PPF33

Astell&Kern

INSTRUCTION BOOK

User Guide



CONTENTS

Getting Started -01

Package Contents	02
Product Overview	03
Power Management	05
Charging	0.6
Connections	07
Firmware Updates	13

Using the Device -02

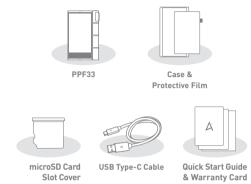
Basic Operations	14
Home Screen	18
Notification Bar	20
Using Open APP Service	23
AK CONNECT	24
Listening to Music	30
Playlist Management	33
USB DAC Installation	36
How to Use USB Audio	37
CD Ripping	38
Settings	40
Connecting to Wi-Fi	46
Using Bluetooth	47
Equalizer Setup	49

Miscellaneous -03

Safety Pre-Cautions	52
Troubleshooting	54
Copyright	55
Certifications	56
Registered Trademarks	57
Disclaimers	58
Specifications	59

Package Contents

Contents may be changed without prior notice to improve the performance or quality of the product.



Case & Protective Film: Protect the device and its screen. microSD Card Slot Cover: The cover is used to protect the microSD card slot when not in use. It is installed in the product by default.

USB Type-C Cable: For charging and data transfer.

Quick Start Guide: Basic overview of device functionality.

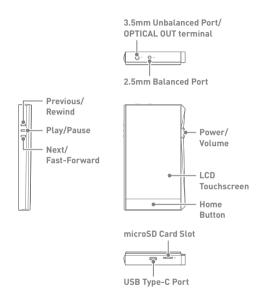
Warranty Card: Provides warranty details for your device. Maintain a copy of this card since it may be required for future technical support requests.

User Guide: The User Guide can be downloaded from the Astell&Kern website.

[http://www.astellnkern.com Support > Download].

Product Overview

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



3.5mm Unbalanced Port/ OPTICAL OUT terminal:

For audio output, connect earphones or headphones that utilize a 3.5mm jack. Music can be played back on an S/PDIF -capable external device via an optical cable.

2.5mm Balanced Port: BAL. - 2.5mm Balanced Port symbol.

For audio output, connect earphones or headphones that utilize a 2.5mm jack.

microSD Card Slot: 🕒 - microSD Card Slot symbol.

Insert a microSD card to access its files.

Power/Volume: (1) - Power symbol.

Short press - Turns the screen on or off.

Press and hold - Turns the device on or off.

Turn the wheel to adjust the playback output volume level.

LCD Touchscreen: Display screen with touch control features.

Play/Pause: Play or pause the current song.

Previous/Rewind:

Short press - Play the previous song or restart the current song. $% \label{eq:condition}%$

Press and hold - Rewind the current song.

Next/Fast-Forward: Short press - Play the next song.

Press and hold - Fast-forward the current song.

Home Button: Press to return to the Home Screen.

USB Type-C Port: 9V == 1.67A / 5V == 2A - DC Power symbol.

For charging and data transfer.

Power Management

Powering the Device On/Off

- Press and hold the [Power] button to turn on the device.
- 2. While the device is on, press and hold the [Power] button to shut down the device. A confirmation message will appear.
- 3 Press [OK] to turn off the device



This device has an automatic shutdown feature to save battery power. The device will turn off if there is no user input during the period defined in [Menu - Settings - Timer Settings - Auto Power Off] (See Page 44)

Turning the Screen On/Off

- 1. While the screen is on, press the [Power] button to turn off the screen.
- 2. Press [Power] button again to turn it on.



This device has an automatic timeout feature to save battery power. The screen will turn off if there is no user input during the period defined in [Menu - Settings - Timer Settings - Screen Timeout]. (See Page 44)

Reset Function

1. In case of unexpected device failure or freeze, press and hold [Power] for 7 seconds to force a shutdown. The device can then be restarted after the shutdown is complete.



Resetting the device will not affect stored data or time settings. Do not use the reset function while the product is in use. Doing so may corrupt the data on the device.

