iDSD GR 2

User Manual

Thank you for choosing the iDSD GR 2 . The iDSD GR 2 is an Ultra-Res Portable DAC + Headphone Amp for ultra-resolution audio.

The **iDSD GR 2** takes the iconic design of one of iFi's most popular DACs and pushes the boundaries even further for a new generation. An entirely new DAC chipset and architecture give greater potential for incredible sound than ever before, while all-new touch controls and iFi Nexis compatibility put every feature at your fingertips, no matter where you are.

With a range of digital and analogue input options, including lossless Bluetooth, and a host of innovative features for the on-the-go audiophile, the **iDSD GR 2** is the

most versatile true-portable DAC we've ever made.

FEATURES:

DIGITAL

• All-new Burr Brown PCM1795 DAC chipset and architecture offer uncompromising sonic potential

• aptX Lossless Bluetooth codec allows CD-Quality audio without data loss

• Wide range of digital filters, and JVCKENWOOD's "K2 Technology" and "K2HD" for harmonic restoration

• Multiple digital input options, including SPDIF for integrating into desktops and home audio systems

ANALOGUE

• Up to 2,173mW max peak output for impressive power in a compact, portable form factor

• Three distinct power modes, including iEMatch to optimise output for sensitive IEMs

• New discrete amplifier circuit minimises distortion, and delivers explosive dynamics and crystal-clear transparency

• Analogue input options for greater versatility across a range of setups and uses

