

PPF31

Astell&Kern

INSTRUCTION BOOK

User Guide

IRIVER

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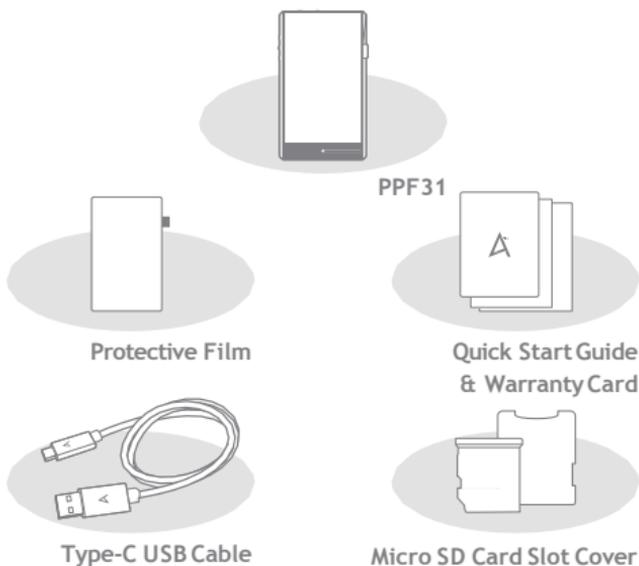
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Package Contents

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



Protective Film: Protects the product's screen.

Type-C USB Cable: Connects the product to the PC or charges the product.

Quick Start Guide: It describes the basic method of using the product.

Warranty Card: The warranty card is required for customer services. Keep the warranty card for technical support.

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

[<http://www.astellkern.com/> > Support > Download]. **Micro SD Card Slot Cover:** Protects the micro SD card slot when not in use. It is installed on the product by default.



The product does not include any micro USB cable.

Description of Each Part

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

3.5mm Unbalanced Port
microSDcard slot

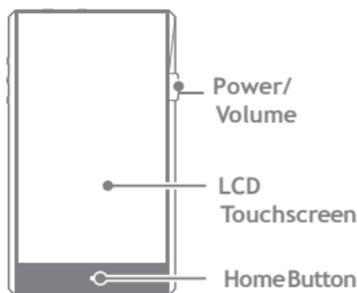
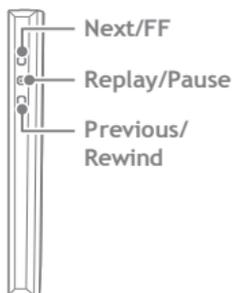


2.5mm BalancedPort

Balanced Port for External Devices



Type-C USB Port



3.5mm Unbalanced Port: Connects to the earphones and the headphones with 3.5mm unbalanced ports.

2.5mm Balanced Port: Connects to earphones and headphones with 2.5mm balance ports for audio output.

Balanced Port for External Devices: Provides balanced output when connected with an external device.

Micro SD Card Slot: Reads the files on the inserted micro SD card.

Type-C USB Port: Connect to a computer or recharge the device.

Power/Volume: Turn the wheel to adjust the volume of the sound.

Click: Turns the screen on and off.

Click and Hold - Turns the device on and off.

LCD Touchscreen: Display the screen, and touch it to start.

Previous/Rewind:

Short press - Plays the previous song or restarts the song.

Long press - Rewinds.

Play/Pause: Short press - Plays/pauses.

Long press - Returns to the playback screen.

Next/FF: Short press - Plays the next music.

Long press - Fast-forwards.

Home Button: Returns to the home screen.

Power Management

Turning on/off Power

1. Long-press the [Power/Volume] to turn on the device.
2. While the device is on, long-press the [Power/Volume] to shut down the device. A confirmation message will appear.
3. Press [Confirm] 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 - Power - Automatic Shutdown] (See Page 45.)

Turn the Screen On/Off

1. While the screen is on, press the [Power/Volume] to turn off the screen.
2. Press [Power/Volume] 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 - Power - Screen Timeout]. (See Page 45.)

Reset Function

1. In cases of unexpected device failure or freeze, press [Power] for 12 seconds to force a shutdown. The device can be restarted after a shutdown.



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

Charging

Charging Via PC

1. Connecting to PC via Type-C USB cable will also charge the product.



Charging Time: Maximum 8 hours (Completely run-down and power-off) Depending on the PC specifications, the charging process may require turning on the PC.

When charging via PC connection, the charging time may vary depending on whether the device is turned on or off.

Some PCs in power-saving mode may not charge the device.

The built-in battery will gradually lose capacity over time with repeated charging/running-down.

Do not use cables other than Type-C USB cable and micro USB cable. Doing so may cause a malfunction.

Charging Via Adapter

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



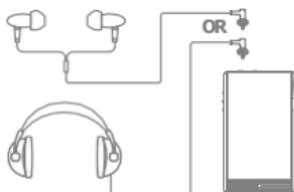
Fast charging: Maximum 2 hours (Completely run-down, Power-off, 9V 1.67A adapter) / Normal charging: Maximum 2 hours (Completely run-down, Power-off, 5V 2A adapter)

A fast charger of 9V 1.67A may be used. Using a 12V adapter will not charge the product and may cause malfunctions.

Connections

3.5mm Unbalance Port

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



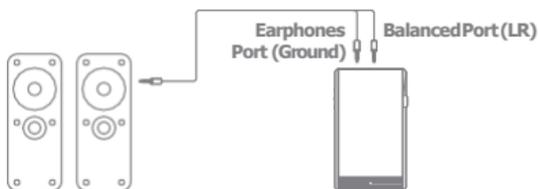
Connect to the 2.5mm Balanced Port

1. Connect earphones and headphones to the 2.5mm balance port.



Balanced Audio Device

1. Connect to an external audio device by using the Earphones port and Balanced port in conjunction.



! Astell & Kern balanced cable (PEF12, PEF21) is not supported.

