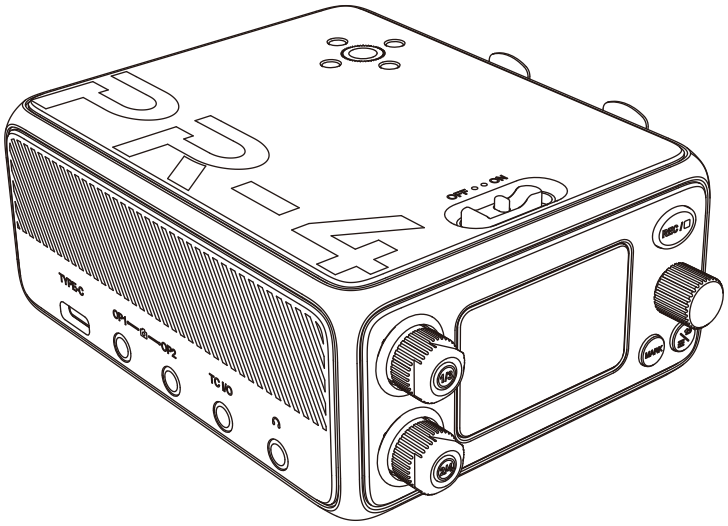
DEITY®
MICROPHONES



PR4

User Guida

English

Table of Contents

Preface

Thank you for using this product. To use this product better and more safely, please read the user manual carefully.

Scope of Application

This user guide is suitable for the PR4 recorder of Shenzhen Aputure Innovation Technology Co., Ltd. (hereinafter referred to as Aputure). It describes its appearance dimensions, features, technical requirements, and precautions.

The PR4 recorder is equipped with 4-channel input, 6-track recording, and 2-channel output, allowing for flexible and convenient routing operations. It supports high-quality 192kHz/32Bit Float recording, AES digital signal input, and can be used as an audio interface. It features built-in wireless timecode and can be used with the Sidus Audio™ application to achieve centralized control of Deity ecosystem devices.

The PR-4 adopts a portable design concept overall, providing users with a more convenient operating experience to meet the needs of carrying it outdoors. It is suitable for various professional audio recording scenarios such as film and television, interviews, outdoor recording, and field recording.

Terminology

Channel: Refers to the input/output path of an audio signal, representing the physical port through which the signal enters or leaves the device.

Track: Refers to the medium used for recording, editing, and playback of audio. After entering through a channel, the signal can be routed to a specific ISO track or a mix track.

Routing: Refers to the signal's transmission path and assignment method.

Mixing: The process of combining signals from multiple tracks.

Fader: A physical control on a mixer—either a rotary knob or a linear slider—used to adjust the level at which each channel's signal is sent to a bus. Moving the fader down attenuates the signal; moving it up increases the level. Most faders provide a greater attenuation range than gain range and include a "0 dB gain" position, at which the input level is passed directly to the bus without amplification or attenuation.

Pre-fader: The recording signal is captured before fader adjustment, so the recorded audio is not affected by fader level changes. ISO tracks are typically recorded pre-fader to ensure that any fader movement does not alter the recorded signal.

Post-fader: The recording signal is captured after fader adjustment, so the recorded audio is affected by fader level changes.

Pan: Used to position a sound within the stereo field between the left and right channels. When centered, the signal is equally sent to both channels; panning left or right biases the signal toward the corresponding channel.

AES3: A standard for exchanging digital audio signals between professional audio devices. AES3 transmits two channels of PCM audio over a balanced 110-ohm connection, most commonly using XLR-3 cables.

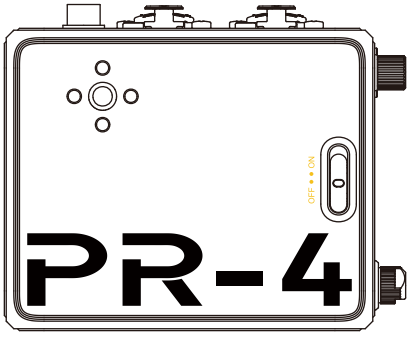
AES42: A digital interface standard for microphones and their inputs. AES42-compliant microphones output digital audio directly via an XLR connector instead of analog signals and require power.

Basic / Expert Mode: This device provides two operating modes. Basic mode has no fader concept and is intended for entry-level users; Expert mode includes faders and more detailed controls, suitable for professional users.

Arming: In a recorder, the Arming function determines which tracks will actually be recorded.

Solo: In a recorder, the Solo function allows monitoring of a single track while temporarily muting all other tracks. It is an essential monitoring tool for mixing, live recording, and post-production, and does not affect the final recorded content.

List Of Articles



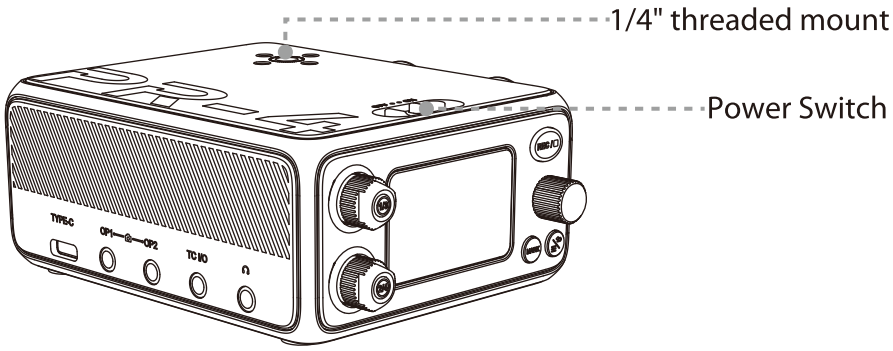
PR4 × 1

** All illustrations in this manual are for reference only. Plug specifications vary per region. The physical product may also differ from the schematic diagram due to continuous updates and upgrades.*

** Not include NP-F550 battery and SD card.*

Product Panel Views

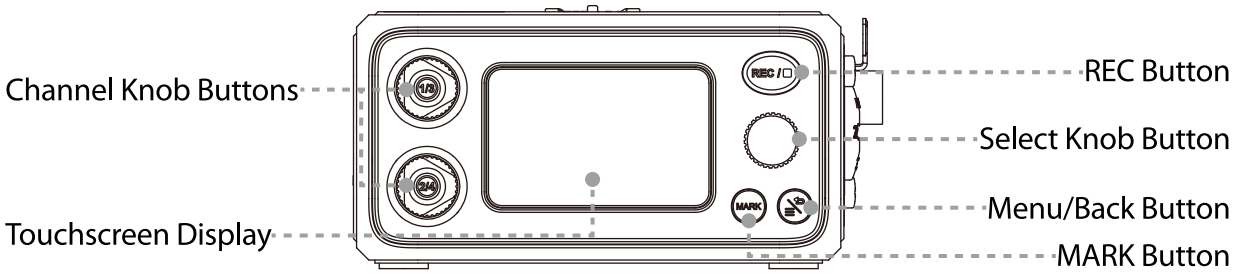
1. Top Panel



1. 1/4" threaded mount: Can be used to attach a microphone stand or other mounting accessories.

2. Power switch: When the device is powered off, toggle to ON to turn it on. When powered on, if the device is in recording mode, you must exit recording or playback before switching to OFF to power down.

2. Front Panel (Basic Mode)



1. Channel Knob Buttons

(Basic Mode)

● Left knob (CH 1/3): Press to enter Track 1/3 settings; rotate to adjust gain.

● Left knob (CH 2/4): Press to enter Track 2/4 settings; rotate to adjust gain.

(Expert Mode)

● Left knob (CH 1/3): Press to enter Track 1/3 settings; press and rotate to adjust gain; rotate to adjust fader level, Turncounterclockwisequickly, thefadervaluewillimmediatelychangeto-inf.

● Left knob (CH 2/4): Press to enter Track 2/4 settings; press and rotate to adjust gain; rotate to adjust fader level, Turncounterclockwisequickly, thefadervaluewillimmediatelychangeto-inf.

2. REC Button: When stopped, press to start recording. During recording, press and hold for 3 seconds to stop recording.

3. Select Knob Button

● Single press to enter the Quick Settings screen; rotate the knob to quickly select options.

● Rotate — Adjust headphone volume

(In the "HP Knob Control" menu, this can be switched to "SET", changing rotation to control headphone routing.)

● Press & rotate — Switch headphone routing

(When "HP Knob Control" is set to "SET", press & rotate adjusts headphone volume instead.)

4. Menu/Back Button: When on the main interface, press this key to enter the menu interface; in the menu interface or operation interface, press this key to back to the previous level menu/interface. Triple-click this key on the main interface to lock and unlock the device.

5. MARK Button: Add marker. Press the MARK key during recording to add a marker to the audio. Marker points can be read by TC SYNC software when reading the material.The maximum number of markers per recording file is100.

6. Touchscreen Display:

● On the home screen, Tap the screen: Switch channels 1/2 to channels 3/4

● On the home screen, Swipe left → right: Enter the recording settings screen

● On the home screen, Swipe right → left: Enter the TC (timecode) menu

● On the home screen, Swipe top → bottom: Enter the “Next Take” settings

  ◯ When not recording: edits apply to the next recording file

  ◯ During recording: edits apply to the current recording file

● On the home screen, Swipe bottom → top:

  ◯ When not recording: enter “Previous Take” settings

  ◯ During recording: enter “Quick Notes” for the current recording file

7. Key Combinations:

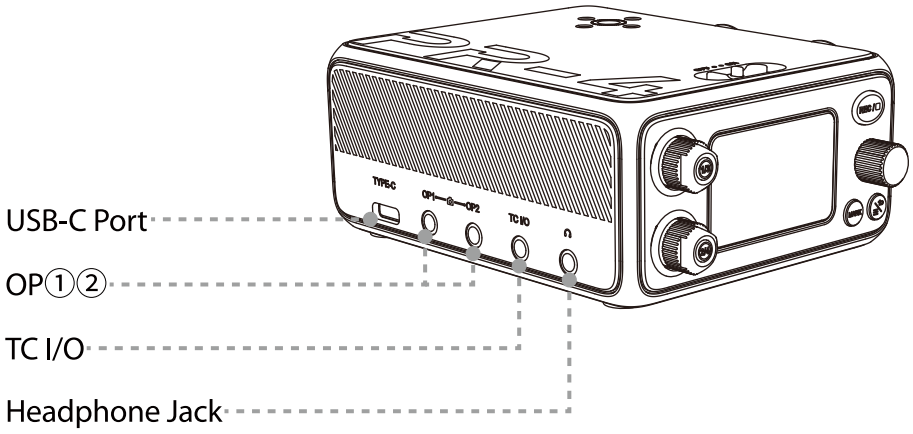
● MARK + Menu/Back: Scene name +1 (Number +1, or letter advances to the next character)

● MARK + Channel Knob (1/2/3/4): Arm channel 1/2/3/4

● Menu/Back + Channel Knob (1/2/3/4): Channels 1/2: Toggle 48V phantom power; Channels 3/4: Toggle 5V power; In AES42 mode, enable 10V power supply.

● Right Knob + Channel Knob (1/2/3/4): Solo monitoring for channel 1/2/3/4

3. Left Side



1. USB-C Port:

● Power supply: By default, supplies power to the device; can also charge an NP-F550 battery, supporting 12V fast charging. When connected to a device that supports data communication, charging is disabled.

● File transfer: Connect to a computer while powered on and select USB Mode: Card Reader in the menu. In this state, NP-F550 battery charging is not supported.

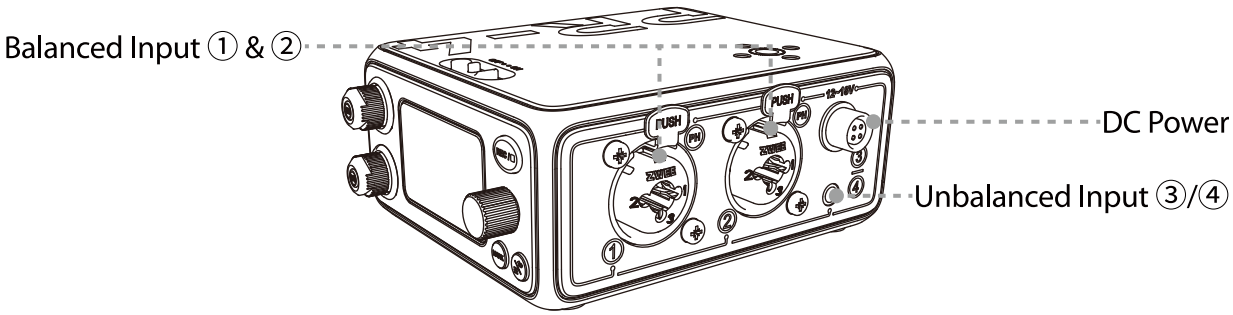
● Audio interface: When connected to a computer while powered on, the device functions as a USB audio interface by default, supporting two-channel output. In this state, NP-F550 battery charging is not supported.

