

AK Recorder

Astell&Kern

INSTRUCTION BOOK

User Guide

IRIVER

CONTENTS

Getting Started _01

Connecting with a Player	02
Package Contents	03
AK Recorder at a Glance	05
Assembly	07
Power Management	08

Using the Device _02

Main Menu	10
Setup	12
Presets	16
Recording Screen	17
Recording	18
File List Screen	22
File Management	23
Playback	24
Playback Screen	25

Miscellaneous _03

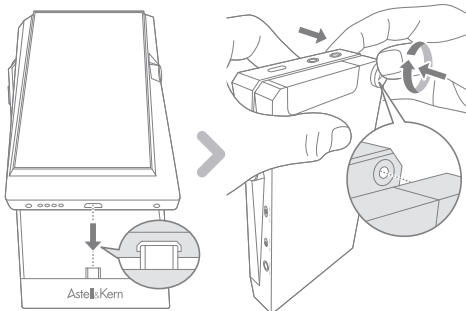
Safety Precautions	27
Troubleshooting	29
AK Recorder Specifications	31
DPA SC4061 Microphone Specifications	33
Copyright	34
Certifications	34
Registered Trademarks	35
Disclaimers	35

Connecting with a Player

Connecting a Portable AK Player to the AK Recorder

The AK Recorder can be used in conjunction with the 300 series of portableAK media players.

1. Carefully attach a compatible AK media player to the connector on the AK Recorder as shown below.
2. Completely secure the portable player and recorder by fastening the bolt on the rear of the AK Recorder.



The AK Recorder can only be used in conjunction with the AK380, AK320, and AK300.

The AK320 and AK300 will be supported via a future firmware update.

The AK Recorder may become separated during use unless the connecting bolt is firmly secured. Be sure to securely fasten the bolt before use.

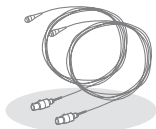
Package Contents

Contents may be changed without prior notice to improve the performance or quality of the product. The AK Recorder is available as a stand-alone product and as part of a bundle with the DPA microphone kit. The included components vary depending on the package you purchase.

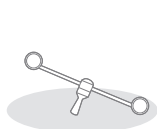
• DPA Microphone Kit



AK Recorder



SC4061 Microphone



Microphone Stand



Magnetic Holder



Rubber Holder



String Holder



Windscreen



Tripod Grip

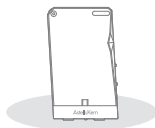


Mini-XLR-to-XLR cable



Quick Start Guide & Warranty Card

• Stand-Alone Kit



AK Recorder



Mini-XLR-to-XLR cable



Quick Start Guide & Warranty Card

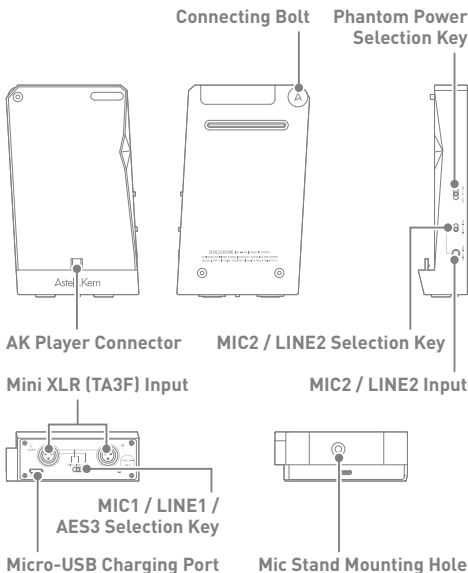
- DPA SC4061 Microphone:** The DPA SC4061 microphone can be connected to the AK Recorder via the Mini XLR input at the bottom of the device. When using the microphone, be sure to set the phantom power at 5 V.
- Microphone Stand:** Connect the stereo microphone stand to the mounting hole at the top of the AK Recorder.
- Tripod Grip:** The AK Recorder can be combined with a player and used in conjunction with the tripod. Adjust the grips by turning the bolt on the side.
- Magnetic Holder:** The SC4061 microphone can be secured in the groove of the magnetic holder after attaching the stereo microphone stand.
- Rubber Holder:** The SC4061 microphone can be secured in the groove of the rubber holder when recording a musical instrument such as a piano.
- String Holder:** The SC4061 microphone can be secured in the groove of the string holder after mounting between the bridge and tailpiece of a musical instrument such as a violin or cello.
- Windscreen:** The windscreen slips onto the SC4061 microphone unit.
- Mini-XLR-to-XLR cable:** This cable is used when connecting a standard XLR condenser microphone to the Mini XLR input at bottom of the AK Recorder.
- Quick Start Guide:** Basic overview of device functionality.
- Warranty Card:** The warranty card is required for customer and technical support. Do not misplace the card.