Connecting to PC

1. Turn on the device and your PC.
2. Connecting the product to PC using Type-C USB cable will follow the [Menu - USB Connection] settings.
 - Media Device (USB Drive): Transfer files from a PC to the device.
 - DAC Input: Listen to music on a connected PC through the device. (See Page 36.)



Mac users need to download and install the MTP program from the Astell&Kern website. <http://www.astellkern.com> > Support > Download]

For an optimal connection, quit any unnecessary programs before connecting the device to the computer.

Do not use cables other than the Type-C USB cable provided with the product.

Windows XP users require Service Pack 2 and Windows Media Player 10 to be installed for the computer to recognize the USB device. Download Windows Media Player and required Service Packs from the Microsoft website. <http://www.microsoft.com>

Disconnecting from the Computer

1. Disconnect the Type-C USB cable after the transfer between the product and PC is completed.



Disconnecting the device from the computer during an operation (e.g., file transfer) may corrupt data on the device.

Copy Files (Folders) to the Product

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



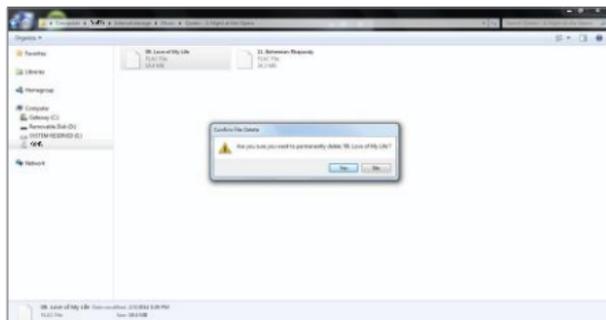
Connect the Type-C USB cable correctly.

Turning off the product or disconnecting the Type-C USB cable while copying or moving files/folders may cause serious damage to the memory.

File transfer speeds may be affected by the computer and/or the OS environment.

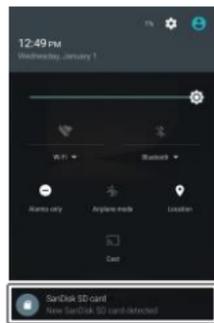
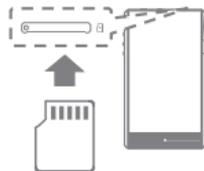
Delete Files (or Folders) from the Product

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



Insert/Remove a Micro SD Card

1. Refer to the diagram and gently insert a micro SD card into the micro SD card slot.
2. To safely remove a micro SD card, select [Safely remove SD card] from the Notification Bar or select [Dismount SD card] from [Menu - System Information].
3. Gently press the micro SD card to release it from the slot.



Recommended micro SD Cards

Micro SD: SanDisk, Transcend



Maximum Capacity: 256GB

Notes on Inserting Micro SD Card

- When inserting the micro SD card, do not use excessive force. This may cause the product and the card to malfunction.
- Do not repeatedly insert/remove the micro SD card.
- If the card is improperly inserted, it may become immovable or cause damage to the device.

Notes on removing a micro SD card

- Be sure to safely dismount and remove the micro SD card from the device. Not following the proper procedure may corrupt data and cause serious damage to the system.
- Do not disconnect the micro SD card during use. Doing so may damage the micro SD card, corrupt or delete data and cause the device to malfunction.

Notes on Using Micro SD Card

- If the micro SD card is not recognized or is not functioning properly, format the card, preferably in FAT32 system.
- Using cards other than the recommended micro SD card may cause malfunctions.
- A micro SD card is not included in the product package. Purchase a micro SD card separately.

Firmware Upgrade

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

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



For Wi-Fi connections, see Page 47.

The firmware upgrade may not initialize if the battery level is too low. (A minimum battery level of 50% is required.)

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

Do not disconnect from the wireless network while downloading a firmware upgrade. 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 upgrade, download the firmware update again through [Menu - Update - System Update].

Basic Operations

LCD Touchscreen

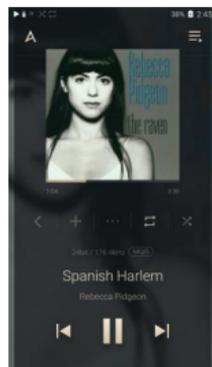
1. This device features an LCD touchscreen that allows you to perform operations by touch.
Interact with the device by touching the screen to access various features.



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

Return to the Home Screen

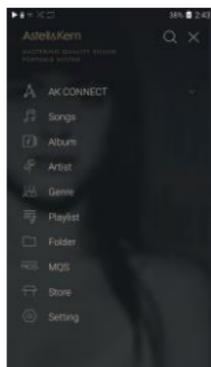
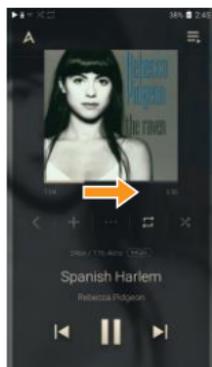
1. Press [O] to go to the Home Screen.



HomeScreen

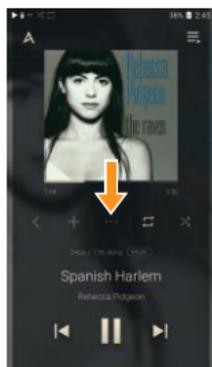
Menus

1. Touch and drag to the right and left in the home screen to display menus.



Notification Bar

1. Touch and drag up and down on the home screen to display the notification bar.



View Current Playlist

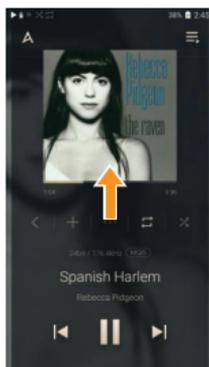
1. Touch and drag right and left on the home screen to display the current playlist.



