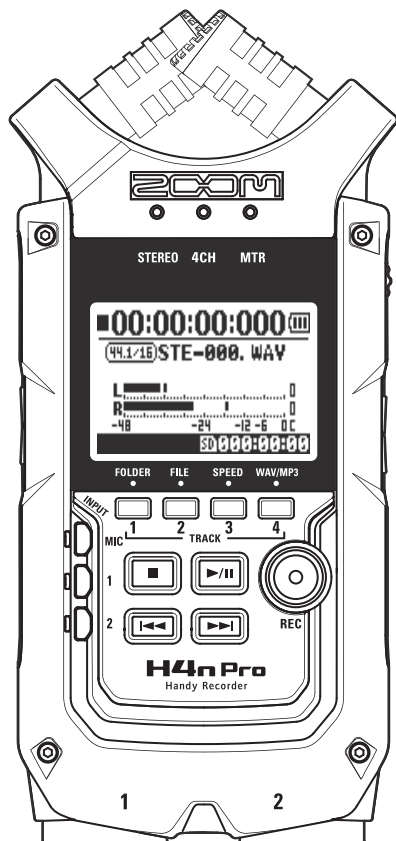


**ZOOM**®

# H4n Pro Handy Recorder

## OPERATION MANUAL



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# H4n Pro features

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 for users

## 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



Warning

#### AC adapter operation

- ❶ 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.

- ❷ When disconnecting the AC adapter from the AC outlet, make sure to grasp the adapter itself. Never pull on the cable.
- ❸ During lightning or when not using for an extended period, disconnect the AC adapter from the AC outlet.

#### Battery operation

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

- ❶ When not using for an extended period, remove the batteries from the unit.
- ❷ If battery leakage has occurred, wipe the battery compartment and battery terminals carefully to remove all remnant of battery fluid.
- ❸ When using the unit, the battery compartment cover should be closed.
- ❹ Install batteries with the correct +/- orientations.
- ❺ Do not use new and old batteries together. Do not use batteries of different brands or types together.



Caution

### Environment



Warning

- ❶ 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



Caution

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



Caution

- ❶ 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



Warning

- ❶ 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



Caution

- ❶ 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 Sivel S.p.A.
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- Macintosh and Mac OS are trademarks of Apple Inc.
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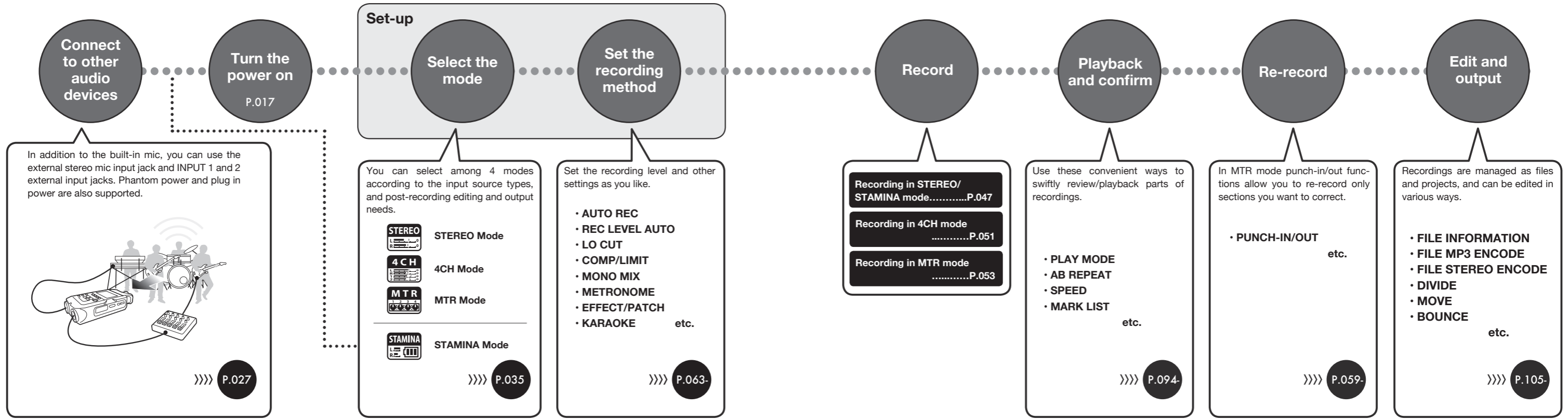
For the purpose of improvement, product specifications and appearance are subject to change without notice.



# Getting started

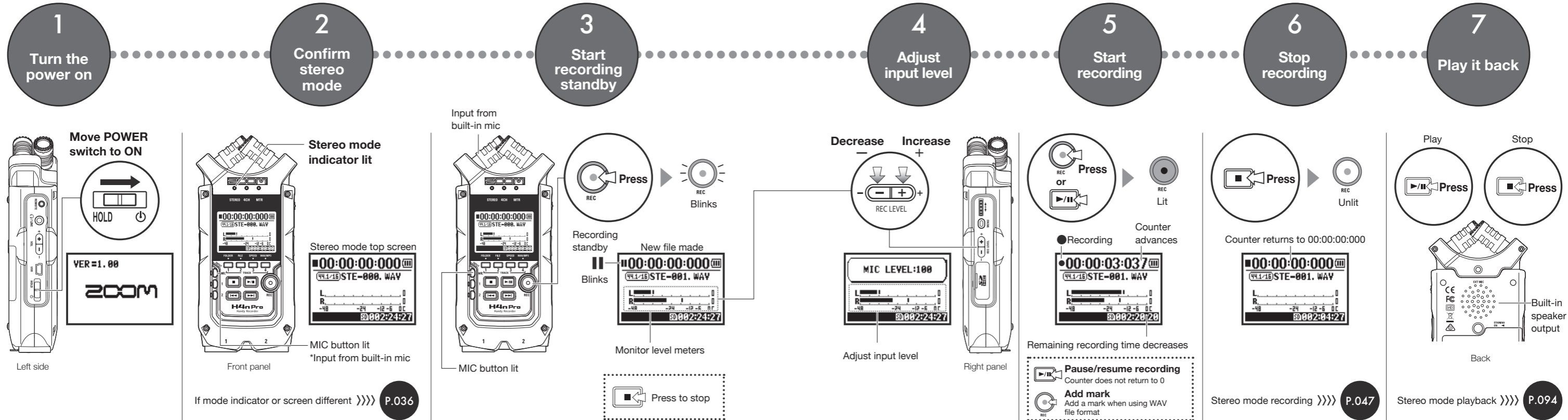
# 1-1 Recording flow using the H4n Pro

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.