Charging

Charging via USB Wall Adapter

1. Commercially available 9V 1.67A output adapters may be used for charging.

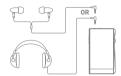


Fast charging time: Approx. 2 hours 20 minutes (Fully discharged, Power-off, 9V 1.67A adapter) / Normal charging: Maximum 5 hours (Fully discharged, Power-off, 5V 2A adapter) A fast charger of 9V 1.67A may be used. Using a 12V adapter will not charge the device and may cause malfunctions.

Connections

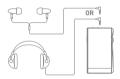
3.5mm Unbalanced Port

1. Connect earphones or headphones to the 3.5mm unbalanced port.



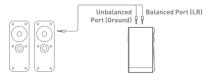
2.5mm Balanced Port

1. Connect earphones or headphones to the 2.5mm balanced port.



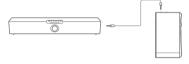
Connecting to Balanced Audio Device

1. Connect to an external audio device by using the 3.5mm unbalanced port and 2.5mm balanced port.



Connecting S/PDIF OUT

1. Listen to music through an external device by connecting the S/PDIF-IN-compatible external device using the optical cable and operating the product. Turn on the output format conversion function in [Menu-Settings-S/PDIF Conversion], to convert to the format that is set when S/PDIF connection is made and output.





At S/PDIF OUT, the DSD format is converted to PCM and played back. PCM can select output bit rate (16/24bit) and sample rate (48/96/192kHz).

The volume will be fixed at the maximum level.

The output format of connected external devices may differ so refer to the specifications of each device.

Connecting to Computer

- 1. Turn on the device and your computer.
- 2. Use the USB Type-C cable to connect the device to a computer in accordance with settings in [Menu - Settings - USB Mode].
 - [Default] Media Device (USB Drive): Transfer files from a computer to the device.
 - DAC Input: Listen to music on a connected computer through the device. (See Page 37)





Mac users need to download and install Android File Transfer from the Astell&Kern website. [http://www.astellnkern.com > Support > Download1

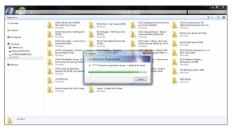
For an optimal connection, quit any unnecessary programs before

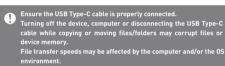
Do not use cables other than the USB Type-C cable provided with the device. Doing so may cause malfunctions. Use USB 2.0 only on Mac.

Type-C-to-Type-C cable is recommended when connecting with a MAC that supports Type-C port.

Copy Files (Folders) to the Device

1. To copy files/folders from your computer, select the desired files/folders and drag & drop them into the device folder.





Delete Files (or Folders) from the Device

- 1. Select the file/folder to delete, right-click the mouse, and then select [Delete].
- 2 Select [Yes] in the [Confirm File/Folder Deletion] window to delete the selected files/folders.



Disconnecting from the Computer

1. Disconnect the USB Type-C cable after the transfer between the device and computer is complete.



Disconnecting the device from the computer during a file transfer may corrupt data on the device.

Insert/Remove a microSD Card

- 1. Refer to the diagram and gently insert a microSD card into the microSD card slot
- 2. To safely remove a microSD card. on the Home Screen, select [Safely remove SD card] from the Notification Bar or select [Unmount SD card] from [Menu - Settings - System Information].
- 3. Gently press the microSD card in to unlock and release it from the slot





Recommended microSD Cards

SAMSUNG



Maximum Capacity: 512GB

Notes on Inserting a microSD Card

- Do not force the microSD card into the slot. Doing so may cause malfunction of the product and damage to the card.
- Do not repeatedly insert/remove the microSD card.
- If not inserted properly, the microSD card may cause product malfunctions and may become lodged in the product.

Notes on Removing a microSD Card

- Be sure to safely remove the microSD card from the device. Not following the proper procedure may corrupt data and cause serious damage to the both the card and device.
- Do not remove the microSD card during use. Doing so may cause malfunction, delete data and damage the microSD card.