Now Playing	
Title Text	Sub text

View Past Playlists

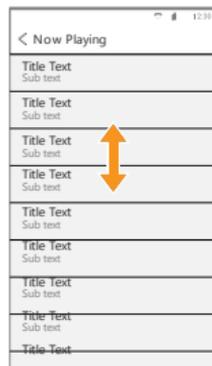
1. Touch and drag up and down on the home screen to display previous playlists.



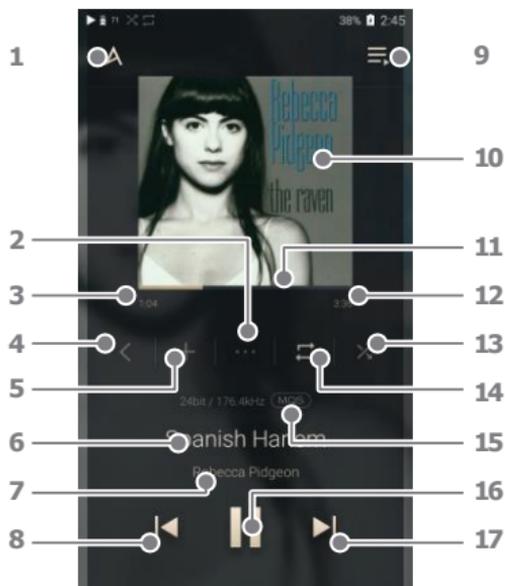
Play History	
Title Text	Sub text

Moving Up/Down on the List

1. Scroll through the list by dragging up and down.



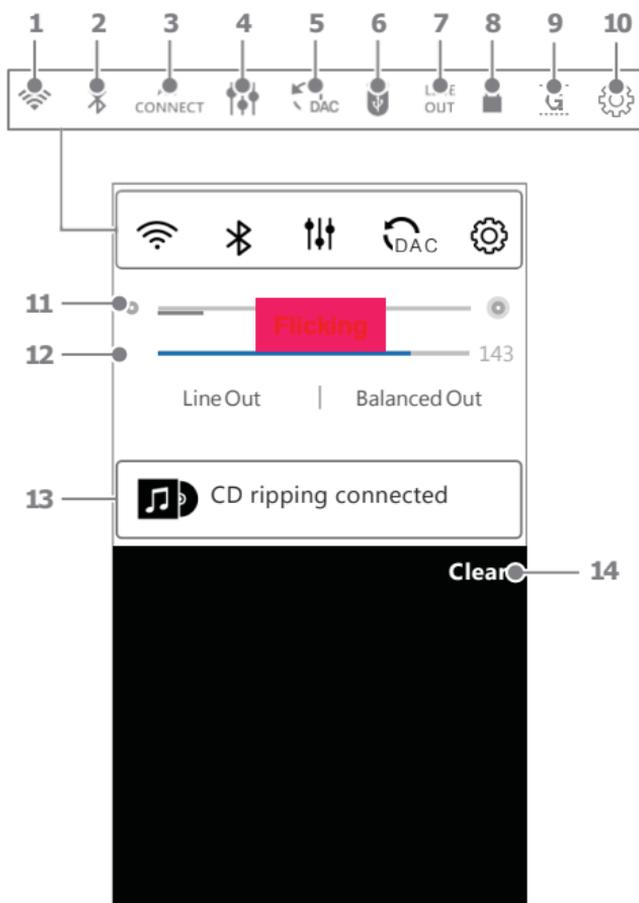
Home Screen



1	☰	Menus	Displays menus.
2	↑	Details	Displays current song information.
3		Song Duration	Indicates the song's total duration. Press to switch from elapsed time to remaining time.
4	←	Current Album	Goes to the album of the current song.
5	+	Add to Playlist	Add the selected song to the playlist.
6		Title	Song title information. File name is displayed when ID3Tag is unavailable.

7	 Artist/Album	Displays the artist and the album.
8	 Previous/ Rewind	Short press: Plays the previous song. Long press: Rewinds the current song.
9	 Playback Screen	Displays the playback screen.
10	 Album Cover	Display album covers. Press the album cover to view the lyrics.
11	 Progress Bar	Shows the progress bar. Drag the indicator to move to the desired track time.
12	 Song Duration	Indicates the song's total duration. Press to switch from elapsed time to remaining time.
13	 Play Mode	Press [] to set the play mode. → :Sequential playback. ↻ :Shuffle playback.
14	 Repeat Mode	Press [] to set the Repeat mode.  :Repeat the entire playlist.  :Repeat the current song.  :Cancel repeat.
15	 Details	Displays bit rate and sampling frequency data.
16	 Play/Pause	Plays or pauses the current song.
17	 Next/FF	Short press: Plays the next song. Long press: Fast-forwards the current song.

Notifi- cation Bar



1	 Wi-Fi	Press [] to turn Wi-Fi ON/OFF.
2	 Bluetooth	Press [] to turn Bluetooth
3	AK CONNECT	Set AK Connect.
4	 EQ	Press [] to turn the EQ ON/OFF. The most recent EQ settings are applied by default.
5	 PC Connection Mode	Select the mode to use when connected to a PC.  : Listen to music on the device through a connected PC.  : Enables transfer of media files.
6	 USB Audio	Please turn ON/OFF USB audio output after connecting to the portable USB DAC. (See page??.)
	 CD Ripping	Turn ON/OFF automatic CD ripping. (See page ??.)
7	Line-out	Turns ON/OFF the line-out.
8	 Screen Lock	Press [] to turn the screen lock ON/OFF. The volume wheel is disabled when the screen is locked.
9	 Gapless Playback	Press [] to turn Gapless Playback ON/OFF.