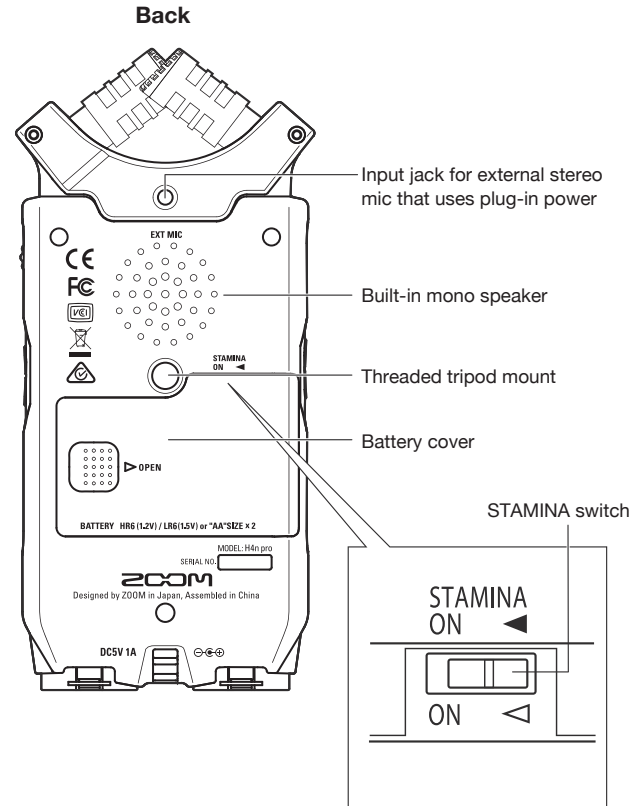
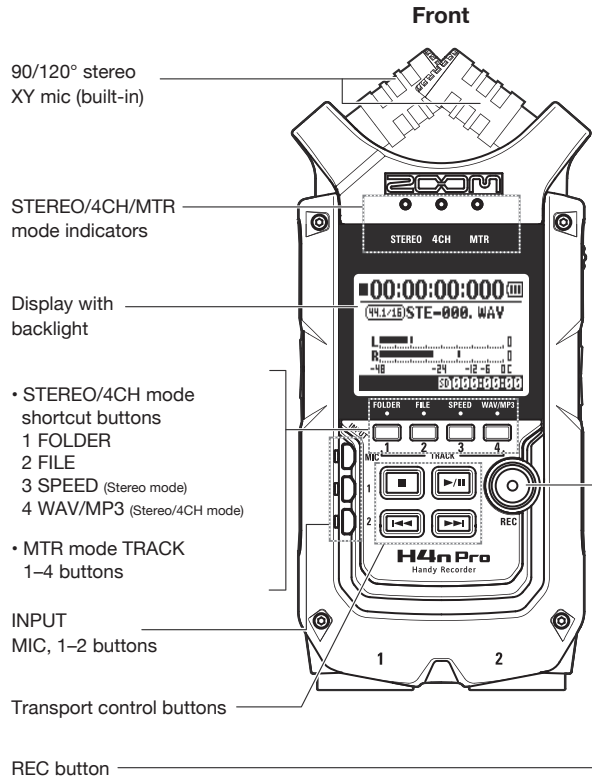


# 1-2 Easy recording guide (STEREO mode)

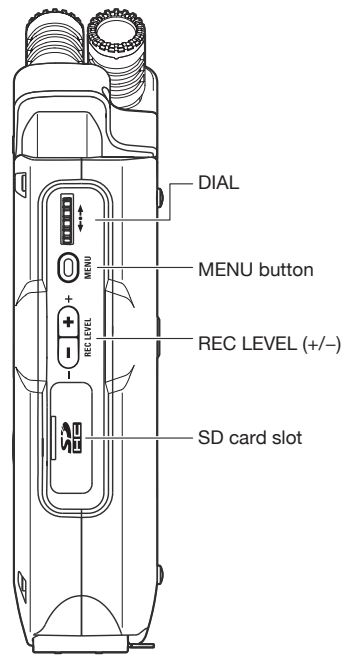
The following are basic recording instructions using the built-in stereo mic and built-in speaker in STEREO mode.



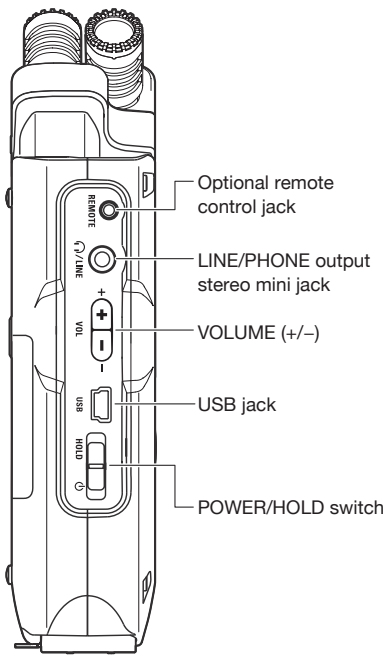
## 2-1 Names and functions of parts



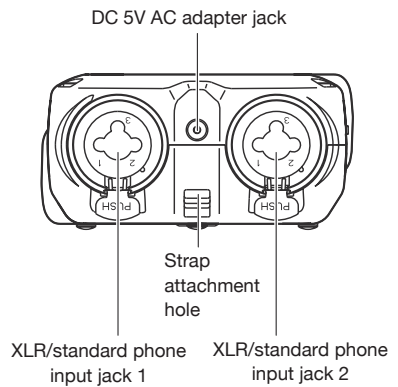
**Right side**



**Left side**



**Bottom**

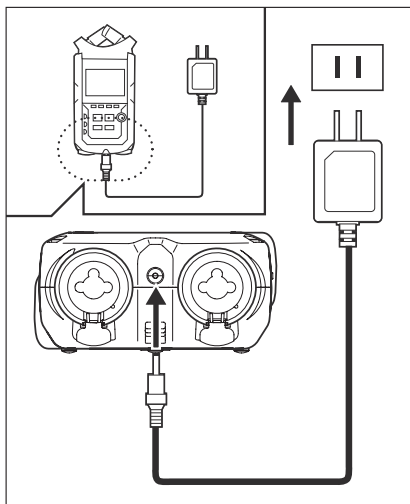


### 3 Battery/Power setting

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

#### • Using a standard power outlet

Always use the specified AC adapter.

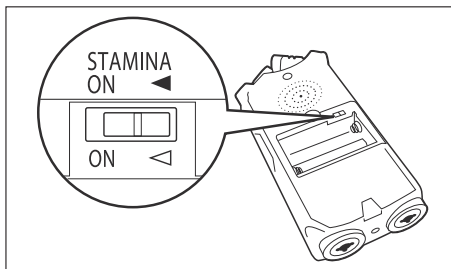
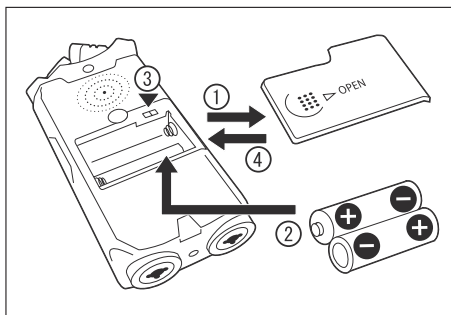


Specified AC adapter:  
ZOOM AD-14A/D

**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.

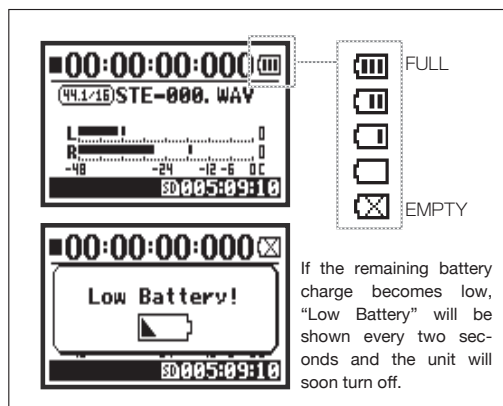
◀ Ordinary use  
(using AC adapter or batteries)

ON: STAMINA mode on  
(conserves power when using batteries)

#### 4 Close the battery compartment cover.

## • Remaining battery charge

When a “Low Battery!” warning appears, immediately turn the unit off and replace the batteries, or switch to an AC adapter.



## 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

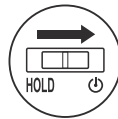
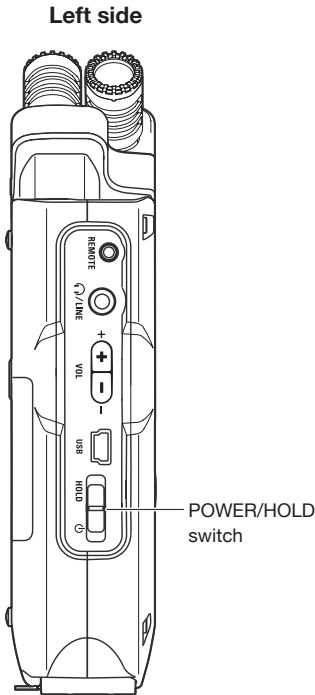


Using AC adapter


Ref. USB bus power P.033

Ref. Battery type P.130

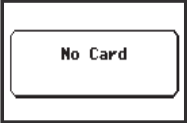

# 4-1 Using the POWER/HOLD switch and turning the power on/off



## 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.

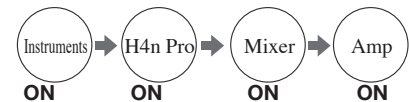
### NOTE:

- 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. 

Ref.  P.026  
Date and time setting

### HINT: Turning multiple devices on

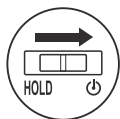
When many devices are connected, turn them on in the following order.