2. OP①②: Analog output interfaces

3. TC I/O: Timecode input/output interface

4. Headphone Jack: Wired headphone monitoring output interface

4. Right Side



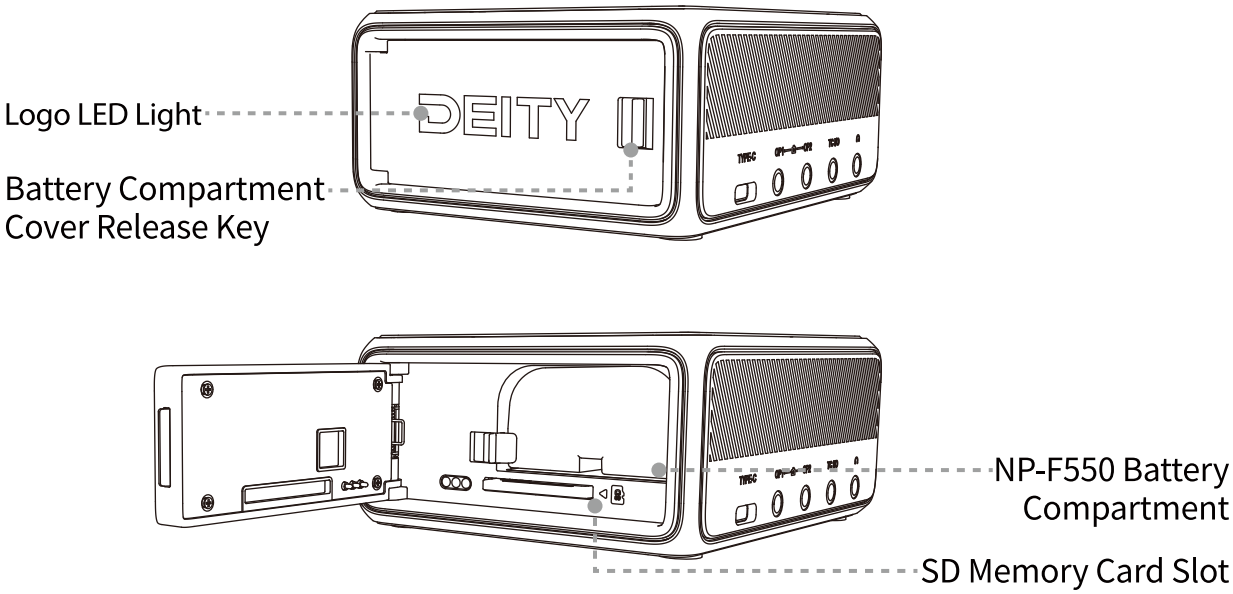
1. Balanced Input ① & ②: Input channels 1/2 are compatible with XLR and 6.35mm TRS jacks. Support AES digital input.

XLR (1:GND, 2:HOT, 3:COLD): TRS (Tip:HOT, Ring:COLD, Sleeve:GND)

2. Unbalanced Input ③/④: 3.5mm TRS dual-channel input. When the XLR input ①② is set to AES input, the unbalanced input ③④ is disabled. Specific settings details see "Main Menu Description > Input Settings".

3. DC Power: Hirose-4Pin power input port, supports 12-18V DC input.

5. Rear



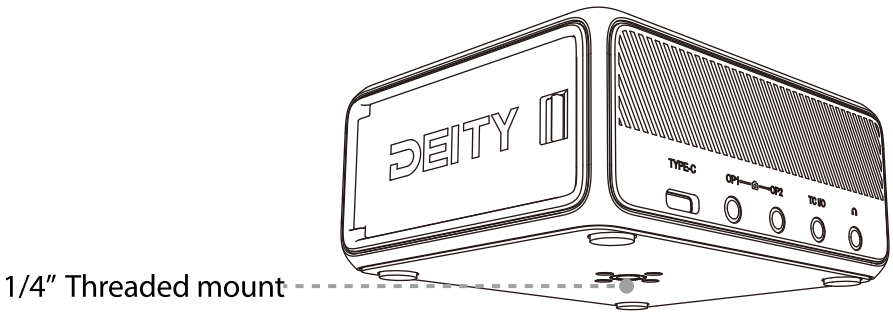
1. Logo LED Light: Can be used as a tally light, turn off can be set in the menu.

2. Battery Compartment Cover Release Key.

3. NP-F550 Battery Compartment.

4. SD Memory Card Slot, supports up to 1TB SD card.

6. Bottom Panel

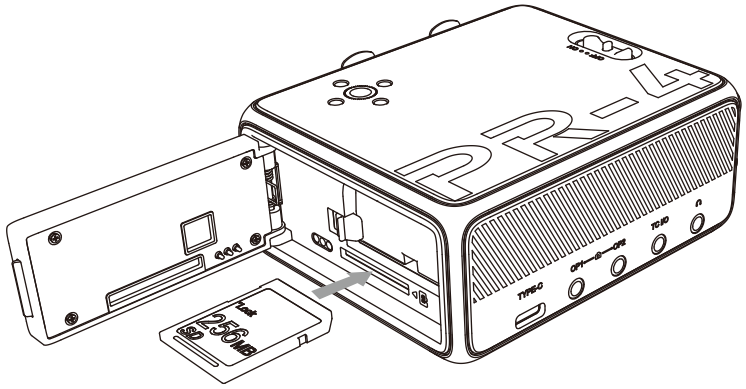


1/4" Threaded mount: Can be used for fixed installation on tripod mounts, etc.

Quick Setup Guide

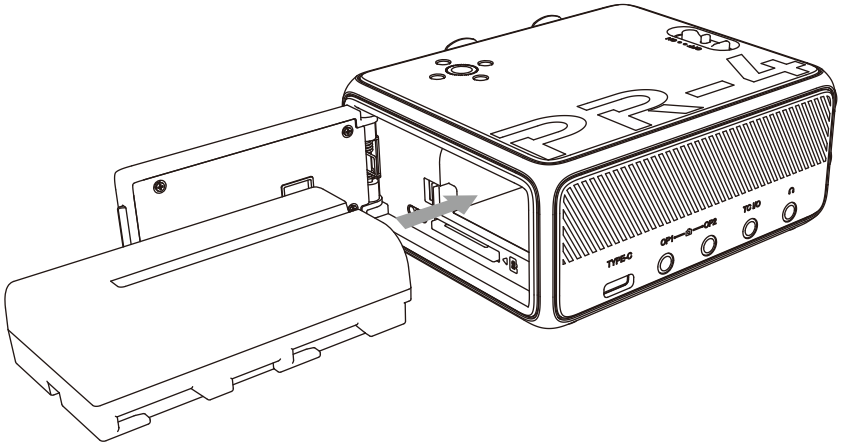
1. Insert SD Card

The PR-4 has a built-in 64G SSD. The external SD card is installed from the rear battery compartment position.



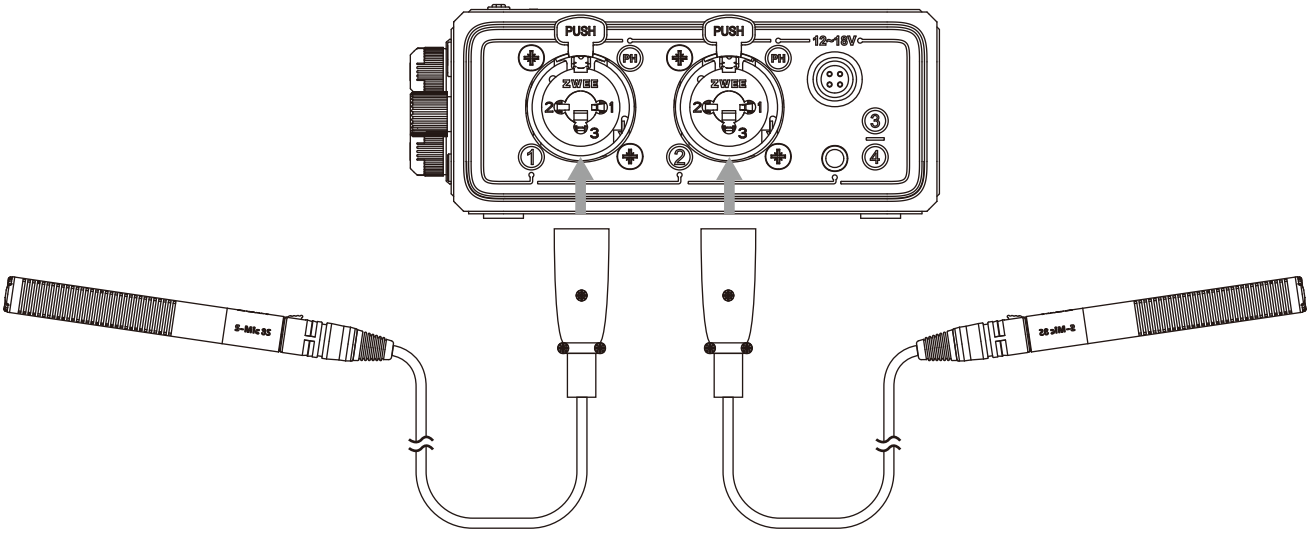
2. Install Battery

Install an NP-F550 battery into the rear battery compartment.

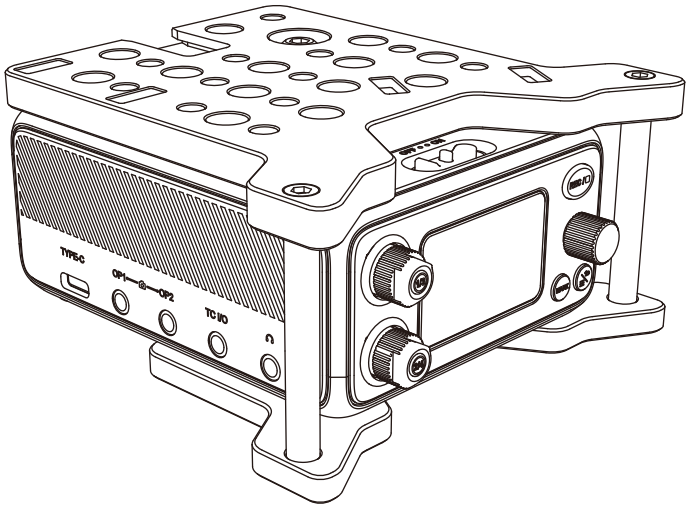


3. Connecting an External Microphone

Connect the microphone to this device.

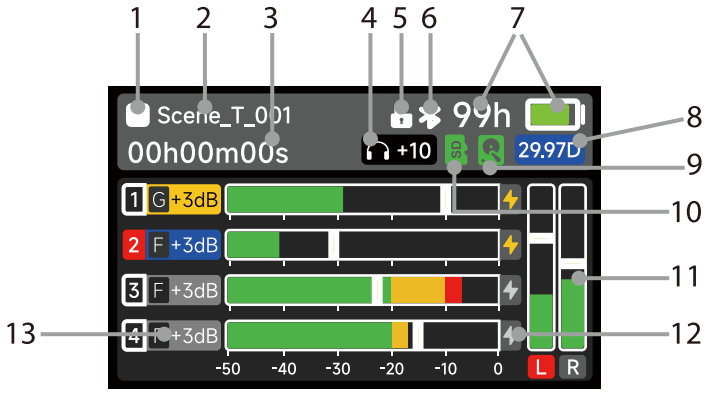


The DEITY microphone stand accessory can be used for microphone installation.



Interface Description

1. Main Interface



1. Recording Status Indicator:

State	Indicate
Stop	(White ■ icon)
Record	(Red ● icon)

2. Current File Name: Displays the name of the current file. During recording, it shows the name of the active recording file. The file name can be customized in the menu.

3. Current File Duration: Displayed in hours : minutes : seconds. During recording, it shows the elapsed recording time of the current file.

4. Headphone Monitoring Gain

5. Device Lock Status

6. Bluetooth App Status (On/Off)

7. Battery Remaining Time / External Power Status: Displays the estimated remaining battery runtime. When external power is connected, the input voltage is shown.8.

Current Timecode Frame Rate, Flashes when timecode is not synchronized.

9. Internal SSD Card Status:

● Green: Normal recording

● Red: Remaining capacity less than 1 hour of recording time

10. External SD Card Status:

● Green: Normal recording

● Red: Remaining capacity less than 1 hour of recording time

No icon is displayed when no SD card is inserted.

11. Individual Channel / Mix Track Meters with Arming Indication:

Displays the peak and VU audio levels of each individual channel and the L/R mix tracks. Armed tracks are indicated in red.

For details on enabling/disabling track arming, see Main Menu > REC > Arm Set.

You can quickly toggle the arming status of individual channels using the shortcut “MARK” + “1/2/3/4 Channel Knob”.

12. Channel Port Power Supply Indicator:

● Turns yellow when channel power is enabled.Channels 1/2: XLR 48V phantom power indicator

● Channels 3/4: TRS 5V power indicator

● In AES42 mode, a 10V power supply indicator is displayed.

You can quickly toggle channel power using the shortcut “Menu” + “1/2/3/4 Channel Knob”.

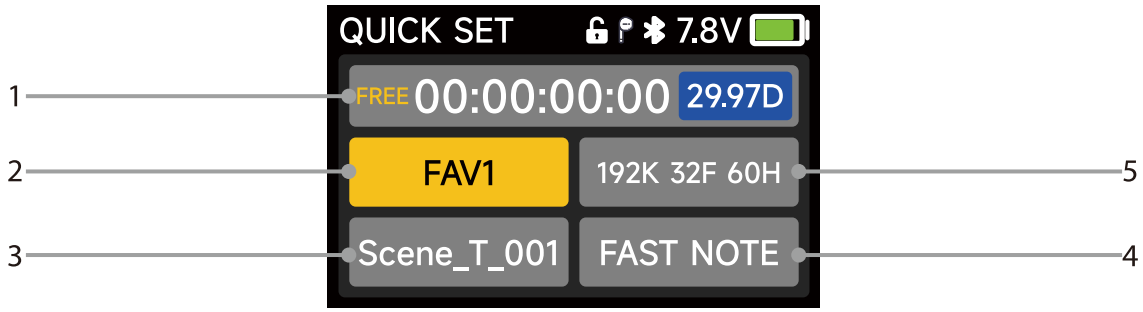
13. Channel Gain / Fader Status:

Yellow indicates the knob is adjusting gain; blue indicates the knob is adjusting the fader.