10	 Settings	Displays a list of settings.
11	Brightness	Use the adjustment bar to control the display brightness.
12	Volume	Adjust the volume with the volume control.
13	Notifications Display	Notification contents are displayed in this area.
14	Delete Notifications	Deletes the notifications.

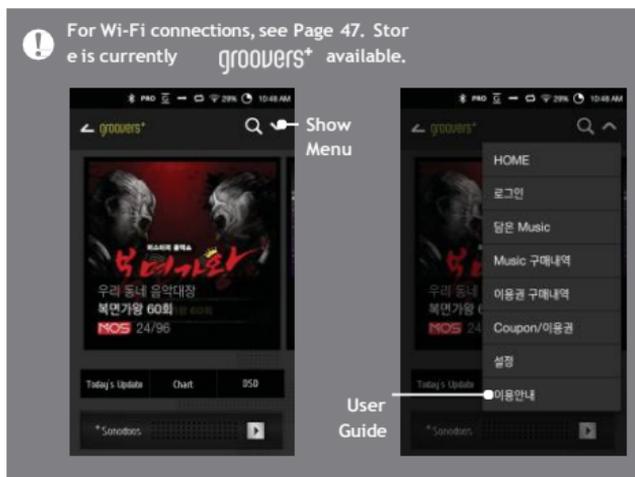
 [ EQ /  /  / ] Long-press them to move to the corresponding screen.

Purchasing Music from Store

Conveniently purchase music from the Store when connected to a wireless network.

Purchasing Music

1. Connect to a wireless network.
2. Select [Store] from the menu.
3. Select the desired store.
4. Check the user guide or help menu within each store for detailed information.
 - Select [Menu > User Guide] within the Groovers Store for instructions.



AK CON NECT

The PPF31 can access and play back music files stored on a PC on the same network as well as output sound through Astell&Kern speakers.

MQS Streaming Server Installation

1. Visit the Astell&Kern website and download the server installer that corresponds to your operating system. [<http://www.astellkern.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.

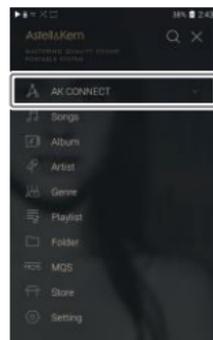


Please refer to the following PC/Mac minimum system requirements.

- Minimum PC Requirements
OS: Windows XP, Windows 7/8/10 (32 & 64-bit)
- Mac Requirements
OS X 10.7 (Lion) or later

Connecting to the AK Connect Server/Speakers

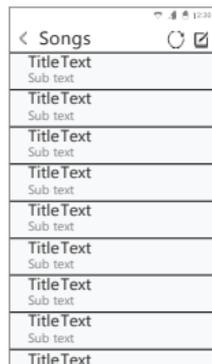
1. Turn on the server and connect to the same network as the PPF31.
 - Run the MQS streaming server on your PC.
2. Turn on [AK Connect] from the device settings.
3. Press [AK Connect] on the menu.



- A list of servers on the same network as the PPF31 will be displayed.



- Select the search option on the home menu to display the music list.



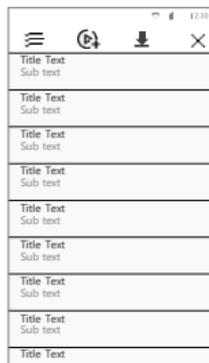
For Wi-Fi connections, see Page 47.

Streaming and Downloading from the Music Server

1. Select the search option on the server menu to display the music list.
2. Select a song to begin streaming.



3. Press [] button at the upper-right corner of the music list.
4. Select the desired music, and press [] the top to download the music.
 - A message on the Notification Bar will indicate a completed download.



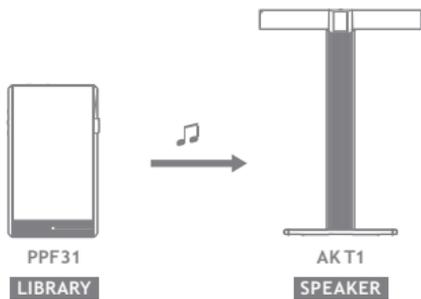
Depending on network conditions, song loading may be slow or streaming may stutter.

Server response may be slow when the server computer is busy. If you do streaming 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.

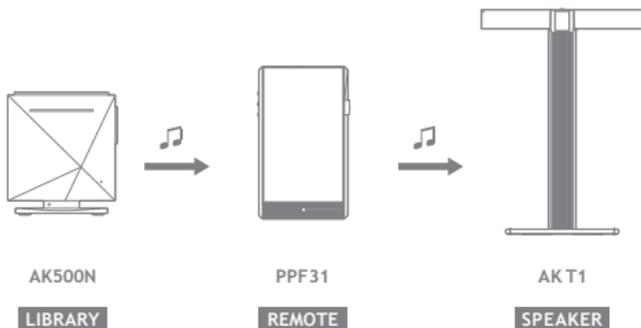
Terminating music streaming or pressing the item being downloaded within the Notification Bar will stop the downloading.