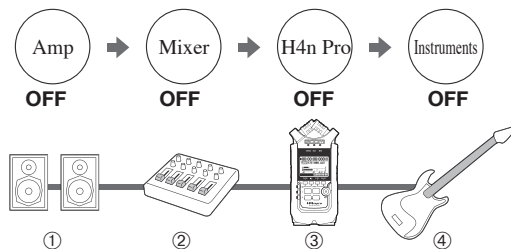


## Turning the power off and shutting down

- 1** Turn the monitoring system and connected instruments off in that order first.
- 2** Slide the POWER switch to turn the power off.



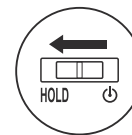
### **HINT: Order for turning off equipment**



### **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.

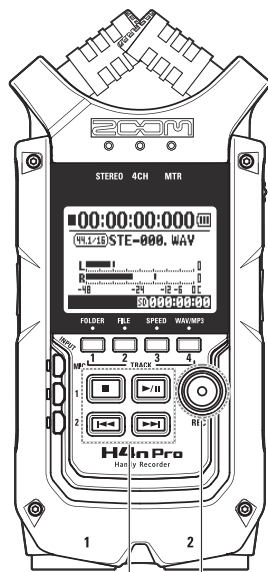


If you press any button while HOLD is active, the screen will display “Key Hold” for two seconds. To deactivate HOLD, slide the POWER switch away from HOLD.

## 4-2 Using recording and transport buttons

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

Front



REC button

Transport buttons

### STEREO/4CH/STAMINA modes



#### REC button

- Stopped** Enter recording standby and reset counter
- Recording standby** Start recording and counter
- Recording** **Playing** Add mark (WAV files only)

#### Transport buttons



#### STOP button

- Recording/recording standby/paused** Stop recording and reset counter
- Playing/paused** Stop playback and stop counter



#### PLAY/PAUSE button

- Stopped** Start playback and start counter
- Recording/paused** Resume paused recording
- Recording standby** Start recording and counter
- Playing/paused** Resume paused playback



#### FF/REW buttons

- Stopped** **Press for less than a second**
- Playing** 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 a 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.

### MTR mode



#### REC button

(Only when a track is in recording standby)

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

#### ALWAYS NEW recording

- Stopped** Enter recording standby and reset counter
- Recording standby** Start recording and start counter

#### Transport buttons



#### STOP button

- Recording** Stop recording and stop counter
- Playing** Stop playback and stop counter
- Recording paused** **Playback paused** Stop recording/playback



#### PLAY/PAUSE button

- Stopped** Start playback
- Recording** Pause recording  
(only when ALWAYS NEW recording)
- Recording standby** Start recording and counter
- Playing** Resume paused playback

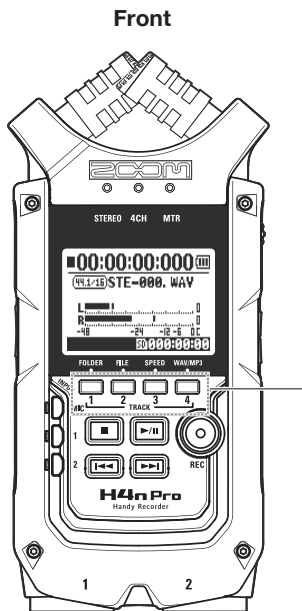


#### FF/REW button

- Stopped** **Press for less than a second**
- Playing** FF: Skip forward one second  
REW: Return to beginning
- Playback paused** **Press for more than a second**
- Search forward/backward

# 4-3 Using TRACK 1-4 buttons

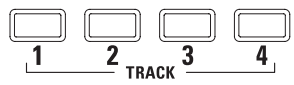
The of TRACK 1-4 buttons have different functions depending on the MODE.



TRACK 1-4

## MTR MODE

Switch between track recording and playback.

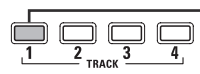


When you start recording, press the track number you want to record and the track becomes Recording Standby status. That track button will then become illuminated.

### Make track and the input source settings

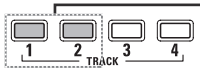
After selecting the track, use the input source buttons to select the input for that track. Using the INPUT button you can record in mono, stereo or a combination of both.

#### Selecting one track



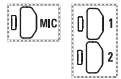
Same for tracks 2-4

#### 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



Move to the FOLDER SELECT menu



Move to the FILE menu



Move to the SPEED menu (only STEREO MODE)



Move to the REC FORMAT menu (STEREO MODE, 4CH MODE)

These operations are not available during recording and playback.

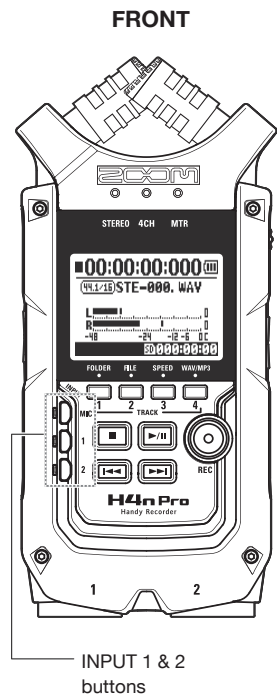
### HINT:

#### When stereo link active

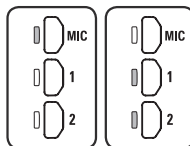
When tracks are stereo-linked, pressing the button for one track will have the same effect on the linked track.

## 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 or 2 button and then press another button.

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

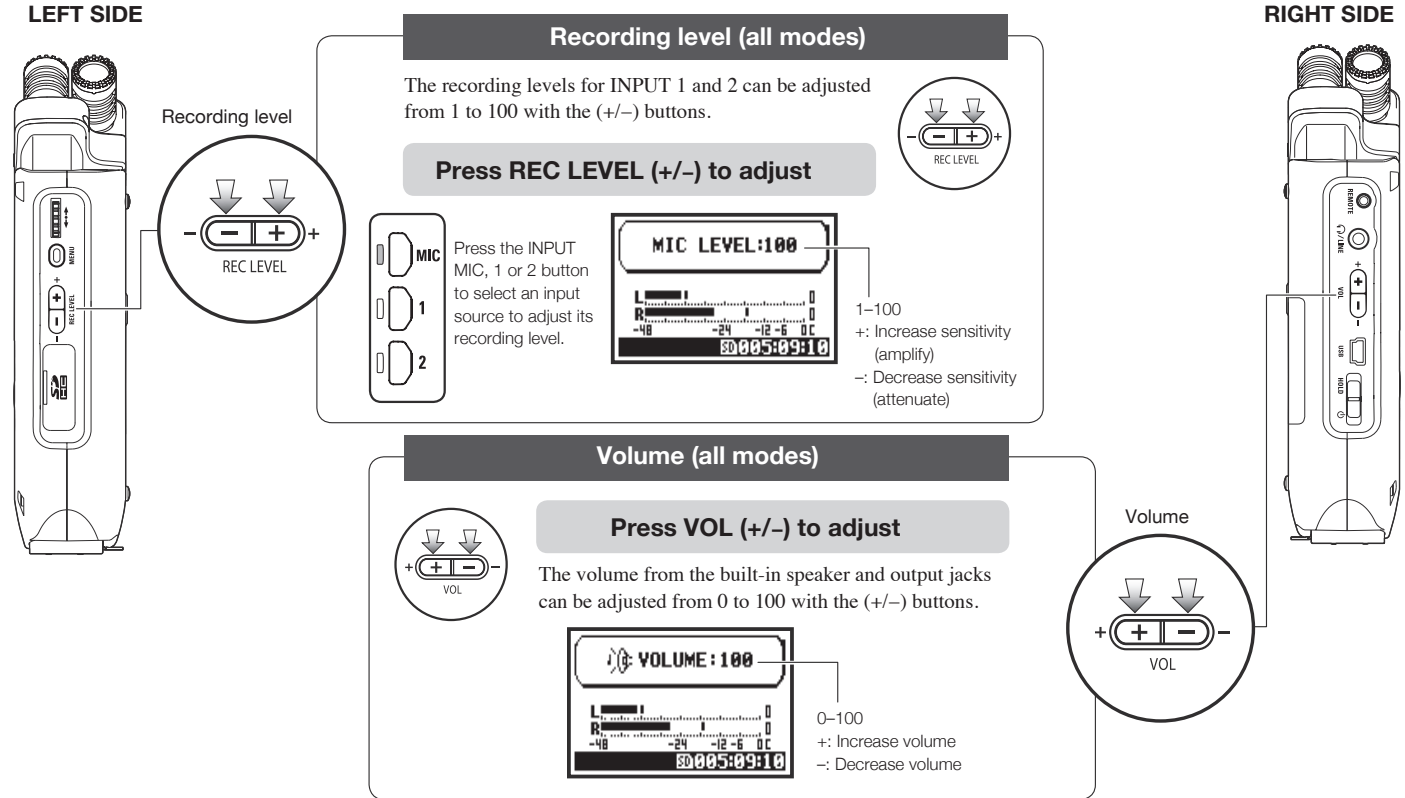
### HINT:

#### 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.

# 4-5 Using REC LEVEL and VOLUME buttons

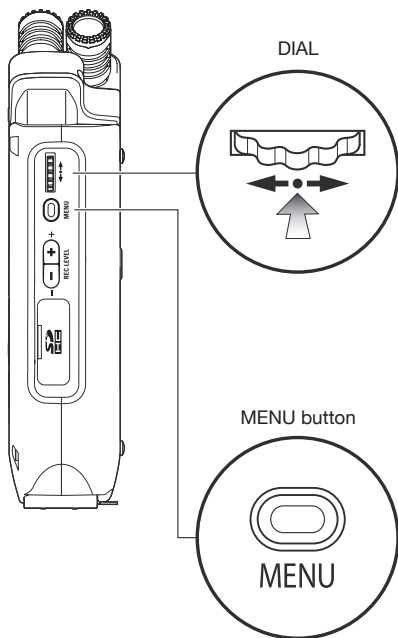
These keys allow you to adjust the levels of recording input and output volume.  
(All the modes are the same.)



## 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



### 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**

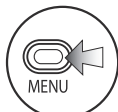
#### Press the DIAL to confirm the selection

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**



**Long Press**

#### 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)

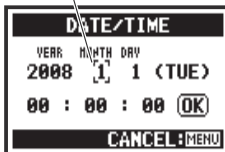
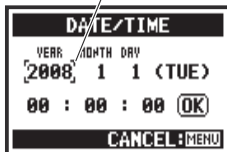


Turn the DIAL to move the cursor.

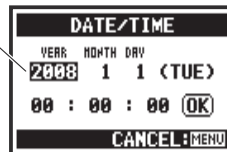


Press the DIAL to change numbers and letters.

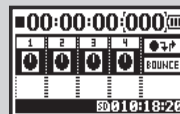
DIAL moves



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

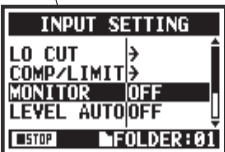
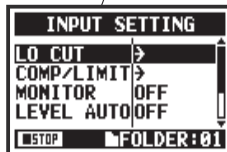


Turn the DIAL to scroll through a list.

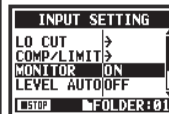
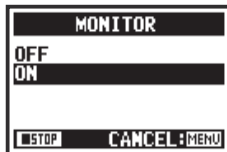


Push the DIAL to confirm a selection.

DIAL moves



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.

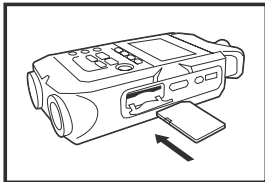
## 5-1 Loading an SD card

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.

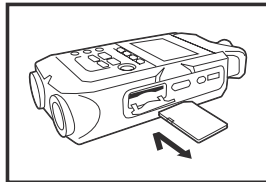
**2** Insert the SD card into the slot.



### How to remove an SD card

**1** Make sure power is off.

**2** Push the SD card in to remove it from the slot.



### SD card recording capacity (approximate)

4GB SDHC card	Recording time (approximate)
44.1 kHz/16-bit WAV (stereo track)	380 minutes
44.1kHz/128kbps MP3 (stereo track)	68 hours

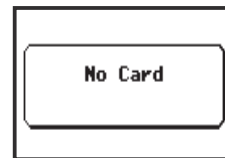
### NOTE:

#### TURN THE POWER OFF!

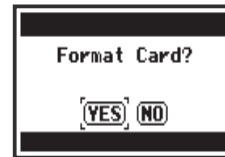
Never insert or remove an SD card while the power is on. This could destroy data.

### 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: <http://www.zoom.co.jp/>
- 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.



No SD card warning when starting up.



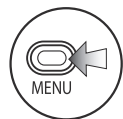
This warning will appear if an SD card is not in a recognized format. Select YES to format the card. This will delete all of its data.



## 5-2 Setting the date and time (DATE/TIME)

Each file will automatically record the date/time.

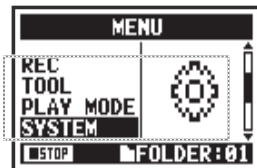
To facilitate searching for files by date, be sure to set the date/time after every battery change.



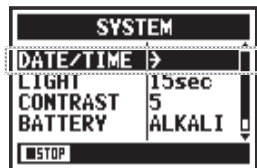
**1** Press.



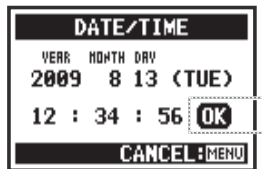
**2** Select SYSTEM and press.



**3** Select DATE/TIME and press.

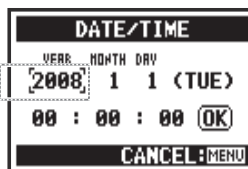


**5** Select OK and press.

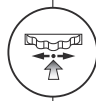


**4** Set YEAR → MONTH → DAY → TIME (hour: minute: second)

Select the item on DATE/TIME:

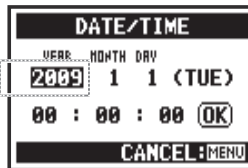


Turn the DIAL to select the item.



Press the DIAL.  
The selected item value is highlighted.

Change the value.



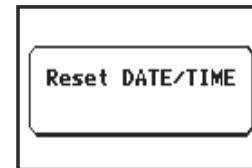
Turn the DIAL to set the value.



Press the DIAL.  
The cursor appears again.