The stand-alone product does not include the SC4061 microphone or related accessories. The included Mini-XLR-to-XLR cable can be used to connect an external microphone. The components included in the DPA microphone accessory kit may change at any time at the discretion of the manufacturer for performance improvements or other reasons.

At a Glance

The appearance of the product as well as the printed and engraved information may vary depending on the model.



AK Player Connector: Connects the AK Recorder to a compatible AK media player.

Mini XLR (TA3F) Input: A 3-pin Mini XLR microphone can be connected directly, and standard XLR condenser microphones can be connected via the Mini-XLR-to-XLR cable included in the bundled product.

MIC1 / LINE1 / AES3 Selection Key: Select the desired function via the selection key.

Micro-USB Charging Port: Charge the AK Recorder using a Micro-USB cable.

Bolt: Connect and secure a compatible AK media player to the AK Recorder with the bolt provided.

MIC2 / LINE2 Input: A non-powered (passive) dynamic microphone as well as a powered (active) condenser microphone can be connected, and other external devices can be connected via LINE-IN for recording.

MIC2 / LINE2 Selection Key: Select the desired function via the selection key.

Phantom Power Selection Key: It can select the power level of a microphone connected to the Mini XLR Input Port.

Microphone Stand Mounting Hole:

Secure the microphone stand to the mounting hole.



The AES3 function is only supported on the left-side Mini XLR input.

A professional condenser microphone can be used with the AK Record via the Mini-XLR-to-XLR conversion cable.

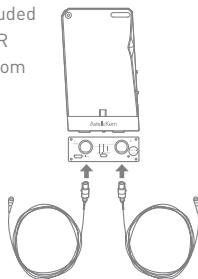
After setting the MIC1 / LINE2 / AES3 or MIC2 / LINE2 selection key to the desired position, you must select the matching input port from the INPUT menu of the main screen. We recommend selecting LINE2 when recording via MIC1 at the bottom of the device and MIC2 when recording via LINE1.

Be sure to identify the exact power specifications of a microphone before using the phantom power setting. Using the phantom power setting with an unsupported microphone may cause damage to the microphone.

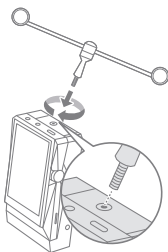
To use a microphone that requires phantom power, you must enable [Phantom Power] under Settings. The microphone will not function if the setting is disabled.

Assembly **DPA Microphone Kit Component Assembly**

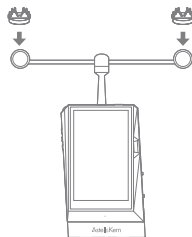
1. Connect the microphone included in the package to the Mini XLR connector located on the bottom of the AK Recorder.



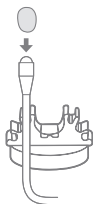
2. Fasten the microphone stand to the mounting hole located on the top of the AK Recorder.



3. Attach a magnetic holder on each side of the microphone stand.



4. Slip a windscreen onto the microphone, and secure the bottom part of the SC4061 microphone unit into a groove of a magnet holder.



5. Rotate the bolt on the right side of the tripod grip to widen the grips for attaching to the AK Recorder.



Power Management

Charging

1. We recommend using a 5 V, 3 A adapter (sold separately) for optimal charging performance during a recording session.
2. You may use a regular 5 V, 2 A adapter when the AK Recorder is not connected to an AK media player.



If the screen turns off during recording, lightly touch the screen to turn it on again.

The device will not charge normally when using a fast-charge adapter that supports multiple voltages (5 V, 9 V, 12 V, etc.). Doing so may cause damage to the device.

A 5 V, 2 A adapter will not provide sufficient charging when an AK media player is connected to the AK Recorder. Only use a 5 V, 2 A adapter to charge the player or AK Recorder when separated. We recommend using a 5 V, 3 A adapter (sold separately) for optimal charging performance when the devices are connected.

Turn On/Off

1. The AK Recorder does not provide a separate power button.
2. Connect and secure a compatible AK media player to the AK Recorder, and turn on the AK media player.
3. A message will be displayed when a compatible AK device is successfully connected to the AK Recorder. After the "Recorder connected" message is displayed, a [REC] menu will be displayed at the top of the main menu of the AK media player.
4. Select the [REC] menu to enter the AK Recorder's main menu.
5. Press the [CLOSE] button at the bottom of the AK Recorder's main menu to display the main menu of the connected AK media player.



Refer to the user manual of the respective AK device (AK380, AK320, AK300, etc.) for details on [Turn On/Off], [Screen On/Off], and [Reset Function] features.