AK Connect Usage Examples

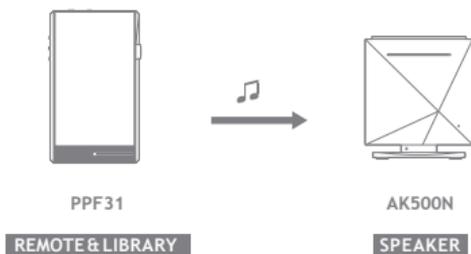
Case 1



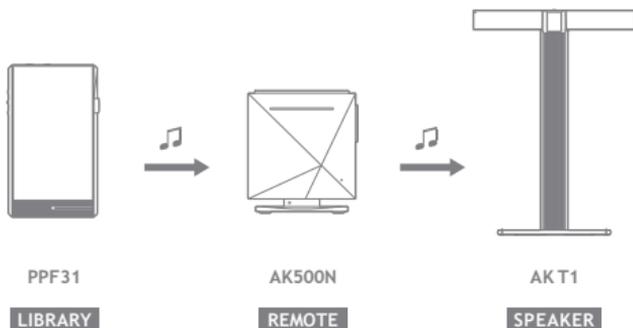
Case 2



Case 3



Case 4



Case 5



PPF31

LIBRARY

or



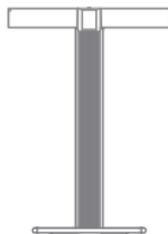
AK500N

LIBRARY



AK Connect APP

REMOTE



AKT1

SPEAKER

Listening to Music

Selecting Music

1. Select a search option at the bottom of the home screen to display the playlist.
2. Select a song from the list to begin playback.



Select [Folder] to search music by folder.

Continuous Playing Time: Approximately 12 hours (Music: FLAC, 16bit, 44kHz, Unbalanced, LOW Gain, Volume 50, EQ Off, LCD Off) Supported Formats: PCM[8-384kHz(8/16/24/32bit)] DSD [2.9/5.6/11.2MHz]

Listening to Music

- Press [Q] on the menu list and enter the title. The search result will be displayed.
- Press [↓] on the past playlist. The music will be displayed from the most frequently played selections.
- Select [MQS] and press [⇩] on top. The music will be displayed from the highest quality selections.
- Select [Folder] as the music search option to copy/move the music files.
- Press [⇩] on the music list to add all music to the current playlist.
- Press [☑] on top of the music list to view the options. :
 - ▶ : Add the file to the end of the list or next to the current song.
 - 🎵+ : Add the selected file to the playlist.
 - ☰ : File selection box
 - 🗑️ : Delete the selected file.
 - ✕ : Exit
- Turn the [volume wheel] to adjust the volume.

- Press [⏸] during playback to pause and [▶] to resume playback.
- Press [⏮] during playback for the previous/next song. Long-press [/] during playback to rewind/fast-forward. Drag the indicator to the desired location during playback. Press the Album Cover during playback to show lyrics.
- Press the [O] to go to Home Screen.
- Select an album cover from the home screen to begin playback.

Playlist Screen

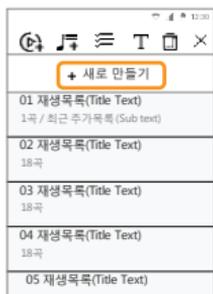
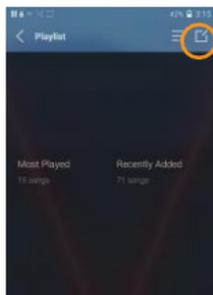


1 Previous	Return to the previous screen.
2 Playlist	Displays the playlist for the current location.
3 MusicOptions	Displays all music options.
4 PlayAll	Play all songs from the current playlist.

Manage Playlist

Creating a Playlist

1. Press [Playlists] on the Home screen to view the playlists.
2. Press [] on the upper-right corner, and select [+ Add].
3. Enter a name for the playlist, and then press [Add] to create a new playlist.



Adding a Song to a Playlist

1. Press [Playlists] to display the list of playlists.
2. Select a playlist and press [+ Add] to display a list of songs.
3. Select a song, and press [Add] to add the song to the selected playlist.



Removing a Song from a Playlist

1. Press [Playlists] to display the list of playlists.
2. Select the playlist, and then press [] at the top of the screen.
3. Select music, and press [] on top to delete the music from the playlist.



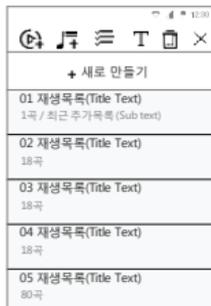
Editing the Playlist Order

1. Press [] next to the playlist to change the playlist order.



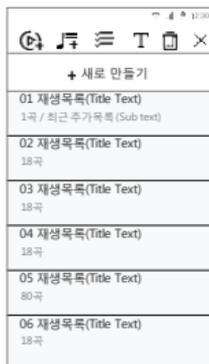
Playing a Playlist

1. Select the desired playlist for playback.
2. Press [] on top of the playlist to move it to the end of the current list or next to the current song.



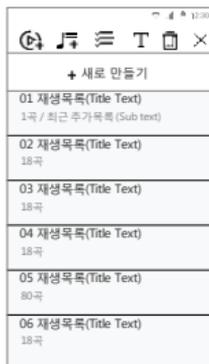
Renaming a Playlist

1. Press [Playlists] to view the playlists, and press [✎].
2. Select a playlist to be renamed.
3. Press [T] at the top of the screen to display the renamed window.
4. Enter a name for the playlist, and then press [Rename] to save the playlist under a new name.



Deleting a Playlist

1. Press [Playlists] to view the playlists, and press [✎].
2. Select the playlist to be deleted.
3. Press [🗑] at the top of the screen to delete the selected playlist.