### NOTE:

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

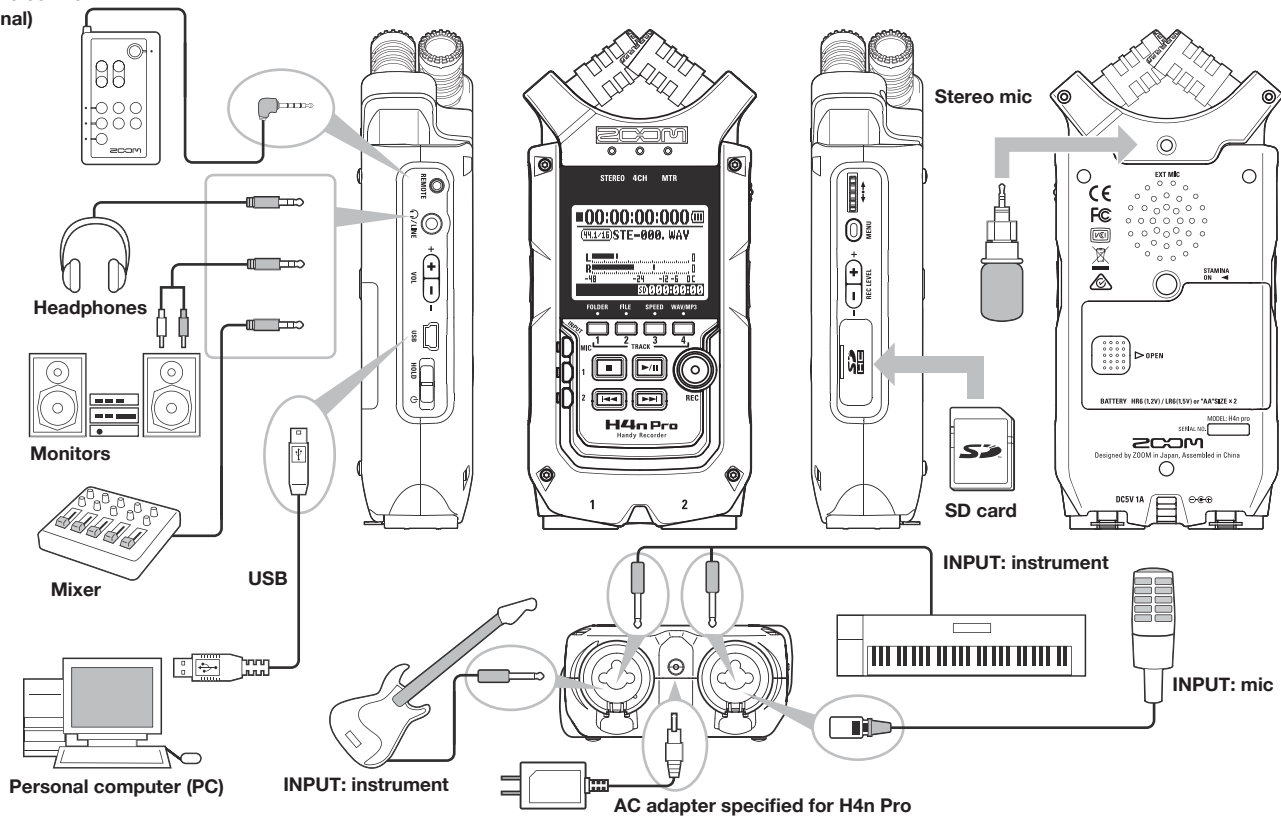


- If no power source is connected for more than three minutes, the DATE/TIME setting will reset to the default value.
- You cannot set this during recording and playback.

# 6-1 Setup: Connecting external devices

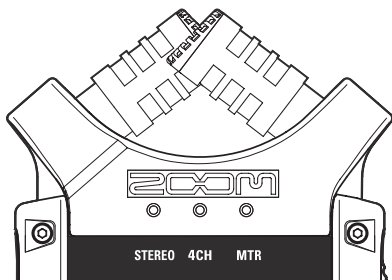
The H4n Pro offers versatile connectivity with options for any recording application.

Remote control  
(optional)



## 6-2 Setup: Built-in microphones

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



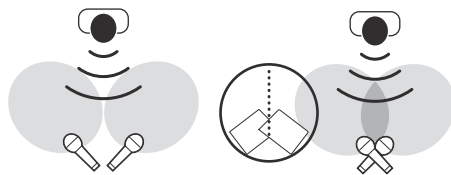
**High quality microphones in an XY pattern ensure a natural stereo image when recording sounds.**

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.

### XY mic placement

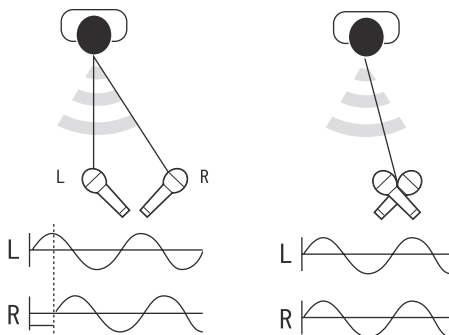
#### Capturing the stereo image center



Ordinary stereo mic placement

H4n Pro stereo mic pair

#### Stereo images without phase cancellation.

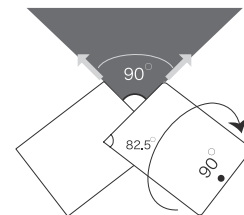


Ordinary stereo mic placement

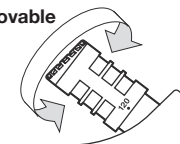
H4n Pro stereo mic pair

### 90° or 120° directivity

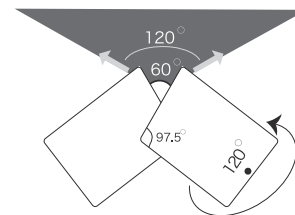
#### Centered 90°



#### Movable



#### Wide 120°

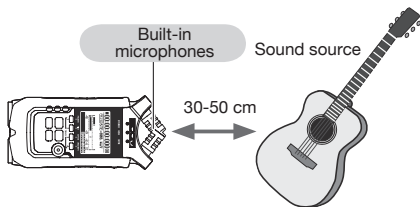


## 6-3 Setup: Built-in microphones/external mic with plug-in power

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

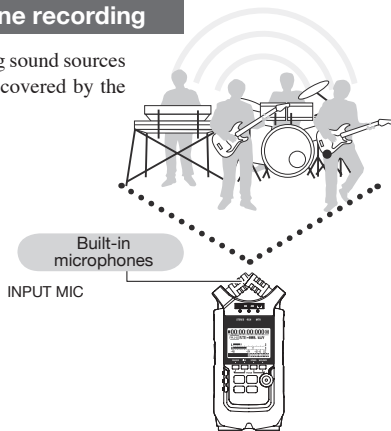
### Close microphone recording

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



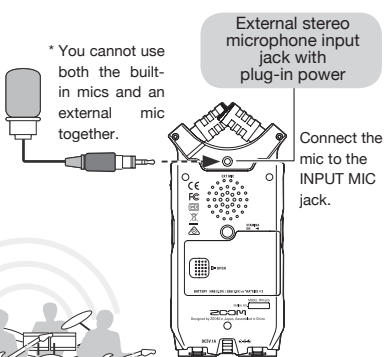
### Off microphone recording

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



### Close microphone recording

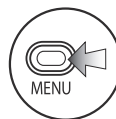
When you use an external microphone, be sure to select the correct setting.



### NOTE:

Plug-in and phantom power cannot be set during recording and playback.

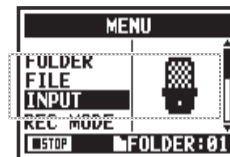
### Setting PLUG-IN power



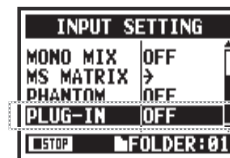
**1**  
Press.



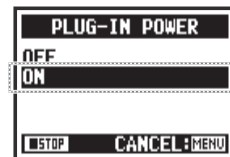
**2**  
Select INPUT and press.



**3**  
Select PLUG-IN and press.



**4**  
Select ON and press.



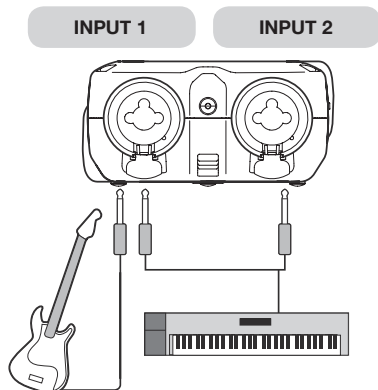
# 6-4 Setup: INPUT 1/2 connections and phantom power

Use INPUT 1 and 2 to connect to a guitar, bass or keyboard, for example.

## Connecting instruments

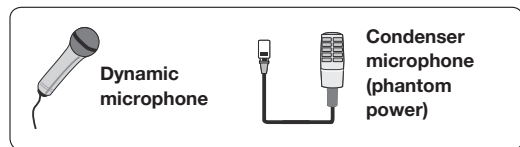
You can directly plug a guitar or a bass into either INPUT 1 or INPUT 2.

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.

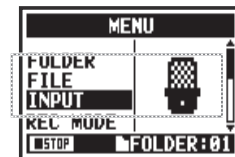
## Setting PHANTOM power



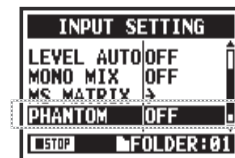
**1**  
Press.



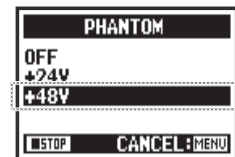
**2**  
Select  
INPUT and  
press.



**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.

Power ON already

Connect H4n Pro to computer with USB cable.