● Basic Mode: Only gain adjustment is available.

● Expert Mode: Fader adjustment is active by default; press the channel knob and rotate it to adjust gain.

2. Quick Interface



On the main interface, short press the select Knob Button to enter this interface. This interface displays key items for recording, and you can directly go to the corresponding setting menu interface via knob selection. (The timecode display is for viewing only and cannot be directly selected. Swipe left on the home screen to quickly access the timecode settings.)

Displays the settings for the current recording when recording; displays the settings for the next recording when not recording.

1. Timecode information, can be modified in the "Timecode" menu settings.

2. Monitor Preset, can set headphone output routing in the "Output > Headphone " settings. PR4 supports saving three monitoring presets. The default preset names are Stereo, FAV1, FAV2, and FAV3, and users can rename the presets as needed. Displayed in the format “HP - xxx (name)”.

3. Recording File Name: Tap to edit the current file name.

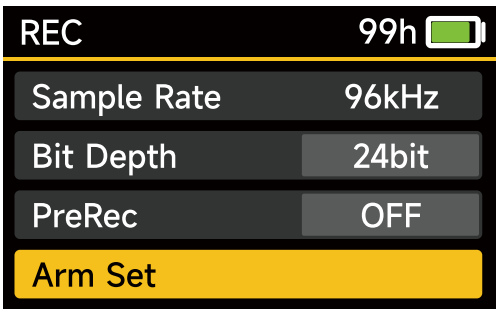
4. Quick Note: Tap to select preset quick note entries.

5. Recording Parameters: Displays the sample rate, bit depth, and the available recording time under the current settings. (When both cards are enabled, displays the remaining recording time of the card with the longer available recording time.)

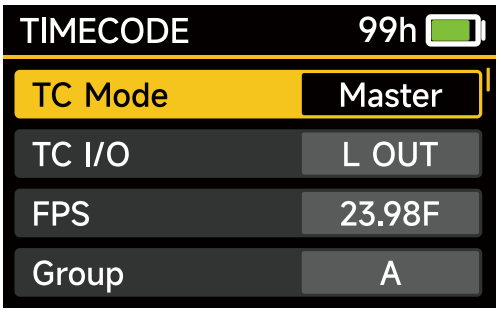
3. Other Touchscreen Shortcut Interfaces

The touchscreen interface is only active on the home screen.

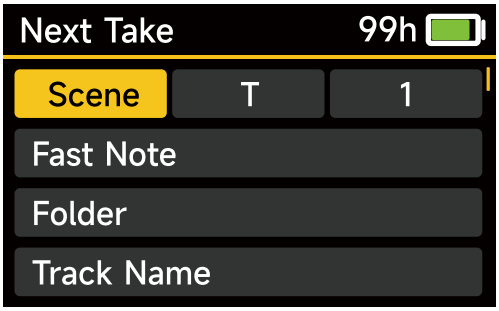
1. From the Main Menu, swipe left to right to enter the Quick Recording Settings screen, where you can directly set the sample rate, bit depth, pre-record, record arming, formatting, and related options.



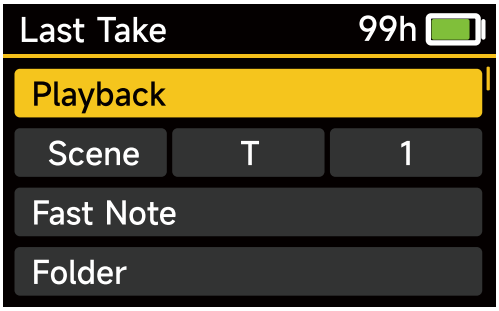
2. In the main menu, swipe from right to left to enter the quick timecode settings interface, where you can adjust the timecode mode, input/output, frame rate, group, synchronization, settings, color, and other options as needed.



3. In the main menu, swipe from top to bottom to enter the next quick settings interface, where you can quickly set notes, folders, track names, and related options.

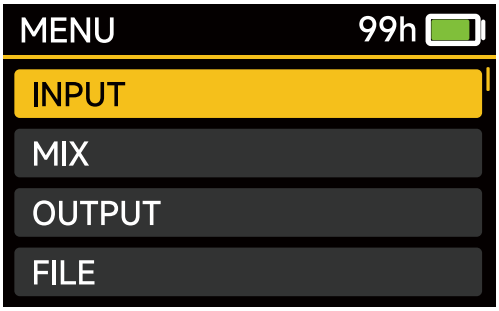


4. In the main menu, swipe from bottom to top to enter the previous quick settings interface, where you can configure playback, quick notes, folders, track names, and other related settings.



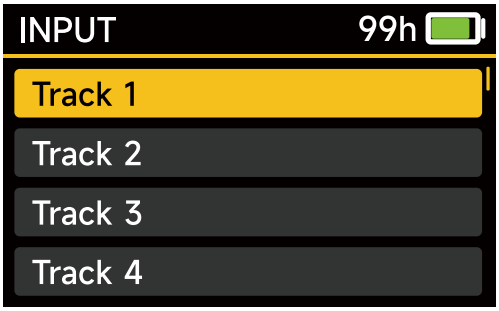
Main Menu Description

Press the Menu button on the main interface to enter the main menu interface:



1. Input Settings

The Input Settings menu includes settings related to input tracks, linked settings, limiter on/off, and single-track recording mode (pre-fader or post-fader). Each track submenu covers: mode settings, gain settings, fader settings (not adjustable in basic mode), low-cut settings (Off, 75Hz, 150Hz), pan settings, phase settings, delay settings, and equalizer settings.

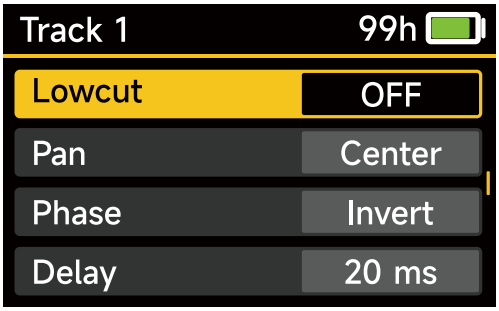


1.1 Track 1 & Track 2 & Track 3 & Track 4

● By default, for analog input, Track 1 & Track 2 correspond to channels 1 and 2 of the XLR interface, respectively. Each track's parameters can be individually configured, including input mode, gain, fader, low-cut, pan, phase, delay, and EQ.

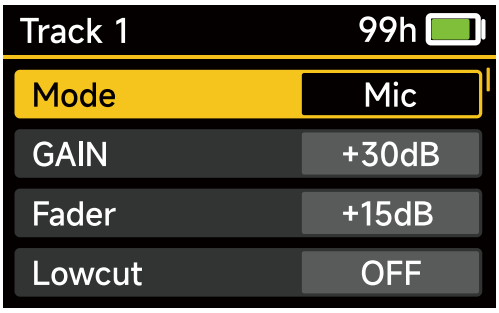
● By default, for analog input, Track 3 & Track 4 correspond to the 3.5mm TRS input interface. Their parameters can be individually configured, including input mode, gain, fader, low-cut, pan, phase, delay, and EQ.

● When any track is set to AES digital input mode, all track modes will be synchronized to AES digital input. The 3.5mm TRS input channels are disabled, and analog and digital inputs cannot be used simultaneously.



Mode

The input source selection for Track 1 and Track 2 allows you to choose the mode based on the connected external input: Mic, Mic 48V, Line Input, AES3 Digital Input, or AES42 Digital Input.



● When Microphone or Line Input is selected, each XLR corresponds to a single input channel—occupying one track.

●When Digital Input (AES3 or AES42) is selected, the PR4 switches entirely to digital input mode. Each XLR corresponds to two input channels—occupying two tracks. That is, the signal from Channel 1 is mapped to Track 1 and Track 2, corresponding to AES3-1 and AES3-2, or AES42-1 and AES42-2. In this mode, the settings for Track 3 and Track 4 also switch to digital input, and the 3.5mm TRS physical input interface is disabled.

The input source selection for Track 3 and Track 4 allows you to choose the mode based on the connected external input: Microphone, 5V Microphone, Line Input, AES3 Digital Input, or AES42 Digital Input.

Gain

The gain setting corresponds to the external physical knob and indicates the gain controlled by the channel. The gain range depends on the type of input selected.

- Microphone: 0 to +60dB
- 48V: 0 to +60dB
- Line: -20 to +30dB
- AES3: -20 to +40dB
- AES42: 0 to +60dB

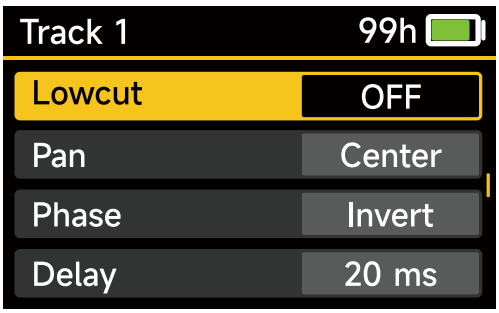
Fader (Not adjustable in Basic Mode)

The fader setting corresponds to the external physical knob and controls the channel's volume level. This setting affects the mix L/R as well as the level of any track set to “Post-Fader.” Range: continuous from -∞ to +20dB.Quickly rotate the fader knob counterclockwise, and the value will be set directly to-inf.

In Basic Mode, the fader defaults to 0 and cannot be adjusted.

Low Cut

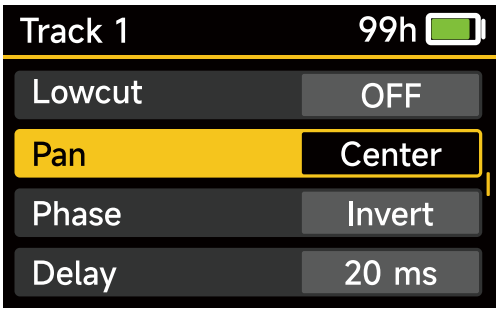
The low-cut filter is off by default, with selectable options of 75Hz or 150Hz. When enabled, it attenuates audio below the selected frequency. The low-cut filter can reduce low-frequency noise such as wind, air conditioning, and projectors. Set the cutoff frequency of the low-cut filter to match the noise environment.



Pan

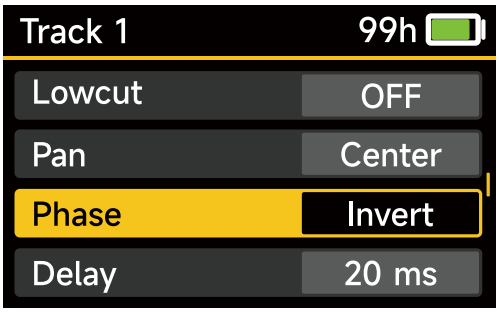
In this mode, you can set the stereo pan position of each channel in the L/R mix. The default is "Center," and you can choose Left, Center, or Right. When panned to "Left" or "Right," the signal is sent accordingly to the left or right mix.

This function is greyed out and cannot be adjusted in PR4-Basic mode.



Phase

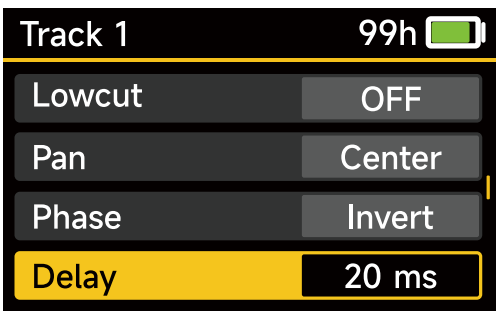
In this mode, you can set whether the phase of each input signal should be inverted. The default is "Off." (Note: If two or more microphones are used to record the same source and the sound seems unclear, inverting the phase of one or more inputs can improve audio quality.)



Delay

In this mode, you can set the delay time for each input signal. The default is "0 ms" (no delay), adjustable from 0–50 ms.

This function compensates for time differences between input signals or delays caused by distance differences between connected microphones.



Equalizer Settings

Channel equalizer. Each input channel is equipped with a 3-band parametric equalizer, which can be turned on or off. The default state is off.The equalizer allows you to boost or cut specific frequency ranges. It can be used to enhance the sound of individual instruments, adjust the balance across a wide frequency range, or reduce unwanted frequencies.

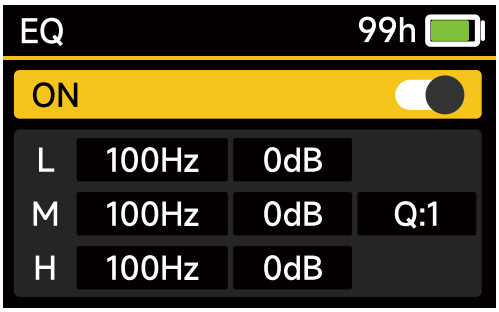
The equalizer is divided into Low (L), Mid (M), and High (H) bands, each of which allows you to set the center frequency, adjust gain, and adjust Q value.

●The center frequency for all three bands can be customized.

●L, M, and H frequencies are adjustable, with different ranges. Adjusting the frequency controls the gain for that frequency range (boost or cut) to improve sound quality, solve live recording issues, and make vocals or ambient sound cleaner, clearer, and more intelligible.

●Gain range per band: -18 dB to +18 dB.

●Q value range 1 to 30. A higher Q value results in a narrower affected frequency band around the set frequency (sharper), while a lower Q value affects a wider frequency band (smoother).