Notes on Using a microSD Card

- If the microSD card is not recognized or functions improperly, format the card, preferably in the FAT32 system.
- Using cards other than the recommended microSD card types may cause malfunctions.
- A microSD card is not included in the product package. Please purchase separately.

Firmware Updates

Wi-Fi Update / OTA (Over-the-Air)

- 1 Connect to a wireless network
- 2. If a new firmware update is available, the screen will display a Firmware Update Guide window.
- 3. Select [Update].
- 4. Follow the on-screen instructions to proceed with the firmware update.



For Wi-Fi connections, see Page 46.

(A minimum battery level of 20% is required.)

Do not disconnect from the wireless network while downloading the update file. Doing so may cause data corruption and/or damage to the system.

If an error occurs or the notice in the Notification Bar disappears during an update, download the firmware update again through [Menu - Settings - Update - System].

Moving to another screen during a file download will cancel the download.

Rasic Operations

I CD Touchscreen

1. This device features an LCD touchscreen that allows you to perform operations by touch.

Use the touchscreen to access various features on the device.



To prevent damage to the screen, do not use a sharp object or excessive force.

Return to the Home Screen

1. Press [O] at any time to return to the Home Screen.





Home Screen

From the Home Screen, swipe your finger to the left, right, up or down from any edge of the touchscreen to access display menus. Each side of the Home Screen will activate a different display menu.

Main Menu

1. From the left edge of the touchscreen, swipe your finger right to display the Main Menu.





Music files extracted using the AK CD-Ripper accessory that are stored in the Ripping folder of the internal memory will be displayed

Notification Bar

1. From the top edge of the touchscreen, swipe your finger down to display the Notification Bar.





View Current Playlist

1. From the right edge of the touchscreen, swipe your finger left to display the Now Playing menu.





View Play History

1. From the bottom edge of the touchscreen, swipe your finger up to display the Play History menu.



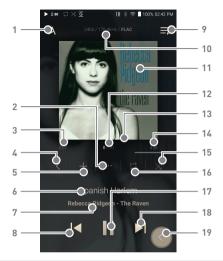


Moving Up/Down on a List

1. Scroll through a list by dragging your finger up or down.



Home Screen



1	Α	Menu	Displays the Main Menu.
2		Details	Displays current song information.
3		Song Progress	Indicates song duration.
4	<	Recent Menu	Go to the last displayed menu list.
		List	
5	+	Add to Playlist	Add the current song to a playlist.
6		Title	Song title information.
			File name is displayed when the title
			is unavailable.
7		Artist/Album	Displays the artist and album info.

