting cables and input and output jacks**

You should always turn off the power to the H4n Pro and all other equipment before connecting or disconnecting any cables. Make sure to disconnect all connection cables and the power cord before moving the H4n Pro.

**Alterations**

Never open the case of the H4n Pro or attempt to modify the product in any way since this could result in damage to the unit.

**Volume**

Do not use the H4n Pro at a loud volume for a long time since this could cause hearing impairment.

**USAGE PRECAUTIONS**

**Electrical interference**

For safety considerations, the H4n Pro has been designed to provide maximum protection against the emission of electromagnetic radiation from inside the device, and protection from external interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves should not be placed near the H4n Pro, as the possibility of interference cannot be ruled out entirely.

With any type of digital control device, the H4n Pro included, electromagnetic interference could cause malfunction and could corrupt or destroy data. Care should be taken to minimize the risk of damage.

**Cleaning**

Use a soft, dry cloth to clean the H4n Pro. If necessary, slightly moisten the cloth. Do not use abrasive cleanser, wax, or solvents (such as paint thinner or cleaning alcohol), since these may dull the finish or damage the surface.

**Breakdown and malfunction**

If the unit becomes broken or malfunctions, immediately disconnect the AC adapter, turn the power off and disconnect other cables. Contact the store where you bought the unit or ZOOM service with the following information: product model, serial number and specific symptoms of breakdown or malfunction, along with your name, address and telephone number.

Please keep this manual in a convenient place for future reference.
Copyright warnings

■ Recording of live performances
Many artists and most live venues do not allow recording and photography and will check for cameras and recorders at the entrance. Even if recording is allowed, it is prohibited to sell, distribute, or upload to the Internet without the organizers authorization. Copyright violation is a crime.

■ Music CDs and downloaded sound sources
Using music recorded on CDs and other media as well as downloaded sound sources for purposes other than personal enjoyment (including, for example, playing them in a concert hall or other location and altering songs) could be a violation of copyright laws.

Zoom Corporation will not assume any responsibility related to infringements of copyrights.

Trademarks:
• The SD and SDHC logos are trademarks.
• MPEG Layer-3 audio compression technology is licensed from Fraunhofer IIS and Sisvel S.p.A.
• Windows®, Windows® 10, Windows®8, Windows® 7 and Windows Vista® are trademarks or registered trademarks of Microsoft® Corporation.
• Macintosh and Mac OS are trademarks of Apple Inc.
• Other product names, registered trademarks and company names in this document are the property of their respective companies.

For the purpose of improvement, product specifications and appearance are subject to change without notice.
Getting started
1-1 Recording flow using the H4n Pro

The following is the basic flow of recording operations for the H4n Pro. Depending on the recording application, you can select which recording mode and audio quality setting is right for the situation.

Connect to other audio devices

In addition to the built-in mic, you can use the external stereo mic input jack and INPUT 1 and 2 external input jacks. Phantom power and plug in power are also supported.

Turn the power on

P.017

Set-up

Select the mode

You can select among 4 modes according to the input source types, and post-recording editing and output needs.

- STEREO Mode
- 4CH Mode
- MTR Mode
- STAMINA Mode

Set the recording method

Set the recording level and other settings as you like.

- AUTO REC
- REC LEVEL AUTO
- LO CUT
- COMP/LIMIT
- MONO MIX
- METRONOME
- EFFECT/PATCH
- KARAOKE etc.

P.027

P.035

P.063
Operational overview / Recording flow using the H4n Pro

**Record**
- Recording in STEREO/STAMINA mode........P.047
- Recording in 4CH mode...............P.051
- Recording in MTR mode............P.053

**Playback and confirm**
- Use these convenient ways to swiftly review/playback parts of recordings.
  - PLAY MODE
  - AB REPEAT
  - SPEED
  - MARK LIST
  - etc.

**Re-record**
- In MTR mode punch-in/out functions allow you to re-record only sections you want to correct.
  - PUNCH-IN/OUT
  - etc.

**Edit and output**
- Recordings are managed as files and projects, and can be edited in various ways.
  - FILE INFORMATION
  - FILE MP3 ENCODE
  - FILE STEREO ENCODE
  - DIVIDE
  - MOVE
  - BOUNCE
  - etc.

P.094  
P.059  
P.105
The following are basic recording instructions using the built-in stereo mic and built-in speaker in STEREO mode.

1. Turn the power on

2. Confirm stereo mode

3. Start recording standby

If mode indicator or screen different " " P.036
4 Adjust input level

5 Start recording

6 Stop recording

7 Play it back

- Decrease
- Increase

Adjust input level

Right panel

Remaining recording time decreases

Pause/resume recording

Counter does not return to 0

Add mark

Add a mark when using WAV file format

Built-in speaker output

Stereo mode recording >>> P.047

Stereo mode playback >>> P.094

Operational overview / Easy recording guide
2-1 Names and functions of parts

Front

90/120° stereo
XY mic (built-in)

STEREO/4CH/MTR mode indicators

Display with backlight

- STEREO/4CH mode shortcut buttons
  1 FOLDER
  2 FILE
  3 SPEED (Stereo mode)
  4 WAV/MP3 (Stereo/4CH mode)

- MTR mode TRACK
  1–4 buttons

INPUT
MIC, 1–2 buttons

Transport control buttons

REC button

Back

Input jack for external stereo mic that uses plug-in power

Built-in mono speaker

Threaded tripod mount

Battery cover

STAMINA switch
Right side
- DIAL
- MENU button
- REC LEVEL (+/-)
- SD card slot

Left side
- Optional remote control jack
- LINE/PHONE output stereo mini jack
- VOLUME (+/-)
- USB jack
- POWER/HOLD switch

Bottom
- DC 5V AC adapter jack
- Strap attachment hole
- XLR/standard phone input jack 1
- XLR/standard phone input jack 2
3 Battery/Power setting

The H4n Pro can be powered by a standard power outlet or batteries.

- Using a standard power outlet
  Always use the specified AC adapter.

  Specified AC adapter:
  ZOOM AD-14

  Use of an AC adapter other than the specified model could cause malfunction.

- Using batteries
  Install two AA batteries.

1. Open the battery compartment cover.

NOTE:
Make sure the power is off!
Confirm that the power is off whenever you open the battery compartment cover or connect/disconnect the AC adapter. Failure to do so could damage recording data.

2. Insert the batteries.
   (Follow the +/− orientation.)

3. Set the STAMINA switch.
   → Ordinary use
      (using AC adapter or batteries)
   ON: STAMINA mode on
      (conserves power when using batteries)

4. Close the battery compartment cover.

Ref. ☞ Stamina mode explanation P.035
• Remaining battery charge
When a “Low Battery!” warning appears, immediately turn the unit off and replace the batteries, or switch to an AC adapter.

If the remaining battery charge becomes low, “Low Battery” will be shown every two seconds and the unit will soon turn off.

**NOTE:**

**Usable batteries**
You can use conventional alkaline and nickel metal hydride rechargeable batteries.

**Power supply from USB**
Connect a USB cable that is already connected to the computer to the unit while it is off. Power will be supplied by USB bus power and the unit will turn on automatically. This function is only available when the H4n Pro is used as an SD card reader or an audio interface.

**HINT:**

**To measure the battery charge accurately**
The remaining battery charge can be measured more precisely by using the H4n Pro battery type setting.

**Date and time setting retention**
If the batteries die or the power supply is interrupted, the H4n Pro will retain the date and time setting for about three minutes. After this, these settings will be reset to their default values.

**Power supply indicator**

- Using batteries
- Using AC adapter

Ref. ☞ USB bus power P.033
Ref. ☞ Battery type P.130
4-1  Using the POWER/HOLD switch and turning the power on/off

Left side

Turning the power on and starting up

1. Turn all connected equipment off first.

2. Insert an SD card.

3. Slide the POWER switch to turn the power on and start up.

4. Turn connected instruments and monitoring equipment on in that order.

NOTE:
- Before turning the power on, lower the volume of instruments and monitors connected to the H4n Pro.
- If the display reads “No Card” when starting up, make sure that an SD card is inserted correctly.
- If the display says “Reset DATE/TIME” when starting up, the date and time have been set to their default values.

HINT: Turning multiple devices on
When many devices are connected, turn them on in the following order.

- Instruments ➔ H4n Pro ➔ Mixer ➔ Amp

Ref. ☞ P.026
Date and time setting
Turning the power off and shutting down

1. Turn the monitoring system and connected instruments off in that order first.

2. Slide the POWER switch to turn the power off.

**HINT:** Order for turning off equipment

- Amp ➔ Mixer ➔ H4n Pro ➔ Instruments
- OFF     OFF     OFF     OFF

**HOLD Function**

The H4n Pro features a HOLD function that disables button operation to prevent misoperation during recording.

**Activating the HOLD function**

Slide the POWER switch toward HOLD.

If you press any button while HOLD is active, the screen will display “Key Hold” for two seconds. To deactivate HOLD, slide the POWER switch away from HOLD.
4-2 Using recording and transport buttons

The functions of the REC, STOP, PLAY/PAUSE, FF andREW buttons depend on the mode.

**STEREO/4CH/STAMINA modes**

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC button</td>
<td>Enter recording standby and reset counter</td>
</tr>
<tr>
<td>STOP button</td>
<td>Stop recording and reset counter</td>
</tr>
<tr>
<td>PLAY/PAUSE button</td>
<td>Start playback and start counter</td>
</tr>
<tr>
<td>FF/REW buttons</td>
<td>Press for less than a second</td>
</tr>
<tr>
<td>FF/REW buttons</td>
<td>Press for more than a second</td>
</tr>
</tbody>
</table>

**Transport buttons**

- **STOP button**: Stop recording and reset counter
- **PLAY/PAUSE button**: Start recording and counter
- **REC button**: Enter recording standby

**MTR mode**

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC button</td>
<td>(Only when a track is in recording standby)</td>
</tr>
<tr>
<td>STOP button</td>
<td>Stop recording (playback continues)</td>
</tr>
<tr>
<td>PLAY/PAUSE button</td>
<td>Recording starts and counter continues</td>
</tr>
<tr>
<td>FF/REW buttons</td>
<td>Stop recording/playback</td>
</tr>
</tbody>
</table>

**Transport buttons**

- **STOP button**: Stop playback and stop counter
- **PLAY/PAUSE button**: Start playback and start counter
- **REC button**: Start recording and start counter

The longer the button is pressed, the faster the search speed. Searching will stop at the beginning or end of the file.
4-3 Using TRACK 1–4 buttons

The of TRACK 1-4 buttons have different functions depending on the MODE.

**Front**

**MTR MODE**

Switch between track recording and playback.

When you start recording, press the track number you want to record and the track becomes Recording Standby status. That track button will then become illuminated.

**Make track and the input source settings**

After selecting the track, use the input source buttons to select the input for that track. Using the INPUT button you can record in mono, stereo or a combination of both.

**Selecting one track**

1. **Selecting two tracks**

   - Same for tracks 3 and 4

**For stereo input select MIC or 1 and 2**

**For mono input select either 1 or 2**

These are the four possible input selections.

**Note**: These operations are not possible during recording and playback.

**STEREO/4CH/STAMINA MODE**

1. Move to the FOLDER SELECT menu
2. Move to the FILE menu
3. Move to the SPEED menu (only STEREO MODE)
4. Move to the REC FORMAT menu (STEREO MODE, 4CH MODE)

These operations are not available during recording and playback.

**HINT:**

**When stereo link active**

When tracks are stereo-linked, pressing the button for one track will have the same effect on the linked track.

Ref. ☞ Stereo link P.058
4-4 Using INPUT MIC, 1 and 2 buttons

These buttons have different functions depending on the various modes.

**STEREO/STAMINA MODE**

Select INPUT MIC, 1 or 2 and the corresponding button lights.

- If you select INPUT 1 or 2, buttons will light after the selection. (Once lit, the buttons do not respond.)
- Any other input source settings, such as REC LEVEL, will be made for the lit source.

Note: If the selected input clips, its button will blink.

**4CH MODE**

Use all input sources. MIC, 1 and 2 all light.

- When you switch to 4CH, the H4n Pro will receive two stereo inputs: one from MIC and one from 1 and 2 together. When you press a lit button, the channel input level is shown and you can adjust its recording level (REC LEVEL).

Note: When an input clips the corresponding button blinks.

**MTR MODE**

Set MIC, 1 and 2 individually for stereo and mono input. The corresponding button lights.

- You can select INPUT MIC, 1 and 2 individually.
- When you use the built-in or an external stereo microphone, select INPUT MIC.
- For stereo input using the external input jacks, use both INPUT 1 and 2. Press either INPUT 1 or 2 button and then press another button.

Note: If the selected input clips, its button will blink.

**HINT:**

What is clipping? If the input level reaches the maximum that the H4n Pro can record (0 dB), the recorded sound could be distorted. The recording level should be adjusted.
These keys allow you to adjust the levels of recording input and output volume. (All the modes are the same.)

**Recording level (all modes)**

The recording levels for INPUT 1 and 2 can be adjusted from 1 to 100 with the (+/−) buttons.

Press REC LEVEL (+/−) to adjust

Press the INPUT MIC, 1 or 2 button to select an input source to adjust its recording level.

**Volume (all modes)**

The volume from the built-in speaker and output jacks can be adjusted from 0 to 100 with the (+/−) buttons.

Press VOL (+/−) to adjust

The volume levels can be adjusted from 0 to 100 with the (+/−) buttons.
4-6 Using the DIAL and the MENU button

The DIAL and the MENU button are used for various settings while recording and during playback. Here are explanations about their basic operations.

**RIGHT SIDE**

![Diagram of DIAL and MENU button]

**Basic DIAL operations**

- **Rotate the DIAL to select an item**
  Rotate the DIAL, and the cursor on the display will move with the DIAL.

- **Select**

- **Press the DIAL to confirm the selection**
  Press to DIAL and your selection will be confirmed.
  → When there are additional selections, press to move to the next screen.
  → When you complete selection, the screen returns to the previous one.

**Basic MENU button operation**

- **Opening the MENU screen**
  Press the MENU button to make settings for recording, playback and other functions.

- **Select**

- **Canceling a setting change**
  Press the MENU button during any setting operation, to cancel the operation and return to the previous screen.
  To cancel a setting operation and return to the top screen of the mode, press the MENU button for more than 2 seconds.
Operation when the [ ] cursor appears (date and time setting, changing file names, etc)

Turn the DIAL to move the cursor.

Press the DIAL to change numbers and letters.

When the item is highlighted, rotate the DIAL to change the numbers and letters. Press the DIAL to confirm.