• XSpace and XBass+ analogue filters for fine-tuning your soundstage

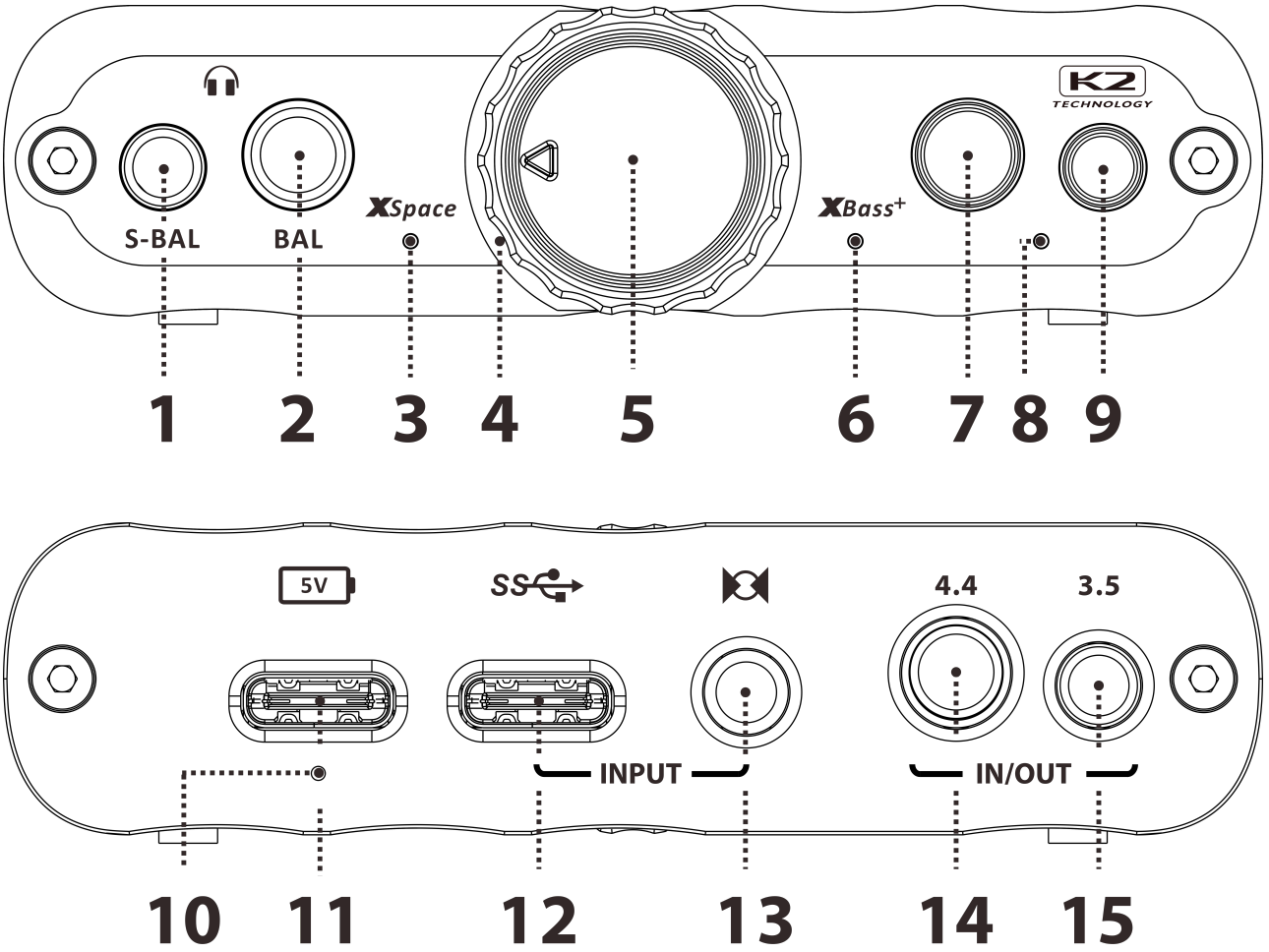
GENERAL

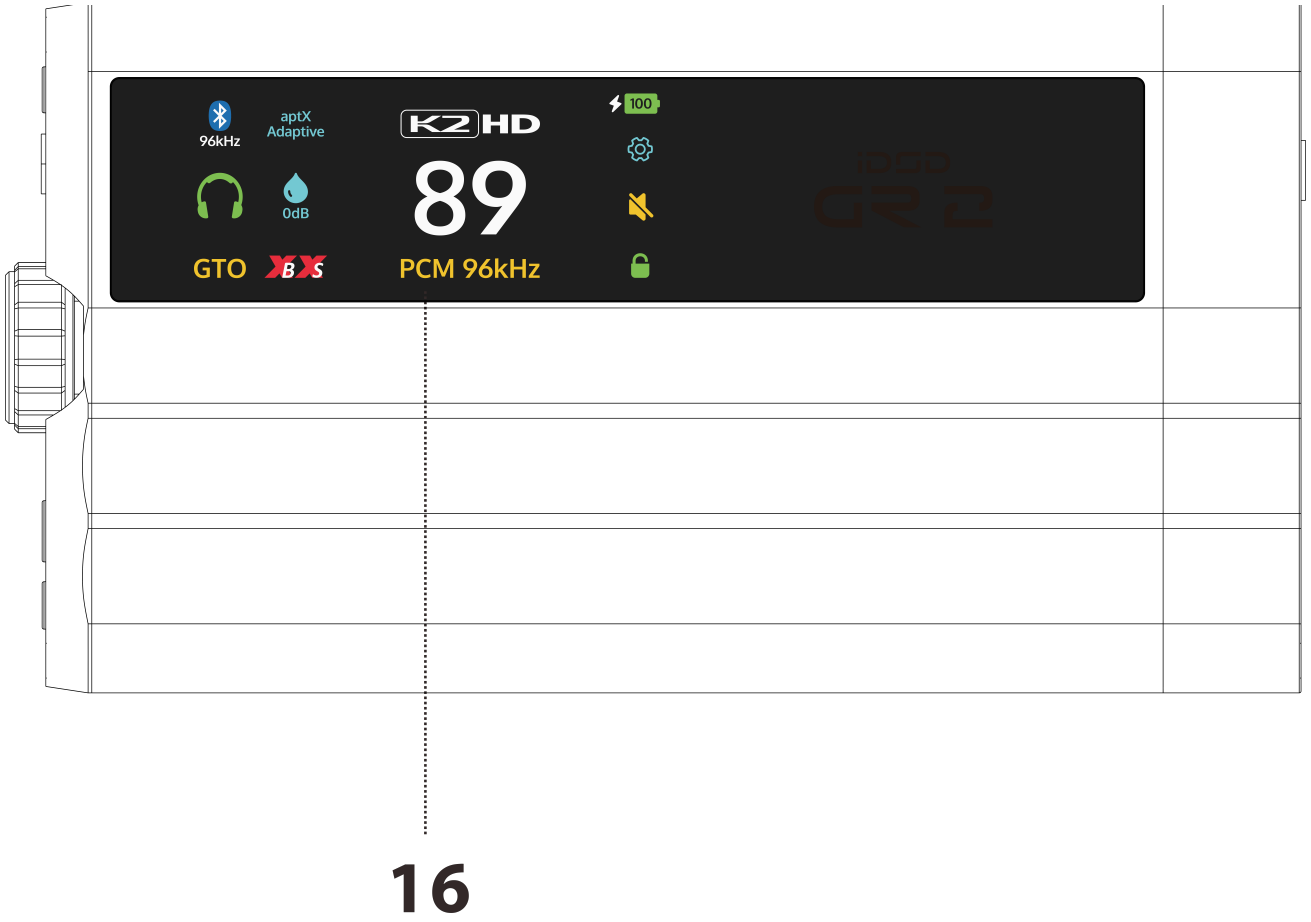
• Vibrant OLED display with capacitive touch control for quick access to on-board features