1.2 Stereo Link

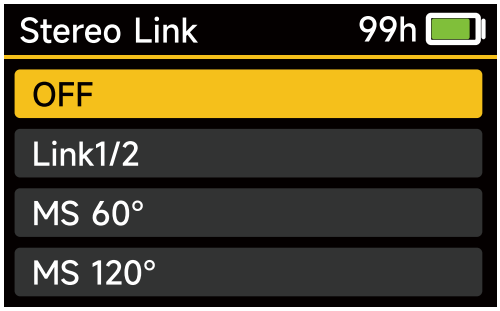
In this mode, you can set the channel linking status. Audio from Channels 1–2 can be recorded as a stereo audio file. Linking options include: Unlinked, Link 1/2, MS 60° (Narrow), and MS 120° (Wide). When channel linking is enabled, the settings in the Track 1 menu will also apply to Track 2.

In linked mode, parameters of Input Track 2 will follow those of Input Track 1.

In MS mode, Left Knob 1/3 adjusts gain or fader parameters; Left Knob 2/4 adjusts MS ratio. Rotating left increases M ratio and reduces S ratio, resulting in a more centered sound; “C” indicates a centered stereo image; rotating right reduces M ratio and increases S ratio, resulting in a wider sound.

Note: MS60° and MS120° are both Mid-Side stereo recording modes. A higher M value results in a more focused sound, while a higher S value results in a wider sound. In 60° mode, the default value is M10 with a lower Side level, producing a more focused sound with a narrower angle; in 120° mode, the default value is M6 with a higher Side level, producing a wider sound with a broader angle. In both modes, MS ratio can be adjusted using Left Knob 2/4.

In AES mode, Link is disabled.

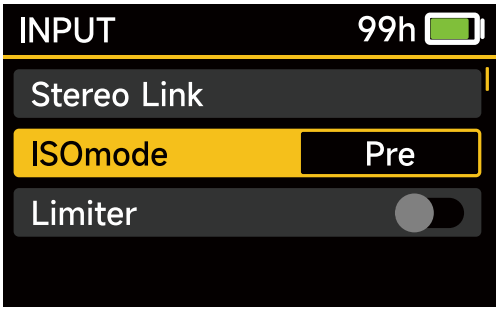


1.3 ISO Mode (Track Record Mode)

In this mode, you can set the position where the single-track audio is extracted in the audio chain. The setting applies to all four input channels simultaneously. The default setting is Pre-Fader.During recording, this mode is greyed out and cannot be modified.

● Pre-Fader: The single-track signal is extracted before the fader control. The recorded single-track audio is not affected by the fader.

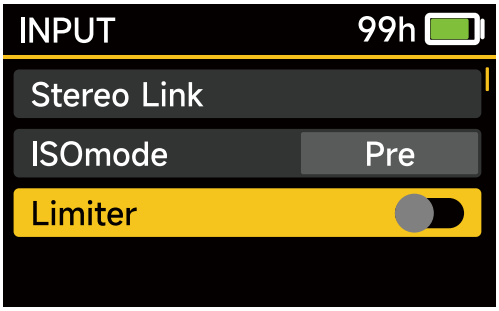
● Post-Fader: The single-track signal is extracted after the fader control. The recorded single-track audio is affected by the fader.



1.4 Limiter

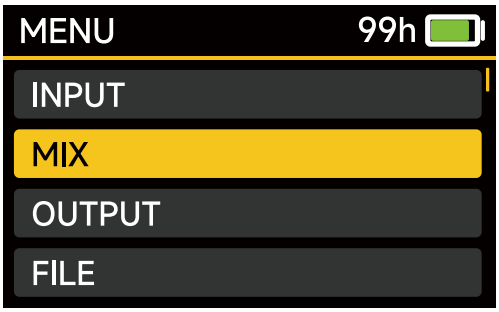
In this mode, you can turn the input limiter on or off. The default is off.

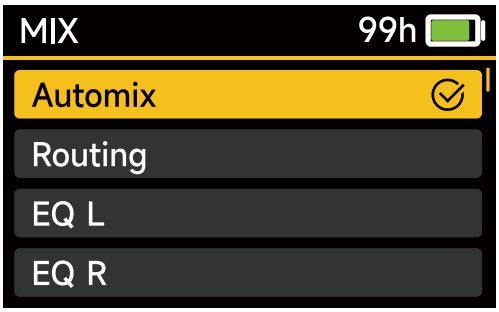
Using the limiter helps prevent distortion caused by sudden excessive input levels.



2. Mix

Mix contains Automix, Routing (Mix L & Mix R), Left Equalizer, Right Equalizer.





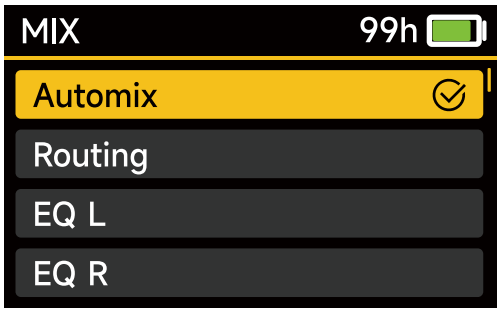
2.1 Automix

In this mode, you can enable or disable the automatic mixing function. The default is off.

Automatic mixing is primarily used when multiple signals are input. The software can automatically adjust fader parameters to reduce environmental noise and ensure that multiple signals achieve a consistent level.When enabled, MS link functions are disabled, and the menu will be greyed out.

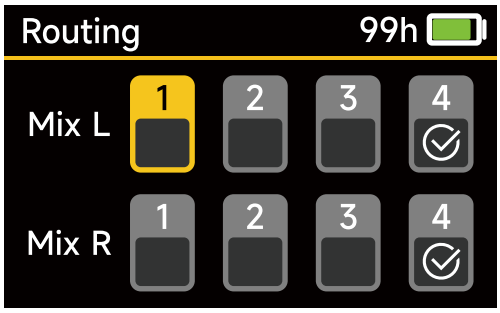
● When the single-track recording mode is set to **Pre-Fader**, the average level for automatic mixing is -15 dB.

● When the single-track recording mode is set to **Post-Fader**, the automatic mixing level is defined by the upper-average limit based on the fader settings for each channel.



2.2 Routing

In this mode, you can set the routing channels for Mix L and Mix R.



2.3 EQ L

In this mode, you can set the equalizer parameters for Mix L. The default state is off.

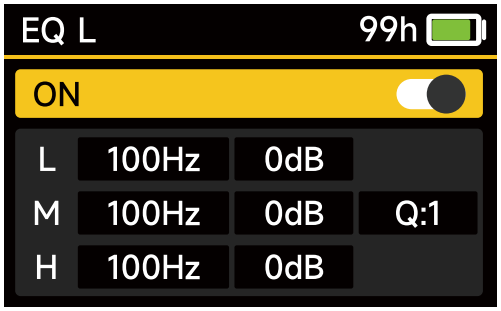
The left-channel equalizer features a 3-band parametric EQ, which can be enabled or disabled. The EQ is divided into Low (L), Mid (M), and High (H) bands, each allowing you to set the center frequency, adjust gain, and adjust Q value.

●The center frequency for all three bands can be customized.

●L, M, and H frequencies are adjustable, with different ranges. Adjusting the frequency controls the gain for that frequency band (boost or cut), improving sound quality, solving live recording issues, and making vocals or ambient sound cleaner, clearer, and more intelligible.

●Gain range per band: -18 dB to +18 dB.

●Q value range 1 to 30. A higher Q value produces a narrower affected frequency band around the set frequency (sharper), while a lower Q value affects a wider frequency band (smoother).



2.4 EQ R

In this mode, you can set the equalizer parameters for Mix R. The default state is off.

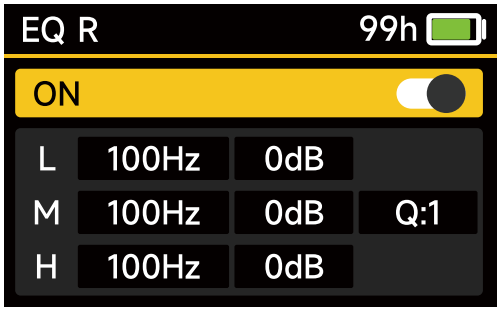
The right-channel equalizer features a 3-band parametric EQ, which can be enabled or disabled. The EQ is divided into Low (L), Mid (M), and High (H) bands, each allowing you to set the center frequency, adjust gain, and adjust Q value.

●The center frequency for all three bands can be customized.

●L, M, and H frequencies are adjustable, with different ranges. Adjusting the frequency controls the gain for that frequency band (boost or cut), improving sound quality, solving live recording issues, and making vocals or ambient sound cleaner, clearer, and more intelligible.

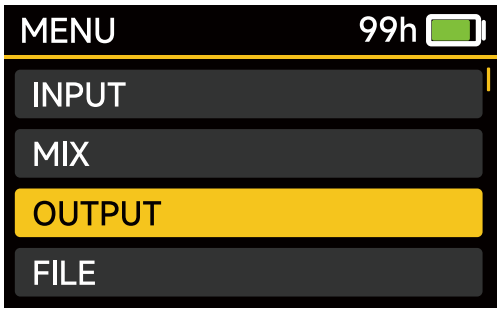
●Gain range per band: -18 dB to +18 dB.

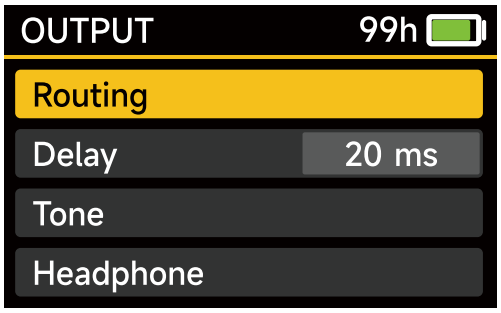
●Q value range 1 to 30. A higher Q value produces a narrower affected frequency band around the set frequency (sharper), while a lower Q value affects a wider frequency band (smoother).



3. Output

Output settings include output routing, output delay, 1KHz Tone, headphone monitor presets, record reminder.



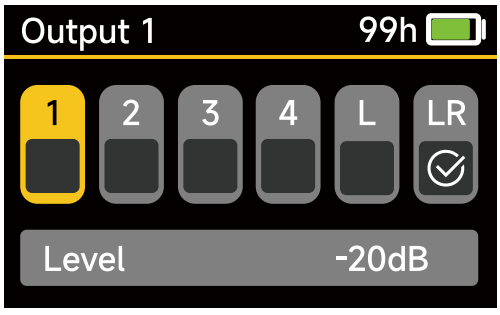


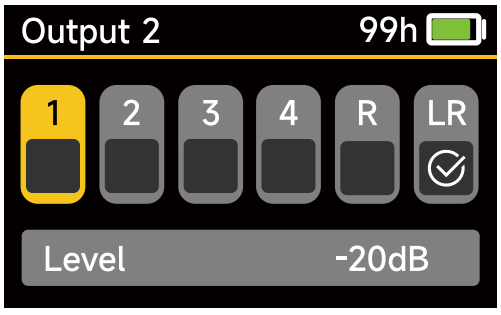
3.1 Output Routing

In this mode, you can set the routing and output level for the two output channels (OP1/OP2). By default, both are set to mix output.

1, 2, 3, 4 correspond to single-track audio, with each signal output in a balanced manner. Selecting only L or R also outputs in a balanced manner, meaning both "+" and "–" of the TRS carry the Mix L or Mix R signal. The mix output sends L and R in an unbalanced manner, where L outputs Mix L and R outputs Mix R.

Note: Each output channel can only select a single signal. To output multiple signals simultaneously, use the mix function.

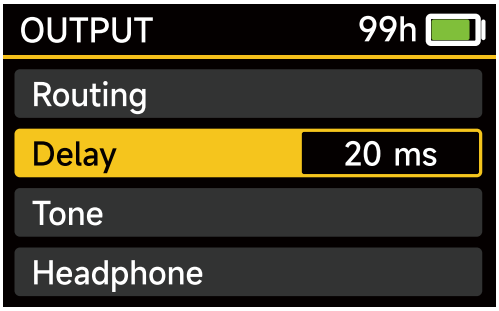




3.2 Output Delay

In this mode, you can set the delay time for output signal. The default is "0 ms" (no delay), adjustable from 0–50 ms.

The output delay function applies to both OP1 and OP2.

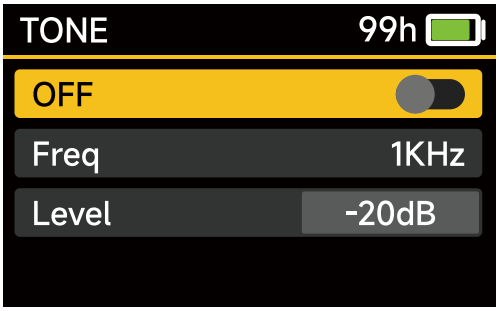


3.3 Tone

In this mode, you can turn the tone (1 kHz) function on or off, and set the level and frequency of the internal tone. By default, the tone function is off.During recording, this mode is greyed out and cannot be modified.

The main purpose of the tone is to establish a reference recording level for the entire system, ensuring consistent volume and avoiding distortion or noise. When the tone function is enabled, OP1, OP2, and the headphone output will all output the 1 kHz signal simultaneously.