DIAL operation on the top screen
Turn the DIAL to move the cursor on the top screen. Press to enable counter adjustment or open the setting menu. (Only in MTR mode.)

Selecting items in lists

Turn the DIAL to scroll through a list.

Push the DIAL to confirm a selection.

The screen returns to the previous one.

About the ➔ in selection lists
When you see an ➔, there are more selections on the next screen. Select the arrow and press the DIAL to move to the next screen.
5-1 Loading an SD card

The SD card is required to record. Make sure to turn off power before inserting or removing the SD card.

How to install an SD card

1. Make sure power is off.
2. Insert the SD card into the slot.

How to remove an SD card

1. Make sure power is off.
2. Push the SD card in to remove it from the slot.

NOTE:

TURN THE POWER OFF!
Never insert or remove an SD card while the power is on. This could destroy data.

CAUTIONS WHEN INSERTING SD CARDS

- You can use 16MB to 32GB SD cards. For a list of operation-certified SD cards please refer to the ZOOM website: zoomcorp.com
- If you use an SD card that was used by a computer, digital camera or other machine, formatting in the H4n Pro is required.
- If “No Card” appears on the display at startup, check if the SD card is correctly inserted.
- When “Format Card” appears on the display at startup, this means the SD card has not been formatted in the H4n Pro. To format it, press the DIAL and select YES.
- When the startup screen says “Card Protect”, the card is write-protected. To disable this, slide the lock switch on the SD card.

SD card recording capacity (approximate)

<table>
<thead>
<tr>
<th>SD card</th>
<th>Recording time (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4GB SDHC card</td>
<td>380 minutes</td>
</tr>
<tr>
<td>44.1 kHz/16-bit WAV (stereo track)</td>
<td>68 hours</td>
</tr>
<tr>
<td>44.1kHz/128kbps MP3 (stereo track)</td>
<td></td>
</tr>
</tbody>
</table>

No SD card warning when starting up.

This warning will appear if an SD card is not in a recognized format. Select YES to format the card. This will delete all of its data.

Ref. Using H2 and H4 SD cards P.136
5-2 Setting the date and time (DATE/TIME)

Each file will automatically record the date/time. To facilitate searching for files by date, be sure to set the date/time after every battery change.

1. Press.
2. Select SYSTEM and press.
4. Set YEAR → MONTH → DAY → TIME (hour: minute: second)
   Select the item on DATE/TIME:
   Press the DIAL. The selected item value is highlighted.
   Change the value.
   Press the DIAL. The cursor appears again.

5. Select OK and press.

NOTE:
If “Reset DATE/TIME” appears during startup, the date/time needs to be set.

- If no power source is connected for more than three minutes, the DATE/TIME setting will reset to the default value.
- You cannot set this during recording and playback.
6-1 Setup: Connecting external devices

The H4n Pro offers versatile connectivity with options for any recording application.
6-2 Setup: Built-in microphones

These are the special features of the H4n Pros built-in microphones.

**High quality microphones in an XY pattern ensure a natural stereo image when recording sounds.**

Stereo recording is often done by placing two microphones in a V-shaped configuration. Pointing microphones outward will result in stereo separation, but the recording will lack definition around the center, resulting in a poor stereo image.

The H4n Pro utilizes an XY stereo mic configuration. By placing two microphones in a crossed pattern (opposite angles), the H4n Pro can cover a wide area and capture sound sources in the center with clarity and definition. Sounds reach both mics simultaneously, so no phase cancellation occurs between right and left channels.
6-3 Setup: Built-in microphones/external mic with plug-in power

The input jack for the external microphone is suitable for microphones that require plug-in power.

Close microphone recording
Put the H4n Pro 30-50 cm from the sound source.

Off microphone recording
Make sure the recording sound sources are all located in zone covered by the built-in microphones.

Setting PLUG-IN power
Press the MENU button for more than 2 seconds, and start operation from the top screen.

1. Press.
2. Select INPUT and press.
3. Select PLUG-IN and press.
4. Select ON and press.

NOTE:
Plug-in and phantom power cannot be set during recording and playback.
Use INPUT 1 and 2 to connect to a guitar, bass or keyboard, for example.

### Connecting instruments

You can directly plug a guitar or a bass into either INPUT 1 or INPUT 2.
Plug a keyboard with stereo output into both INPUT 1 and 2.

### Connecting microphones

Connect microphones with XLR plugs to INPUT 1 and INPUT 2. If you need phantom power, such as when using a condenser microphone, make the following setting.

***NOTE:***

Some condenser microphones cannot operate with +24V phantom power, but compared to the +48V setting this reduces power consumption during battery operation.

### Setting PHANTOM power

Press the MENU button for more than 2 seconds, and start operation from the top screen.

1. **Press.**

2. **Select INPUT and press.**

3. **Select PHANTOM and press.**

4. **Select the voltage and press.**
6-5 Using as a USB audio interface

The H4n Pro can be used as a two-in/two-out USB interface at 44.1 or 48 kHz.

1. Connect H4n Pro to computer with USB cable.

2. Press when on the top screen.

3. Select USB and press.

4. Select AUDIO I/F and press.

5. Select FREQUENCY and press.

6. Select a sampling rate and press.

7. Select CONNECT and press.

Input or output levels

Two channels can be sent and received at 44.1 or 48 kHz while connected to a computer.

Ref. ☞ EFFECT P.083
TUNER P.075
MONITOR P.070
PHANTOM P.030
PLUG-IN P.029
Selection of input source

When you select an input the corresponding button lights, confirming the selection. To turn off the input, press the corresponding button so the light turns off.

To monitor input signals, you must turn MONITOR on.

Note: If no input is selected and no input buttons are lit, no signal is being sent to the computer.

NOTE:
- You cannot change the sampling rate while the computer identifies the H4n Pro as an audio interface.
- When connecting as an interface, make sure the sampling rate (step 6) matches the recording software and playback file.
- You cannot changed this setting during recording and playback.

HINT:
Audio interface use
- You can record and playback signals directly to and from your DAW software using the H4n Pro.
- In this mode, you can use the H4n Pros built-in effects on input signals if the sampling rate is set to 44.1kHz.
- No specific driver is needed to use the H4n Pro as a USB audio interface.
- When using a DAW or other software, refer to its manual.
6-6 Setup: Using as a USB SD card reader

When you use the H4n Pro as an SD card reader, make the following settings.

1. Connect H4n Pro to computer with USB cable.
2. Press on the top screen.
3. Select USB and press.
4. Select STORAGE and press.

**NOTE:**
- Before physically unplugging the USB cable (and H4n Pro) from the computer, be sure to use the “Safely Remove Hardware” function on the computer first. Unplugging the USB cable (and H4n Pro) without doing this could damage files.
- Compatible operating systems: Windows Vista and newer Mac OS X (10.6 and newer)

**HINT:**
**USB bus power**
USB bus power is a way to supply power from a computer through the USB cable. Connecting the H4n Pro by USB when its power is off causes it to automatically start up and show the USB menu.

**SD card reader use**
- Use files recorded by the H4n Pro on your computer.
- Use audio files created on a computer on the H4n Pro.
The H4n Pro is equipped with a built-in mono speaker.

**NOTE:**

Speaker output is disabled:
- When the LINE/PHONE jack is connected
- When MONITOR setting is ON
- When in recording standby in MTR mode

Speaker can be used:
- During file playback
- When used as an audio interface
- When nothing is connected to the LINE/PHONE jack
7-1 Mode overview

The H4n Pro has four operation modes: STEREO, STAMINA, 4CH (4-channel) and MTR (multitrack). Choose the mode according to your need.

**• STEREO mode**
You can easily create a stereo recording using the built-in microphones or an external microphone. The STEREO mode is convenient for recording live band performances, acoustic instruments, voices, lectures, and subtle soundscapes. You can then use it to play stereo WAV and MP3 files.

**• STAMINA mode**
This mode enables longer battery life. STAMINA mode is similar to STEREO mode, but has less functions. The continuous usage time with alkaline batteries is approximately 11 hours (but could be less depending on usage). When in STAMINA mode, the H4n Pro can only record/playback in WAV 44.1kHz/16-bit and MP3 formats. To enable STAMINA mode when using batteries, set the STAMINA switch before turning the power on.

**• 4CH mode**
In 4CH mode, you can record two stereo signals simultaneously. You can capture live sounds via the built-in mics and direct instruments via external inputs at the same time.

**• MTR mode**
You can record using effects in this mode. You can also overdub recordings and use sound files previously recorded using the other modes. When creating a demo, you can record backing tracks at home and record instrumental tracks in the studio while listening to the backing tracks.
Be sure to select the appropriate mode for your application.

1. Press.

2. Select MODE and press.

3. Select among STEREO, 4CH and MTR modes and press.

HINT:

Mode confirmation
- The current mode is indicated by a mode indicator LED on the front panel.
- The H4n Pro will power up in the same mode it was in when turned off.
- When starting up for the first time, the default mode is STEREO.

Note: To engage STAMINA mode, use the switch located in the battery compartment.
7-3 Mode details

Input and output levels as well as saving and file formats are different in each mode.

**STEREO mode**

In STEREO mode, you can select 2 different inputs either INPUT MIC or INPUT 1 and 2, and record and play one stereo file at a time. Files are saved in one of the ten sub-folders in the STEREO folder.

In STAMINA mode, the functions are limited to maximize the battery life time.

**4CH mode**

In 4CH MODE, the H4n Pro records two stereo WAV files: one stereo WAV file for the built-in mic or stereo mic input and one stereo WAV file for INPUT 1 and 2. These FILES are saved in one of the ten 4CH sub-folders.

**MTR mode**

You can record tracks in MONO or STEREO from INPUT 1, INPUT 2 and a stereo microphone. You can combine them with tracks recorded in other modes and overdub existing tracks. In MTR mode, project data and settings are saved as a project in the MTR folder.
8-1 Mode screens: STEREO and STAMINA modes

• Explanation of the top screen

Recorder status
- Stopped
- Recording standby
- Recording
- Playing
- Paused

File format
Format of file selected, being recorded or playing back
- WAV file: kHz/bit
- MP3 file: bit rate

File names
Name of file selected, being recorded or playing back
If there is no file in any folder, “No Data” appears.

Clipping indicators
The clip indicators “light” if the recording or playback level reaches 0 dB and remain lit until the file ends or the stop button is pressed.

Optional setting indicators
These icons appear on the display when optional functions are ON.

Remaining battery life (when battery used)
If “Low Battery” appears on the display, it is time to change the batteries.

Counter
Elapsed recording or playback time (hours): (minutes): (seconds): (milliseconds)

Remaining recording time
Remaining possible recording time on SD card

96kHz/24-bit WAV indicator
128kbps MP3 indicator

STAMINA MODE

Stamina icon

96kHz/24-bit WAV indicator
128kbps MP3 indicator

Level meters
Recording and playback levels

LO CUT function
COMP/LIMIT function
Phantom power (48V/24V)
MS stereo matrix

P.066
P.067
P.030
P.073

P.046
P.067
P.030
P.073
• **Explanation of the top screen**

**Recorder status**
- **Stopped**
- **Recording standby**
- **Recording**
- **Playing**
- **Paused**

**File format**
Format of file selected, being recorded or playing back

**Optional setting indicators**
These icons appear on the display when optional functions are ON.

- **LO CUT function**
- **COMP/LIMIT function**
- **Phantom power (48V/24V)**
- **MS stereo matrix**

**Counter**
Elapsed recording or playback time
(hours): (minutes): (seconds): (milliseconds)

**Remaining recording time**
Remaining possible recording time on SD card

**Remaining battery life (when battery used)**
If “Low Battery” appears on the display, it is time to change the batteries.

**File names**
Name of file selected, being recorded or playing back
If there is no file in any folder, “No Data” appears.

**Clipping indicators**
The clip indicators “light” if the recording or playback level reaches 0 dB and remain lit until the file ends or the stop button is pressed.

**Input sources and level meters**
Input sources and recording and playback levels
- **MIC**...... Input from either the built-in mics or an external stereo mic
- **IN** ...... Input from INPUT 1 and INPUT 2
8-3 Mode screens: MTR mode

- Explanation of the top screen

**Recorder status**

- **Stopped**
- **Recording Standby**
  - ALWAYS NEW recording only
- **Paused**
  - REC button blinks

**Playing**

**Track numbers**

Icons are highlighted for tracks in recording standby.

**Track menu icons**

Select an icon to access the track menu where settings, including volume, panning and stereo/mono, can be made.

**Level meters**

These show the recording or playback levels of tracks 1-4.

**Optional setting indicators**

These icons appear on the display when optional functions are ON.

- **EFFECT**
  - Effects
- **48V**
  - Phantom power (48V/24V)
- **↑**
  - Protect function

**Remaining recording time**

Remaining possible recording time on SD card.

- **Counter**

Elapsed recording or playback time (hours): (minutes): (seconds): (milliseconds)

Counter function:

- **Specify a time**

**Remaining battery life (when battery used)**

If “Low Battery” appears on the display, it is time to change the batteries.

**Auto punch in/out icon**

Selecting this icon brings up the PUNCH IN/OUT settings.

The icon only appears when recording in OVER WRITE mode.

**BOUNCE ICON**

Selecting this icon brings up BOUNCE settings.

**L/R level meters**

These show the master left and right output levels.
8-4 Mode screens: MAIN MENU

This is a list of the menu items that appear for each mode when the MENU button is pressed.

1. Press.

2. Select item and press.

**STereo mode**

**STAmina mode**

**4CH mode**

**MTR mode**

**HINT:**

The ▼ icon marks the item first shown in the MENU after the unit is started or the mode is switched. After the menu has been opened previously, the last used item will be shown first.

Cancelling: To return to the top, press the MENU button more than 2 seconds.
Enable STAMINA mode with the STAMINA switch before starting the unit when running on batteries. P.015

On menu pages where recording and playback are possible, the current status is shown at the bottom left of the screen.

The current folder number is shown at the bottom right of the screen, (in Stereo, 4CH and Stamina modes).

In MTR mode, the current project name is shown.
9 Optional remote control operation

You can operate the H4n Pro from a distance with the optional remote control.

Remote control button operation

**VOLUME +/-**
- 0-100
  - +: increase (raise)
  - -: decrease (lower)

**INPUT MIC, 1 and 2 buttons and indicators**
*green, yellow, red*
- Select the input source
- The indicator corresponding to the button shows the input status.
  - Green: selected input source
  - Yellow: input level is over −6 dB
  - Red: input is clipping

**REC LEVEL +/-**
- 1-100
  - +: increase sensitivity (amplify)
  - -: decrease sensitivity (attenuate)

**Transport buttons**

**FF and REW buttons**
- Press for less than one second
  - FF: Show next file
  - REW: Return to file beginning (if there are marks, FF and REW jump to the nearest mark)
- Press for more than one second
  - Search forward/backward
  - The longer the button is pressed, the faster the search speed. Searching will stop at the beginning or end of the file.