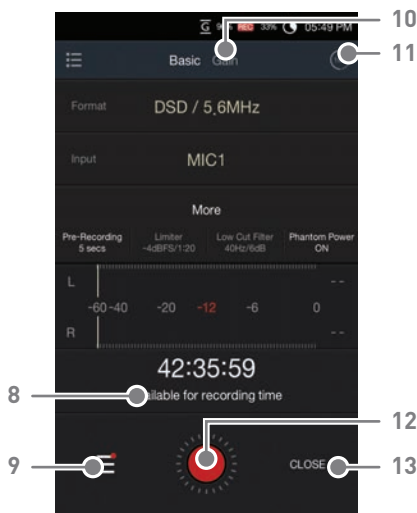
The device may become hot during extended recording or charging sessions. However, this does not affect the performance of the product or quality of recordings.

We recommend using a tripod for extended recording sessions or when charging while recording.

AK Recorder Main Menu



- | | | |
|---|-------------------------|--|
| 1 | Basic Settings | Displays basic recording preferences. |
| 2 | Presets List | Import preset values or create new presets. |
| 3 | Recording Format | Set the recording file format. |
| 4 | Recording Source | Set the recording source. |
| 5 | Other Settings | Set additional recording options. |
| 6 | Level Meter | Displays the intensity of the input signal in decibels [dB]. |
| 7 | Recording Time | Indicates the time available for recording or the duration of the current recording. |



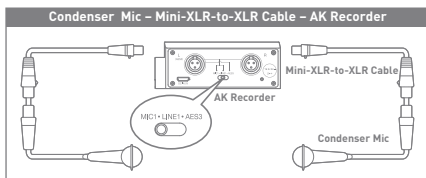
8	File Name	Displays the file name.
9	File List	Displays a list of recorded files.
10	Gain Settings	Set microphone and pre-amp gain options.
11	Screen Rotation	Rotate the screen by 180 degrees.
12	Record	Start recording.
13	Close	Close the recording function.

Setup

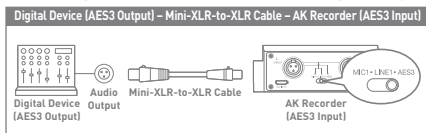
Set basic options.

Select [Basic] on the screen.

- Format: Set the recording file format.
- Input: Set the input source.
 - [MIC1] Record using an external microphone that requires phantom power. The SC4061 microphone included in the bundled product can be connected directly to the Mini XLR port, and standard XLR microphones can be connected via the Mini-XLR-to-XLR cable as shown below.

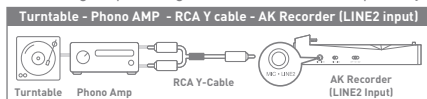


- [LINE1] Record audio from an external source connected via the Mini XLR cable.
- [AES3] Record audio from an external source with AES3 or AES/EBU digital output. As shown below, the AK Recorder can connect to and record directly from a recording console or device with AES3 digital output.



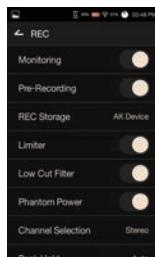
- [MIC2] A non-powered (passive) dynamic microphone as well as a powered (active) condenser microphone can be connected, and other external devices can be connected via LINE-IN for recording.

- [LINE2] Record audio from an external source connected via a 3.5 mm cable (sold separately). As shown below, the AK Recorder can connect to and record directly from an external source such as a turntable connected to a phono amplifier with analog output using an RCA Y-cable (sold separately).



- More: Set additional recording options.

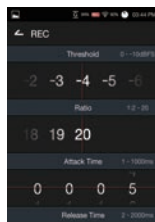
- Monitoring: Enable or disable the monitoring function. When enabled, sound can be heard in real-time before recording. "READY" will be displayed on the screen after approximately 2 to 3 seconds of stand-by time.



- Pre-Recording: Enable the pre-recording function, and set the time as 2, 3, 5, or 10 seconds. You may only use the pre-recording function after enabling monitoring.

- REC Storage: Set the storage location for recorded files. You may select internal storage or SD card.

- Limiter: Enable or disable the limiter function, and set the maximum dBFS value, slope, and time. The limiter function corrects distorted signals and prevents clipping when excessive input levels are detected.



The limiter's base threshold value can be set from 0 to -10dBFS, and the compression ratio (slope value) can be set from 1:2 to 1:20. A ratio of 1:20 is the limiter's maximum slope value.

Attack Time (signal compression time) refers to the time that the limiter is operating, and the Release Time sets the time the limiter is released. Default values: Threshold - 4dBFS, Ratio 1:20, Attack Time 5 ms, Release Time 200 ms.