• iFi Nexis app compatibility for seamless updating and additional options

• 4,900mAh battery offers an impressive 7 hours of listening time

• Battery Health and Hybrid power options to maximise long-term battery lifespan


S-BAL
BAL
XSpace
XBass+
K2
TECHNOLOGY
1
2
3
4
5
6
7
8
9
5V
SS
4.4
3.5
INPUT
IN/OUT
10
11
12
13
14
15



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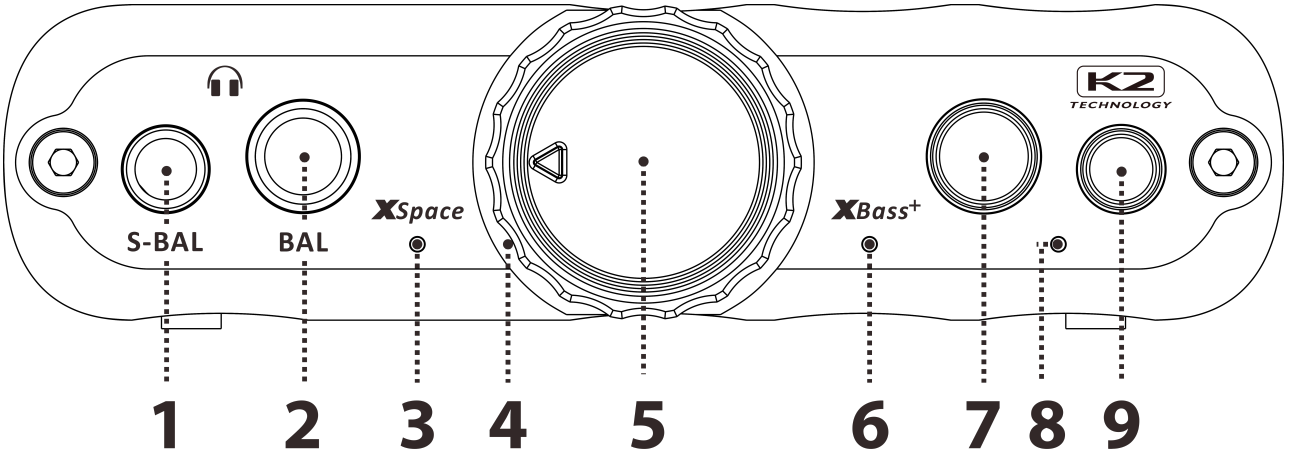
Set up your iDSD GR 2 using our iFi Nexis App