**STOP button**
- Stop recording and reset counter to 0
- Stop playback and stop counter

**PLAY/PAUSE button**
- Start playback and start counter
- Start recording and counter
- Resume paused recording
- Resume paused playback

Recording and placing marks.

- **OVER WRITE recording**
  - Enter recording standby
  - Stop recording (playback continues)
  - Recording starts and counter continues

- **ALWAYS NEW recording**
  - Stop recording and counter
  - Start recording and start counter
Operations
1-01 Settings/recording: Setting input sources and recording levels

Make recording settings for the built-in mics and external input jacks.

**STEREO MODE**

Use either MIC or INPUT 1 and 2 as the stereo input source.

- **Built-in microphones (stereo)**
- **External stereo microphone**

Connect an external microphone sets input automatically

1. **Select INPUT** and press. *Selection is possible when stopped, recording or in recording standby.*

2. **Use REC LEVEL** to adjust the levels.

**HINT:**

INPUT 1 and 2 recording levels can be set independently.

Ref. ☞ Recording functions: INPUT 1/2 LEVEL LINK P.071

**4CH MODE**

Use both MIC and INPUT 1 and 2 as stereo inputs.

- **Built-in microphones (stereo)**
- **External stereo microphone**

Connect an external microphone sets input automatically

1. **Select INPUT** and press. The recording level of the selected is shown

2. **Use REC LEVEL** to adjust the levels.

**HINT:**

On the 4CH mode top screen, if you press a REC LEVEL button, “REC LEVEL TARGET” appears. Select the input and adjust it.
MTR MODE

All tracks can be independently set for mono or stereo input.

Select input for each individual track and adjust.

Set the REC LEVEL

HINT:
In MTR mode, you can record multiple tracks separately. You can also select any input for each track when recording.
1-02 Settings/recording: Recording in STEREO and STAMINA modes

These are the steps to record in STEREO or STAMINA mode.

**Recording process**

1. Enter recording standby
2. Select input source
3. Adjust recording level of source
4. Start recording
5. End recording

*You can record without making these settings.

**Confirm the mode is STEREO.**

1. Press to enter recording standby.

2. Select input source and press.

Press MIC to use the built-in mics, or press INPUT 1 or 2 to use external inputs.

3. Adjust the recording level of the input source.

4. Press to start recording.

5. Press to end recording.

**Change recording settings.**

- REC FORMAT
- FILE NAME TYPE

**Use recording functions.**

- AUTO REC/STOP, PRE REC, REC LEVEL AUTO

**Use METRONOME**

**Adjust the recording level of the input source.**

**Press to start recording.**

- The counter and remaining time start changing.

**Press to end recording.**

- The counter resets to 0.

**REC FORMAT, FILE NAME TYPE**

**Use recording functions.**

- AUTO REC/STOP, PRE REC, REC LEVEL AUTO

**Use METRONOME**

**Adjust the recording level of the input source.**

**Press to start recording.**

- The counter and remaining time start changing.

**Press to end recording.**

- The counter resets to 0.
HINT:

Recording format
In STEREO mode you can record in 19 different WAV and MP3 file formats. The recording format must be selected before recording a file begins.

File naming
Recorded files are named automatically. Choose from two formats. The default format is DEFAULT. DEFAULT: STE-xxx DATE: 090531-xxx The recording date is in yymmdd format.

Marks
When the recording format is WAV, you can mark a file by pressing the REC button while recording. You can move swiftly to marked positions during playback. When you pause recording of a WAV file, a mark will be added at the paused point.

NOTE:
During recording and playback, the recording format and file name type cannot be changed.

Ref. ☞
REC FORMAT P.049  FILE NAME P.050
Mark setting P.096  METRONOME P.079
AUTO REC P.063  PRE REC P.065
REC LEVEL AUTO P.069
1-03 Settings/recording: Recording format (REC FORMAT)

Set the recording format (REC FORMAT) before recording.

1. Press.

2. Select REC and press.

3. Select REC FORMAT and press.

4. Select one and press.

Default: WAV44.1 kHz/16bit

NOTE:

How to use WAV and MP3 format
• WAV files with no compression are used for high-quality sound recording. Since data is not compressed, files are larger than MP3 files.
• MP3 files have lower sound quality because of data compression, but are useful to save SD card capacity and record more.

HINT:

Types of WAV files
44.1/48/96 kHz indicates the sampling rate of the analog-to-digital conversion. 16/24-bit indicates the bit depth of the analog-to-digital conversion. The larger the number, the higher the sound quality, and the larger the file size.

WAV files recorded in STEREO/4CH/STAMINA mode comply with BWF (Broadcast Wave Format) and include marks and creation dates.

Types of MP3 files
Select the bit rate, which is the amount of data per second. The higher the number, the lower the rate of compression and the better the sound quality. MP3 files that are more compressed occupy less space on SD cards.

VBR (Variable Bit Rate) means the bit rate is automatically adjusted based on the input information.
1-04 Settings/recording: File name (FILE NAME)

When recording, the file name is automatically assigned. Follow these procedures to change the format.

1. Press the MENU button for more than 2 seconds, and start operation from the top screen.

2. Select REC and press.


4. Select and press.

NOTE:
- You can set the DATE type only in STEREO mode.
- You can use other file names in STEREO and MTR mode. Use FILE RENAME to make these settings.

---

<table>
<thead>
<tr>
<th>File Name</th>
<th>STEREO mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>STE/MONO--xxx.wav/mp3 (STE: stereo, MONO: mono; XXX: 3-digit number; wav/mp3 extension)</td>
</tr>
<tr>
<td>DATE</td>
<td>090531-xxx.wav/mp3 (yyymmdd; 3-digit number; wav/mp3 extension)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>File Name</th>
<th>4CH mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>4CH-xxxM.wav</td>
</tr>
<tr>
<td></td>
<td>File recorded using the built-in microphones</td>
</tr>
<tr>
<td></td>
<td>4CH-xxxL.wav</td>
</tr>
<tr>
<td></td>
<td>File recorded using the external input</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>File Name</th>
<th>MTR mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereo and mono files</td>
<td>TRK1-xx.wav (TRK: track number; 2-digit number, extension)</td>
</tr>
<tr>
<td>For stereo tracks, track numbers like 12 for L and R are used.</td>
<td></td>
</tr>
</tbody>
</table>

Ref. ☞ FILE RENAME P.109
1-05 Settings/recording: 4CH mode recording

This is the method to record 4 channels (2 stereo) from the built-in mic and the external input jacks.

Recording process

1. Enter recording standby
2. Select input source
3. Adjust recording level of source
4. Start recording
5. End recording

*You can record without making these settings.

Operations / Settings/recording: 4CH mode recording

Change recording setting.*
- REC FORMAT

Use recording functions.*
- AUTO REC/STOP, PRE REC, REC LEVEL AUTO
- USE METRONOME*

Switch to 4CH mode

Press the MENU button for more than 2 seconds, and start operation from the top screen.

1. Press to enter recording standby.

2. Select the input sources and press.

3. Adjust the recording level of the input source.

4. Press to start recording.

5. Press to end recording.

Select mic for the built-in microphones
Select INPUT 1 or 2 for external inputs

The counter and remaining time start changing.

The counter resets to 0.
HINT:

File naming
In 4CH mode the input from the built-in and the external inputs are saved separately as stereo WAV files. Those 2 files are always managed as a pair and named as follows according to the input.
MIC file: 4CHxxxM.wav
INPUT 1/2 file: 4CHxxxI.wav
On screen, the 2 files are shown together as M/I.
* You cannot change the file names.

Recording format
Change before recording.

Marks
When the recording format is WAV, you can mark a file by pressing the REC button while recording. You can move swiftly to marked positions during playback. When you pause recording of a WAV file, a mark will be added at the paused point.

NOTE:
During recording and playback, the recording format and file name type cannot be changed.
1-06-1 Settings/recording: MTR mode recording (REC MODE)

Using multiple tracks, you can combine mono and stereo recordings.

Recording flow

1. Press.
2. Select REC MODE and press.
3. Select either OVER WRITE or ALWAYS NEW and press.

Set REC MODE to OVER WRITE or ALWAYS NEW

Press the MENU button for more than 2 seconds, and start operation from the top screen.

1. Press.
2. Select REC MODE and press.
3. Select either OVER WRITE or ALWAYS NEW and press.

*You can record without making these settings.
Input sources and tracks

When recording only one track

1. Input source is either INPUT 1 or INPUT 2

   INPUT 1 or 2 → TRACK

2. Input source is MIC or INPUT 1 and 2

   Built-in microphone L
   Built-in microphone R

   Recording is created by mixing signals from both sources

   INPUT 1
   INPUT 2 → TRACK

When recording two tracks

1. Input source is either INPUT 1 or INPUT 2

   INPUT 1 or 2 → Track 1 or 3
   Track 2 or 4

   The same signal is sent to both tracks.

2. Input source is MIC or INPUT 1 and 2

   Built-in microphone L
   Built-in microphone R

   or

   INPUT 1
   INPUT 2 → Track 1 or 3
   Track 2 or 4

   or

   INPUT 1
   INPUT 2 → Track 1 or 3
   Track 2 or 4
1-06-2  Settings/recording: MTR mode recording (OVER WRITE)

You can select from two recording modes.
Using the OVER WRITE mode, you can overwrite new sounds on the existing file.

1. Select the TRACK.

2. Press.

3. Press to start recording.

4. Press to stop recording.

Use the REW button to return to the beginning of the file. Then, press the PLAY/PAUSE button to listen to what you have just recorded.
1-06-3 Settings/recording: MTR mode recording (ALWAYS NEW)

In ALWAYS NEW mode, a new file is made for every recording.

1. Select the TRACK.
   - Press the MENU button for more than 2 seconds, and start operation from the top screen.
   - The selected TRACK lights

2. Press.
   - Shows input level

3. Press to start recording.

4. Press to stop recording.
   - Counter does not reset to 0.

Use the PLAY/PAUSE button to listen to the recorded file.
This menu to set tracks is available only in MTR mode. Link tracks to create stereo track and set output effects.

Press the MENU button for more than 2 seconds, and start operation from the top screen.

Select a project and start ……P.119

Select TRACK MENU

Adjust the track output level

Adjust the panning

1. On the top screen select a track menu icon and press.

HINT: LEVEL
Set the track output level
Setting values: Mute, −48.0dB – +12.0dB
Default: 0.0dB

HINT: PAN
Set the left–right position of the track.
Setting values: L100 – C – R100
Default: C (Center)

Select LEVEL and press.
Set the value and press.

Select PAN and press.
Set the value and press.

Press the MENU button for more than 2 seconds, and start operation from the top screen.

Select TRACK MENU

Name of file assigned to track

Currently selected track
NOTE:  
STEREO LINK, FILE and KARAOKE settings are not available during recording or playback for tracks that are record ready.

HINT: Stereo link  
Turning stereo link ON creates a stereo track from tracks 1 and 2 or 3 and 4. Setting stereo link OFF creates mono tracks. Setting values: ON/OFF (default: OFF)

NOTE:  
- You can only play mono files on mono tracks and stereo files on stereo tracks.  
- When LINK is turned ON, no file will be assigned to the track, so “NO DATA” will appear.  
- If you change it from ON to OFF, the previous PAN setting is restored.  
- When you change from OFF to ON, the LEVEL and PAN settings are reset to their defaults.

NOTE:  
- You cannot record on the KARAOKE track.  
- If LINK is turned ON automatically when set to a mono track, “NO DATA” will result.  
- When a KARAOKE track has been set, you cannot set other tracks to KARAOKE.

HINT: Karaoke  
You can only use the KARAOKE setting on one pair of stereo tracks: either 1 and 2 or 3 and 4. In KARAOKE mode, you can use KEY CONTROL and CENTER CANCEL functions. Setting values: ON/OFF (default: OFF)

NOTE:  
- You can only play mono files on mono tracks and stereo files on stereo tracks.  
- When LINK is turned ON, no file will be assigned to the track, so “NO DATA” will appear.  
- If you change it from ON to OFF, the previous PAN setting is restored.  
- When you change from OFF to ON, the LEVEL and PAN settings are reset to their defaults.

NOTE:  
STEREO LINK, FILE and KARAOKE settings are not available during recording or playback for tracks that are record ready.

HINT: Stereo link  
Turning stereo link ON creates a stereo track from tracks 1 and 2 or 3 and 4. Setting stereo link OFF creates mono tracks. Setting values: ON/OFF (default: OFF)

NOTE:  
- You can only play mono files on mono tracks and stereo files on stereo tracks.  
- When LINK is turned ON, no file will be assigned to the track, so “NO DATA” will appear.  
- If you change it from ON to OFF, the previous PAN setting is restored.  
- When you change from OFF to ON, the LEVEL and PAN settings are reset to their defaults.

NOTE:  
- You cannot record on the KARAOKE track.  
- If LINK is turned ON automatically when set to a mono track, “NO DATA” will result.  
- When a KARAOKE track has been set, you cannot set other tracks to KARAOKE.

HINT: Karaoke  
You can only use the KARAOKE setting on one pair of stereo tracks: either 1 and 2 or 3 and 4. In KARAOKE mode, you can use KEY CONTROL and CENTER CANCEL functions. Setting values: ON/OFF (default: OFF)
The PUNCH IN/OUT function allows you to partially re-record a recorded file. Here we explain how to use PUNCH IN and PUNCH OUT automatically.

1-08-1 Settings/recording: Automatic re-recording (PUNCH IN/OUT)

Press the MENU button for more than 2 seconds, and start operation from the top screen.

Assign files to tracks

Set the recording start (punch in) point

1. On the top screen select the track menu icon and press.

2. Select FILE and press.

3. Select the desired file and press.

4. Press to start playback.

5. Select the punch in/out icon and press.

6. Find the desired punch in point and press.

Change the REC MODE to OVER WRITE ............P.053

Press the MENU button for more than 2 seconds, and start operation from the top screen.