- **Low-Cut Filter (High-Pass Filter):**
Enable or disable the low-cut filter function, and set the frequency and slope values. The low-cut filter function can effectively remove low-frequency sounds as well as resonant sounds in the environment. The slope can be set from 6 dB to 24 dB, and the frequency can be set from 40 Hz to 240 Hz in units of 10 Hz. For example, if the slope and frequency are set to 6 dB and 50 Hz, respectively, low-frequency sounds of less than 50 Hz are reduced relative to a 6 dB slope. Default values: Slope 6 dB, Frequency 40 Hz.
- **Phantom Power:** Enable or disable the phantom power function.
- **Channel Selection:** Select stereo or mono.
- **AES3 Format:** Set the recording format to 16-bit or 24-bit when recording audio from an external source connected via AES3. Recording is performed through AES3 based on the selected bit value.
- **Peak Hold:** Select whether to manually or automatically maintain the maximum value of an input signal.



The screen will turn off while recording according to the screen timeout setting of the AK media player used in conjunction with the AK Recorder. Lightly touch the screen to turn it on again. When using features such as the limiter or low-cut filter, the user must set the detailed settings according to the recording subject or environment before use. Settings that do not match the recording subject or environment may adversely affect recording quality.

The limiter and low-cut filter functions cannot be used when the recording format is set to DSD or greater than 352.8 kHz. Certain features may not be available when recording.

After selecting an input source from the screen, be sure to set the keys accordingly on the bottom or side of the AK Recorder. Recording will not function normally if the screen selections and keys do not match.



Be sure to select the correct phantom power setting when using an external microphone that requires phantom power. Using incorrect settings may cause damage to the microphone and/or result in abnormal recordings.

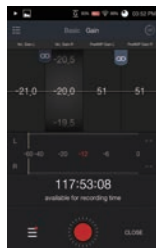
The pre-amp gain function will be disabled when an external device is connected to LINE1, LINE2, or AES3.

Since DSD recording requires precise data measurement before recording, 15 seconds of data verification is necessary after activating the monitoring function. For 15 seconds, sound is delivered through the microphone, but the recording function cannot be activated.

Microphone/Pre-Amp Gain Settings

Microphone volume and pre-amp gain settings can be easily adjusted via the touchscreen. Select [Gain] from the home screen.

- Vol. Gain: When recording from a microphone or external device connected to MIC1 / LINE1 / AES3 or MIC2 / LINE2, the input volume can be adjusted via the gain value.
 - The left and right gain values can be adjusted independently.
 - Enable the [] icon to lock and simultaneously adjust the left and right gain values.
- Pre-Amp Gain: The pre-amp gain functions similarly to the volume gain feature. This feature can only be used when a microphone is connected. The pre-amp gain cannot be adjusted when recording from an external device that is connected to LINE1, LINE2. The vol and pre-amp gain cannot be adjusted when recording from an external device that is connected to AES3.
 - The left and right gain values can be adjusted independently.
 - Enable the [] icon to lock and simultaneously adjust the left and right gain values.



Presets

Gain settings can be saved as presets for added convenience.

Import Preset

1. Select [≡] from the screen to display a list of presets.
 2. The values stored in a preset will be automatically applied when a preset is selected from the list.
- The default values cannot be changed by the user.



Save Preset

1. Select [≡] after setting the desired gain or other options on the main Recorder screen.
2. Select [Save] and then [+]. Enter a name for the preset and select [CREATE] to save the new preset.

Preset Setting

- [Pencil icon] : Edit the name of a preset.
- [Trash can icon] : Delete a preset.

Recording Screen



1 Current Track Time	Displays the recording time of the current track.
2 Pause	Pauses the current recording.
3 Stop	Stop and save the current recording.
4 Recording Duration	Displays the total duration of the current recording. (Displayed only when a file is split.)
5 File Splitting	Splits a recording into multiple files. The total number of files is indicated above the icon. (Disabled when pre-recording or monitoring.)
6 Bookmark	Bookmark the current location. (Disabled when pre-recording or monitoring. / Disabled if the recording format is DSD.)

Recording

1. Connect a microphone or external device to the AK Recorder.
 - Powered microphone:
Connect to the Mini XLR port on the bottom of the device.
 - Non-powered dynamic microphone / Powered condenser microphone:
Connect to the MIC2 / LINE2 port on the side of the device.
2. Select basic recording options (audio format, input port, etc.).
3. Select [●] to start recording and [||] to pause.
 - Displays pre-recording information (pre-recording time setting).
 - If enabled, monitoring information is displayed on the screen. Sound can be heard in real-time when monitoring is selected. The volume of sound changes according to the volume and pre-amp settings on the gain screen.
4. Select [H] while recording to split a file.
5. Select [B] while recording bookmark the current position. (The number indicates the number of bookmarks for the current file. A maximum of 99 bookmarks can be saved.)
6. Select [■] to stop and save the current recording.