Press and hold: Rewind the current sor Press and hold: Rewind the current sor Promat Information Playlist Displays the bit rate and sampling frequency data. Now Playing Song Count Playback Progress Bar Progress Bar Indicates the song's total duration Press to switch from elapsed time to remaining time. Press [☑] to set track sequence for playback. ※ : Shuffle mode on. ※ : Shuffle mode off. Repeat Mode Press [☑] to set the Repeat mode ☑ : Repeat entire playlist. ☑ : Repeat mode off. Play/Pause Play or pause the current song. Back button Press the floating back button to			
10 Format Information Displays the bit rate and sampling frequency data. 11 Album Cover Displays album cover of current son Tap image to view the songlyrics of the song Count Displays the current song number playing Song Count Shows the current track playback Progress Bar Displays the current track playback Progress Bar to move to the desired track time to remaining time. 14 Song Duration Indicates the song's total duration Press to switch from elapsed time to remaining time. 15 ★ Shuffle Mode Press [★] to set track sequence for playback. ★ : Shuffle mode on. ★ : Shuffle mode off. 16 ★ Repeat Mode Press [★] to set the Repeat mode ★ : Repeat entire playlist. ★ : Repeat current track. ★ : Repeat mode off. 17 ▶/II Play/Pause Play or pause the current song. 18 ▶ Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 ★ Back button Press the floating back button to	8 4		Short press: Play the previous song or restart the current song. Press and hold: Rewind the current song.
Information frequency data. 11 Album Cover Displays album cover of current son Tap image to view the song lyrics 12 Now Playing Song Count Displays the current song number playing total number of songs in Now Playing Progress Bar Progress. Drag the Playback Progres Bar to move to the desired track time to remaining time. 14 Song Duration Indicates the song's total duration Press to switch from elapsed time to remaining time. 15 ★ Shuffle Mode Press [★] to set track sequence for playback. ★ : Shuffle mode on. ★ : Shuffle mode off. 16 ★ Repeat Mode Press [★] to set the Repeat mode ★ : Repeat entire playlist. ★ : Repeat entire playlist. ★ : Repeat mode off. 17 ▶/II Play/Pause Play or pause the current song. 18 ▶ Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 ★ Back button Press the floating back button to	9 ☴	Playlist	Display current playlist.
Tap image to view the song lyrics 12 Now Playing Song Count 13 Playback Shows the current track playback Progress Bar progress. Drag the Playback Progres Bar to move to the desired track tim to remaining time. 14 Song Duration Indicates the song's total duration Press to switch from elapsed tim to remaining time. 15 ★ Shuffle Mode Press [★] to set track sequence for playback. ★ : Shuffle mode on. ★ : Shuffle mode off. 16 ★ Repeat Mode Press [★] to set the Repeat mode ★ : Repeat entire playlist. ★ : Repeat current track. ★ : Repeat mode off. 17 ►/II Play/Pause Play or pause the current song. 18 ► Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 ★ Back button Press the floating back button to	10		Displays the bit rate and sampling frequency data.
Song Count total number of songs in Now Playir 13 Playback Shows the current track playbac Progress Bar progress. Drag the Playback Progres Bar to move to the desired track tim Indicates the song's total duration Press to switch from elapsed tim to remaining time. 15 ★ Shuffle Mode Press [★] to set track sequence for playback. ★ : Shuffle mode on. ★ : Shuffle mode off. 16 ★ Repeat Mode Press [★] to set the Repeat mode ★ : Repeat entire playlist. ★ : Repeat current track. ★ : Repeat mode off. 17 ►/II Play/Pause Play or pause the current song. 18 ► Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 ★ Back button Press the floating back button to	11	Album Cover	Displays album cover of current song. Tap image to view the song lyrics.
Progress Bar progress. Drag the Playback Progres Bar to move to the desired track time. 14 Song Duration Indicates the song's total duration Press to switch from elapsed time to remaining time. 15 ★ Shuffle Mode Press [★] to set track sequence for playback. ★ : Shuffle mode on. ★ : Shuffle mode off. 16 ★ Repeat Mode Press [★] to set the Repeat mode ★ : Repeat entire playlist. ★ : Repeat current track. ★ : Repeat mode off. 17 ►/II Play/Pause Play or pause the current song. 18 ► Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 ★ Back button Press the floating back button to	12	, ,	Displays the current song number playing/ total number of songs in Now Playing.
Press to switch from elapsed time to remaining time. 15 ★ Shuffle Mode Press [★] to set track sequence for playback. ★: Shuffle mode on. ★: Shuffle mode off. 16 ★ Repeat Mode Press [★] to set the Repeat mode ★ : Repeat entire playlist. ★: Repeat current track. ★: Repeat mode off. 17 ►/II Play/Pause Play or pause the current song. 18 ► Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 ★ Back button Press the floating back button to	13		Shows the current track playback progress. Drag the Playback Progress Bar to move to the desired track time.
playback. X : Shuffle mode on. Shuffle mode off. 16 ☐ Repeat Mode Press [☐] to set the Repeat mode ☐: Repeat entire playlist. ☐: Repeat current track. ☐: Repeat mode off. 17 ►/II Play/Pause Play or pause the current song. 18 ►I Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 《 Back button Press the floating back button to	14	Song Duration	Indicates the song's total duration. Press to switch from elapsed time to remaining time.
☐: Repeat entire playlist. ☐: Repeat current track. ☐: Repeat mode off. 17 ►/II Play/Pause Play or pause the current song. 18 ► Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19 Back button Press the floating back button to	15 🔀	Shuffle Mode	☆ : Shuffle mode on.
18 ▶ Next/FF Short press: Play the next song. Press and hold: Fast-forward the current song. 19	16 🛱	Repeat Mode	; Repeat current track.
Press and hold: Fast-forward the current song. 19	17 ▶/	Play/Pause	Play or pause the current song.
9	18 ▶	Next/FF	Press and hold: Fast-forward the
	19 🔇	Back button	Press the floating back button to return to a previous menu/screen.