Operations / Settings/recording: Automatic re-recording (PUNCH IN/OUT)
Set the recording end (punch out) point

7 Press the desired punch out point.

8 Rewind to the file beginning (counter at 0) or to a position before the punch in point.

9 Press to put TRACK 1 into recording standby.

10 Press to start TRACK 1 playback/recording.

Re-recording

HINT:
- You can set the punch in/out points while stopped by using the counter. First set a time and move the cursor to the punch in/out icon, and then press the DIAL.
- After setting the punch out point in step 7, pressing the DIAL again will cancel all the settings.

NOTE:
Setting available only for OVER WRITE recording in MTR mode.

Operations / Settings/recording: Automatic re-recording (PUNCH IN/OUT)

When in punch in/out mode, the track button lights during recording and blinks in recording standby.

When the track reaches the punch in point, the REC light will turn on and recording will start.

When the track reaches the punch out point, the light will blink and recording will stop.

Ref. Specifying a counter time P.102
1-08-2 Settings/recording: Manual re-recording (PUNCH IN/OUT)

Using OVER WRITE recording in MTR mode, you can manually punch in and out. Press the REC button during playback to start re-recording from that point.

Assign files to tracks

1. On the top screen select the track menu icon and press.
2. Select FILE and press.
3. Select the desired file and press.

Playback

4. Press to enter recording standby.
5. Press to start playback.

Change the REC MODE to OVER WRITE ..........P.053

Operations / Settings/recording: Manual re-recording (PUNCH IN/OUT)

Using OVER WRITE recording in MTR mode, you can manually punch in and out. Press the REC button during playback to start re-recording from that point.

Press the MENU button for more than 2 seconds, and start operation from the top screen.

Change the REC MODE to OVER WRITE ..........P.053

Assign files to tracks

Lit

Lit
6 Perform (not recording).

7 Press to start recording.

8 Perform (recording).

9 Press to finish recording.

10 Press to stop playback.
The H4n Pro can detect when the input level exceeds a preset level and automatically start recording from recording standby.

1. Press.
2. Select REC and press.
3. Select AUTO REC and press.
4. Select START LVL (starting level) and press.
5. Adjust the level.
6. Select ON/OFF and press.
7. Select ON and press.

**HINT:**
“Wait for Signal” message
If the AUTO REC function is ON, “Wait for Signal” appears when in recording standby. The unit is sensing whether the input level exceeds the recording start level.

**NOTE:**
- You cannot make this setting during recording or playback.
- You cannot use this function together with REC LEVEL AUTO, PRE REC or PRE COUNT.

Set the input level that will start recording automatically.

When “Wait for Signal” appears, you can press the REC button to start recording manually.
2-01-2 Recording functions: AUTO REC STOP

When AUTO REC is ON and the H4n Pro is recording, it will automatically stop when the input level goes below the preset level.

1. Press.
2. Select REC and press.
3. Select AUTO REC and press.
4. Select STOP LVL (stop level) and press.
5. Adjust the level.
7. Set the time.

Set the input level at which recording will stop

HINT:
When AUTO STOP is on, a stop level indicator appears during recording.

HINT:
• You cannot make this setting during recording or playback.
• Even when AUTO STOP is on, you can press the STOP button to stop recording.
2-02 Recording functions: PRE REC

When PRE REC is ON, up to 2 seconds before the REC button is pressed will automatically be captured in the recording.

1. Press.

2. Select REC and press.

3. Select PRE REC and press.

4. Select ON and press.

HINT:
When PRE REC is ON, the H4n Pro will pre-record audio two seconds before the record button is pressed.

NOTE:
- You cannot make this setting during recording and playback.
- When recording at 96 kHz in 4CH mode, the maximum PRE REC time is one second.
- You cannot use this function together with AUTO REC and PRE COUNT.
2-03 Recording functions: LO CUT

The LO CUT filter setting allows you to eliminate wind or blowing noises.

1 Press.
2 Select INPUT and press.
3 Select LO CUT and press.
4 Select the input source and press.
5 Select the cutoff frequency and press.

HINT:
• You can select from eleven LO CUT filter frequencies: OFF, 80, 98, 115, 133, 150, 168, 185, 203, 220, and 237 Hz. When using higher values, you should test the effect before recording.
• The smaller the number, the lower the cut-off frequency.
2-04 Recording functions: COMP/LIMIT

The COMP/LIMIT function can compensate for volume differences. For each input source, low-level input signals are raised and high-level input signals are lowered when recording.

1. Press.

2. Select INPUT and press.


4. Select the setting input source.

5. Select the setting target.

Press the MENU button for more than 2 seconds, and start operation from the top screen.
## HINT

<table>
<thead>
<tr>
<th>Type</th>
<th>Explanation</th>
<th>Threshold (dB)</th>
<th>Ratio</th>
<th>Output level (dB)</th>
<th>Attack time (ms)</th>
<th>Release time (ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Compressor and limiter OFF</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>COMP1 (GENERAL)</td>
<td>Standard compressor</td>
<td>-48.7</td>
<td>9:1</td>
<td>+6.0</td>
<td>7.2</td>
<td>968</td>
</tr>
<tr>
<td>COMP2 (VOCAL)</td>
<td>This compressor is good for vocals. These compressors reduce high-level</td>
<td>-8.4</td>
<td>16:1</td>
<td>0</td>
<td>1.8</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>sounds and raise the minimum level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMP3 (DRUM)</td>
<td>This compressor is good for drums and percussion.</td>
<td>-48.2</td>
<td>7:1</td>
<td>+3.6</td>
<td>12.3</td>
<td>947</td>
</tr>
<tr>
<td>LIMIT1 (GENERAL)</td>
<td>Standard limiter</td>
<td>-14.4</td>
<td>60:1</td>
<td>0</td>
<td>6.4</td>
<td>528</td>
</tr>
<tr>
<td>LIMIT2 (CONCERT)</td>
<td>Limiter good for live performance. Limiters compress when input signals</td>
<td>-13.8</td>
<td>32:1</td>
<td>+1.2</td>
<td>1.9</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>exceed the fixed level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIMIT3 (STUDIO)</td>
<td>Limiter good for studio recording.</td>
<td>-12.0</td>
<td>8:1</td>
<td>+1.2</td>
<td>6.5</td>
<td>423</td>
</tr>
</tbody>
</table>
2-05 Recording functions: REC LEVEL AUTO

This function automatically sets the level for recording.

1. Press.

2. Select INPUT and press.

3. Select LEVEL AUTO and press.

4. Select ON.

HINT:
When REC LEVEL AUTO is used, the unit automatically sets recording levels using signals present during recording standby. If the volume surpasses 6 dB during recording, the input level is automatically adjusted with the new level shown on the screen for two seconds.

NOTE:
- You cannot use this function together with AUTO REC.
- You cannot make this setting during recording and playback.
2-06 Recording functions: MONITOR

Turning on the MONITOR function allows you to monitor input signals at all times.

1. Press.

2. Select INPUT and press.

3. Select MONITOR and press.

4. Select ON and press.

HINT:
You can always monitor the input source through the LINE/PHONE stereo out mini jack when in recording standby.

NOTE:
You cannot monitor input sounds through the built-in speaker.
2-07 Recording functions: INPUT 1/2 LEVEL LINK

The recording levels for INPUT 1 and 2 can be set separately. This is useful when connecting different types of mics to these jacks.

### Preparation

1. Press.
2. Select INPUT and press.
3. Select 1/2 LINK.
4. Select OFF and press.

### Set recording levels separately

5. Press INPUT 1 or INPUT 2.
6. Press the REC LEVEL buttons.
7. Press the button for the input to adjust.
8. Use the REC LEVEL buttons to adjust the recording level.

**NOTE:**

This function can be used in STEREO, 4CH and STAMINA modes only when MS MATRIX and MONO MIX are OFF.
1. Press.

2. Select INPUT and press.

3. Select MONO MIX and press.

4. Select ON and press.

NOTE:
- The names of files recorded with MONO MIX are formatted like “MONO-xxx”.
- You cannot use this function together with MS STEREO MATRIX.
- You cannot use this setting during recording and playback.
This function enables you to convert stereo microphone signals when using a mid-side recording configuration.

1. Press.

2. Select INPUT and press.

3. Select MS MATRIX and press.

4. Make each setting accordingly.

**ON/OFF**
Set MS STEREO MATRIX to ON or OFF.

**MID LEVEL**
Set the level of the directional MID mic that is pointed at the recording target.
Setting values: MUTE, −48.0 – +12.0 dB
Default: +0.0 dB
MS stereo format overview

This technique converts input from a directional mid mic, which captures sound in the center, and a bidirectional side mic, which captures sounds from the left and right, to stereo. You can change the stereo width as you like by adjusting the side mic level. Since this technique can capture a wide stereo image, it is ideal for recording large open spaces with numerous sound sources, including orchestras, live concerts and soundscapes. This technique is also extremely effective when you want to adjust room ambience. Since it offers a high degree of freedom, it is used not only for studio recording but also for a wide range of recording—even of rehearsals and live performances.
3-01-1 Tuner: CHROMATIC TUNER

The H4n Pro features a tuner with multiple tuning modes.

1. Press.

2. Select TOOL and press.

3. Select TUNER and press.

4. Select CHROMATIC and press.

5. Tune the instrument.
   The indicators show whether the input signals are higher or lower than the note shown. Both marks light when the input signal matches the note.

HINT:
- The input source signal that is currently selected is used for tuning.
- In 4CH mode, at Step 4 select INPUT and set the input source, and then continue to step 5.

NOTE:
This cannot be used during recording and playback.
1 Press.

2 Select TOOL and press.

3 Select TUNER and press.

4 Select the tuning mode and press.

5 Tuning.

The indicators show whether the input signals are higher or lower than the note shown. Both marks light when the input signal matches the note.

HINT:
- The input source signal that is currently selected is used for tuning.
- In 4CH mode, at Step 4 select INPUT and set the input source, and then continue to step 5.

NOTE:
This cannot be used during recording and playback.

Ref. Tuner display
String number/note name P.078
This function allows you to calibrate the tuner.

1. Press.

2. Select TOOL and press.

3. Select TUNER and press.

4. Select CALIB and press.

5. Select the frequency.

HINT:
- The default setting is 440Hz.
- Set this between 435Hz and 445Hz in 1Hz increments.

NOTE:
This cannot be used during recording and playback.
In 4CH mode you can select the input source for the tuner.

4 Select INPUT and press.

5 Select the input source and press.

HINT:

Tuner types and string notes

<table>
<thead>
<tr>
<th>Tuner type</th>
<th>String number/note name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUITAR</td>
<td>E B G D A E B</td>
</tr>
<tr>
<td>BASS</td>
<td>G D A E B</td>
</tr>
<tr>
<td>OPEN A</td>
<td>E C# A E A E</td>
</tr>
<tr>
<td>OPEN D</td>
<td>D A F# D A D</td>
</tr>
<tr>
<td>OPEN E</td>
<td>E B G# E B E</td>
</tr>
<tr>
<td>OPEN G</td>
<td>D B G D G D</td>
</tr>
<tr>
<td>DADGAD</td>
<td>D A G D A D</td>
</tr>
</tbody>
</table>

When pitch is low

When pitch is high

No input sound (chromatic)

NOTE:
This cannot be used during recording and playback.
3-02 Metronome (METRONOME)

The metronome has convenient functions such as a pre-count.

1. Press.

2. Select TOOL and press.

3. Select METRONOME and press.

4. Set each item.

Click

This setting turns the metronome off or on during recording, playback or both. This setting must be made before recording or playback.

Pre Count

Set the count used before recording starts. This cannot be set if PRE REC or AUTO REC is ON.

Count of Special

Select the condition

OFF

- Recording/playback

Only when recording

Only when playback

Set the count to OFF, 1-8 beats or SPECIAL.
NOTE:
The metronome starts at the beginning of recording and playback. If you start in the middle of a song or track, the metronome beats may not be in sync with the song.

**TEMPO**
Set the metronome speed.
- Default: 120.0
- You can set this between 40.0 and 250.0 BPM in 0.1 increments.

**SOUND**
Set the metronome tone.
- Default: bell
- You can select BELL, CLICK, STICK, COWBELL or HI-Q.

**PATTERN**
Set the pattern of the metronome.
- Default: 4/4
- You can select 0/4 (no accent), 1/4 – 8/4 or 6/8.

**LEVEL**
Set the volume of the metronome.
- You can select from eleven levels.
This is an overview about how to use effects, including the process and input and output.

Effect use process

1. Use an effect
   Use a preset as is

2. Edit a patch (EDIT)
   - Select the preset that is closest to the desired sound
   - Edit modules
   - Adjust the patch level
   - Change the patch name
   - Select modules:
     - PRE AMP
     - EFX
   - Adjust parameters

3. Import a patch
   - Select the mode:
     - Import one (EACH)
     - Import all (ALL)

Change to MTR mode

Record
Effect input and output
You can use effects in MTR mode for mono and stereo signals. The flow of the signals will change according to the input sources and recording tracks.

One recording track
1. Input source is either INPUT 1 or 2

Two recording tracks
1. Input source is either INPUT 1 or 2

2. Input source is either MIC or INPUT 1 and 2
3-03-2 Effects (EFFECT)

Using the 2 EFFECT modules in MTR mode, you can add various effects to the input signals.

1. Press.

2. Select EFFECT and press.

3. Press ON and press.

4. Select No.: (patch name) and press.

5. Select PATCH and press.

6. Press MENU for more than two seconds to return to the top screen.

NOTE:

Patch number: patch name.

Turn EFFECT ON or OFF

IMPORT: Import a patch from another project
EDIT: Create a new patch or edit a patch

Patch list

Effects module settings are saved as a patch.
60 patches are available with 50 already programmed.
Select the desired No.: (patch name) and press.

Select EDIT and press.

Select the parameter that you want to change and press.

EDIT MENU

PRE AMP
The PRE AMP module has guitar and bass amp modeling effects.

LEVEL
Adjust the patch level.

RENAMEN
Change the patch name.

STORE
Save the edited patch.
You can edit preset effect patches as you like.

Select the desired PATCH and edit it .... P.084

Adjust the PRE AMP module

7 Select PRE AMP and press.

8 Press OFF/ON to turn the PRE AMP module on.

9 Select the parameter to edit and press.

---

Icons

PRE AMP module ON/OFF status
Set effect AMP type
CABINET, EQ, LEVEL, etc.
ZN R icon

Ref. PRE AMP module parameters P.141
3-03-5  EFX module editing (EFFECT EDIT: EFX)

Edit patch parameters to make the sound closer to the desired effect.

Select a patch close to the desired sound and edit it....P.084

Adjust the EFX module

7 Select EFX and press.

8 Press OFF/ON to turn the EFX module on.

9 Select the parameter to edit and press.

HINT:
To select PRE AMP and EFX modules, make setting after changing the module status ON.
Default: When a module is OFF, no parameters or settings are shown.
When OFF, you cannot select modules.
3-03-6  EFFECT EDIT: LEVEL/RENAME

Adjust the patch level and change the patch name.