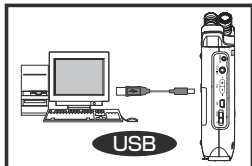
Power OFF



H4n Pro starts up using USB bus power, and USB setting screen opens

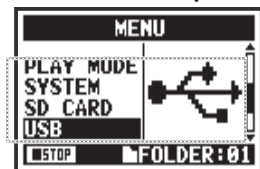


**1** Connect H4n Pro to computer with USB cable.

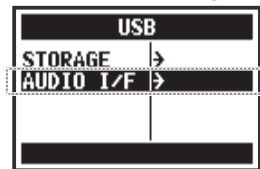


**2** Press **MENU** when on the top screen.

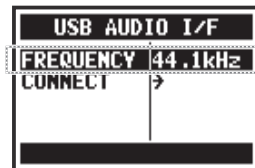
**3** Select **USB** and press.



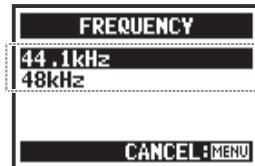
**4** Select **AUDIO I/F** and press.



**5** Select **FREQUENCY** and press.



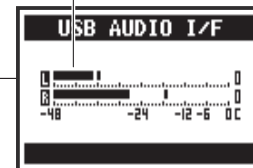
**6** Select a sampling rate and press.



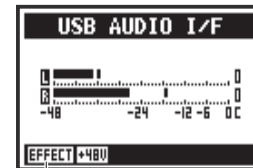
**7** Select **CONNECT** and press.



Input or output levels



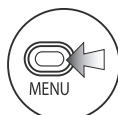
Two channels can be sent and received at 44.1 or 48 kHz while connected to a computer.



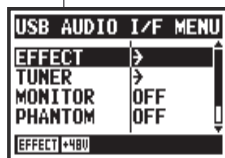
Active function

Ref.	Icon	Page
EFFECT		P.083
TUNER		P.075
MONITOR		P.070
PHANTOM		P.030
PLUG-IN		P.029

### Button operation in AUDIO I/F menu



Press.



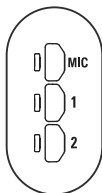
#### AUDIO I/F MENU

EFFECT	Use effects (only 44.1 kHz)
TUNER	Use tuner
MONITOR	Enable monitoring
PHANTOM	Enable phantom power
PLUG-IN	Enable plug-in power
DISCONNECT	End connection



Select and press.

### Selection of input source

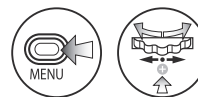


When you select an input the corresponding button lights, confirming the selection. To turn off the input, press the corresponding button so the light turns off.

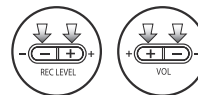
To monitor input signals, you must turn MONITOR on.

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

### These buttons are usable during setting



Open MENU and make settings



Adjust input and output levels

### 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 change this setting during recording and playback.

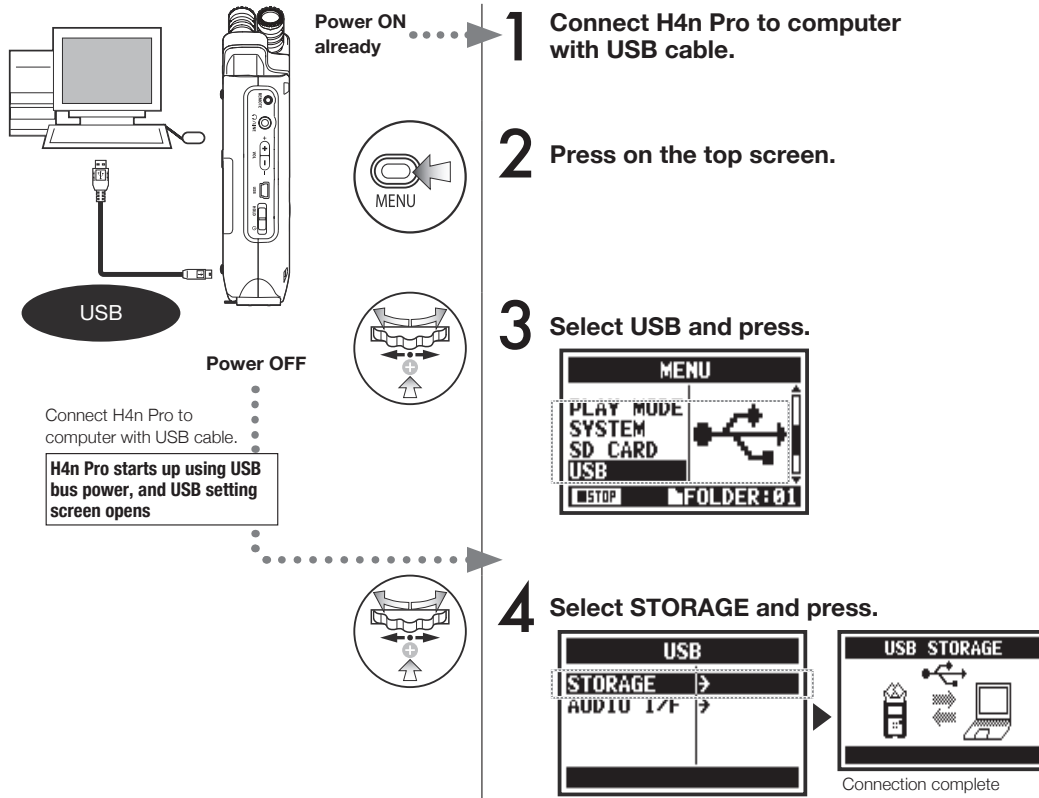
### HINT:

#### 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.



### 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.

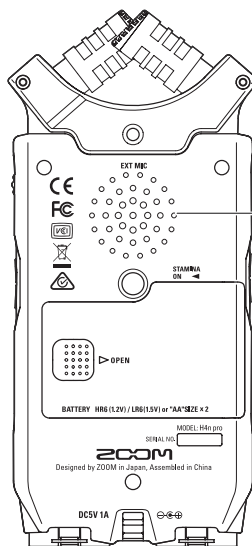
#### SD card reader use

- Use files recorded by the H4n Pro on your computer.
- Use audio files created on a computer on the H4n Pro.



## 6-7 Setup: Built-in speaker

The H4n Pro is equipped with a built-in mono speaker.



### H4n Pro built-in speaker

This is a mono speaker for playback. Use it to easily play and listen to recorded data without connecting headphones to the LINE/PHONE jack.

### 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

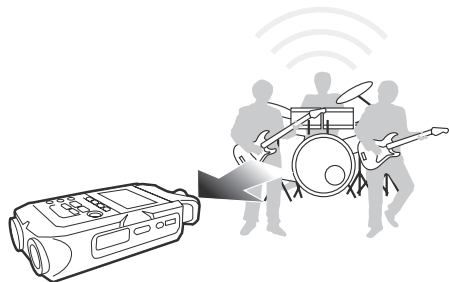
## 7-1 Mode overview

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.



- One-pass stereo recording of live performances and rehearsals
- Direct recording of a single instrument
- Field recording
- Voice memos
- Recording meetings

### • 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.

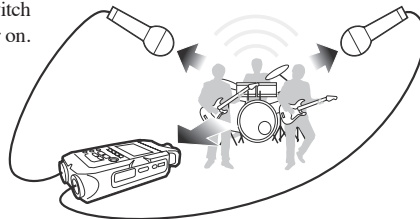
To enable STAMINA mode when using batteries, set the STAMINA switch before turning the power on.

►P015

- Field recording
- Live outdoor recording
- At conferences and in other situations when changing batteries is difficult

### • 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.

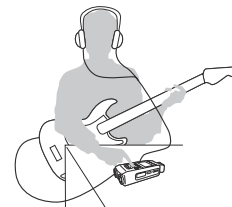


- Simultaneous recording with both line input and mics
- Surround recording via front and rear microphone placement
- Simultaneous recording of both ambient and direct sound sources
- Recording both ambient and direct sounds to add a live feel to recorded performances

### • 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.

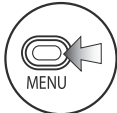
When creating a demo, you can record backing tracks at home and record instrumental tracks in the studio while listening to the backing tracks.