Notification Bar



1	Ė	Wi-Fi	Press $\widehat{\ \ }\widehat{\ \ }$] to turn Wi-Fi on/off.
2	*	Bluetooth	Press [*] to turn Bluetooth on/off.
3	111	EQ	Press [$\uparrow \downarrow \uparrow$] to turn the EQ on/ off. The most recent EQ settings are applied by default.
4	DISK	Computer Connection Mode	Select the mode to use when connected to a computer. DAC: Listen to music on a connected computer through the device. [Default] DISK: Enables transfer of media files.
5	\$	USB Audio CD Ripping	After connecting the device to a portable USB DAC, press [\sqrt{p}] to connect or disconnect the device. Turn CD ripping function on/off.
6	A	AK CONNECT	Press [λ] to turn AK Connect on/off.
7	<u></u>	Line-out	Press [\bigcirc] to turn line-out on/ off.
8	G	Gapless Playback	Press [
9	<u>A</u>	Wheel Lock	Press [] 1 to turn Wheel lock on/off. When turned on, the volume wheel will be disabled when the screen is locked.

10 💿	Settings	Press [\bigcirc] to display the full settings menu.
11	Brightness	Use the adjustment bar to control the display brightness.
12	Notifications Display	Device notifications are displayed in this area.
13	Clear Notifications	Clear notifications.

Long-press an icon [$\column{2}{c}$ / $\column{2}{c}$ / $\column{2}{c}$ / $\column{2}{c}$ / $\column{2}{c}$) to navigate to the corresponding full settings menu screen.

Using Open APP Service

The Open APP Service enables the user to install specific APK music streaming apps to the device. Copy the desired APK into the Open Service folder of the product and install the relevant App in the Menu-Service of the product.



The source of the app you are trying to install is unknown. Be aware that if the app is installed, the device may be damaged and personal data compromised. Depending on the APP, some functions may not work. If you install an app from an unknown source, despite this warning, the company is not responsible for any damages to the device and data resulting from the app's installation, and downloading and installing such apps may limit the scope of after-sales services provided under the manufacturer warranty.

ΔΚ CONNECT

Access and play back music files stored on a computer, NAS drive or AK Device on the same network, as well as output sound through compatible speakers with AK Connect.

AK Connect is available on your AK device and also available as an app for your smartphone or tablet via Apple's App store or Google Play Store.

MQS Streaming Server for your Computer

- 1. In order for your computer to be visible by AK Connect, on your computer, visit the Astell&Kern website and download the MQS Streaming Server installer that corresponds to your operating system. [http://www.astellnkern.com > Support > Download].
- 2. Run the downloaded installer and follow the on-screen instructions.
- 3. Check the User Guide within the program for detailed information on using the MQS Streaming Server.



Using AK Connect to Link Music Libraries/Speakers

- 1. Turn on the music library device and/or speaker and AK player.
 - To access the music library on your computer, you must also open and run the MQS streaming serveron vour computer.
- 2 Connect all devices to the same Wi-Fi network
- 3 Turn on the AK CONNECT feature by pressing and holding $[\ \ \ \]$ in the Notification Bar or selecting [Menu-Settings-AK CONNECT1.
- 4. Press [AK CONNECT] on the Main Menu.