- **Frequency**: fixed at 1 kHz
- **Level**: adjustable from -20 dB to 0 dB



3.4 Headphone

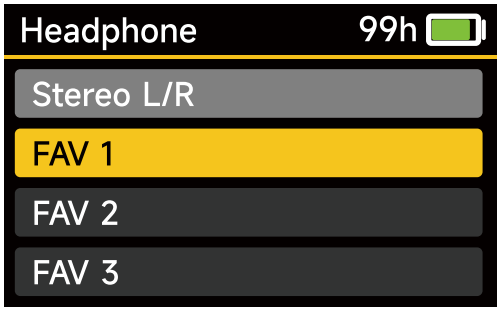
In this mode, you can configure the routing presets and volume for headphone monitoring. The PR4 supports saving three monitoring presets, with default names FAV1, FAV2, and FAV3. Users can customize and rename these presets. Once set, the presets can be accessed directly from the quick interface.The first row is set to the stereo preset by default and cannot be modified.

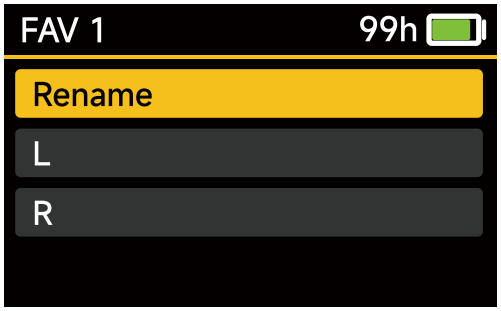
- **Rename**: The default name is FAV, and it can be modified using a combination of letters and special characters.
- **Left**: Select the routing for the left channel of the headphone output. Only one signal can be selected; to output multiple signals, use the Mix L & Mix R.

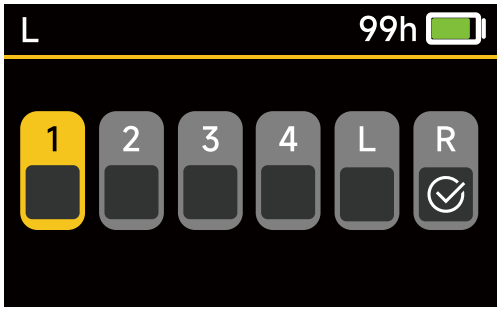
● **Right**: Select the routing for the right channel of the headphone output. Only one signal can be selected; to output multiple signals, use the Mix L & Mix R.

● Default output is Stereo L/R in an unbalanced configuration.

● Single-track monitoring can be controlled via shortcut keys: on the main interface, press the **Right Knob + Channel Knob 1/2/3/4** to switch monitoring for the corresponding single track individually.





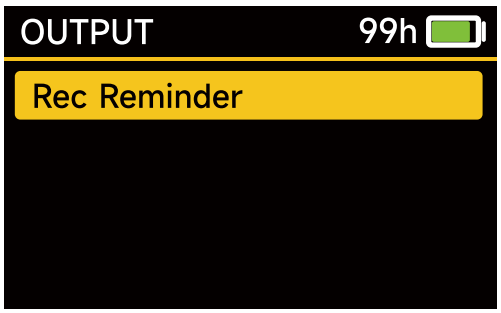


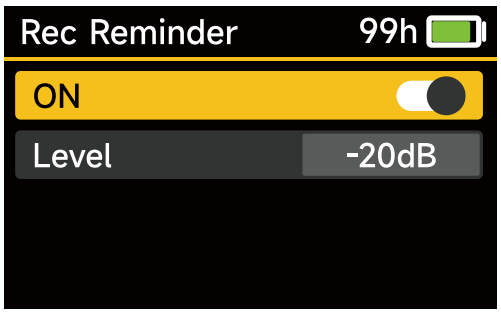
3.5 Rec Reminder

In this mode, you can enable or disable the recording alert and adjust its volume. The default is off.

● When enabled, the recording alert tone can be heard through the headphone output.

● **Volume**: adjustable from -30 dB to +10 dB.



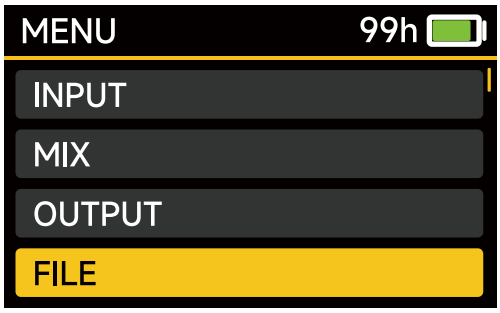


4. File

In this option, you can define and manage recorded audio files. Supported operations include renaming files, adding file notes, playback, and file search.

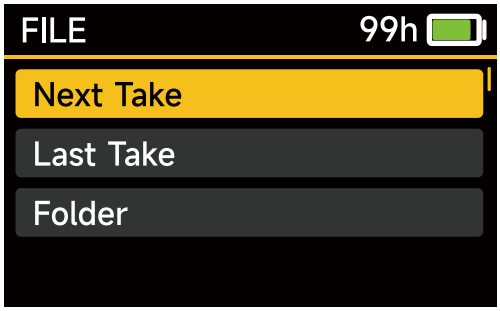
A CSV report file is automatically generated in each recording folder.

During recording, this mode is greyed out and cannot be modified.



4.1 Next Track

In this mode, you can perform pre-editing of recorded audio files. Click to enter the corresponding module to customize and modify content.

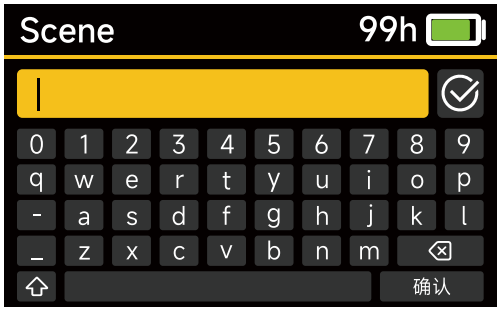


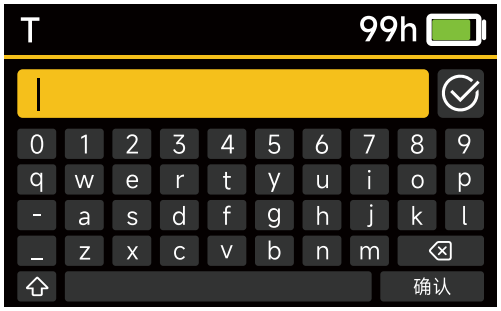
The fixed format for material file names is:

Scene: Scene name, supports English letters (case-sensitive) and special characters.

T: Scene section, 1 character, supports English letters (case-sensitive) .

1: Section number.

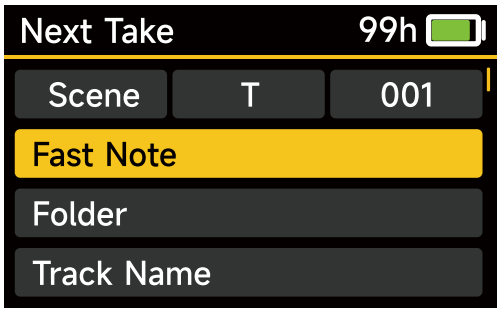


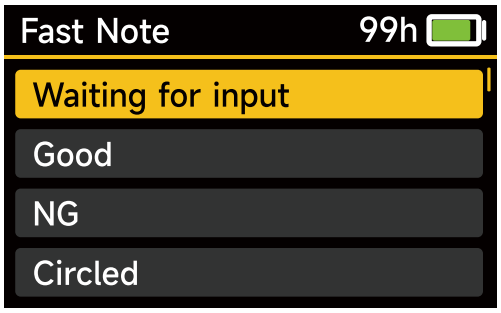


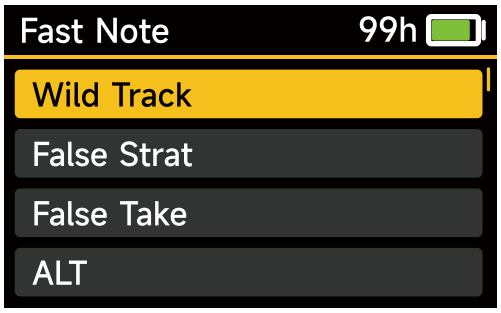
Fast Note

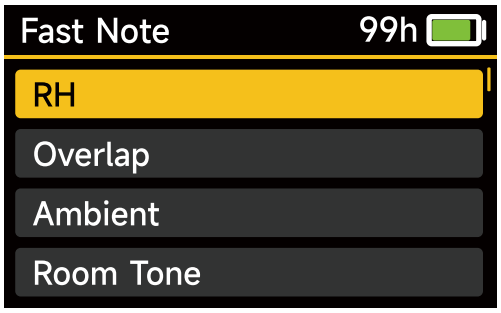
In this mode, you can customize the content of quick notes. The device also provides 15 commonly used note phrases.

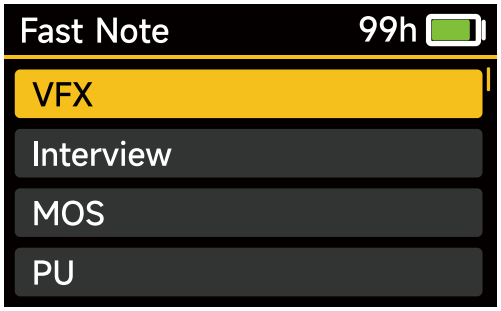
Fast Notes allow you to add temporary markers or text annotations to the current recording without stopping the recording. They can also be used before or after recording—for example, marking a take as “Good” immediately after recording a satisfactory clip.







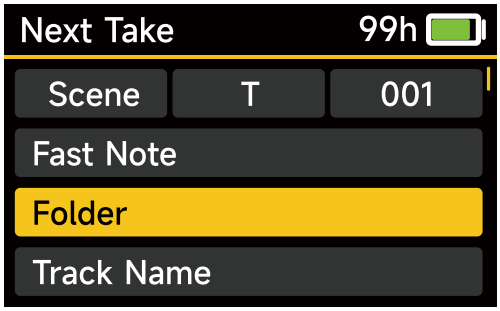


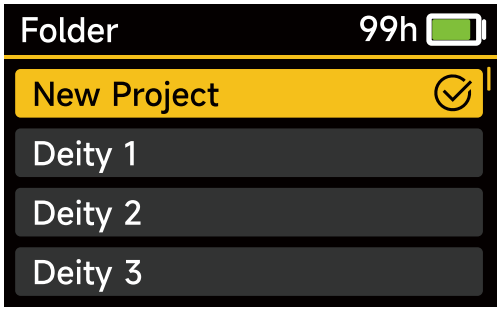


Folder

In this mode, you can create or select the folder path for storing the “Next Take” recording file. The default storage path is Deity.

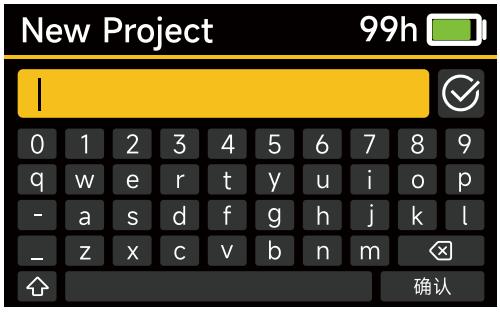
The folder hierarchy is fixed as: Project > Date (YYMMDD) > File Name (Scene_T_01), with the date generated according to the system’s time settings





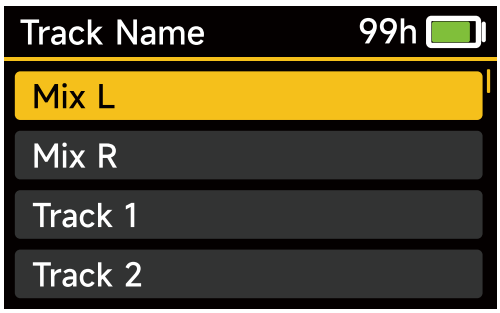
New Project

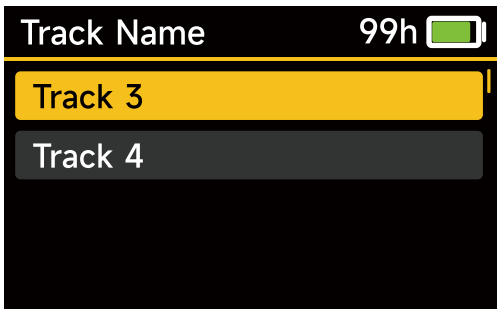
In this mode, you can customize the name of a new project. The project name will also be used as the recording folder name. Once created, this path becomes the default recording storage path.

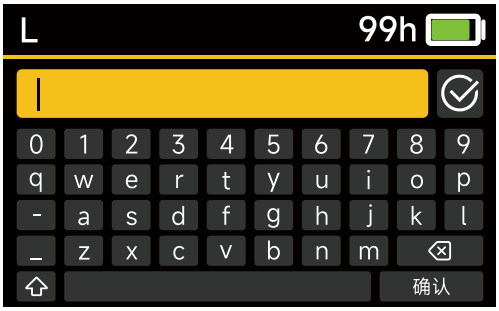


Track Name

In this mode, you can assign a custom, descriptive name to each recording track on the device.The PR4 has 6 tracks: L (Mix Track L), R (Mix Track R), 1 (Single Track 1), 2 (Single Track 2), 3 (Single Track 3), and 4 (Single Track 4).