Cautions

Prolonged Heat Exposure

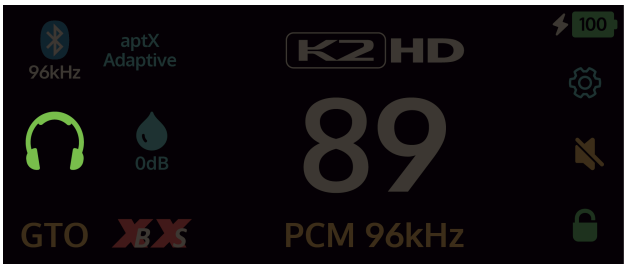
SPECIFICATIONS



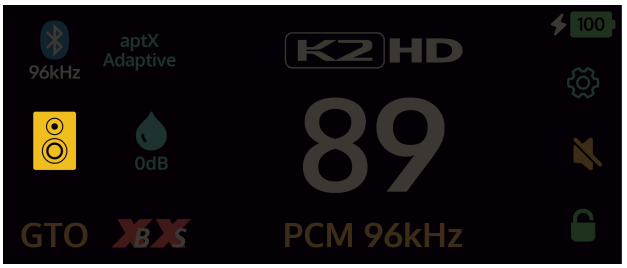
1. S-Balanced^ 3.5mm Headphone Output or Line Output (Variable)

a) Headphone Output - When the output mode displayed on the main screen is switched to headphone output mode (tap the headphones or speaker icon and swipe to switch), use this connection for 3.5mm single-ended or balanced headphones (compatible with standard TRS configuration).

b) Headphone Line Output - When the output mode displayed on the main screen is switched to line output mode (tap the headphones or speaker icon and swipe to select to switch), this port provides an analogue line-out via a 3.5 > RCA or similar single-ended connection for analogue output to connect to active speakers or amplifiers that have a volume control.



Headphone Output Mode



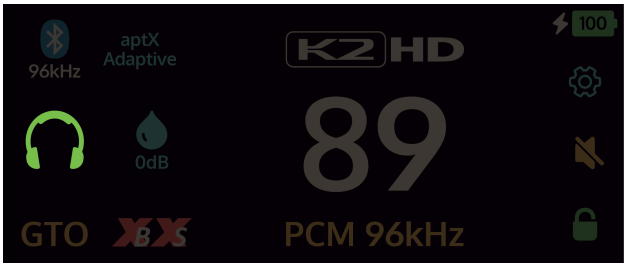
Line Output Mode

Tip: iFi's exclusive S-Balanced circuit delivers maximum performance from single-ended and balanced headphones alike.

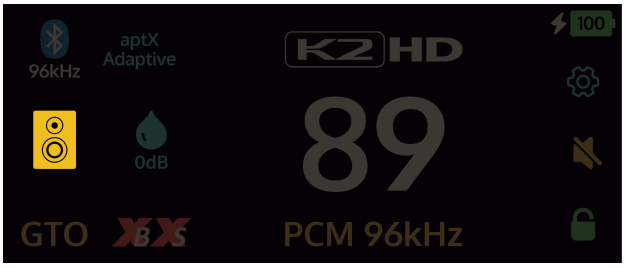
2. Balanced 4.4mm Headphone Output or Line Output (Variable)

a) Headphone Output - When the output mode displayed on the main screen is switched to headphone output mode (tap the headphone or speaker icon and swipe to switch), use this connection for 4.4mm balanced headphones.

b) Headphone Line Output - When the output mode displayed on the main screen is switched to line output mode (tap the headphones or speaker icon and swipe to select to switch), this port provides an analogue line-out via a 4.4 > XLR or similar balanced connection for analogue output to connect to active speakers or amplifiers that have a volume control.