**LEVEL**

1. Select LEVEL and press.
   
   ![EDIT: Fender Clean](image)
   
<table>
<thead>
<tr>
<th>PRE AMP</th>
<th>FD CLEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>LEVEL</td>
<td>80</td>
</tr>
<tr>
<td>RENAME</td>
<td>?</td>
</tr>
</tbody>
</table>
   
2. Change the number and press.
   
   ![EFFECT PATCH LEVEL](image)

3. Select OK and press.

**RENAME**

1. Select RENAME and press.
   
   ![EDIT: Fender Clean](image)
   
<table>
<thead>
<tr>
<th>PRE AMP</th>
<th>FD CLEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>LEVEL</td>
<td>80</td>
</tr>
<tr>
<td>RENAME</td>
<td>?</td>
</tr>
</tbody>
</table>
   
2. Change the PATCH name and press.

3. Select OK and press.

---

**NOTE:**

Select STORE to save the patch. To return to the top without saving the change, select MENU.
Select STORE and press.

Select the PATCH No. where you want to save it and press.

Select EXECUTE and press.

HINT:
ED appears next to items you have edited until confirmed by the STORE operation.

Not stored (not saved)
Confirm with STORE
Selecting “YES” will overwrite the current patch. To save without overwriting an existing patch, select an empty patch during the STORE operation. Patches are saved by project.
3-03-8 Importing patches from other projects (EFFECT IMPORT)

You can apply an edited and saved effect patch used in another project to the current project.

1. Press IMPORT on the EFFECT screen.

2. Select MODE and press.

3. Select the desired mode and press.

4. Select the project and press.

5. Select NEXT and press.


All the patches from the project selected at step 4 are imported into the current project.
5. Select NEXT and press.

6. Select a patch to import and press.

7. Select the patch you want to import it to in the current project and press.

8. Select YES and press.

NOTE:
If there is no other project when you press IMPORT, “No Other Project!” will appear.

HINT:
Import mode:
Import project:
Start importing:
3-04-1  Karaoke preparation (KARAOKE)

Use music files of your choice for karaoke, then record vocals or additional guitar sounds with those files.

**Karaoke process**

**Preparation**
- Prepare stereo files for the background
- Create a new project for karaoke ……P.118
- Import the file to the project
  - Copy the file to the project folder ……P.037
  - Use the MOVE function ……P.117
- Karaoke setup
  (Prepare tracks for karaoke)
  1. Select a track menu icon and open the TRACK menu
  2. Turn KARAOKE ON.
  3. Assign files.
- Adjust the karaoke tracks
  - LEVEL
  - CENTER CANCEL
  - KEY
  - FINE
- Perform with karaoke
  4. Connect a microphone
  5. Make recording track settings
  6. Enable recording
    - Playback
    - Record

**Karaoke track preparation**

1. Select a track menu icon and press.

2. Select KARAOKE and press.

3. Select ON and press.

4. Select the track menu icon and press.

5. Select FILE and press.

6. Select the desired file and press.
Enable center cancelation on the KARAOKE track

1. Select the track menu icon and press.

2. Select CNT CANCEL and press.

3. Select ON and press.

HINT:
The KARAOKE track menu has different contents than other tracks.

MTR mode only

Change the key of the KARAOKE track

4. Select the track menu icon and press.

5. Select KEY and press.

6. Adjust and press.
3-04-2 Karaoke recording (KARAOKE)

Fine adjustment of the KARAOKE track key

13 Select the track menu icon and press.

14 Select FINE and press.

15 Adjust it and press.

Recording with KARAOKE

1 Connect a microphone.
Press the INPUT button corresponding to the connected input jack.

2 Select the track menu icon and press.

3 Press to practice (no recording).

4 Press the REC button to enter recording standby.
Then, press the PLAY/PAUSE button to start recording.

NOTE:
You cannot use this function together with the EFFECT.

Ref. TRACK MENU P.057
Immediately after recording, you can play the file by pressing the PLAY/PAUSE button. Follow these steps to call up a file later for playback.

1. Press.

2. Select FILE and press.

3. Select the desired file and press.

4. Select SELECT and press.

5. Press to start playback.

**HINT:**
- On the top screen you can move directly to step 3, by pressing the TRACK 2 button."
- If you press the PLAY/PAUSE button after selecting a file, that file starts playback immediately.
- You can select files in folders directly using the DIAL on the top screen.

Shortcut
- Press TRACK on the top screen.
4-02 Playback: PLAY MODE

In addition to ordinary playback, you can also play just one file, repeat playback of one file, and repeat playback of all files.

1. Press.

2. Select PLAY MODE and press.

3. Select a play mode and press.

4. Press to start playback.

**NOTE:**
You cannot change this setting during recording and playback.
During file playback you can add marks at desired points. You can move easily to those points during playback.

**Adding marks**

During playback, press the REC button.

**Playing files with marks**

Press the FF and REW buttons to move to mark positions in files with marks.

**NOTE:**
- The mark function can only be used for WAV format files.
- The maximum number of marks in one file is 99.
- Once a mark has been created it cannot be deleted.

**HINT:**
- Press the REC button during recording to add a mark.
- You can check marks in the file in the MARK LIST.

Ref. MARK LIST P.115
4-04Playback: AB REPEAT

The AB REPEAT function allows you to play between two points in a file repeatedly.

1. Press.

2. Select TOOL and press.

3. Select AB REPEAT and press.

4. Press to start playback.

5. Press to set point A.

6. Press to set point B.

HINT:
You can also set point A and B while stopped.

Point A moves.
A mark is placed at point A, then mark B appears and moves until set.
Playback repeats between the points.
NOTE:
During recording and playback, you cannot make any settings after Step 3 of AB REPEAT.

HINT:

Caution:
When moving around using FF and REW buttons, if you press the button for less than 2 seconds (quick press), it will move to the next file. If there is a mark, it will move to the next mark.
Press the FF and REW buttons for more than 2 seconds to search for a desired point.

After setting up A and B points, press the REC button to cancel all settings.

Button functions with AB REPEAT

<table>
<thead>
<tr>
<th>Function</th>
<th>Icon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set/clear A and B points</td>
<td>![REC]</td>
</tr>
<tr>
<td>Stop</td>
<td>![Stop]</td>
</tr>
<tr>
<td>Play/Pause the file</td>
<td>![Play/Pause]</td>
</tr>
<tr>
<td>Hold for more than one second to search backward or forward</td>
<td>![Hold]</td>
</tr>
<tr>
<td>Press briefly to skip to the next file in order (If there is a mark in a WAV file, however, this will move to the nearest mark instead)</td>
<td>![Skip]</td>
</tr>
</tbody>
</table>
4-05 Playback: SPEED

You can adjust the playback speed of a file.

1. Press.

2. Select TOOL and press.

3. Select SPEED and press.

4. Adjust the playback speed.

5. Press to start playback.

NOTE:
During recording and playback, you cannot make any settings after Step 3 of SPEED.

HINT:
- You can open this menu quickly by pressing the TRACK 3 button on the top screen of the mode.
- You can set the playback speed between 50% and 150% in increments of 5%.
  (default: 100%)
- You can move the playback location using the FF and REW buttons.
4-06  Playback: MIXER

In 4CH mode you can use the mixer to adjust the playback LEVEL and PAN settings of two stereo files.

1 Press the MENU button for more than 2 seconds, and start operation from the top screen.

2 Select MIXER and press.

LEVEL setting

PAN setting

HINT:
The cursor cycles on the MIXER screen from MIC LEVEL to MIC PAN to INPUT LEVEL to INPUT PAN.
4-07 Playback: Playing files (MTR mode)

MTR mode has various ways to play files. You can, for example, create and record files separately, assign them to tracks and play them back simultaneously.

Initial track recording
- Press track 1
- Record TRK1-00.wav

Next track recording
- Press track 2
- Play TRK1-00.wav

Third track recording
- Press track 3
- Play TRK1-00.wav

Last track recording
- Press track 4
- Play TRK1-00.wav

Play 4 tracks
- Press
- Play TRK1-00.wav
- Play TRK2-00.wav
- Play TRK3-00.wav
- Play TRK4-00.wav

Second time recording to tracks
- Press track 1
- Over write TRK1-00.wav

Playback
- Assign other files
- Play Guitar.wav
- Play Bass.wav
- Play TRK3-01.wav
- Play TRK4-01.wav

Ref. ☞ TRACK MENU P.057
4-08 Playback: Specifying a counter time

Using the counter, you can specify any desired point in a recording.

Press the MENU button for more than 2 seconds, and start operation from the top screen.

1 Select the counter on the top screen and press.

HINT:
00:00:00:00
Hour: minute: second: millisecond

2 Select the time to set (hour, minute or second).

3 Change the value and press.
Select the folder that contains the file you want to record with or play.

1. Press.

2. Select FOLDER and press.

   Shortcut
   Press TRACK 1 on the top screen.

3. Select a folder and press.

   Current folder

**NOTE:**
- You cannot use this setting during recording and playback.
- You can select any one of ten folders in STEREO, STAMINA and 4CH modes.

**HINT:**
You can open the FOLDER SELECT screen by pressing the TRACK 1 button on the top screen.
You can select files for playback from a file list.

1. Press.

2. Select FILE and press.

3. Select a file and press.

4. Select SELECT and press.

HINT:
- You can also select files in the folder directly using the DIAL on the top screen.
- You can press the TRACK 2 button on the top screen to jump to file selection in step 3.
This function displays the selected file information.

4. Select INFORMATION and press.

<table>
<thead>
<tr>
<th>NAME</th>
<th>Name of file</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td>Recorded date of file (or modification date when created by a computer or other device)</td>
</tr>
<tr>
<td>FORMAT</td>
<td>Format of file (in MTR mode, MONO or STEREO shown)</td>
</tr>
<tr>
<td>SIZE</td>
<td>File size (kB or MB)</td>
</tr>
<tr>
<td>TIME</td>
<td>Recording time of file</td>
</tr>
</tbody>
</table>
You can delete a selected file.

4. Select DELETE and press.

5. Select YES and press.

NOTE:
Be careful!
Once deleted, a file cannot be recovered.
You can delete all the files in a folder or project.

Selecting files . . . P.104 FILE SELECT

4. Select DELETE ALL and press.

5. Select YES and press.

NOTE:
Be careful!
Once deleted, files cannot be recovered.
5-06 Editing/Output: FILE COPY

In MTR mode you can copy files. The copies are saved in the same project as the original files. This function is useful when you want to preserve the original copy.

1 Press.

2 Select FILE and press.

3 Select the desired file and press.

4 Select COPY and press.

5 Select EXECUTE and press.

HINT:
Changing file names: The default name given to copied files is COPY-XXX. You can change it if necessary.

Ref. ☞ FILE RENAME P.109
5-07 Editing/Output: FILE RENAME

In STEREO, MTR and STAMINA modes, you can change the names of files. If recorded in 4CH mode, file names cannot be changed.

Select RENAME and press.

Select a character and press.

Input a character and press.

Press.

Select OK and press.
HINT:
Display when more than 12 characters
When the name of a file has more than 12 characters, a triangle mark appears showing that letters that can be selected are off the screen.

When changing letters, they appear in the following order:
(space)!#$%&()*+,-0123456789;=@ABCDEFGHIJKLMNOPQRSTUVWXYZ^_`abcdefghijklmnopqrstuvwxyz{}˜

NOTE:
If two files in the same folder would have the same name, “This File Name Already Exists!” appears on the display, and the previous screen reopens and you will need to change the name.
5-08 Editing/Output: FILE MP3 ENCODE

In STEREO mode you can convert WAV files to MP3 format at various bit rates.

Selecting files . . . P.104 FILE SELECT

4 Select MP3 ENCODE and press.

5 Select BIT RATE and press.

6 Select the desired bit rate and press.

7 Select EXECUTE and press.

HINT:
- The name of the encoded file automatically becomes “(original file name).mp3”.
- You cannot have two files with the same name. If the screen says, “File Name Exists!” select RENAME and create a different name.

Bit rate that can be selected (kbps) 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320, VBR (default: 128 kbps)

Ref. FILE RENAME P.109
5-09 Editing/Output: FILE NORMALIZE

This function automatically adjusts the volume level of a recorded file for enhanced sound quality and audio consistency.

4 Select NORMALIZE and press.

5 Select YES and press.

NOTE:
NORMALIZE function is only available for files recorded in WAV format.
5-10 Editing/Output: FILE STEREO ENCODE

This function will mix down a 4CH file to a stereo file. The file will be saved in the folder in STEREO mode.

Selecting files . . . P.104 FILE SELECT

Select STEREO ENCODE

Select STEREO ENCODE and press.

Setup MIXER:

Enable the MIXER before encoding.

Select MIXER and press.

Select and press.

Ref. ☞ MIXER P.100

ENABLE Use MIXER settings.

DISABLE Do not use MIXER settings. Two files are mixed equally.
Select SAVE IN and press.

Select the folder to save in and press.

Select EXECUTE and press.

HINT:
You cannot have two files with the same name. If the screen says “File Name Exists!” select RENAME and change the name.

The encoded file is stored in the folder. The file name automatically given is the same as the one in 4CH mode but M/I is changed to MIX.

Ref. MIXER P.109
5-11 Editing/Output: MARK LIST

You can view a list of the marks put in a WAV file.

Select MARK LIST and press.

HINT:
If there are no marks in the file, “No Mark!” will appear on the display.

Sound dropouts (skipping) with SD cards
When recorded data is transferred to an SD card, sometimes the processing speed is not fast enough and the sound drops out. The processing speed depends on the mode, REC FORMAT setting, type of SD card, etc. If the processing load is light, sound dropouts rarely happen, but if the load is heavy, they often happen. In this case, change the REC FORMAT to a lighter setting.

<table>
<thead>
<tr>
<th></th>
<th>Stereo mode</th>
<th>4CH mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy</td>
<td>WAV96kHz/24bit</td>
<td>WAV48kHz/24bit</td>
</tr>
<tr>
<td></td>
<td>WAV96kHz/16bit</td>
<td>WAV44.1kHz/24bit</td>
</tr>
<tr>
<td></td>
<td>WAV48kHz/24bit</td>
<td>WAV48kHz/16bit</td>
</tr>
<tr>
<td></td>
<td>WAV44.1kHz/24bit</td>
<td>WAV44.1kHz/16bit</td>
</tr>
<tr>
<td>Light</td>
<td>WAV48kHz/24bit</td>
<td>WAV48kHz/24bit</td>
</tr>
<tr>
<td></td>
<td>WAV44.1kHz/16bit</td>
<td>WAV44.1kHz/16bit</td>
</tr>
<tr>
<td></td>
<td>MP3</td>
<td>MP3</td>
</tr>
</tbody>
</table>

NOTE:
The H4n Pro will automatically place a mark at point where sound drops out during recording.
5-12 Editing/Output: DIVIDE

In STEREO MODE, you can divide files at any desired position.