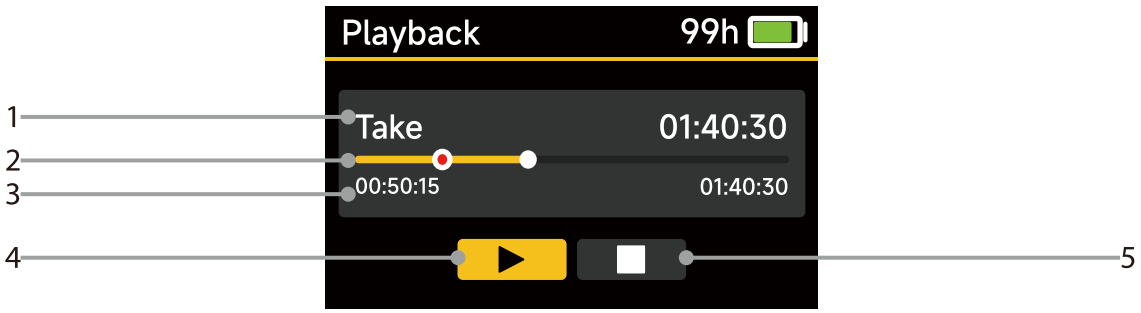


4.2 Last Take

In this mode, you can edit the previously completed recording file. Its submenu content is basically the same as “5.4.1 Next Take,” with the addition of a Playback function.

Playback

Plays back only the most recently completed recording.

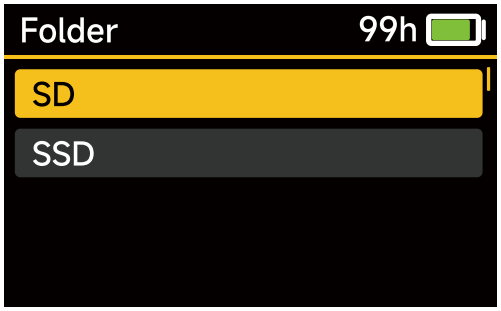


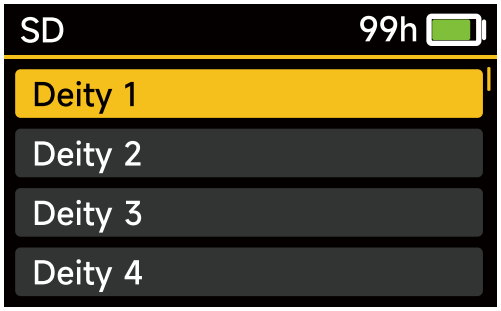
1. Playback file name and total duration of the file
2. Playback progress bar, supports manual scrubbing
3. Elapsed time & remaining time of the current material
4. Play/Pause
5. Stop

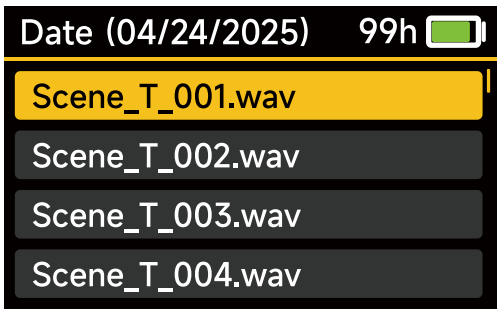
4.3 Folder

In this mode, you can search for completed recording files and select them for playback.

Locate the corresponding material track in the recording card.

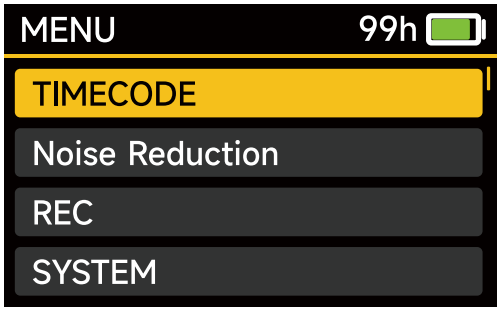


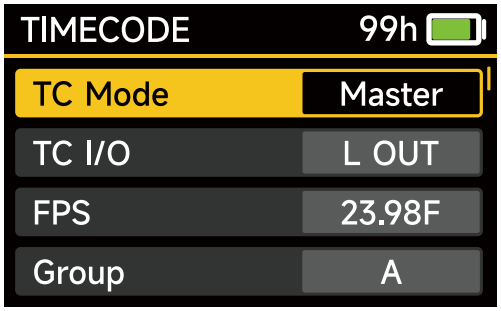




After clicking confirm, you can playback the selected material. Playback in file search supports switching to the previous or next track.

5. Timecode





The PR4 supports both internal timecode generation and external timecode input. The device timecode can function as either master or slave. Timecode settings include TC mode, TC I/O, frame rate, group, TC set, JAM, and color.

During recording, this mode is greyed out and cannot be modified.

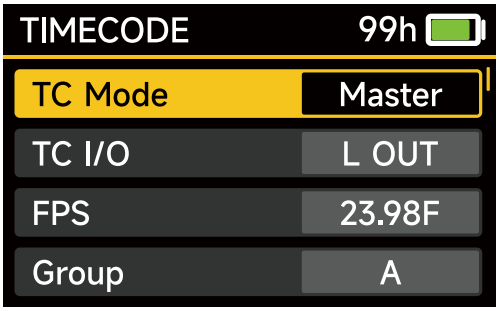
5.1 Timecode Mode

In this mode, you can set the PR4's timecode master/slave mode. The default is Auto (Auto Jam).

● Master: In this mode, the PR4 wirelessly outputs timecode to other Deity timecode receiving devices—such as TC-1/TC-2. Other Deity timecode receivers must be set to Auto Jam or Jam Once And Lock mode and assigned to the same group. The PR4 can also synchronize external timecode via the TC I/O interface using a 3.5 mm cable.

● Auto (Auto Jam): In this mode, the PR4 waits for external timecode input to synchronize. By default, the system is in slave timecode mode.

● JAM1 (Jam Once And Lock): In this mode, the PR4 waits for external timecode input and locks after a single synchronization. During this time, the PR4 will not follow any commands from the master timecode device or the Sidus Audio™ app until you switch to another timecode mode.



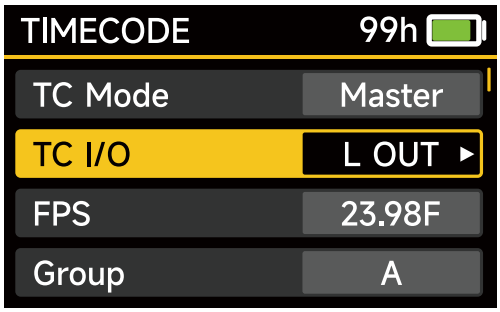
5.2 TC I/O

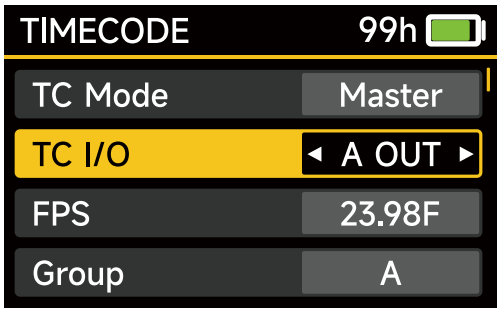
In this mode, you can set the PR4 timecode input/output type.

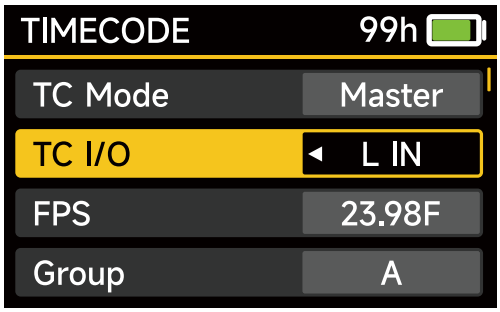
● **L-OUT**: Outputs timecode at line level.

● **A-OUT**: Outputs timecode at microphone level (Mic level) to a DSLR device. The timecode is recorded as an audio signal on the left track, while the right track outputs the headphone right channel audio.

● **L-IN**: Accepts timecode input at line level. When the timecode mode is set to Master, L-IN is disabled.

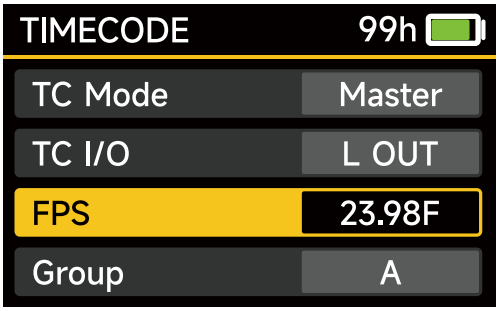






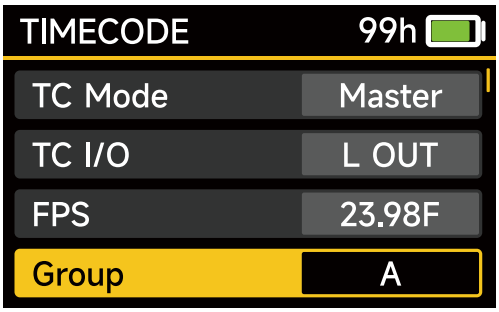
5.3 FPS

In this mode, you can set the PR4 timecode frame rate. The frame rate can be set to 23.98F, 24F, 25F, 29.97F, 29.97DF, 30F, 47.95F, 48F, 50F, 59.94F, 59.94DF, or 60F as needed. DF indicates drop-frame. The system default frame rate is 25. When the PR4 is set to slave timecode mode, make sure the frame rate is set in advance to match the master timecode.



5.4 Group

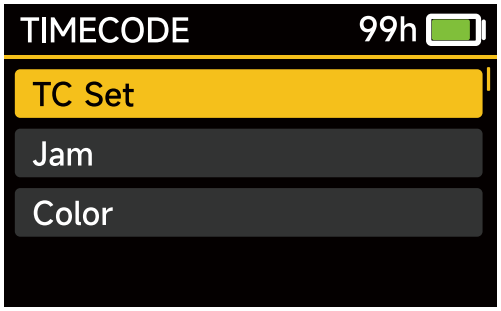
In this mode, you can set the group for the PR4 timecode. Using Deity's Bit Connectify wireless synchronization technology, Deity timecode–enabled devices can sync with each other. Before syncing, make sure all devices are in the same group. The system default group is A.

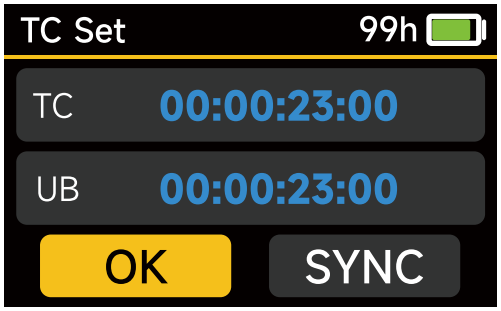


5.5 TC Set

When the PR4 timecode mode is set to **Master**, this function is enabled. In this mode, you can customize the PR4 timecode and User Bits (UB).

- **TC**: Runs from 00:00:00:00 or any custom starting timecode. Long-press the select knob to quickly reset the timecode to zero.
- **UB**: User Bits are 8 additional characters included in the timecode. Unlike the timecode itself, UB does not affect synchronization and is only recorded as supplementary information.
- **OK**: Confirms changes to the TC and UB settings, writing them only to the local device without sending externally.
- **SYNC**: Confirms changes to the TC and UB settings and sends them externally, synchronizing with slave devices in other Deity timecode system





5.6 Jam

In this mode, you can manage the synchronization between the PR4's current timecode and external timecode. When there is a difference (DIF), you can perform a JAM.

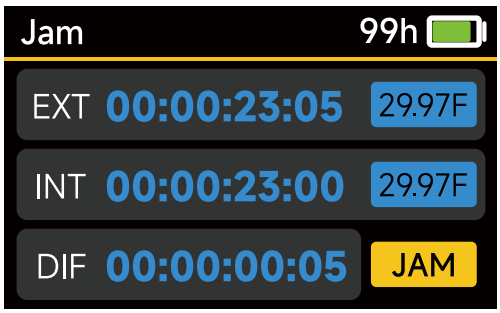
● EXT: Detects external timecode via the 3.5 mm jack and synchronizes to it. If no external timecode is present, this will be empty.

● INT: PR4 internal timecode.

● DIF: Displays the difference between the external timecode (EXT) and the internal timecode (INT).

● JAM: Synchronizes the external timecode to the local device.

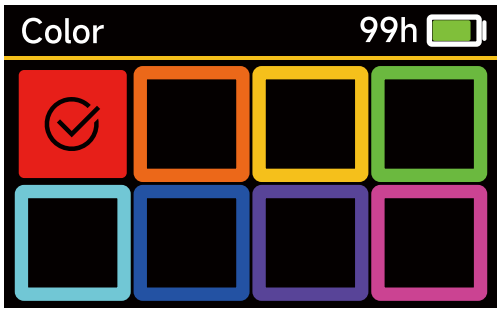
Note: After entering this interface, the TC I/O mode automatically switches to L - IN to receive external timecode. After exiting, it returns to the previously set TC I/O mode.



5.7 Color

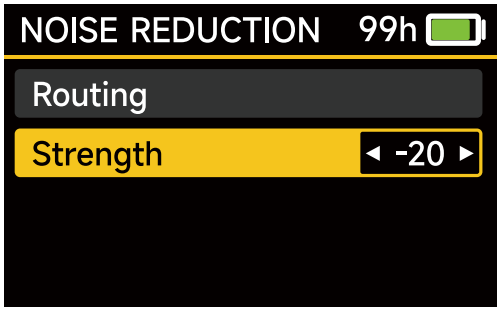
In this mode, you can set the PR4 timecode group color (eight colors available). The selected color is displayed on the main screen's frame rate box to visually identify the device.

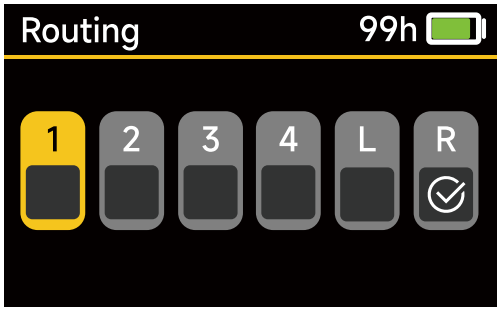
This helps you quickly recognize and distinguish different devices in multi-device environments, effectively preventing device confusion and errors.