Headphone Output Mode



Line Output Mode

Tip: As the iDSD GR 2 is balanced (reduces noise and crosstalk in the signal path by fully separating the left and right channels.), we recommend the 4.4mm output.

3. XSpace Matrix LED

XSpace Matrix holographic sound field indicator: press (7) briefly to turn the XSpace Matrix on/off; if the indicator lights up, this indicates that the XSpace function is enabled (For information on XSpace, please refer to item 7).

The corresponding XSpace icon on the home screen will light up at the same time; you can also switch modes by tapping the XSpace icon on the home screen, and the icon will update in real time.

4. Volume LED

The LED colour scheme indicates the current volume level.

LED	Volume
Flashing	Mute
Blue	1 to 17
Magenta	18 to 37
Cyan	38 to 57
Green	58 to 75
Yellow	76 to 90
Red	91 to 100

5. Multi-Function Dial

Controls:

- Power ON/OFF (long press 3s)

- Menu settings

**Only valid in SPDIF/Line input mode*

- Analogue volume control (turn)

- Mute/Unmute (short press)*

- Pause/play (short press once)*

**Only valid in USB/Bluetooth input mode*

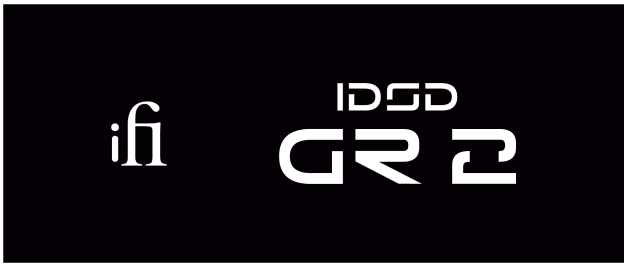
- Previous song (press three times briefly)*

- Next song (press twice briefly)*

Power ON/OFF

Long press ≥3s the switch to power on/off.

When the digital input mode is selected and the device is not charging, if there is no data stream (audio playback) for 20 consecutive minutes, the device will automatically enter power-saving mode and shut down.



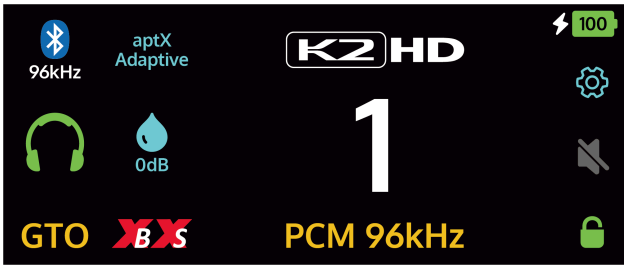
ON

OFF

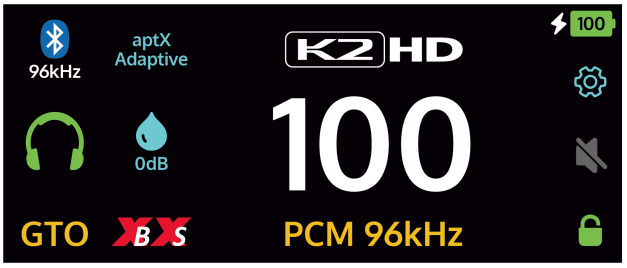
Analogue volume control

Warning: Due to the high power of the iDSD GR 2, always start at a low volume level, so there is no risk of damage to your headphones or your hearing. iFi audio is

not responsible for any hearing or equipment damage from misuse.