USB DAC Installation

The USB DAC allows PPF31 to be recognized as a sound card on a PC. Music from the PC is played through the device earphones port for an enhanced listening experience.

USB DAC Specifications

- Supported OS
 - Windows XP(32bit) / Windows 7(32bit/64bit) / Windows 8(32bit/64bit) / Windows 10(32/64bit) / MAC OS 10.7
- USB DAC Support Specifications
 - Supported Formats: PCM [8~384kHz(8/16/24/32bit)]
DSD [2.8/5.6/11.2MHz]
- Control the volume with the PPF31's volume wheel.



Playback is unavailable when settings exceed the support formats. Volume control is unavailable when the LCD screen is turned off during USB DAC connection.

The Previous, Play, and Next buttons are unavailable during USB DAC connection.

Playback may stutter when computer performance is slow or the USB connection is experiencing heavy usage.

There may be issues with audio-to-video synchronization during video playback depending on the sound quality and operating environment.

Volume cannot be adjusted via the Windows volume control. The volume wheel on the device or volume control on the appropriate program must be used to adjust the volume.

How to Use USB Audio

Enjoy USB audio by connecting a portable amp and DAC available on the market.

How to Link Portable USB DAC

1. Connect the device's micro USB jack with the portable USB DAC with dedicated cable.
2. Press [] after scrolling down the notification bar.
3. Once [] is activated, you can enjoy the music through the portable USB DAC's audio output jack.



The USB Type-C cable provided with the product is to be used to connect to the PC or to charge the product.
For instructions on the dedicated cable, please refer to the manual of the portable USB DAC manufacturer.

How to Change USB Audio DSD Output Type

You can change the output type of DSD data output from USB audio.

1. Select a DSD output type on [Menu - USB audio].
 - PCM : The device's DSD is converted into PCM and is output through USB audio.
 - DoP : The device's DSD is converted into DoP and is output through USB audio.



The portable USB DAC must be able to receive digital input through the micro USB's OTG.
Output may not be optimum depending on the digital input specs of the micro USB of the portable USB DAC. This is not a defect in the device and not a reason for exchange or refund.
In the case of using DoP as a DSD output type, no sound may be output except noise depending on the specs of the portable USB DAC.

CD Ripping

Connect the AK Ripper (sold separately) to rip CDs.

Turning the AK Ripper ON/OFF

1. Connect the micro USB port and the AK ripper of PPF31, and press [] to use the AK ripper.
2. While the AK Ripper is turned on, pull down the notification bar and press the CD ripping icon to stop the AK Ripper operation.

Automatic CD Ripping

1. Connect the AK Ripper and insert a CD.
2. The metadata (ID3 tags) for the inserted CD will be retrieved via Gracenote.
3. CD ripping will begin automatically after the metadata has been retrieved.
4. When finished, press [OK] on the results prompt to complete automatic CD ripping.

Manual CD Ripping

1. When the AK Ripper is connected and a CD is inserted, the [CD Ripping] menu will be activated on the home screen.
2. Press the [CD Ripping] menu and select the desired file format (FLAC or WAV).
3. The Gracenote database will be searched for matching CD metadata after the file format is selected.
4. When the database search is complete, press [Start] to begin CD ripping.
5. Rip only selected songs.

CD Ripping Results

- : Indicates that CD ripping is complete, or that although an error occurred, CD ripping was successfully completed via error correction.
- ✕ : Indicates that the song currently being ripped can be canceled via user input.
- △ : Indicates that CD ripping failed due to a scratch on the CD or other similar reasons. Also indicates that CD ripping was canceled due to user interruption.



To search the Gracenote database, the device must be connected to Wi-Fi. The database access time may vary depending on the network environment.

Please note that metadata for certain CDs may not be available on the Gracenote database.

You may not access the Home screen while CD ripping is in progress.

The AK Connect service will be disabled during CD ripping. The service will automatically restart when CD ripping is completed.

Music playback will be disabled during CD ripping, and tracks that have been ripped will not be available for playback until the entire CD has been ripped.

You can set the desired file format and ripping speed from the [Menu - CD Ripping] menu.

Several attempts at correction will be made for data with errors when the feature is enabled under [Menu - CD Ripping - Error Correction]. Please note that the CD ripping speed will be affected when this feature is enabled.

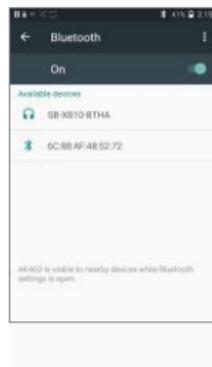
Using Bluetooth

Connect a Bluetooth device to listen to music wirelessly.

Turning Bluetooth ON/OFF

A Bluetooth device must be paired with the AK320 prior to use. Refer to the Bluetooth device's instruction manual for details.

1. Select [Bluetooth] from the home screen, or select [ON/OFF] from [Menu - Bluetooth].

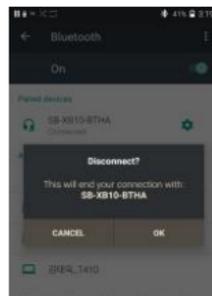


Bluetooth Pairing

1. Select the appropriate Bluetooth device from the list of available devices.

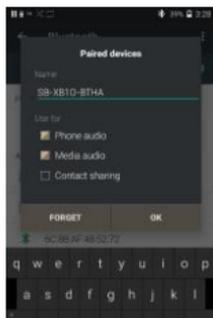
Terminating a Bluetooth Connection

1. Press the connected Bluetooth device and confirm the message prompt to disconnect the device.



Removing a Bluetooth Pairing

1. Press [≡] to the right of the paired device to go to settings.
2. Select [Remove Pairing] to complete the process.



Bluetooth Support Specifications

- Profile: A2DP, aptX HD
- Device performance may be affected during a Hi-Fi playback. Do not turn off the device while connected to Bluetooth.