6. Noise Reduction

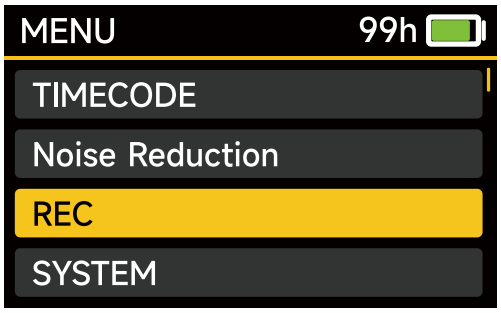
In this mode, you can enable noise reduction processing for the selected channel. In Basic mode, the noise reduction depth can be set from 0 to -6 dB; in Pro mode, it can be set from 0 to -20 dB. By default, no channels are selected, meaning recorded material is not processed with noise reduction.

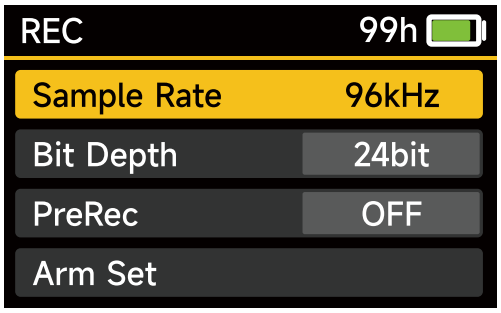




7. REC

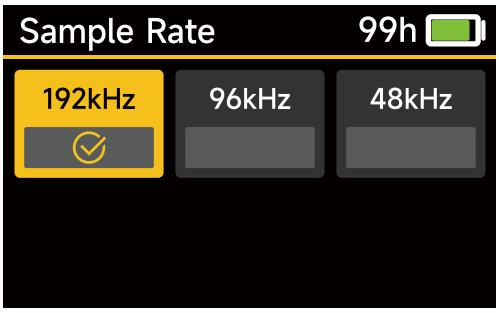
The REC menu contains recording sample rate, bit depth, pre-record, format.During recording, this menu is grayed out and cannot be modified.





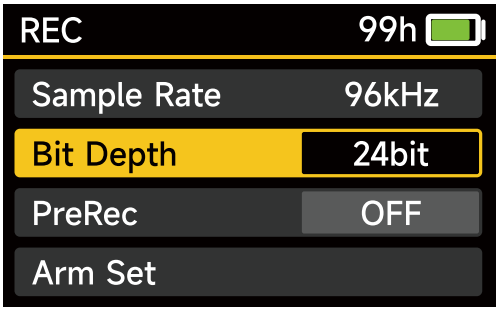
7.1 Sample Rate

In this mode, you can set the recording sample rate. Options available:192KHz, 96KHz , 48KHz.



7.2 Bit Depth

In this mode you can set the recording bit depth. Options: 24bit, 32bit, 32bitFloat.

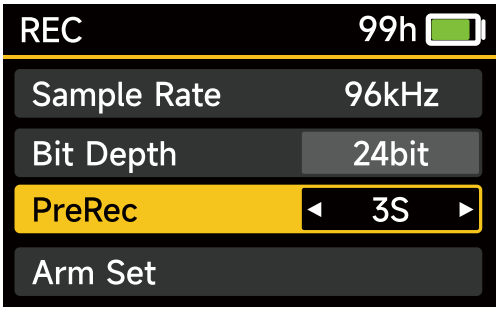


7.3 PreRec

In this mode, you can set the pre-record duration. Options: Off, 3 s, 6 s, 10 s.

Pre-recording captures audio before recording officially starts. When the pre-record function is enabled and the device is in standby mode, it can record up to 10 seconds of input signal prior to the start of recording.

Before configuring pre-recording, please first set the Sample Rate, Bit Depth, and ArmSet. After enabling pre-recording, these menu options will be greyed out.



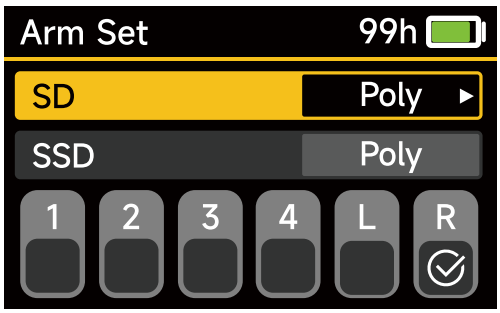
7.4 ArmSet

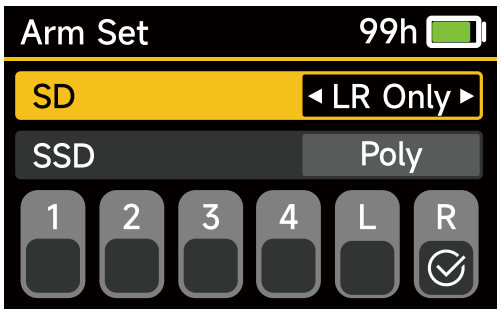
This function is mainly used to enable or disable recording tracks and select the storage card for the material.

Note: Disabling a track in Arm does not turn off the physical channel input. All PR4 physical channel inputs remain active at all times.

● **SD & SSD**: You can set the recording file format separately for the SD card and SSD. Supported options:Poly (multi-track audio)； LR Only (only stores left mix track Mix L and right mix track Mix R). In this mode, regardless of whether single tracks 1–4 are selected, only the LR mix tracks are recorded.“/” (disables recording to the corresponding storage card)

● **Track Selection**: Checking a track enables it for Arm recording preparation. Unchecking a track will prevent it from being recorded. By default, all channels are selected for recording.

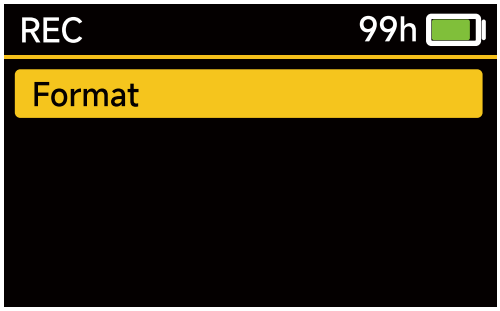


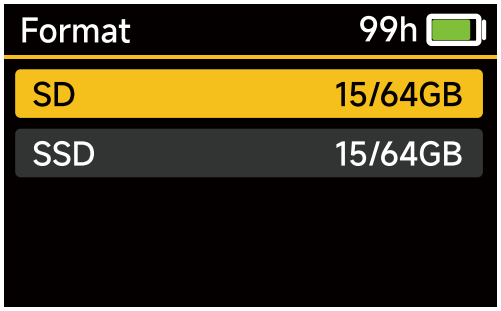


7.5 Format

In this mode, you can view the storage usage of the memory cards (remaining space / total card capacity). Select **Format** and click **Confirm** to format the selected memory card. When the "Success" message appears, the formatting is complete. After formatting, only the most recently used folder is retained, but its contents are cleared.

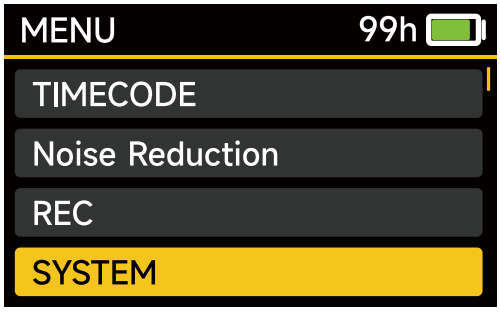
(For higher recording stability, it is recommended to format the memory card in the device before first use.)

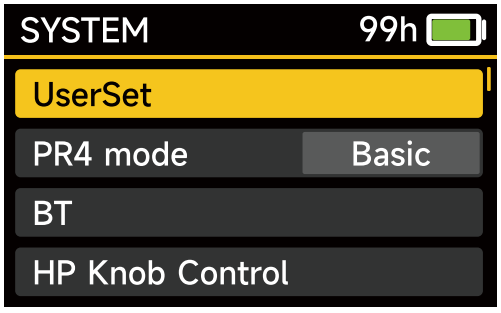




8. System

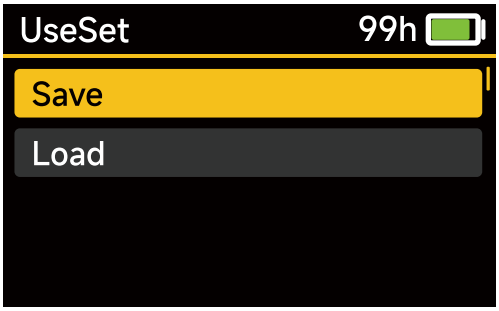
The System Settings menu includes submenus for User Presets, PR4 Mode, Bluetooth, Knob Control, USB, Battery, Screen Brightness, Logo LED, Language, Date/Time, Update, Firmware, and other configurable options.During recording, the following options are greyed out and cannot be adjusted: PR4 mode, USB, Date/Time, and Firmware.





8.1 UserSet

In this option, you can save all device parameter settings or load previously saved user presets according to your needs. A total of three presets can be saved: Custom 1, Custom 2, and Custom 3. When saving, you can customize the preset name. When loading, you can select one of the three presets or perform a reset to restore the factory default settings.



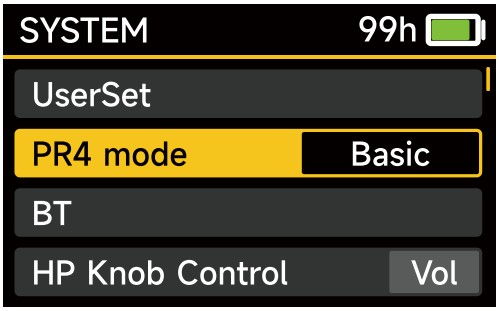
8.2 PR4 Mode

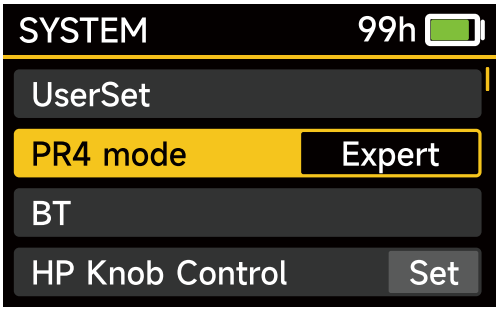
In this option, you can choose between Basic Mode and Professional Mode.

In Basic Mode, fader settings are disabled; only gain can be adjusted.

In Professional Mode, both fader and gain can be adjusted.

The factory default is Basic Mode.



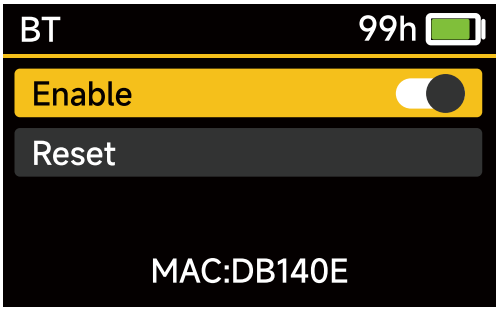


8.3 BT

In this mode, you can turn the bluetooth function on/off. Bluetooth is turned on by default.

Select “RESET” and click "YES" to reset bluetooth. When the “SUCCESS" message appears, it means that the reset is complete.

The MAC address is the bluetooth physical address number of the current device, which is the unique identification code of the device from the factory, and can distinguish different devices when the mobile phone is connected with bluetooth.

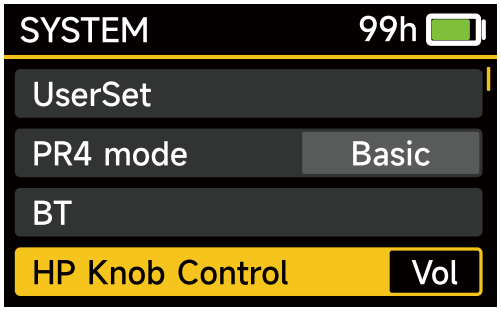


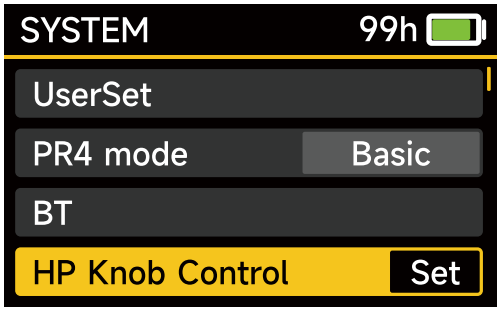
8.4 HP Knob Control

In this option, you can change the control logic of the Right Select Knob for monitoring.

By default, rotating the knob adjusts the headphone volume, and pressing the knob switches the headphone routing.

When switched to Routing mode, rotating the knob changes the headphone routing, and pressing the knob adjusts the volume.

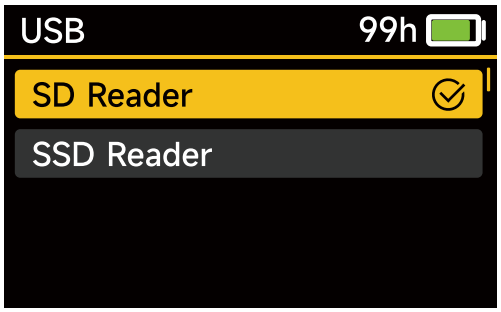


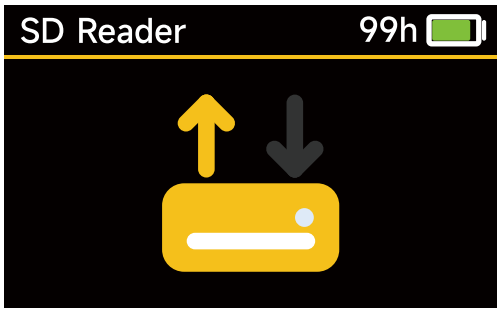


8.5 USB

In this option, you can choose to access the SD card or SSD card.