- Recording parts one track at a time
- Overdubbing
- Recording using effects
- Mixing track levels after recording
- Indoor and outdoor rehearsals

## 7-2 Switching and confirming modes

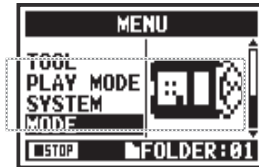
Be sure to select the appropriate mode for your application.



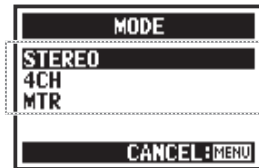
**1** Press.



**2** Select MODE and press.



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

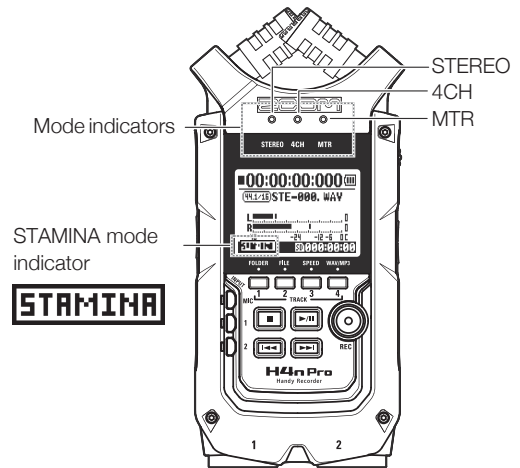


Note: To engage STAMINA mode, use the switch located in the battery compartment.

### HINT:

#### Mode confirmation

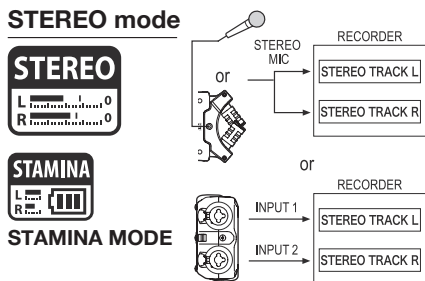
- The current mode is indicated by a mode indicator LED on the front panel.
- The H4n Pro will power up in the same mode it was in when turned off.
- When starting up for the first time, the default mode is STEREO.



## 7-3 Mode details

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

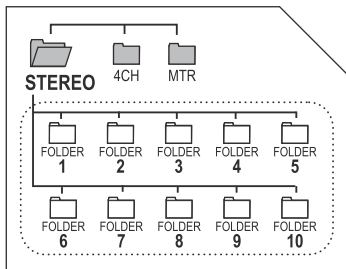
### STEREO mode



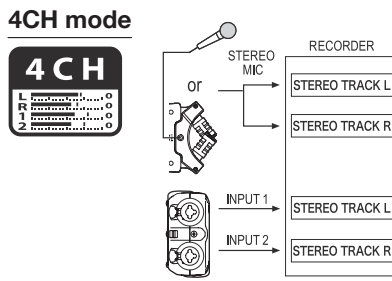
In STEREO mode, you can select 2 different inputs either INPUT MIC or INPUT 1 and 2, and record and play one stereo file at a time.

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.

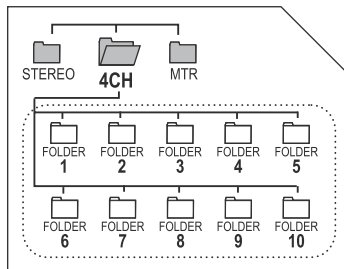


### 4CH mode

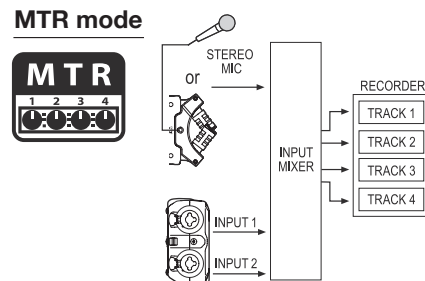


In 4CH MODE, the H4n Pro records two stereo WAV files: one stereo WAV file for the built-in mic or stereo mic input and one stereo WAV file for INPUT 1 and 2.

These FILES are saved in one of the ten 4CH sub-folders.



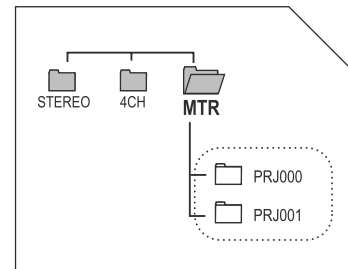
### MTR mode



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.

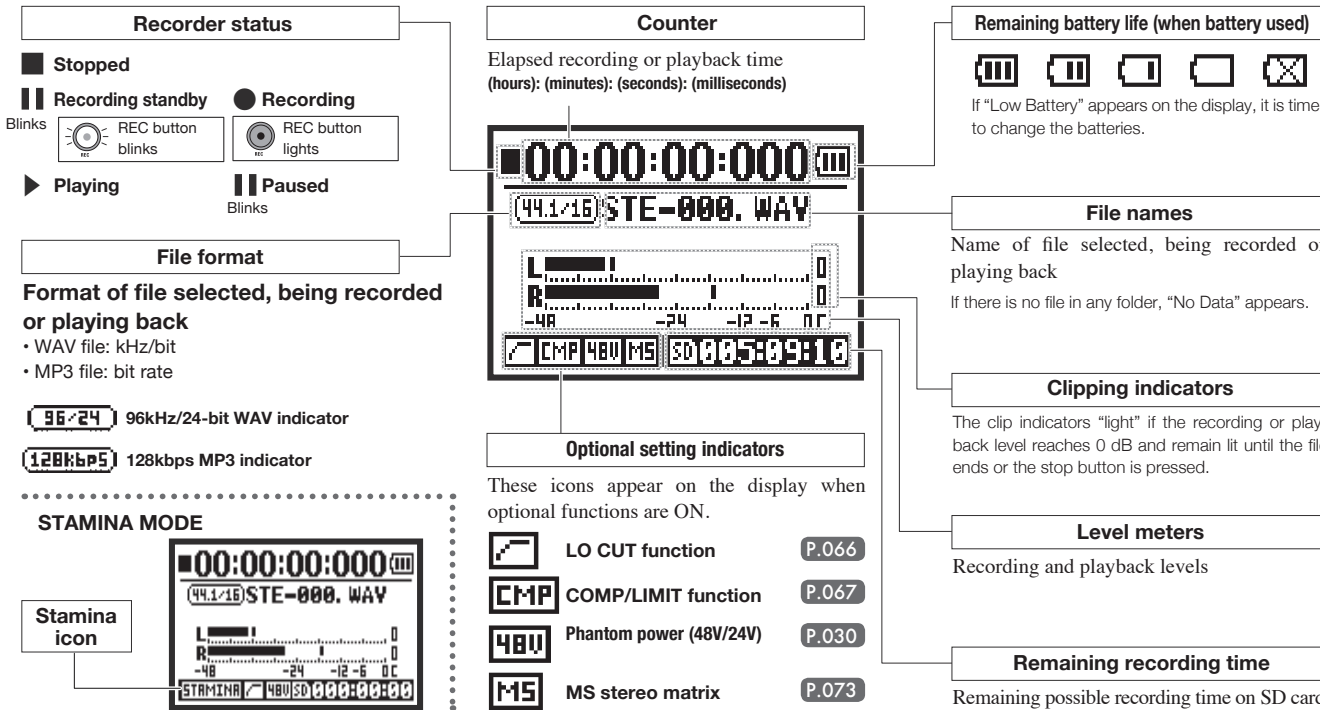
In MTR mode, project data and settings are saved as a project in the MTR folder.