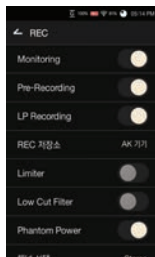
After connecting a microphone or external device to the AK Recorder, you must select the matching input selection key on the device and input port from the main menu. For example, if a microphone requiring 48 V is connected to the Mini XLR input port:

- Select "MIC1" from the MIC 1 / LINE 1 / AES3 Selection Key.
- Select "MIC" as the input source on the main menu.
- Select "48 V" from the Phantom Power OFF / 5 V / 48 V Selection Key.
- Enable the Phantom Power option under Settings.

LP recording

You can record LP sound sources by connecting the turntable to the AK Recorder.

1. Press [More] in the Recorder, and turn [LP Recording] On in the settings screen.



2. Connect the turntable and the recorder, and record LP sound sources.



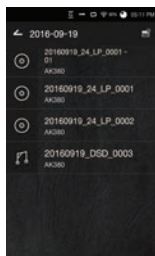
3. After recording is done, press the right [📁] button in the recording library.

- File icons

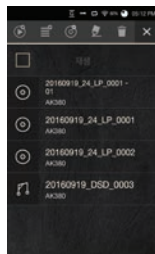
📁 : General recording file

🎵 : Files recorded in the LP Recording mode

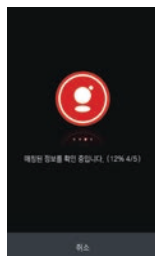
(The file name includes 'LP.')



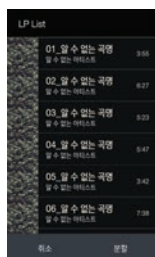
4. Select a recording file you want to analyze, and press the [🔍] button at the top to start analysis.



5. Bring the meta data of the recorded LP from Gracenote.



6. When you are done brining the data, the list of analyzed files will be shown. If you split, the split files will be placed in the REC folder.



7. If you press the split track file, you will be able to modify and play back file information.



The LP Recording mode does not support 32bit and 24bit 352. 8KHz and 384KHz recording.

The LP Recording mode does not support the bookmark and Divide function.

In the LP Recording mode, only Line 2 input can be recorded. If you record with the Volume Gain set up too high or too low, you cannot bring accurate analysis information. For information on how to use the turntable, read the product manual.

Up to 4 files recorded in the LP recording mode can be analyzed. If you select files recorded in different LP Recording modes for analysis, you cannot bring accurate analysis information.

Files not recorded in the LP Recording mode cannot be analyzed. To bring the Gracenote meta data, you must be connected to Wi-Fi. It may take a long time to bring the meta data depending on network environment.

Some sound sources may not have meta data in Gracenote. You cannot move to the home screen while bringing the meta data.

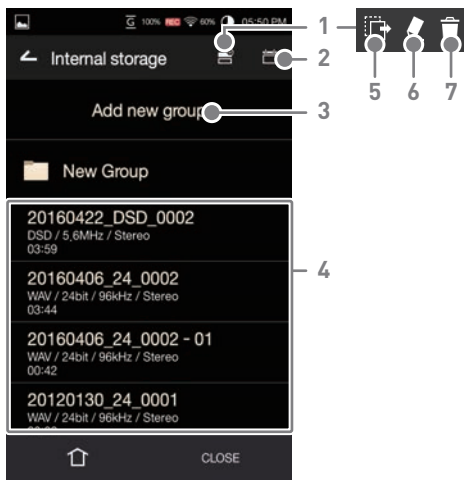
The playback length can be edited 1 to 5 seconds forward or backward per file.

Each track can be merged with the track in front of or behind it. However, only split tracks in one recorded file can be merged.

You can modify files before splitting.

File List Screen

Select [] to display the file list screen.





1	Edit	Select a file or folder to be edited.
2	List by Date	Files are displayed by date.
3	Add New Group	Create a new group.
4	File List	Displays a list of files.
5	Move	Move a file.
6	Edit Filename	Change the name of a file.
7	Delete	Delete a file.

File Manage- ment



Add a Recording Group

1. Select either internal storage or SD card.
2. Select [Add New Group] from the file list screen.
3. Enter the desired group name and select [Create] to create a new group.



Move a File to a Group

1. Select [] from the screen.
2. Select a file to be moved, and then select [] to display a list of available groups.
3. Select the desired group, and then select [Paste] to move the file.

Edit Filename

1. Select [] from the screen.
2. Select the desired file, and then select [] to display an input field.
3. Enter a new filename, and then select [Rename] to apply the changes.








Delete File

1. Select [] from the screen.
2. Select the desired file, and then select [] to display a confirmation prompt.
3. Select [OK] to delete the selected file.