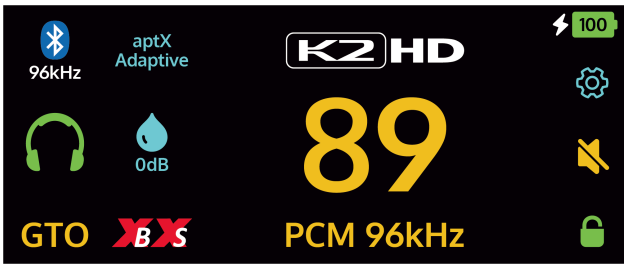
Turn anti-clockwise to lower the volume



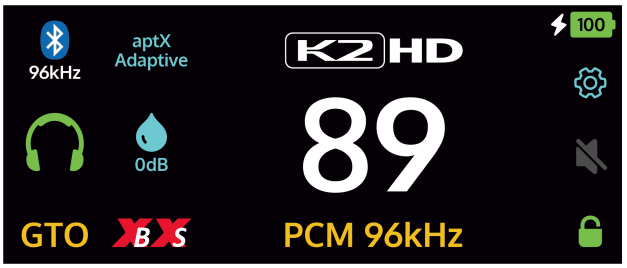
Turn clockwise to increase the volume

Mute/Unmute

To mute the sound, short press the mute icon or turn the volume dial anti-clockwise to reduce the volume to 0. To unmute, short press the mute icon again or turn the volume dial clockwise.



Mute



Unmute

Tip: When the device is in silent mode, the Volume LED (4) flashes.

6. XBass+ LED

XBass+ indicator: press (7) briefly to turn XBass+ on/off; if the indicator lights up, this indicates that the XBass+ function is enabled (For information on XBass+, please refer to item 7).

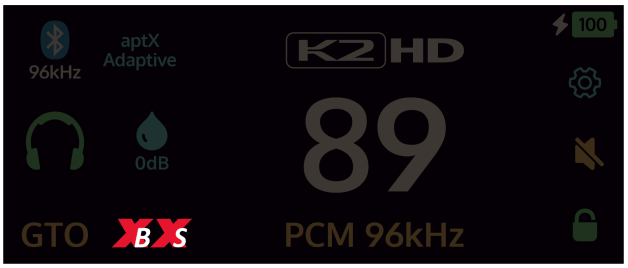
The corresponding XBass+ icon on the home screen will light up at the same time; you can also switch modes by tapping the XBass+ icon on the home screen, and the icon will update in real time.

7. XSpace/XBass+/Menu Settings

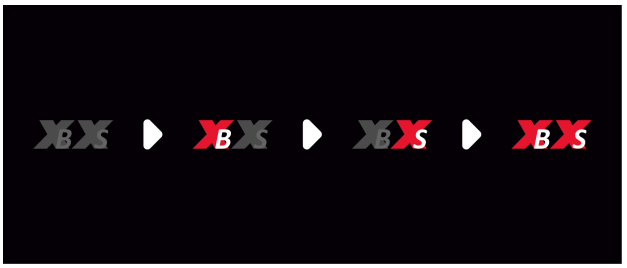
XSpace/XBass+ Selection (short press or tap icon)

Cycles between:

Off > **XBass+** > **XSpace** > **XBass+ and XSpace**



XBass+ and XSpace Mode



Off > **XBass+** > **XSpace** > **XBass+ and XSpace**

XSpace is a pure analogue signal processing (ASP) circuit designed to restore the correct sense of spatial positioning to the music, so that when you listen to music through headphones, it sounds as though you are listening to a pair of speakers. This resolves the 'in-head effect' that can make the sound feel unsettling during use.

XBass+ is a pure analogue signal processing (ASP) circuit designed to 'boost' lost low-frequency response, thereby reproducing the original recording more accurately; it offers superior sound quality to digital signal processing (DSP) systems. XBass+ is tailored to correct the inherent bass deficiencies in headphones and speakers and achieve the desired level. It is not a traditional tone or volume control.