4 Select DIVIDE and press.

5 Press to start playback.

6 Press at the desired division point.

7 Select Yes and press.

HINT:
The DIVIDE operation creates 2 files. “A” will be added to the end of the file name of the first part and “B” will be added to the second.
5-13 Editing/Output: MOVE

This function is used to move files to different folders and modes.

Selecting files . . . P.104 FILE SELECT

4 Select MOVE and press.

5 Select MOVE TO and press.

6 Select the destination.

7 Select NEXT and press.

8 Select the destination folder (project).

HINT:

Movable file formats
- Only stereo files can be moved to a stereo folder. Mono files cannot be moved to stereo folders.
- Only 4CH files can be moved to 4CH folders.
- Only 44.1kHz/16bit files can be moved MTR projects.
- If you try to move a file in another format, “44.1kHz/16 bit WAV Format Only!” will appear on the screen.

MOVE TO MTR PROJECT
To move a folder to an MTR project, a project folder must exist. If there is no project folder, “No Project!” will appear on the screen.

HINT:

Movable file formats
- Only stereo files can be moved to a stereo folder. Mono files cannot be moved to stereo folders.
- Only 4CH files can be moved to 4CH folders.
- Only 44.1kHz/16bit files can be moved MTR projects.
- If you try to move a file in another format, “44.1kHz/16 bit WAV Format Only!” will appear on the screen.

MOVE TO MTR PROJECT
To move a folder to an MTR project, a project folder must exist. If there is no project folder, “No Project!” will appear on the screen.
In MTR mode, settings, including for audio tracks and effects, are saved in projects. First, we will make a new project.

Press the MENU button for more than 2 seconds, and start operation from the top screen.

1. Press.

2. Select PROJECT and press.

3. Select NEW PROJECT and press.

4. Select EXECUTE and press.

**HINT:**

To change the name of the new project.

Select NAME and press.

Select a letter to change and press.

Select OK and press.

**Maximum number of projects**

You can create a maximum of 1000 projects. Each project name can be up to 8 characters long.

Project numbering

- The H4n Pro numbers new projects automatically.
- You cannot change this number.
- You can use the same name in multiple projects.

Characters are changed in the order above.
Select a project stored on the SD card.

Press the MENU button for more than 2 seconds, and start operation from the top screen.

1 Press.

2 Select PROJECT and press.

3 Select SELECT and press.

4 Select the desired project and press.
5-16 Editing/Output: PROJECT DELETE

This function will delete a project.

1. Press.

2. Select PROJECT and press.

3. Select DELETE and press.

4. Select a project to be deleted and press.

5. Select YES and press.

NOTE:
Once deleted, you cannot restore a project.

HINT:
You cannot delete a protected project. You need to end protection before deletion.

Ref. ☞ PROTECT P.125
5-17 Editing/Output: PROJECT RENAME

You can change the name of a project.

1. Press.
2. Select PROJECT and press.
3. Select RENAME and press.
4. Select the project with the name to change and press.
5. Select a letter to change and press.
6. Change the letter and press.
7. Select OK and press.

HINT:

Characters are changed in the following order.

(Space)!#$%&()*+,-./0123456789;?@ABCDEFGHIJKLMNOPQRSTUVWXYZ\
ABCDEFGHIJKLMNOPQRSTUVWXYZ 

Project number
- The H4n Pro numbers new projects automatically.
- You cannot change the number.
- You can use the same name in multiple projects.
5-18 Editing/Output: PROJECT COPY

You can copy a project to create a new project with a new number.

Select a project and start operation. . . P.119

Press and hold the MENU button for more than 2 seconds, and start operation from the top screen.

1 Press.

2 Select PROJECT and press.

3 Select COPY and press.

4 Select EXECUTE and press.

HINT:

Change the number of the destination project

Automatically shows the lowest unused number

Change the name of the target project.

Ref. PROJECT (RENAME) P.121
5-19 Editing/Output: PROJECT BOUNCE

You can combine tracks created in MTR mode and mix them down to one mono or stereo track.

1. Select BOUNCE on the top screen and press.

2. Select NAME and press.

3. Change the name of the file.

Set the bounce file name

Press the MENU button for more than 2 seconds, and start operation from the top screen.

Select BOUNCE

Proceed to next step if no change. →

The file will automatically be given a name in “BOUNCEXX” format.

Ref. ☞ FILE RENAME P.109
Select output file format: mono or stereo

4 Select FORMAT and press.

5 Select the file type and press.

Execution

6 Select EXECUTE and press.

**HINT:**
“Bouncing” means to combine various music data from different tracks and files into a stereo or mono file.

**NOTE:**
You cannot use this function during recording or playback.

- Track 1
- Track 2
- Track 3
- Track 4

Stereo file

Bouncing creates a new file in the same project.
5-20 Editing/Output: PROJECT PROTECT

Using the PROTECT function on a project prevents the dividing of tracks and changing files in the project.

1. Press.
2. Select PROJECT and press.
3. Select PROTECT and press.
4. Select ON and press.

HINT:
If you try to change a file assigned in a track, “Project Protected” will appear on the display.

HINT:
PROTECT is useful to prevent completed music from being accidentally changed.
6-01 Utilities: DISPLAY BACK LIGHT

You can set the time that the display backlight stays lit.

1. Press.
2. Select SYSTEM and press.
3. Select LIGHT and press.
4. Select the desired time and press.

**MENU**

**STereo 4CH MTR STAMINA**

Press the MENU button for more than 2 seconds, and start operation from the top screen.

**NOTE:**

You cannot change this setting during recording or playback.

**DISPLAY BACK LIGHT**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>The backlight stays off all the time.</td>
</tr>
<tr>
<td>ON</td>
<td>The backlight stays on all the time.</td>
</tr>
<tr>
<td>15sec</td>
<td>The backlight stays on for 15 seconds after the last key operation.</td>
</tr>
<tr>
<td>30sec</td>
<td>The backlight stays on for 30 seconds after the last key operation.</td>
</tr>
</tbody>
</table>
Even without an SD card, the built-in memory can record up to 35 seconds. This is useful for voice memos, for example.

**Change the recording mode**

When no SD card is loaded, press the MENU button for at least 2 seconds and start from the top screen.

1. Press.

2. Select TOOL and press.

3. Select MEMORY REC and press.

4. Select REC&PLAY.

Switch to MEMORY REC mode

**Recording and playback**

- Record P.047
- Playback P.094

**NOTE:**

Only one file can be recorded and the maximum time is 35 seconds. Each time you record will erase the previous contents. Please be aware of these restrictions.
Transferring recordings to SD cards

After loading an SD, press the MENU button for at least 2 seconds and start from the top screen.

1. Select BACKUP and press.

2. Select NAME to change the file name, or select FOLDER to change the destination folder.

3. Select EXECUTE and press.

4. When the confirmation screen opens, select YES and press.

NOTE:
If a file with the same name already exists in the destination folder, a screen where you can select RENAME or CANCEL appears.

HINT:
The destination folder is a stereo mode folder.

This transfers the file to the SD card and deletes it from the built-in memory.
Follow these steps to adjust the display contrast.

1. Press.

2. Select SYSTEM and press.

3. Select CONTRAST and press.

4. Change the number and press.

**NOTE:**
You cannot change this setting during recording and playback.

This can be set from 1 to 8. The higher the number, the greater the contrast (default: 5).
6-04 Utilities: BATTERY TYPE

By setting the battery type, the H4n Pro can accurately display the remaining battery life.

1 Press.

2 Select SYSTEM and press.

3 Select BATTERY and press.

4 Select the battery type and press.

**NOTE:**

- Batteries that can be used:
  - Use alkaline batteries or NiMH rechargeable batteries.
  - You cannot change this setting during recording and playback.
After startup, you can check the H4n Pro version.

1. Press.

2. Select SYSTEM and press.

3. Select VERSION and press.

NOTE:
You cannot use this during recording and playback.
This function restores all settings to their original defaults.

1. Press.

2. Select SYSTEM and press.

3. Select FAC RESET and press.

4. Select YES and press.

**NOTE:**
- You cannot use this function during recording and playback.
- Warning: if you use the FACTORY RESET function, all the settings stored in this unit will be deleted. The settings will be restored to their original defaults.
6-07 Utilities: REMAIN

Do this to confirm the remaining capacity of the SD CARD.

1 Press.

2 Select SD CARD and press.

3 Select REMAIN and press.

NOTE:
You cannot use this during recording and playback.
6-08 Utilities: FORMAT

Use this function to format SD cards for the H4n Pro.

1. Press.

2. Select SD CARD and press.

3. Select FORMAT and press.

4. Select YES and press.

HINT:
“Format Card?”
“Format Card?” appears during startup if the loaded SD card is not formatted for the H4n Pro.

NOTE:
- You cannot use this function during recording and playback.
- Warning: All data will be deleted when you format the SD card.
- SD cards used in a computer or a digital camera should be formatted by the H4n Pro before use with it.

Ref. ☞ Using H2 and H4 SD cards P.136
If the H4n Pro (with an SD card) is connected to a computer (PC) that has access to the internet, you can download H4n Pro software upgrades.

1. Open the ZOOM website on a computer and download the most recent system software. (zoomcorp.com)

2. Connect the H4n Pro and computer with a USB cable.

3. Copy the downloaded system software to the root directory of the SD card in the H4n Pro.

4. Disconnect the PC and H4n Pro.

5. Turn on while holding down the PLAY/PAUSE button.

HINT:
Connect to a computer and select STORAGE. The H4n Pro will be recognized as an SD card reader and can be used as one.

NOTE:
Follow the computer procedures to disconnect from it.

Ref. SYSTEM (VERSION)
P.131
Insert an H2/H4 SD card into the H4n Pro and turn it on.

Select YES to move the files.

NOTE:
- H2/H4 stereo files and H4 projects will be moved to H4n Pro stereo folders and MTR projects.
- After moving files to the H4n Pro folder, those SD cards will not be recognized in the H2/H4 again.
- The projects are move in order from the lowest numbered to the highest numbered.
- If the H4n Pro has more than 1000 projects in the unit after transfer, “Project Full!” appears and transfer stops.
- You must reduce the number of projects on the H4n Pro to continue transfer.

HINT:
- “File Name Exists!”
  If a file with the same name already exists in the destination folder, select RENAME and change the name.

Startup continues
Reference
### Main specifications by mode

<table>
<thead>
<tr>
<th></th>
<th>STEREO</th>
<th>4CH</th>
<th>MTR</th>
<th>STAMINA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recording formats</strong></td>
<td>Stereo WAV: 44.1/48/96kHz, 16/24-bit</td>
<td>Stereo WAV × 2: 44.1/48kHz, 16/24-bit</td>
<td>44.1kHz/16-bit stereo and mono WAV (4 tracks total)</td>
<td>44.1kHz/16-bit WAV (fixed)</td>
</tr>
<tr>
<td></td>
<td>Stereo MP3: 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256 and 320 kbps, VBR 44.1kHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum simultaneous recording tracks</td>
<td>2 (one stereo track)</td>
<td>4 (two stereo tracks)</td>
<td>2 (one stereo or two mono tracks)</td>
<td>2 (one stereo track)</td>
</tr>
<tr>
<td>File capacity limit</td>
<td>2 GB (If a recording exceeds 2 GB, a new file will be created when recording in STEREO and 4CH modes.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>File creation during recording</td>
<td>Always save new files (overwrite recording not possible)</td>
<td>Always save new files (overwrite recording not possible)</td>
<td>Select either to overwrite recordings or save new files</td>
<td>Always save new files (overwrite recording not possible)</td>
</tr>
<tr>
<td>File saving locations</td>
<td>Save in 10 dedicated folders for STEREO mode</td>
<td>Save in 10 dedicated folders for 4CH mode</td>
<td>Manage multiple files together as projects</td>
<td>Save in 10 dedicated folders for STEREO mode</td>
</tr>
<tr>
<td>Changing file names</td>
<td>Possible</td>
<td>Not possible</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Changing folder names</td>
<td>Not possible</td>
<td>Not possible</td>
<td>Not possible</td>
<td>Not possible</td>
</tr>
<tr>
<td>Mark functions</td>
<td>Possible (WAV files only)</td>
<td>Possible (WAV files only)</td>
<td>Not possible</td>
<td>Possible (WAV files only)</td>
</tr>
</tbody>
</table>
### Settings available in each mode

#### Menu items

<table>
<thead>
<tr>
<th>System</th>
<th>Stere0</th>
<th>4Ch</th>
<th>MTR</th>
<th>Stamina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time</td>
<td>∆</td>
<td>∆</td>
<td>∆</td>
<td>∆</td>
</tr>
<tr>
<td>Light</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>File Stereo Encode</td>
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<tr>
<td>Comp/Limit</td>
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<td>Ms Stereo Matrix</td>
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<td>Phantom</td>
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<td>Plug-In Power</td>
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<td>Metronome*</td>
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<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>A-B Repeat</td>
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<td>∆</td>
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<tr>
<td>Speed</td>
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<table>
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<tr>
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<tbody>
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<td>Play Mode</td>
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<table>
<thead>
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<th>Rec Mode</th>
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</thead>
<tbody>
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<td>Rec Mode</td>
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<table>
<thead>
<tr>
<th>Effect</th>
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</thead>
<tbody>
<tr>
<td>Edit</td>
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<tr>
<td>Import</td>
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<td>∆</td>
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</tbody>
</table>

○ ...This can be set during recording and playback (* indicates some exceptions).
∆ ...This cannot be set during recording and playback.
# MTR mode effect types and parameters