Power cycle the Bluetooth device in case of malfunction.

Pairing methods may differ for each individual Bluetooth device. Always refer to the respective instruction manual for details.

When connecting the product to a Bluetooth device, the distance between the two must be within 20 cm. Audio quality will degrade with longer distances, and the pairing may disconnect at a distance of 2 m (6.5 ft) or more. (Distances may vary depending on device and environment.)

Crosstalk may be heard while using Bluetooth.

For multi-point devices, make the necessary connections prior to use.

Car audio Bluetooth connections are not supported.

Malfunction, noise, and other undesirable effects may occur due to the device's battery level and the environment.

- If signal interference affects data transmission. (e.g., holding the device while wearing a Bluetooth device, holding the device while holding another electronic device, etc.)
- If the device or Bluetooth headset's radio transmitters are touching parts of the body.
- If the transmission strength is affected by walls, corners, partitions, etc.
- If devices using the same frequencies cause interference. (e.g., medical devices, microwave ovens, Wi-Fi, etc.)
- Areas with an excessive amount of interference or weak signals. (e.g., elevators, underground, etc.)

Settings

Set up the device according to the user's needs. The settings menu may vary depending on the firmware version.

Setup

1. Select [] on the notification bar of the home screen.
2. Select the desired item for setup.

Wi-Fi

- Change wireless network settings and turn Wi-Fi ON/OFF.



See page 47 of the manual for more information on setting Wi-Fi.

Bluetooth

- Connect a Bluetooth device to listen to music wirelessly.



See [Using Bluetooth] on page 40 for more information.

AK CONNECT

- Set whether to use AK Connect.

Equalizer

- Set the equalizer according to the user's preferences. PR
 - O EQ: Preset EQ recommended by professionals. USER
 - EQ: Adjust the frequencies according to the user's preferences.



Supported Formats for EQ: PCM [8 - 192kHz(8/16/24bit)], DSD [2.9/5.6/11.2MHz]

Using the equalizer may negatively affect device performance. See pages 48 - 50 for more information on using the equalizer.

Gapless Playback

- Play the next song without any interruptions/silence.
 - Gapless playback is only supported between two files with identical bit rates, sample rates, and channels.

Line-out

- The volume through Line Out cannot be adjusted.



Do not use earphones with the Line Out feature enabled. Doing so may cause permanent hearing loss.

Left-Right Balance

- Adjust the left-right balance for earphones/headphones.

Playback Setting

- Set the destination to add the selected music.

Amp

- The AMP output may be set LOW/HIGH.

CD Ripping

- Set the automatic CD ripping function as well as the file format and ripping speed.

USB Connection

- Media Device (USB Drive): Select the mode to use when connected to a PC.
- DAC Input: Listen to music on the device through a connected PC.

USB Audio

- It sets up the output type of DSD being output through the portable USB DAC.

Screen Brightness

- Adjust screen brightness settings.

Date & Time

- Set the current date and time.

Device Name

- Set the name of the device.
 - The maximum name length is 30 characters.

Language

- Select the display language.
 - Supported languages: English, Korean, Japanese, Chinese (Simplified/Traditional), French, Russian, German

Keyboard

- Select the keyboard language.
 - Supported languages: Korean, English, Japanese, Chinese (Simplified/Traditional), Russian

Power

- Automatic power off: If a certain amount of time passes while there is no operation of the product and buttons, it will be automatically powered off.
- Turning off the screen: Screen Timeout: The screen will turn off after a defined period when there is no user input.
- Set Sleep Timer: Music playback will stop, and the device will turn off after a defined period.

Download

- Select a folder for downloaded files.



The default folder is set when using AK Connect to download files. When [Select Folder] is selected, the user is prompted to choose a download folder each time a file is downloaded.

Update

- System Update: Update the system when a new version is available.
- Application Update: Update the default applications (including the Store) when new versions are available.

System Information

- System Information: View model number, firmware version, and data storage information. The micro SD card can be mounted/dismounted, and data can be deleted.



Formatting the micro SD card will delete all data on the memory card. Be sure to backup any important files before formatting. When formatting the micro SD card from a computer, be sure to select the FAT32 system.

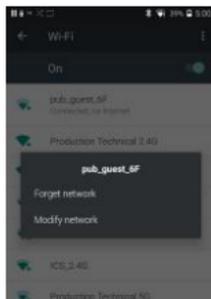
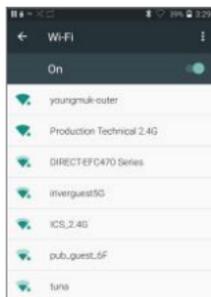
System Restore

- DB Restore: Resets the internal database. The database initialization time may vary depending on the number of files stored on the device.
- Reset: Resets all user settings back to the default setting.
- Factory Reset: Delete all user data and restore the device to its original factory settings.

Connecting to Wi-Fi

Connecting to a Network

1. Long press [Home] from the Notification Bar or select [Menu - Settings - Wi-Fi] to display a list of Access Points (AP).
2. Select the desired AP to connect to the wireless network.
 - Additional information such as key index and network key may be required depending on AP settings.
3. Long-press the network name and select [NetworkSettings] to edit specific network settings.



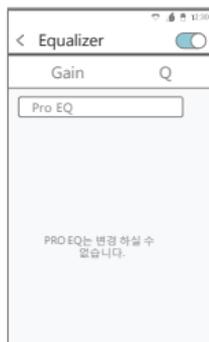
Networks requiring browser or other additional certifications are not supported.