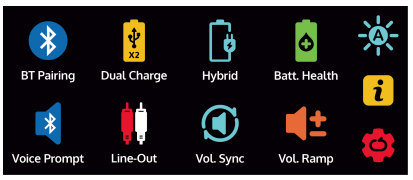
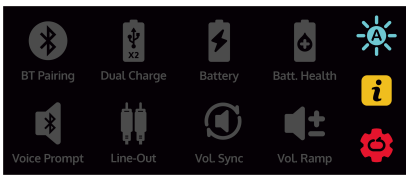
Note: Neither XBass+ nor the XSpace matrix system utilises DSP, which compromises sound quality. These features employ the highest quality discrete components and operate entirely within the analogue section. Consequently, they preserve the clarity and resolution of the original music.

Tip: XSpace holography for headphones is not based on standard crossover systems, such as those found in the amplifiers of certain high-end headphones. Many so-called '3D systems' are typically DSP-based. This artificially alters the sound and adds unwanted reverberation to simulate a spacious soundstage.

Traditional cross-feed tends to produce a 'head-on' sound, but with significantly reduced spatial components, resulting in a narrower soundstage that is sometimes almost monaural. Most DSP-based 3D designs produce an unnatural, echo-like sound, which may be impressive at first but quickly becomes tiring.

In contrast, the XSpace holographic matrix for headphones not only provides 'out-of-head' placement of sound sources but also presents the entire soundstage in a manner very similar to listening to speakers in a normal room, all achieved without adding reverb.

Menu Settings (long press ≥3s or tap icon)

		
Tap Menu Settings icon	**ON**	**OFF**
- BT Pairing	**- Dual Charge**	**- Hybrid Mode**
- Battery Health Mode	**- Bluetooth Voice Prompt**	**- Line Out Volume Control**
- Volume Sync	**- Volume Ramp**	**- Brightness**

- Info	**- Factory Reset**	

Tip: The iDSD GR2 has two operating modes: one is operated via a touch screen and the other is operated via physical buttons and the multi-function dial.

a) Once in the menu, touch the relevant icons on the screen to select or toggle settings on or off.

b) Once in the menu, rotate the multi-function dial to select the function, and short press it to confirm selection or toggle on/off mode.

Short press (7) or (9) to return to the home screen immediately; if no action is taken on the device within 10 seconds, it will automatically exit the menu and return to the home screen.

I) BT Pairing

When Bluetooth input is selected, the Bluetooth icon on the screen will flash whilst the device searches for previously paired devices. If no stored devices are found, the device will automatically enter pairing mode and the Bluetooth icon will continue to flash.

To manually enter Bluetooth pairing mode, short press the Bluetooth pairing icon. When pairing mode is active, the Bluetooth icon will flash repeatedly. To pair, find the 'iFi Lossless Audio' Bluetooth device on your audio source device such as a mobile phone.

The iDSD GR 2 can store up to 8 paired Bluetooth devices. When the 9th device is paired, the oldest paired Bluetooth device will be removed from the pairing list and you may need to manually reconnect it when using it. To delete all previously stored devices, please perform a factory reset.

The iDSD GR 2 receives Bluetooth signals via aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC/HWA, AAC and SBC.

II) Dual Charge

Short press the icon to turn Dual Charge on/off. It is off by default. See (12).

On	This port supports both charging and data input through a single USB connection (Item 12).
Off	This port supports data input only.

III) Hybrid Mode

Short press the icon to turn the Hybrid Mode on/off. It is on by default.

Hybrid Mode

When there is no external power, the battery is used for power supply. When an external power supply is inserted, external power is given priority. If extra power is needed, the iDSD GR 2 will draw power from the internal battery, and then automatically return to priotising external power once the demand is reduced.

Pure Battery Mode

Only powered by the internal battery.

IV) Battery Health Mode

Short press the icon to turn the Battery Health Mode on/off. It is off by default.

When the battery health charging mode is enabled, battery charging stops when the battery charge level is ≥80%, and the iDSD GR 2 will automatically shut down when the charge level is below 10%.