When the PR4 is connected to a computer via USB cable, it is recognized by default as a sound card. By entering this menu and selecting a card, you can transfer recorded audio files.

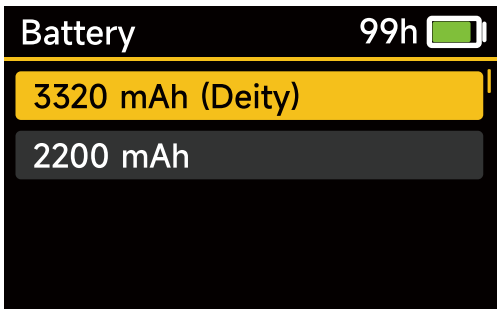




8.6 Battery

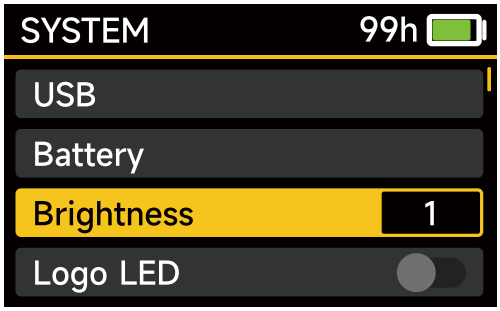
In this option, you can select the corresponding NP-F550 battery based on actual usage, allowing the device to more accurately calculate the remaining battery life. There are two battery capacity options: 3320 mAh DEITY and 2200 mAh.

Due to slight size differences among NP-F550 batteries, it is recommended to use the Deity NP-F550 battery. The PR4 is also compatible with TOPRIG NP-F550 and ZITAY NP-F550 batteries.



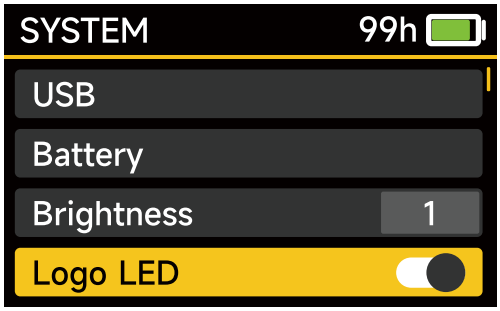
8.7 Brightness

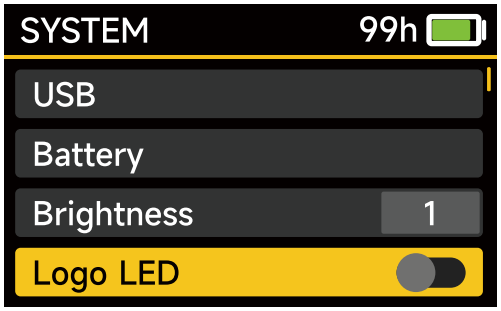
In this option, you can adjust the screen brightness. There are 5 brightness levels, with the default set to the brightest level, **5**. The system will retain the last used setting after adjustment.



8.8 Logo LED

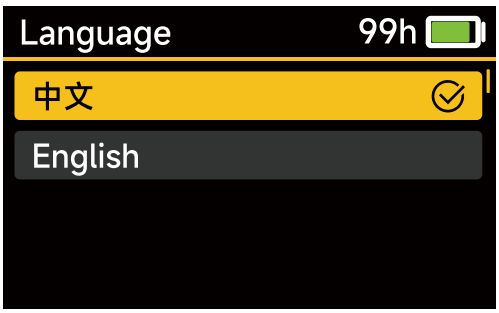
In this option, you can turn the rear **DEITY** logo indicator light on or off. The indicator light is on by default.





8.9 Language

In this option, you can set the display language of the device. The product supports Chinese or English interface display. In the language menu, use the knob to select the language, and click Confirm to save the selected language.

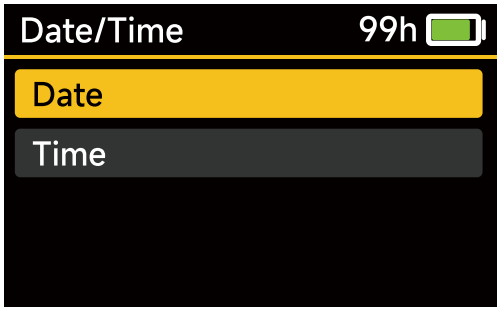


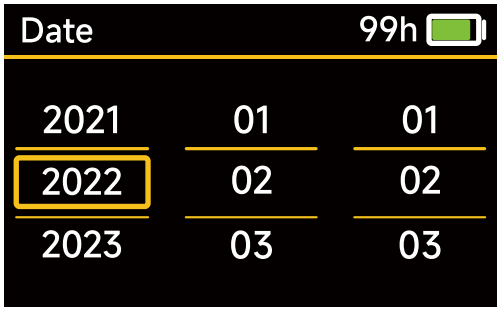
8.10 Date/Time

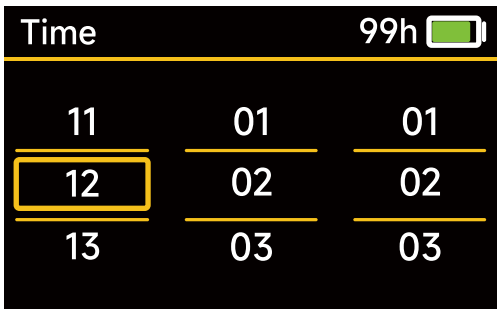
In this option, you can set the date and time for the device.

● **Date Setting**: You can customize the current date for the device. Click Confirm to enter date adjustment, use the knob to change the date numbers, and click Confirm again to save the settings. (Recorded files will follow the set date and automatically generate date-based folders. By default, folders are generated according to the system date.)

● **Time Setting**: You can customize the current time for the device. Click Confirm to enter time adjustment, use the knob to change the time, and click Confirm again to save the settings.

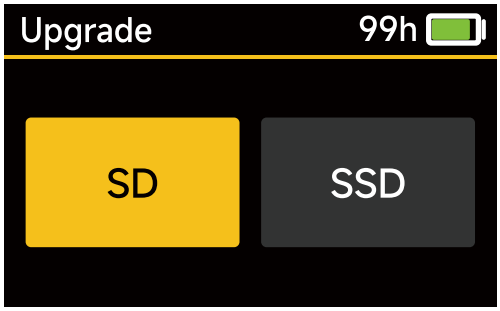


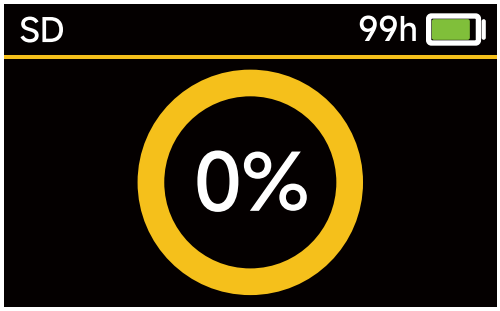


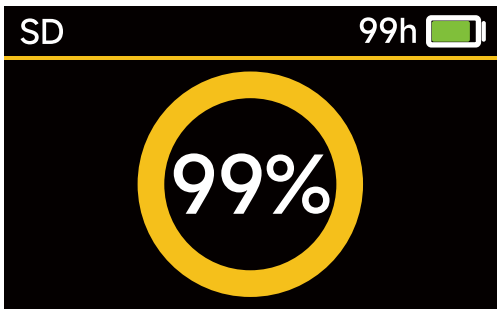


8.11 Upgrade

The device can be upgraded with firmware through SSD card, SD card, or SidusAudio APP. For upgrading, please download the latest firmware from the official website and place it in the root directory of the SSD card or SD card (insert the SD card into the device). Select the corresponding card in the "Upgrade" option in the menu, and update the firmware according to the on-screen prompts. After the firmware update is completed, the firmware version will display the latest version number. You can check the current firmware version information of the device in the "**Firmware**" option in the System Settings menu.

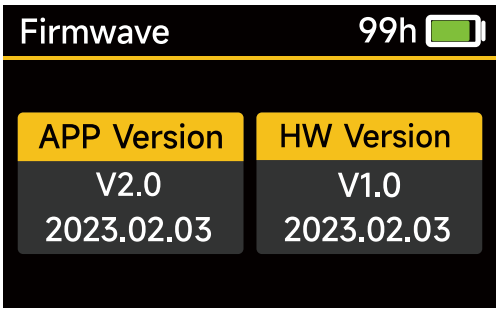






8.12 Firmware

Enter this option to view the current version information of the device and the date information when the version was updated.



PR4 Specifications

Sampling Rate	48KHz, 96KHz, 192KHz
Bit Depth	24bit, 32bit, 32bitFloat
Recording Format	.WAV
Built-in Microphone	None
Built-in Speaker	None
SSD Storage Card	Built-in 64G
SD Card Support	Supports up to 1TB
Timecode Support	LTC/ATC/Wireless Timecode
TC FPS	23.98F, 24F, 25F, 29.97F, 29.97DF, 30F, 47.95F, 48F, 50F, 59.94F, 59.94DF, 60F
Analog Input Channels	4
Analog Output Channels	2
Digital Input Channels	4
Digital Output Channels	0
USB Audio I/O Channels	2 Output
Headphone Monitor Channels	1
Recommended Headphone Impedance	>16Ω

INPUT	
Phantom Power	48V
Maximum Input Level	Line 24dBu; Mic 11dBu
Input Gain Range	● mic /48V/AES42 : 0 ~ +60dB ● line : -20 ~ +30dB ● AES3 : -20 ~ +40dB
Input Impedance	XLR(MIC): 1.5kΩ or more; XLR(Line): 4kΩ or more; 3.5mm(MIC): 2kΩ or more; 3.5mm(Line): 2kΩ or more;
Input Frequency Response	20-80kHz(192kHz Sample Rate)
Input Dynamic Range	137dB
Input Noise Floor(EIN)	-127dBV(mic in,A-weighted, Gain 60dB, Load Impedance 150Ω)
THD+N	0.005%

Continued Table:

OUTPUT	
Maximum Output Level	Line: 8dBu; Headphone: 8dBu

64G SSD Recording Time / Single Track	(The following times are estimates. When multi-track recording is enabled, recording time decreases proportionally.)
.WAV 48kHz/24 Bit	≈113 h
.WAV 48kHz/32 Bit (or 32 Bit F)	≈86 h
.WAV 96kHz/24 Bit	≈56 h
.WAV 96kHz/32 Bit (or 32 Bit F)	≈42 h
.WAV 192kHz/24 Bit	≈28 h
.WAV 192kHz/32 Bit (or 32 Bit F)	≈21 h

Power	
Power Options	NP-F550 Battery, Hirose-4Pin, USB-C
Battery Life	≈8.5h (F550)
Voltage	NP-F550 7.3V; DC 12-18V; USB-C 5/9/12V
Current	NP-F550 360mA; DC 220mA(14.4V); USB-C 520mA
Power	NP-F550 2.62W; DC 3.16W; USB-C 2.6W

Physical	
Dimensions	98*80*41mm(H*W*D)
Weight	218g(without battery)
Operating Temperature	-20°C—50°C

The above data are measured by the Aputure Audio Laboratory and are subject to the actual product data!

Note: The illustrations in this manual are for reference only. Due to the continuous development of new product versions, if there are differences between this product and the user manual illustrations, please refer to the product itself.

Important Hint

● Please read this product manual carefully.

● Keep this product manual. Always include this product manual when passing the products on to third parties

● Heed all warnings and follow all instructions in this product manual.

Warning: Do not place the product near any corrosive chemicals. Corrosion may cause the product to malfunction.

● Only use a microfiber or dry cloth to clean the product.

● Operate carefully - dropping or hitting the product may cause damage.

● Keep all liquids away from the product. Liquids entering the product can short-circuit the lectronics or damage the mechanics.

● Store the product in a dry, clean, dust-free environment.

● Please contact authorized maintenance personnel when maintenance is needed. There are precise electronic circuits in this product. Failure caused by unauthorized disassembly is not covered by our warranty, but users can pay for maintenance.

● This product has been certified by CE, RoHS, UKCA, FCC, IC, KC, MIC,NCC, etc. Please adhere to the operation standards. The warranty does not cover repairs arising out of the misuse of the product, although you may request such repairs on a chargeable basis.

● The instructions and information in this manual are based on thorough, controlled company testing procedures. Further notice will not be given if the design and specifications change.

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and(2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 distance separating the equipment and receiver.

• Connect the device to a different power supply than that which the receiver is connected to.

• Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirements. The device can be used in portable exposure condition without restriction.

Disclaimer

Before use, please read the user manual of this product to ensure correct use after full understanding. After reading, please keep the user manual properly for future reference. If you do not operate this product correctly, you may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you have understood, acknowledged, and accepted all the terms and content of this document. The user promises to be responsible for their own actions and all consequences arising therefrom. DEITY shall not be liable for any losses caused by the user's failure to use the product in accordance with the "User Manual". Under the condition of complying with laws and regulations, the company reserves the final interpretation right for this document and all related documents of this product. No prior notice will be given for any update, revision or termination.

Please visit the DEITY official website to obtain the latest product information.