## PREAMP module

### Guitar preamp effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD TWNR</td>
<td>Models the sound of the Fender '65 Twin Reverb.</td>
</tr>
<tr>
<td>UK 30A</td>
<td>Models the sound of an early class A British combo amp.</td>
</tr>
<tr>
<td>HW 100</td>
<td>Models the sound of the HIWATT CUSTOM 100.</td>
</tr>
<tr>
<td>FD TWEED</td>
<td>Models the sound of the Fender '59 Bassman.</td>
</tr>
<tr>
<td>BGcrunch</td>
<td>Models the sound of the Mesa Boogie Mark III combo amp.</td>
</tr>
<tr>
<td>MScrunch</td>
<td>Models the crunch sound of the Marshall JCM800.</td>
</tr>
<tr>
<td>MS DRIVE</td>
<td>Models the drive sound of the Marshall JCM800.</td>
</tr>
<tr>
<td>XTASY BL</td>
<td>Models the sound of the Bogner Ecstasy Blue channel.</td>
</tr>
<tr>
<td>SD+XTASY</td>
<td>Combination of Bogner Ecstasy and SweetDrive.</td>
</tr>
<tr>
<td>TS+FDcmb</td>
<td>Combination of Fender Combo amp and Ibanez TS-808.</td>
</tr>
<tr>
<td>GD+MSstk</td>
<td>Combination of Marshall JCM800 and GoldDrive.</td>
</tr>
<tr>
<td>FZ+MSstk</td>
<td>Combination of Marshall JCM800 and Fuzz.</td>
</tr>
</tbody>
</table>

The 12 effects above have the same parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) CABINET</td>
<td>Adjusts the depth of the speaker cabinet sound.</td>
</tr>
<tr>
<td>(2) GAIN</td>
<td>Adjusts the preamp gain (distortion depth).</td>
</tr>
<tr>
<td>(3) BASS</td>
<td>Adjusts the low-frequency boost/cut.</td>
</tr>
<tr>
<td>(4) MIDDLE</td>
<td>Adjusts the middle-frequency boost/cut.</td>
</tr>
<tr>
<td>(5) TREBLE</td>
<td>Adjusts the high-frequency boost/cut.</td>
</tr>
<tr>
<td>(6) LEVEL</td>
<td>Sets the level of the signal after the PREAMP module.</td>
</tr>
<tr>
<td>(7) ZNR</td>
<td>Adjusts the sensitivity of ZOOM's original ZNR noise reduction effect.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO SIM</td>
<td>Makes electric guitar sound like an acoustic guitar.</td>
</tr>
<tr>
<td>(1) TOP</td>
<td>Adjusts the string sound characteristic of acoustic guitars.</td>
</tr>
<tr>
<td>(2) BODY</td>
<td>Adjusts the body sound characteristic of acoustic guitars.</td>
</tr>
<tr>
<td>(3) BASS</td>
<td>Adjusts the low-frequency boost/cut.</td>
</tr>
<tr>
<td>(4) MIDDLE</td>
<td>Adjusts the middle-frequency boost/cut.</td>
</tr>
<tr>
<td>(5) TREBLE</td>
<td>Adjusts the high-frequency boost/cut.</td>
</tr>
<tr>
<td>(6) LEVEL</td>
<td>Sets the level of the signal after the PREAMP module.</td>
</tr>
<tr>
<td>(7) ZNR</td>
<td>Adjusts the sensitivity of ZOOM's original ZNR noise reduction effect.</td>
</tr>
</tbody>
</table>

*Manufacturer and product names shown in these tables are the trademarks and registered trademarks of various companies. The names are used only to explain sonic characteristics and do not indicate any affiliation with Zoom Corporation.
Bass preamp effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVT</td>
<td>Models the sound of the Ampeg SVT.</td>
</tr>
<tr>
<td>BASSMAN</td>
<td>Models the sound of the Fender Bassman 100.</td>
</tr>
<tr>
<td>SMR</td>
<td>Models the sound of the SWR SM-900.</td>
</tr>
<tr>
<td>SUP-BASS</td>
<td>Models the sound of the Marshall Super Bass.</td>
</tr>
<tr>
<td>SANSAMP</td>
<td>Models the sound of the SansAmp Bass Driver DI.</td>
</tr>
<tr>
<td>TUBE PRE</td>
<td>ZOOM original tube preamp sound</td>
</tr>
</tbody>
</table>

The 6 effects above have the same parameters.

1. CABINET 0–2 Adjusts the depth of the speaker cabinet sound.
2. GAIN 0–100 Adjusts the preamp gain (distortion depth).
3. BASS −12→+12 Adjusts the low-frequency boost/cut.
4. MIDDLE −12→+12 Adjusts the middle-frequency boost/cut.
5. TREBLE −12→+12 Adjusts the high-frequency boost/cut.
6. BALANCE 0–100 Adjusts the balance between the signals before and after they pass through the module. The higher the value, the greater the post-module signal amount.
7. LEVEL 1–100 Sets the level of the signal after the PREAMP module.
8. ZNR (ZOOM Noise Reduction) OFF, 1–16 Adjusts the sensitivity of ZOOM’s original ZNR noise reduction effect.

Mic preamp effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VO MPRE</td>
<td>Preamp with characteristics good for vocal recording</td>
</tr>
<tr>
<td>AG MPRE</td>
<td>Preamp with characteristics good for acoustic guitar recording</td>
</tr>
<tr>
<td>FlatMPRE</td>
<td>Preamp with flat characteristics</td>
</tr>
</tbody>
</table>

The 3 effects above have the same parameters.

1. COMP OFF, 1–10 Adjusts the compression of the total signal level by lowering high-level signals and raising low-level signals.
2. DE-ESSER OFF, 1–10 Adjusts the amount that sibilant sounds are cut.
3. LOW CUT OFF, 1–10 Adjusts the frequency of the filter that cuts low-frequency noise, which is easily picked up by mics.
4. BASS −12→+12 Adjusts the low-frequency boost/cut.
5. MIDDLE −12→+12 Adjusts the middle-frequency boost/cut.
6. TREBLE −12→+12 Adjusts the high-frequency boost/cut.
7. LEVEL 1–100 Sets the level of the signal after the PREAMP module.
8. ZNR (ZOOM Noise Reduction) OFF, 1–16 Adjusts the sensitivity of ZOOM’s original ZNR noise reduction effect.

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MTR mode effect types and parameters

**EFX modules**

- **Compressor/limiter effects**
  - **Compressors reduce high-level signals and raise the minimum level.**
  - **RackComp**
  - **COMPRESSOR**
  - **LIMITER**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) THRESHOLD 0–50</td>
<td>Sets the base level from which the compressor operates.</td>
</tr>
<tr>
<td>(2) RATIO 1–10</td>
<td>Sets the compression ratio.</td>
</tr>
<tr>
<td>(3) ATTACK 1–10</td>
<td>Sets how quickly compression starts.</td>
</tr>
<tr>
<td>(4) LEVEL 2–100</td>
<td>Sets the level of the signal after the EFX module.</td>
</tr>
</tbody>
</table>

- **Limiter**
  - **Limiter** Compression when input signals exceed the fixed level.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) THRESHOLD 0–50</td>
<td>This sets the base level from which the limiter operates.</td>
</tr>
<tr>
<td>(2) RATIO 1–10</td>
<td>Sets the compression ratio.</td>
</tr>
<tr>
<td>(3) RELEASE 1–10</td>
<td>Sets how quickly the limiter stops functioning after the signal goes below the base level.</td>
</tr>
<tr>
<td>(4) LEVEL 2–100</td>
<td>Sets the level of the signal after the EFX module.</td>
</tr>
</tbody>
</table>

- **Modulation effects**
  - **AUTO WAH**
  - **PHASER**
  - **TREMOLO**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) POSITION Before, After</td>
<td>Sets the insertion point of the EFX module. Select before or after the PREAMP.</td>
</tr>
<tr>
<td>(2) SENSE −10–1, 1–10</td>
<td>Sets the effect sensitivity.</td>
</tr>
<tr>
<td>(3) RESONANCE 0–10</td>
<td>Sets the amount of resonance.</td>
</tr>
<tr>
<td>(4) LEVEL 2–100</td>
<td>Sets the level of the signal after the EFX module.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) POSITION Before, After</td>
<td>Sets the insertion point of the EFX module. Select before or after the PREAMP.</td>
</tr>
<tr>
<td>(2) RATE 0–50, ♪</td>
<td>Adjusts the speed of modulation. (See P.146)</td>
</tr>
<tr>
<td>(3) COLOR 4STAGE, 8STAGE, INVERT4, INVERT8</td>
<td>Select the effect sound type.</td>
</tr>
<tr>
<td>(4) LEVEL 2–100</td>
<td>Sets the level of the signal after the EFX module.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) DEPTH 0–50</td>
<td>Adjusts the modulation depth.</td>
</tr>
<tr>
<td>(2) RATE 0–50, ♪</td>
<td>Adjusts the speed of modulation. (See P.146)</td>
</tr>
<tr>
<td>(3) WAVE UP 0–9, DOWN 0–9, TRI 0–9</td>
<td>Select the modulation waveform from UP (rising sawtooth), DOWN (falling sawtooth) and TRI (triangle) types. The higher the number, the more the wave peaks are clipped, emphasizing the effect.</td>
</tr>
<tr>
<td>(4) LEVEL 2–100</td>
<td>Sets the level of the signal after the EFX module.</td>
</tr>
<tr>
<td>Effect</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td><strong>RING MOD</strong></td>
<td>This effect creates a metallic sound. The FREQ setting can drastically change the tone.</td>
</tr>
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</tr>
<tr>
<td><strong>SLOW ATK</strong></td>
<td>This effect makes the attack of each note gradual, creating a violin-like sound.</td>
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</tr>
<tr>
<td><strong>CHORUS</strong></td>
<td>This mixes an effect sound that varies from the original pitch, creating a varying thick sound.</td>
</tr>
<tr>
<td><strong>ENSEMBLE</strong></td>
<td>This chorus ensemble effect features three-dimensional movement.</td>
</tr>
<tr>
<td><strong>FLANGER</strong></td>
<td>This effect adds modulation and strong undulations to the sound.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The 2 effects above have the same parameters.

(1) **DEPTH** 0–100 Adjusts the modulation depth.
(2) **RATE** 0–50 Adjusts the speed of modulation.
(3) **TONE** 0–10 Adjusts the tone.
(4) **MIX** 0–100 Adjusts the amount of effect sound mixed with the original sound.
## MTR mode effect types and parameters

<table>
<thead>
<tr>
<th>Effect Type</th>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| **CRY**     | This effect varies the sound like a talking modulator. | (1) RANGE 1–10 Adjusts the frequency band affected.  
(2) RESONANCE 0–10 Sets the amount of resonance.  
(3) SENSE −10−1, 1–10 Sets the effect sensitivity.  
(4) BALANCE 0–100 Adjusts the balance of the original and effect sounds. |
| **PITCH**   | This effect shifts the pitch up or down | (1) SHIFT −12–12, 24 Sets the pitch shift in semitones.  
(2) TONE 0–10 Adjusts the tone.  
(3) FINE −25–25 Adjusts the pitch shift in cents (1/100 semitone).  
(4) BALANCE 0–100 Adjusts the balance of the original and effect sounds. |

### Delay/reverb effects

<table>
<thead>
<tr>
<th>Effect Type</th>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
</table>
| **AIR**     | This effect reproduces the reverberant atmosphere of a room and provides spatial depth. | (1) SIZE 1–100 Sets the size of the space.  
(2) REFLEX 0–10 Sets the amount of wall reflections.  
(3) TONE 0–10 Adjusts the tone.  
(4) MIX 0–100 Adjusts the amount of effect sound mixed with the original sound. |
| **DELAY**   | This delay supports long delay times of up to 5000 ms. | (1) TIME 1–5000 ms, ♬ Sets the delay time.  
(2) FEEDBACK 0–100 Adjusts the amount of feedback.  
(3) HIDAMP 0–10 Adjusts the damping of high frequencies in the delay sound.  
(4) MIX 0–100 Adjusts the amount of effect sound mixed with the original sound. |
| **ECHO**    | This tape echo simulation supports long delay times of up to 5000 ms. | |
| **ANALOG**  | This warm analog delay simulation supports long delay times of up to 5000 ms. | |

The 3 effects above have the same parameters.
RvsDelay

This delay supports long delay times of up to 2500 ms.

(1) TIME
10–2500 ms,* Sets the delay time.

(2) FEEDBACK
0–100 Adjusts the amount of feedback.

(3) HIDAMP
0–10 Adjusts the damping of high frequencies in the delay sound.

(4) MIX
0–100 Adjusts the amount of effect sound mixed with the original sound.

*milliseconds

HALL
This reverb simulates the acoustics of a concert hall.

ROOM
This reverb simulates the acoustics of a room.

SPRING
This is a spring reverb simulation.

ARENA
This simulates the acoustics of an arena-sized venue.

T ROOM
This simulates the acoustics of a tiled room.

M SPRING
This is a spring reverb simulation with a bright and clear tone.

The 6 effects above have the same parameters.

(1) DECAY
1–30 Sets the reverb duration.

(2) PRE DLY
1–100 Sets the time between when the original sound is input and reverb starts.

(3) TONE
0–10 Adjusts the tone.

(4) MIX
0–100 Adjusts the amount of effect sound mixed with the original sound.

Note durations
Parameters with ♪ values allow you to make settings in note units based on the metronome tempo. The lengths of the notes are as follows.

<table>
<thead>
<tr>
<th>Note</th>
<th>Thirty-second note</th>
<th>Sixteenth note</th>
<th>Dotted eighth note</th>
<th>Half note triplet</th>
<th>Quarter note x 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>♩ 3</td>
<td>♨ 3</td>
<td>♩ 3</td>
<td>♩ 3</td>
<td>♩ 3</td>
</tr>
<tr>
<td></td>
<td>Quarter note triplet</td>
<td>Quarter note triplet</td>
<td>Dotted quarter note</td>
<td>Quarter note triplet</td>
<td>Quarter note triplet</td>
</tr>
<tr>
<td></td>
<td>Dotted sixteenth note</td>
<td>Dotted sixteenth note</td>
<td>Dotted quarter note</td>
<td>Dotted quarter note</td>
<td>Dotted quarter note</td>
</tr>
<tr>
<td></td>
<td>Eighth note ♩ × 2</td>
<td>Eighth note ♩ × 2</td>
<td>Eighth note ♩ × 2</td>
<td>Eighth note ♩ × 2</td>
<td>Eighth note ♩ × 2</td>
</tr>
<tr>
<td></td>
<td>Quarter note x 20</td>
<td>Quarter note x 20</td>
<td>Quarter note x 20</td>
<td>Quarter note x 20</td>
<td>Quarter note x 20</td>
</tr>
</tbody>
</table>

**NOTE**

- The note values that can be selected depend on the parameter.
- Certain combinations of tempo and note values could exceed parameter ranges. If this occurs, the value will be halved or even quartered to achieve the allowed range.
# H4n Pro patch list

The patches in this list can be used in MTR mode and when the H4n Pro is functioning as an audio interface (at 44.1kHz sampling rate).