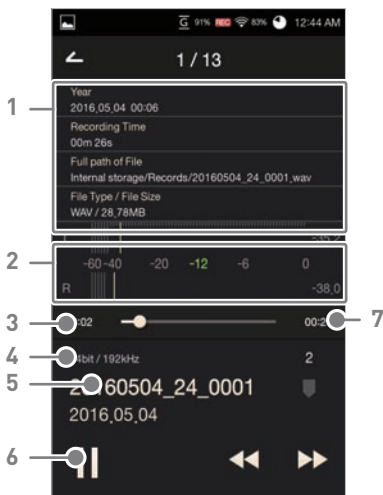
Playback

Playback

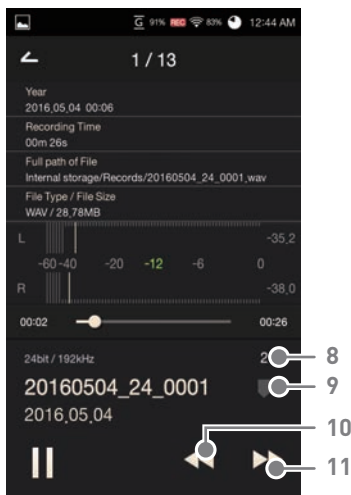
Select a file from the file list to begin playback

- Select [] to pause playback and [] to resume.
- Select [ / ] during playback to play the previous /next file.
- You may drag the progress bar to the desired location during playback.
- Select [] to display a list of bookmarks. Select [ / ] to move to the previous/next bookmark.

Playback Screen



1	File Information	Displays file information.
2	Level Meter	Displays the volume graphically.
3	Progress	Displays playback progress.
4	Format	Displays file format information.
5	Filename	Displays filename and date of recording.
6	Play/Pause	Pause or resume playback.
7	Duration	Displays a file's total duration.



8	Bookmarks List	Displays a list of bookmarks.
9	Bookmark	Enables bookmarks. When enabled, you may select [◀▶] to move bookmarks.
10	Previous File	Plays the previous file.
11	Next File	Plays the next file.

Safety Precau- tions

Device

- When a plug is inserted into the microphone or line-in port, do not apply any force or shock to the plug. Doing so may damage the plug contact points or cause malfunctions.
- Do not attempt to insert cables that do not match the ports on the device.
- Do not place the device near magnetic objects (magnets, televisions, monitors, speakers, etc.) when recording, as doing so may introduce noise.
- Do not touch the device when recording, as doing so may introduce noise.
- When using a powered condenser microphone, be sure to identify the exact power specifications of the microphone before using the phantom power setting. Choosing an incorrect phantom power setting may cause damage to the microphone. Always read the respective instruction manual before use.
- When a plug is inserted into the earphones, balanced, or USB port, do not apply any force or shock to the plug.
- Do not insert any metal objects (coins, hairpins, etc.) or flammable debris into the device.
- Do not place heavy objects on the device.
- In case the device gets wet (rain, water, chemicals, medicine, cosmetics, sweat, moisture, etc.), do not turn on the device and allow it to dry thoroughly. Contact the nearest iriver Customer Support Center. (Malfunctions due to exposure to liquids will be repaired for a fee regardless of the warranty period and such damage may not be repairable.)
- Avoid exposing the device to direct sunlight or extreme temperatures(-5°C – 40°C; 23°F – 104°F) such as the inside of a car during the summer.
- Do not store or use the device in hot and humid places such as a sauna.

- Avoid places with excess moisture, dust, or smoke.
- Do not use for extended periods of time on blankets, electric blankets, or carpet.
- Do not place near a fire or in a microwave.
- Never attempt to disassemble, repair, or alter the product.
- When the AK Recorder is connected to an AK media player, do not store for extended periods in a confined space with the power on.
- Do not place the device near magnetic objects (magnets, televisions, monitors, speakers, etc.).
- Never use chemicals or cleaning products on the device since they can damage the paint and surface coating.
- Avoid dropping or subjecting the device to a strong impact (excessive vibration, etc.).
- Do not press multiple buttons simultaneously.
- Displaying one image for an extended period may cause screen burn-in (afterimage).
- Do not insert any foreign objects into the input ports.

Other

- Do not use earphones/headphones or operate the product while operating any type of vehicle. It is not only dangerous but may be unlawful in certain regions.
- Do not use the device during physical activities (driving, walking, hiking, etc.).
- Always use in a safe environment to avoid the risk of accidents.
- Always be aware of your surroundings when using the device while moving.
- Avoid using the device during thunderstorms to reduce the possibility of electric shock.
- If you experience ringing in the ears during or immediately after use, reduce the volume or discontinue using the product and obtain medical advice.

- Do not listen to music at excessive volumes for extended periods.
- Do not use the earphones/headphones at excessive volumes.
- Be careful not to get the earphones/headphones caught in other objects.
- Do not sleep with earphones in your ears or leave them in for extended periods.

Trouble-shooting

Check for solutions to common problems.