Channels 1 through 13 are supported (but channels 12 and 13 are not supported for FCC).

Equalizer Setup

Equalizer Setup

1. Select [Menu - Setting - Equalizer].



2. Press [Pro EQ] and select [+].

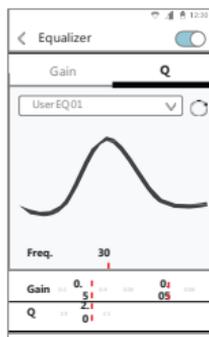


3. Adjust the frequencies up and down according to the user's preferences.

4. The number values at the lower-left corner of the screen can be adjusted for fine-tuning.



5. Press [Q] tab on top to view the PEQ setting screen.

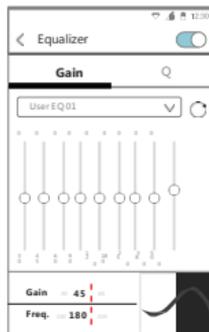


6. Press [Save] on the bottom. Set the equalizer name, and select [Save].



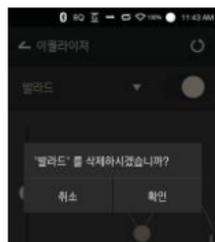
Resetting the Equalizer

1. Select the desired EQ setting and press [Q] at the top of the screen to revert the EQ to its default settings.



Deleting Equalizer

1. Press [Pro EQ] at the upper-left corner of the screen.
2. Press [] next to the desired item to delete the selected equalizer.



Renaming an Equalizer

1. Press [Pro EQ] at the upper-left corner of the screen.
2. Press [] next to the desired item and enter a new name for the selected equalizer.
3. Press [Rename] to apply the changes.



Safety cautions

Device

- When a plug is inserted into the earphones, balanced, or USB port, do not apply any force or impact 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 power 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 (-10°C ~ 50°C) such as the inside of a car during the summer.
- Do not store or use in hot and humid places such as saunas.
- Avoid places with excess moisture, dust, or smoke.
- Do not use for extended period 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.
- 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.
- Do not disconnect the Type-C USB cable during data transfer.

- When connecting the Micro-USB cable, use a USB port on the back of the PC. Connecting to a defective or damaged
- USB port may damage the device.
- Displaying one image for an extended period may cause screen burn-in (afterimage).
- Using poor quality protective films or adhesive stickers on the screen may cause damage.
- Do not insert any foreign objects into the earphones port.
- When playing for extended periods, consider that the device can become hot.

Other

- Do not use earphones/headphones or use the product while operating any type of vehicle. It is not only dangerous but may be a violation of the law in certain regions.
- Do not use the product 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 there is a 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 turn on.
 - The battery may need to be recharged. Charge the device for at least one hour and try again.
 - Reset the device and try again. (See Page 5.)
2. The device will not charge when connected to a computer via USB cable.
 - Connect to the PC using the Type-C USB cable. Connecting to the PC via a micro USB cable will not charge the product.
 - Connect the adapter using the Type-C USB cable.
3. The computer won't recognize the device or an error occurs when connected.
 - Use a USB port on the back of the computer.
 - Check that the Type-C USB cable is properly connected.
 - For Windows XP, verify that Service Pack 2 (or higher) and Windows Media Player 10 (or higher) are installed.
 - Check if the device connects properly on a different computer.
4. The screen turns off repeatedly.
 - The screen turns off automatically after a defined period to reduce battery consumption. Set the time at [Menu-Power Saving - Screen Timeout].
5. The screen does not display images properly.
 - Check the screen for debris.
6. There is no sound, or there is static/interference.
 - Check that the volume setting is above [0].
 - Check that the earphones are plugged in properly, and make sure debris isn't obstructing the port connection.
 - Verify that the music file is not corrupted.
 - Verify that the audio settings have been properly set. (Balanced out, line out, etc.)

7. A file does not play, or the product is unstable when a certain file is used.
 - The following may occur due to the condition of the file: P
 - Playback is unstable or difficult.
 - The product may not work normally.
 - The file may sound different from a computer. There may be a difference in the performance of playback or other functions.
 - There may be differences in the playable specs.
 - A file conversion or use of a different file is recommended.

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The PPF31 was designed and audio-tuned under the advisement of MSD.

Certifications

KC / FCC / CE / TELEC

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: QDMPPF31

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 registered trademarks of Microsoft corp.

Qualcomm®
aptX™ HD



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.

The device must be used minimum 5mm away from the human (body) in normal use conditions.

CAUTION
RISK OF EXPLOSION IF BATTERY IS RE-
PLACED BY AN INCORRECT TYPE. DIS-
POSE OF USED BATTERIES ACCORDIN-
G TO THE INSTRUCTIONS.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Specifi - catio ns

Model	PPF31
DAC	AK4497 x2 (Dual DAC)
LCD	5.0inch HD 720x1280 touch screen
NAND	0.5TB (256GBx2)
XMOS	New version (xCore-200)
Battery	3,700mAh (3.8V Li-Polymer Battery) / TBD
KeyInterface	Click wheel (Power on/off, Volume up/down) Home touch key (Front) Play/Pause, Next, Back Key (Left)
AudioFormat	WAV, FLAC, WMA, MP3, OGG, APE, AAC, ALAC, AIFF, DFF, DSF
DataInterface	USB 3.0 C type, microSD slot x1
Charging	USB 3.0 C type (quick charger)
Material	Stainless Steel
Operating Temperature	-10°C ~ +50°C
Frequency Band	2.4GHz
Maximum Output Level	2.2Vrms