# 8-1 Mode screens: STEREO and STAMINA modes



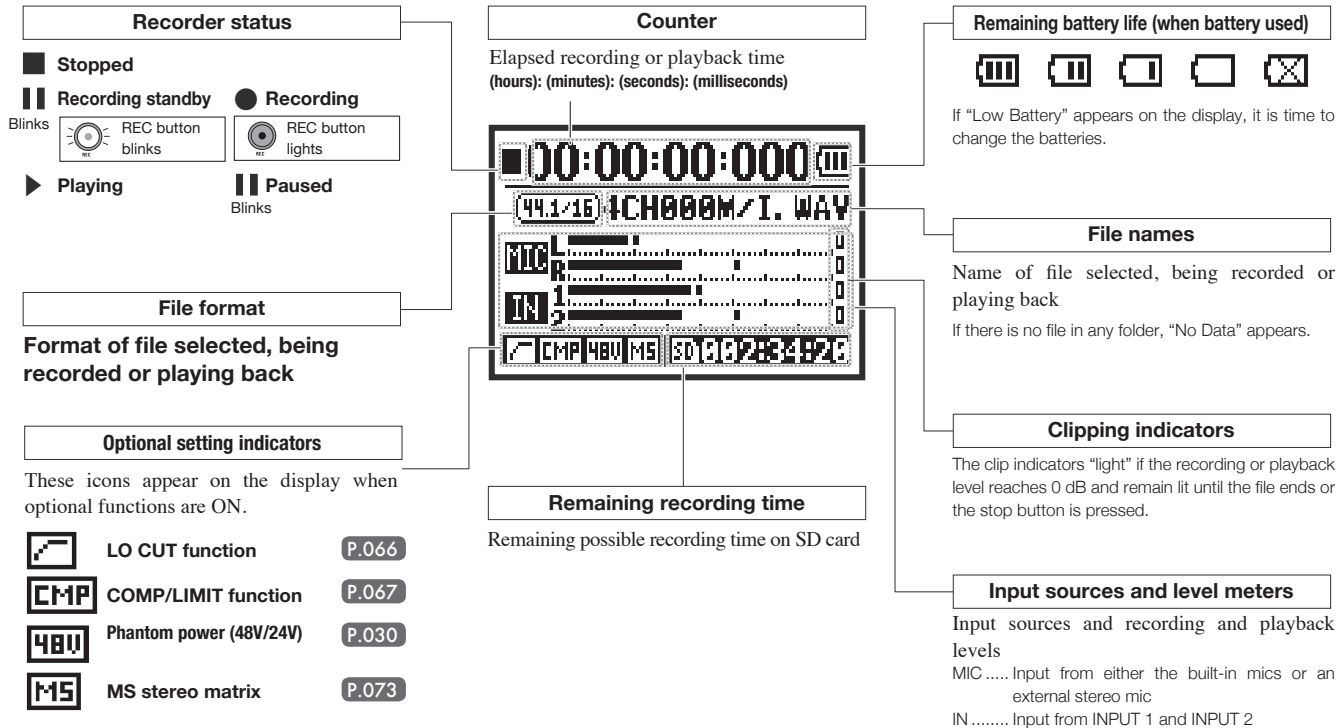
## • Explanation of the top screen



## 8-2 Mode screens: 4CH mode



### • Explanation of the top screen



# 8-3 Mode screens: MTR mode



## • Explanation of the top screen

### DIAL operations on top screen



### Recorder status

**Stopped**

**Recording**

**Recording Standby**

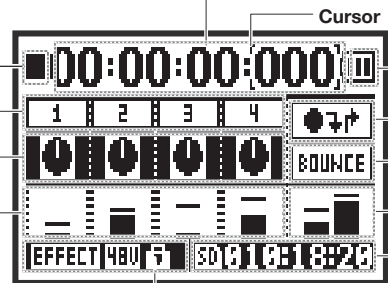
**Paused**

**Playing**

### 1 Counter

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

Counter function:  
Specify a time Ref. P.102



### Remaining battery life (when battery used)



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

### Optional setting indicators

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

- EFFECT** Effects P.083
- 48V** Phantom power (48V/24V) P.030
- Protect function** P.125

### 3 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. P.056

### Remaining recording time

Remaining possible recording time on SD card.

### 4 BOUNCE ICON

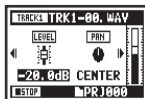
Selecting this icon brings up BOUNCE settings. P.123

### Track numbers

Icons are highlighted for tracks in recording standby.

### 2 Track menu icons

Select an icon to access the track menu where settings, including volume, panning and stereo/mono, can be made. P.057

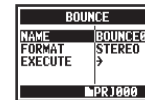


### Level meters

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

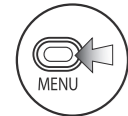
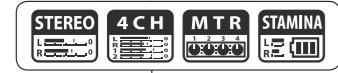
### L/R level meters

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.

**Cancelling:**  
To return to the top, press the MENU button more than 2 seconds.

**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.

Mode	Folder	File	Input	REC	TOOL	Play Mode	System	SD Card	USB	Mode
<b>STEREO mode</b>	▼									
<b>STAMINA mode</b>										
<b>4CH mode</b>	▼									
<b>MTR mode</b>	▼									

Mode	Mixer	Play Mode	System	SD Card	USB	Mode
<b>STEREO mode</b>						
<b>STAMINA mode</b>						
<b>4CH mode</b>						
<b>MTR mode</b>						

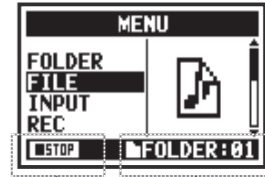
  

Mode	Tool	System	SD Card	USB	Mode
<b>STEREO mode</b>					
<b>STAMINA mode</b>					
<b>4CH mode</b>					
<b>MTR mode</b>					

Enable STAMINA mode with the STAMINA switch before starting the unit when running on batteries. P.015

**Information at MENU screen bottom**

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.

	Stopped
	Paused (playback)
	Playing back
	Recording standby/ paused
	Recording standby In MTR mode and OVER WRITE recording
	Recording




# 9 Optional remote control operation

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

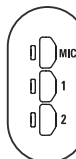
## Remote control button operation

### VOLUME +/-

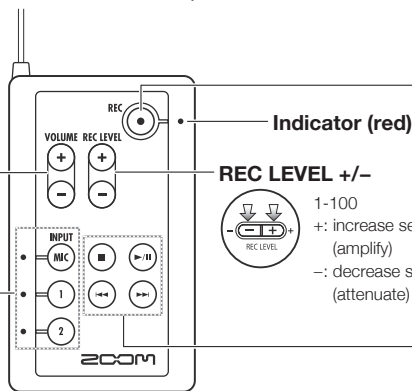


0-100  
 +: increase (raise)  
 -: decrease (lower)


### 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)



### Recording and placing marks.

<b>STEREO</b>	Stopped	Enter recording standby and reset counter to 0.	
<b>4 CH</b>	Recording standby	Start recording and counter.	
<b>STAMINA</b>	Recording	Playing	Add mark (WAV files only)

This can be used only when a track is in recording standby.

<b>M T R</b>	<b>OVER WRITE recording</b>
Stopped	Enter recording standby
Recording/standby	Stop recording (playback continues)
Playing	Recording starts and counter continues
<b>M T R</b>	<b>ALWAYS NEW recording</b>
Stopped	Stop recording and counter
Recording standby	Start recording and start counter

## Transport buttons

### FF and REW buttons

<b>STEREO</b>	Stopped	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)
<b>4 CH</b>	Playing	
<b>STAMINA</b>	Playback paused	
		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.
<b>M T R</b>	Stopped	Press for less than one second FF: Skip forward one second REW: Return to beginning
	Playing	
	Playback paused	Press for more than one second Search forward/backward

### STOP button

<b>STEREO</b>	Recording/recording standby/paused	Stop recording and reset counter to 0
<b>4 CH</b>	Playing/paused	Stop playback and stop counter
<b>STAMINA</b>		
<b>M T R</b>	Recording	Stop recording and stop counter
	Playing	Stop playback and stop counter
	Recording paused	
	Playback paused	Stop recording/playback

### PLAY/PAUSE button

<b>STEREO</b>	Stopped	Start playback and start counter
<b>4 CH</b>	Recording standby	Start recording and counter
<b>4 CH</b>	Recording/paused	Resume paused recording
<b>STAMINA</b>	Playing/paused	Resume paused playback
<b>M T R</b>	Stopped	Start playback
	Recording	While overwrite setting: Stops recording While always new setting: Pauses recording
	Recording standby	Start recording and the counter begins to move
	Playing	Pause playback