1. The device won't record.
 - Make sure the input selection switch (bottom or side of device) is set correctly.
 - If a microphone is connected to the Mini XLR port, check that the phantom power is properly selected and that phantom power is enabled under the Settings menu.
 - If audio cannot be heard after recording begins, increase the microphone and pre-amplifier gain values to appropriate levels.
 - Recording may not function normally due to insufficient storage space.
 - Recording and monitoring will be suspended when the battery level of the AK Recorder and AK media player are below 3%. The recording screen will close when the battery level is below 1%.
 - Recording will not begin if the media scanner is operating.
 - When using the AES3 input, recording will not begin if the recording format has not been set correctly. In addition, recording will not function if an unsupported format is entered.
2. The device will not charge when recording.
 - The device will not fully charge when recording while using a 5 V, 2 A adapter. We recommend using a 5 V, 3 A adapter (sold separately).

3. The device is hot to the touch.
 - The device may become hot during extended recording sessions due to the use of precision audio components. However, the performance and operation of the device are not affected. We recommend using a tripod for extended recording sessions.
4. The screen turned off while recording.
 - The AK Recorder's screen turns off automatically after a defined period that has been set in the AK media player used in conjunction with the device. If the screen turns off during recording, lightly touch the screen to turn it on again
5. The monitoring feature won't work.
 - Approximately 2 to 3 seconds of stand-by time is required before monitoring launches. "READY" will be displayed on the screen during this time, and monitoring mode will automatically launch thereafter.
6. The firmware update began suddenly without notice.
 - The AK Recorder attempts to automatically update its firmware when connected to a compatible AK media player. However, the update will be suspended if the battery level is less than 10%.
7. I can't use the CD-Ripper or USB DAC mode.
 - USB DAC mode and the AK CD-Ripper cannot be used when the AK Recorder is connected to an AK media player. To use the aforementioned device and functionality, disconnect the AK Recorder from the AK media player.
8. Performance is slow when a microSD card is selected as the file storage location.
 - Write performance may be affected depending on the speed class of a microSD card. Be sure to use a microSD card with a speed class of 10 or greater.
9. It does not charge the battery while recording.
 - Since the high power consumption during the recording, it remains without battery is not charged.

AK Recorder Specifi- cations

Recording Channel		2 channel, Stereo recording											
Audio Inputs		mini XLR 3pin type MIC/LINE x2(L/R), AES3 x1(L) 3.5mm MIC/LINE x1											
		<table> <tr> <td>Input</td><td>Mini XLR</td><td>3.5mm</td></tr> <tr> <td rowspan="2">Analog</td><td>Microphone (L/R)</td><td>Microphone</td></tr> <tr> <td>Line IN (L/R)</td><td>Line IN</td></tr> <tr> <td>Digital</td><td>AES3</td><td>-</td></tr> </table>	Input	Mini XLR	3.5mm	Analog	Microphone (L/R)	Microphone	Line IN (L/R)	Line IN	Digital	AES3	-
Input	Mini XLR	3.5mm											
Analog	Microphone (L/R)	Microphone											
	Line IN (L/R)	Line IN											
Digital	AES3	-											
mini XLR 3pin map		1 : Ground(G) / 2 : Positive(+) / 3 : Negative(-)											
Key Interface		MIC1 / LINE1 / AES3 select key x1 MIC2 / LINE2 select key x1 Phantom Power select key x1 (off / 5V / 48V)											
Battery		4,700mAh 3.7V Li-Polymer Battery, micro USB charging											
Continuous Recording Time		about 4hours [24bit/192kHz WAV, External Mic & Phantom Power 48V]											
Normal Charging Time		about 6hours											
Dimensions		80.7(W) x 127.4(H) x 29.9(D) (mm)											
Weight		about 251g											
Audio Perfor- mance	Recording Bit Rate	WAV : 16 / 24 / 32bit, DSD64, DSD128											
	Sampling Frequency	44.1 / 48 / 88.2 / 96 / 176.4 / 192 / 352.8 / 384kHz											
	Frequency Response	10Hz ~ 40kHz											
	A/D Dynamic Range	116dB A-weighted bandwidth											
	Equivalent Input Noise	Mic : -126dBu, 150ohm source, A-weighted filter											
	THD+N	Mic : 0.0004% max [1kHz, -15dBu] / Line : 0.0006% max [1kHz, -15dBu]											
	Gain	Mic : 9 to 60 dB, 3.0dB increments Line : - 96 to 22 dB, 0.5dB increments											
	Low Cut Filters	40 ~ 240Hz in 10Hz steps @ 6,12,18,24dB/oct											
	Compressor & Limiter	0 ~ -10dbFS, 1:2 ~ 1:20 ; Limiter, 1~1,000ms attack time, 10~2,000ms release time											
Phantom Power		5V / 48V Supported											
Media and formats													
Recording media													
Inner memory		64GB ~ 256GB supported											
micro SD Cards		max 128GB supported (Recommended SanDisk, Transcend) (Recommended up to Class 10)											
Recording/playback formats													
PCM Mode	Fs	44.1 / 48 / 88.2 / 96 / 176.4 / 192 / 352.8 / 384kHz											
	Bit depth	16 / 24 / 32bit											
	Playback and recording	WAV											
DSD mode	Fs	2.8224 and 5.6448MHz [DSD64, DSD128]											
	Playback and recording	DSDIFF											
Number of channels		2 mono, 1 stereo											