- 5. A list of libraries / speakers that are on the same network with the AK player will be displayed.
- 6. Select a library / speaker to connect.



7. After selecting a library / speaker, select a category from the menu to display the corresponding music list.



For Wi-Fi connections, see Page 46.

Streaming Music from Your Library

- 1. Select a category from the library menu to see your list of music.
- 2. Select a song to begin streaming.



Downloading Music from Your Library

- 1. Select a category from the library menu to see your list of music.
- 2. Press [「√」 button at the upperright corner of the music list.
- 3. Select the desired music and press [\downarrow] to initiate the download
 - A message on the Notification Bar will indicate when the download is complete.



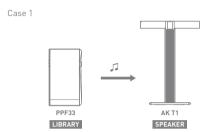
streaming may stutter.

Performing other operations on the linked computer may cause slower response time.

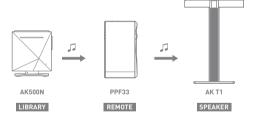
If you stream and download at the same time, it may slow the device's response time depending on the speed of the Wi-Fi network or server.

To stop a download in progress, tap the notification in the Notification Bar to go to the download screen. Then, select the items to pause or delete.

AK Connect Usage Examples



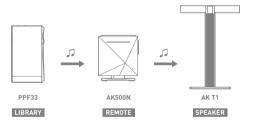
Case 2

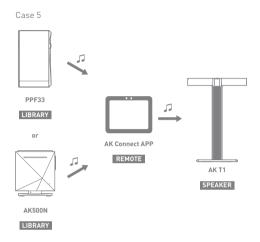


Case 3



Case 4





Listening to Music

Selecting Music

- 1. Select a category from the Main Menu to display the corresponding music list.
- Select a song from the list to begin playback.



Select [Folder] to search music by folder. Continuous Playing Time: Approx. 8 hours (Music: FLAC,16bit, 44.1kHz, Unbalanced, Volume 80, EQ Off, LCD Off) Supported Formats: PCM [8~768kHz[8/16/24/32bit]] DSD [2.8/5.6/11.2/22.4Mhz]

Listening to Music

- To search, press [Q] on the menu list and enter the title. The search result will be displayed.
- At the top of the Play History menu, press [] (/ .l. > 1 to sort the music list in order of most recently played/most played.
- After selecting the [MQS] category, press [] = /] at the top to sort the music list in order of high quality / alphabetical order.
- In the [MQS] category, the MQS tab shows MQA files and PCM files of 24 bits or more, and the DSD tab shows DSD files.
 - O MQS: MQA [44.1-384kHz[16/24bit]]
 - o MQS: PCM [8~768kHz[8/16/24/32bit]]
 - o DSD: DSD [2.8/5.6/11.2/22.4Mhz]
- Select the [Folder] category to check the internal / external memory capacity and number of files / folders, and copy / move music
- Press [] on the music list to add all music to the current playlist.

• Press [[] on top of the music list to view the options:

: Select / deselect entire list

: Add the selected list at the top / bottom / after the current song of Now Playing

: Add selected list to a playlist

: Delete selected list

X · Fyit

- Turn the [Volume] wheel to adjust the volume.
- Press [] during playback to pause and [▶] to resume playback.
- Press [|◀/▶|] during playback for the previous/next track.
- Press and hold [I◀/▶I] to rewind/fast-forward the track.
- Drag the indicator on the Playback Progress Bar to a desired location of a track during playback.
- Press the album art on the Home Screen to display the song lyrics.
- Press the [O] to go to Home Screen.
- Press [X] at the top of the menu list to hide the menu list.
- After selecting [ALBUM] or [CD LIBRARY] category, press [H / = / H] at the top to sort by different viewing options.

Playlist Screen



1	Previous	Return to the previous screen.
2	Playlist	Display the current playlist.
3	Edit mode	Display the editing options for the music list.
4	Play All	Play all songs in the current list.