<table>
<thead>
<tr>
<th>Category</th>
<th>No.</th>
<th>Patch name</th>
<th>Description</th>
<th>PREAMP module</th>
<th>EFX module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guitar</td>
<td>00</td>
<td>Tweed Clean</td>
<td>This FD TWEED clean sound goes great with Stratocasters.</td>
<td>FD TWEED</td>
<td>SPRING</td>
</tr>
<tr>
<td></td>
<td>01</td>
<td>Liverpool</td>
<td>A 60s revival sound is created by gently driving a Class A British combo amp.</td>
<td>UK 30A</td>
<td>AIR</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>Clean Chorus</td>
<td>This clean sound is good for muted rhythmic and arpeggio playing.</td>
<td>FD TWNR</td>
<td>CHORUS</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>Clean Delay</td>
<td>Using a long delay, this clean sound is good for sustained chords and arpeggios.</td>
<td>FD TWNR</td>
<td>ECHO</td>
</tr>
<tr>
<td></td>
<td>04</td>
<td>Clean Trem</td>
<td>This clean sound varies the volume and can be said to be the original effect.</td>
<td>HW 100</td>
<td>TREMOLO</td>
</tr>
<tr>
<td></td>
<td>05</td>
<td>Aco.Simulate</td>
<td>This acoustic guitar simulation is ideal for stroking.</td>
<td>Aco Sim</td>
<td>AIR</td>
</tr>
<tr>
<td></td>
<td>06</td>
<td>Spy’s Shadow</td>
<td>Wrapped in spring reverb, this twangy guitar sound is perfect for electric instruments.</td>
<td>FD TWNR</td>
<td>M SPRING</td>
</tr>
<tr>
<td></td>
<td>07</td>
<td>Wah Cutting</td>
<td>This funky rhythmic tone uses FD TWRN and AUTO WAH.</td>
<td>FD TWNR</td>
<td>AUTO WAH</td>
</tr>
<tr>
<td></td>
<td>08</td>
<td>Glossy Blues</td>
<td>This bewitching Fender ’59 BASSMAN crunch sound follows the dynamics of the player.</td>
<td>FD TWEED</td>
<td>ROOM</td>
</tr>
<tr>
<td></td>
<td>09</td>
<td>UK Crunch</td>
<td>A sense of AIR is added to the natural crunch of a Class A British combo amp.</td>
<td>UK 30A</td>
<td>AIR</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Box Of Edge</td>
<td>U2’s The Edge popularized this distinctive dotted-eighth-note delay effect (at 130 BPM).</td>
<td>UK 30A</td>
<td>ECHO</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>HW Crunch</td>
<td>Crunch sound of a HiWATT CUSTOM 100.</td>
<td>HW 100</td>
<td>ROOM</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Melody</td>
<td>Analog delay adds a natural sense of space to TS+FDcmb for a sound that suits simple melodies.</td>
<td>TS+FDcmb</td>
<td>ANALOG</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>ZEP Drive</td>
<td>A classic Marshall crunch re-creates the sound of Led Zeppelin.</td>
<td>MScrunch</td>
<td>RackComp</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Mellow Vibe</td>
<td>MScrunch and Vibe combine to create a laid-back sound.</td>
<td>MScrunch</td>
<td>VIBE</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>’70’s Drive</td>
<td>The sound of 70s rock.</td>
<td>MS DRIVE</td>
<td>ECHO</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Boogie Drive</td>
<td>The Mesa Boogie Mark III sound creates a mid-range thickness in this drive that is good for solos.</td>
<td>BGcrunch</td>
<td>ROOM</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>MS Drive</td>
<td>For the early sound of Van Halen, the Marshall is turned all the way up.</td>
<td>GD+MSstk</td>
<td>ARENA</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>XTASY Riff</td>
<td>SD+XTASY makes this great for metal riffs.</td>
<td>SD+XTASY</td>
<td>OFF</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Jet MS Drive</td>
<td>Heavy Marshall distortion is combined with a flanger for this epic sound.</td>
<td>GD+MSstk</td>
<td>FLANGER</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Talking Guy</td>
<td>This talking sound follows the guitar pickup position and picking dynamics.</td>
<td>GD+MSstk</td>
<td>CRY</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Oct Lead</td>
<td>Octave doubling below the original pitch creates a heavy impactful drive sound.</td>
<td>GD+MSstk</td>
<td>PITCH</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Dirty Drive</td>
<td>Fuzz gives this classic 70s progressive rock sound its powerful sustain.</td>
<td>FZ+MSstk</td>
<td>ANALOG</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Fuzz Lead</td>
<td>Vintage Marshall and fuzz effects combine to re-create the sweet and beautiful fuzz tone used by Eric Johnson.</td>
<td>FZ+MSstk</td>
<td>ARENA</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>XTASY Lead</td>
<td>This metal lead sound uses XTASY BL and ECHO effects.</td>
<td>XTASY BL</td>
<td>ECHO</td>
</tr>
<tr>
<td>Category</td>
<td>No.</td>
<td>Patch name</td>
<td>Description</td>
<td>PREAMP module</td>
<td>EFX module</td>
</tr>
<tr>
<td>----------</td>
<td>-----</td>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Bass</td>
<td>25</td>
<td>SVT</td>
<td>This is the perfect Ampeg SVT rock sound.</td>
<td></td>
<td>VT</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>SMR</td>
<td>The SWR SM-900 modeling provides a tight sound.</td>
<td></td>
<td>Limiter</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>BASSMAN</td>
<td>This classic sound uses Fender BASSMAN 100 modeling.</td>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>SUP-BASS</td>
<td>The showy drive sound of a Marshall Super Bass.</td>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>SANSAMP</td>
<td>The SansAmp sound plays well with other instruments.</td>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>TUBE PRE</td>
<td>A thick TUBE PRE distortion sound.</td>
<td>TUBE PRE</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Funk Wah</td>
<td>Responding to changes in touch dynamics, this funk wah sound can be used in many situations.</td>
<td>SMR</td>
<td>1W</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>Slap Comp</td>
<td>Combining RackComp and TUBE PRE, this clean sound is perfect for slapping and tapping.</td>
<td>TUBE PRE</td>
<td>RackComp</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>Bass Phaser</td>
<td>This go-to phaser sound combines PHASER and TUBE PRE effects.</td>
<td>TUBE PRE</td>
<td>RackComp</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>Fuzz Room</td>
<td>The combination of SUP-BASS and ROOM effects make this fuzz sound for soloing.</td>
<td>SUP-BASS</td>
<td>Room</td>
</tr>
<tr>
<td>Mic</td>
<td>35</td>
<td>Standard Comp</td>
<td>Standard compressor optimized for recording.</td>
<td>FlatMPRE</td>
<td>RackComp</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>Studio Comp</td>
<td>Compressor suitable for vocal recording.</td>
<td>VO MPRE</td>
<td>RackComp</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>Chorus Vocal</td>
<td>Deep chorus sound for solo vocals.</td>
<td>VO MPRE</td>
<td>Chorus</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>Flange Vocal</td>
<td>Flanger sound for soothing pop vocals.</td>
<td>VO MPRE</td>
<td>Flanger</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>Light Vocal</td>
<td>Perfect when seeking bright and articulate vocals.</td>
<td>FlatMPRE</td>
<td>Room</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>Spring</td>
<td>Sound made distinctive with the effect of spring reverb.</td>
<td>VO MPRE</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>Arena</td>
<td>Deep reverb sounds like singing in an arena.</td>
<td>VO MPRE</td>
<td>Arena</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>Doubling</td>
<td>Conventional doubling effect.</td>
<td>VO MPRE</td>
<td>Delay</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>Lead Vocal</td>
<td>Delay suitable for main vocal parts.</td>
<td>VO MPRE</td>
<td>Delay</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>Analog Echo</td>
<td>Analog style echo sound for vocals using an analog delay model.</td>
<td>VO MPRE</td>
<td>Delay</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>Reverse Trip</td>
<td>Trippy sound using a reverse delay.</td>
<td>VO MPRE</td>
<td>Analog</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>AG Reverb</td>
<td>Preamp and reverb combination optimized for mic recording of acoustic guitars.</td>
<td>AG MPRE</td>
<td>Arena</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>AG Arpeggio</td>
<td>Preamp and chorus combination optimized for mic recording of acoustic guitar (playing arpeggios).</td>
<td>AG MPRE</td>
<td>Chorus</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>AG Ensemble</td>
<td>Preamp and ensemble combination optimized for mic recording of acoustic guitar (playing arpeggios).</td>
<td>AG MPRE</td>
<td>Ensemble</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>AG Lead</td>
<td>Preamp and delay combination optimized for mic recording of acoustic guitars (playing lead).</td>
<td>AG MPRE</td>
<td>Delay</td>
</tr>
</tbody>
</table>

Note: Company and product names in this patch list are trade names and trademarks of their respective owners and do not indicate any affiliation with Zoom Corporation. All product names and explanations identify products that were used for reference in the development of this product.
## H4n Pro specifications

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<th><strong>4CH mode</strong></th>
<th><strong>MTR mode</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Simultaneous recording tracks</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Simultaneous playback tracks</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

**Simultaneous recording tracks:**
- 2 tracks: About 380 minutes (44.1kHz/16-bit stereo WAV tracks)
- 4 tracks: About 68 hours (44.1kHz/128kbps Stereo MP3 tracks)

**Recording time:**
- 4GB (SDHC): About 380 minutes (44.1kHz/16-bit stereo WAV tracks)
- About 68 hours (44.1kHz/128kbps Stereo MP3 tracks)

**Maximum recording file size:**
- 2 GB

**Projects:**
- 1000/card

**Counter:**
- Hour: minute: second: millisecond

**Other functions:**
- Punch-in/out, bounce, A-B repeat

### Effects

**Module:**
- 2

**Stereo/4CH mode:**
- LO CUT, COMP/LIMITER

**MTR mode:**
- PRE AMP module, EFX module

**Types:**
- 53

**Patches:**
- 60

**Tuners:**
- Chromatic, Guitar, Bass, Open A/D/E/G

### Metronome

**Sounds:**
- 5

**Rhythmic patterns:**
- Unaccented, 1/4–8/4, 6/8

**Tempo range:**
- 40.0–250.0 BPM

### A/D conversion

**24-bit**
- 128x oversampling

### D/A conversion

**24-bit**
- 128x oversampling

### Recording media

- SD cards (16MB – 2GB), SDHC cards (4GB – 32GB)

### Data types

**WAV format**
- Recording/playback: Quantization: 16/24-bit
- Sampling frequencies: 44.1/48/96 kHz

**MP3 format**
- Bit rates: 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 kbps, VBR
- Sampling frequency: 44.1 kHz

**Playback**
- Bit rates: 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 kbps, VBR
- Sampling frequencies: 44.1/48 kHz

### Display

- 128×64 dot matrix
- Full-dot LCD (with backlight)

### Built-in mics

- Directionality: Unidirectional
- Sensitivity: –45dB/1Pa at 1kHz
- Input gain: –16 dB – +51 dB
- Maximum sound pressure input: 140 dBspl

### EXT MIC

- Input gain: –16 dB – +51 dB
- Input impedance: 2 kΩ or more
- Supports plug-in power

**INPUT 1 and 2 balanced input**
- Connector: XLR (pin 2 hot)
- Input gain: –16 dB – +43 dB
- Input impedance: 3.0 kΩ or more
- Maximum permissible input level: –6 dBu
- EIN: –120 dBu or less

**INPUT 1 and 2 unbalanced input**
- Connector: Standard phone
- Input gain: –30 dB – +32 dB
- Input impedance: 470 kΩ or more
- Maximum permissible input level: +2 dBu

### Outputs

**LINE/PHONE stereo mini jack**
- LINE output load impedance: 10 kΩ or more
- LINE rated output level: –10 dBu
- PHONE 17 mW + 17 mW (into 32Ω load)

- Built-in speaker: 400mW 8Ω mono speaker

### Phantom power

- 48 V, 24 V, OFF

### USB

- USB 2.0 High Speed
- Operation as mass storage or audio interface
- USB functions can be powered using USB bus power

### Power

- DC 5V 1A AC adapter (ZOOM AD-14), 2 AA batteries

### Continuous recording time

**STEREO mode**
- Using built-in mics at 44.1kHz/16-bit without headphones connected
- About 5.5 hours using alkaline batteries or about 7.5 hours using NiMH (2500mAh) batteries

**STAMINA mode**
- Using built-in mics at 44.1kHz/16-bit without headphones connected
- About 8 hours using alkaline batteries or about 10.5 hours using NiMH (2500mAh) batteries

### External dimensions

- 73 (W) × 157.2 (D) × 37 (H) mm

### Weight

- 294 g

**Notes:** 0 dBm = 0.755 Vrms

For the purpose of improvement, product specifications and appearance are subject to change without notice.
Troubleshooting

If you think that the H4n Pro is operating strangely, check the following items first.

Recording/playback trouble

◆ There is no sound or output is very quiet
  • Check the connections to your monitoring system and its volume setting.
  • Confirm that the volume levels of tracks 1–4 are not too low.

◆ Recorder stops during playback
  • If playback is started when a track is in recording standby, a temporary file is created on the H4n Pro. If the remaining capacity of the SD card is low, the temporary file may use all the remaining space, causing playback to stop. In this case, end recording standby of the track.

◆ Sound from connected instruments cannot be heard or is very quiet
  • Check the input source settings. (→ P045)
  • Confirm that the recording level settings are suitable. (→ P045)
  • If INPUT 1 or 2 jacks are used, raise the output level of the connected device.
  • When the monitor function (→ P070) is off, an input signal can only be monitored if its track is set to recording standby or if the recorder is in recording standby.

◆ Cannot record on a track
  • Confirm that the REC button and that TRACK button are lit red.
  • If a project is protected, recording is not possible. Use another project or turn protection off. (→ P125)

◆ Cannot bounce
  • Confirm that the volume levels of tracks 1–4 are not too low.
  • Confirm that the SD card has enough open space.

Other trouble

◆ Cannot use effects
  • Confirm that the effects are on. Effects are off in MTR mode by default.

◆ Cannot use tuner
  • Confirm that the jack to which the instrument is connected is selected as the input source.

◆ Computer does not recognize it even though it is connected to a USB port
  • Confirm that the operating system is compatible. (→ P033)
  • The operation mode must be set on the H4n Pro to allow the computer to recognize it. (→ P031)
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The FCC regulation warning (for U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For EU Countries

Declaration of Conformity