Media capacities and recording time			
Recording mode settings			Nand / micro SD card (per GB)
PCM	WAV-16	44.1kHz	1h 41m 27s
		48kHz	1h 33m 12s
	WAV-24	44.1kHz	1h 7m 38s
		48kHz	1h 2m 8s
		88.2 kHz	33m 48s
		96kHz	31m 4s
		176.4kHz	16m 54s
		192kHz	15m 32s
	WAV-32	352.8kHz	6m 20s
		384kHz	5m 50s
		When recording in 32bit, it can only be selected 352.8, 384kHz sample rate.	
DSD	DSDIFF	2.8MHz	25m 22s
		5.6MHz	12m 41s
Digital input			
AES/EBU (balanced)			
Connector		mini XLR (1:GND, 2:HOT, 3: COLD)	
Format		IEC60958 / AES/EBU	
Input frequency		44.1/48/88.2/96/176.4/192/352.8/384 KHz 16/24 bit resolution	
Analog inputs			
Unbalanced			
Connectors		3.5mm pin jack	
Maximum input level		+16 dBu	
Balanced			
Connectors		mini XLR (1:GND, 2:HOT, 3: COLD)	
Maximum input level		+21 dBu	

DPA SC4061 Micro- phone Specifi- cations

Directional Pattern	Omnidirectional
Frequency Range	20 Hz - 20 kHz
Sensitivity, nominal, ± 3 dB at 1 kHz	6 mV/Pa; -44 dB re. 1 V/Pa
Equivalent noise level, A-weighted	Typ. 26 dB(A) re. 20 μ Pa (max. 28 dB(A))
S/N ratio (A-weighted), re. 1 kHz at 1 Pa (94 dB SPL)	68 dB(A)
Total harmonic distortion (THD)	< 1% THD up to 123 dB SPL peak; < 1% THD up to 120 dB SPL RMS sine
Dynamic range	Typ. 97 dB
Max. SPL, peak before clipping	144 dB
Power supply	Phantom Power 5V
Microphone diameter	5.4 mm [0.21 in]
Microphone length	12.7 mm [0.5 in]
Cable length	1.8 m [5.9 ft]
Weight	7.5 g [0.26 oz]
Temperature range	-40°C to 45°C [-40°F to 113°F]

Ver.01



The SC4061 microphone is only included with the purchase of a DPA microphone kit.

The SC4061 is a dedicated 5 V phantom power microphone. Be sure to set the phantom power switch (side of device) to 5 V when using the microphone.

Noise may be introduced into the microphone if the volume and pre-amp gain are set too high.

The SC4061 is an omni-directional microphone, meaning sound is recorded from all directions.

Copyright

iriver Limited retains the rights to patents, trademarks, copyrights, and other intellectual property rights related to this manual. No contents of this user manual may be duplicated or reproduced in any format or by any means without the prior approval of iriver Limited. Using or reproducing, in whole or part, the contents of this document is subject to penalties.

Software, audio, video, and any other copyrighted contents are protected in accordance with relevant copyright laws. The user accepts all legal responsibility for the unauthorized reproduction or distribution of the copyrighted contents from this product. Companies, organizations, products, people, and events used in the examples are not based on actual data. iriver has no intention to be associated with any company, institution, product, person, or incident through this instruction manual, and no such inference should be made.

It is the responsibility of the user to comply with applicable copyright laws.

©1999-2016 iriver Limited. All rights reserved.

Certifications

KC / FCC / CE / PSE

Class B Device (Communication equipment for residential use): This is a Class B Device and is registered for EMC requirements for residential use. This device can be used in residential areas and all other areas.



FCCID: PRF11

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.

Registered Trademarks

Windows 2000, Windows XP, Windows 7, Windows 8, Windows 10, and Windows Media Player are trademarks of Microsoft Corp.

Disclaimers

The manufacturer, importer, and distributor shall not be liable for damages including accidental and personal injury due to the improper use or operation of this product. The information in this user manual was written based on current product specifications. The manufacturer, iriver Limited, is adding new complementary features and will continue to apply new technologies in the future. All specifications may be changed without prior notice. There is no warranty against data loss due to the use of this product.