Battery Health Mode	Hybrid Mode	External power supply	Status
ON	Hybrid Mode	YES	Charging stops when the battery charge level is ≥80%; when the battery charge level is ≤70%, the battery will automatically be charged until the charge level reaches ≥80%.
		NO	When the battery level is ≤20%, a message will appear indicating that the current battery level is 20%; when the battery level is ≤10%, a message will appear indicating that the current battery level is 10%, and the iDSD GR 2 will switch off automatically
	Pure Battery Mode	YES	When the battery level is ≤20%, a prompt will indicate that the current battery level is 20%. The device will automatically begin charging until the battery level reaches ≥80%, at which point it will automatically switch back to battery-only power.
		NO	When the battery level is ≤20%, a message will appear stating that the current battery level is 20%; when the battery level is ≤10%, a message will appear stating that the current battery level is 10%, and the iDSD GR 2 will switch off automatically

	Hybrid Mode	YES	When the battery is fully charged (100%), charging stops; when the battery level is ≤90%, the device will automatically recharge the battery to full capacity (100%)
		NO	When the battery level is ≤10%, a notification will appear stating that the current battery level is 10%; when the battery level reaches 0%, a notification will appear stating that the battery is depleted, and the iDSD GR 2 will automatically switch off
OFF	**Pure Battery Mode**	YES	When the battery level is ≤10%, a notification will appear stating that the current battery level is 10%. The device will automatically recharge the battery until it is fully charged (100%), after which it will automatically switch back to battery-only power.
		NO	When the battery level is ≤ 10%, a message will appear indicating that the current battery level is 10%. When the battery level reaches 0%, a message will appear indicating that the battery is depleted, and the iDSD GR 2 will switch off automatically

Tip: Battery Health Mode balances the charging voltage of the internal battery, reducing instances of overcharging and over-discharging. This helps to extend battery life and improve charging efficiency through precise management and intelligent balancing technology. It also regulates temperature and voltage during charging to prevent lithium decomposition and device overheating, thereby ensuring safety.

V) Bluetooth Voice Prompt

Short press the icon to turn the Bluetooth Voice Prompt on/off. It is on by default.

VI) Line Out Volume Control

Short press the icon to turn the Line Out Volume Control on/off. It is off by default.

Line Out OFF	When the headphone output ports (1) and (2) are in use, the line output ports (14) and (15) will automatically mute. However, when line-out ports (14) and (15) are in use, headphone output ports (1) and (2) will not be muted (headphone output takes priority over line-out).
Line Out ON	The headphone output ports (1) and (2), and line output ports (14) (15) all output signal at the same time.

VII) Volume Sync

Short press the icon to turn Volume Sync on/off. It is off by default.

When enabled, the iDSD GR 2's analogue volume will be synchronised with the volume level on the source device.

Note: The Volume Sync function is only available via USB and Bluetooth input. Some source devices may not be able to provide the data required to synchronise volume.

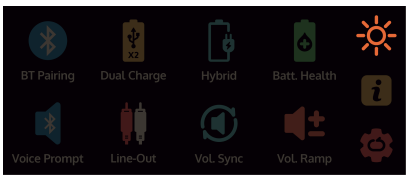
VIII) Volume Ramp

Short press the icon to turn the Volume Ramp on/off . It is on by default.

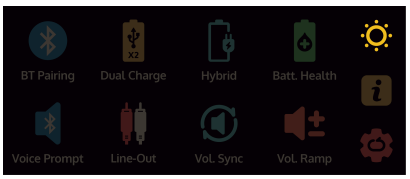
When enabled, volume changes take place smoothly over 2s to prevent sudden, unwanted jumps in loudness.

IX) Brightness

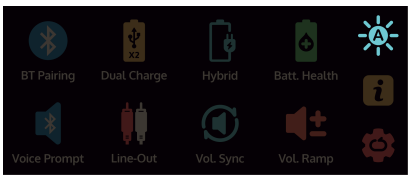
Short press the icon to adjust the Brightness mode. It is set to Soft mode by default.



Bright



Soft

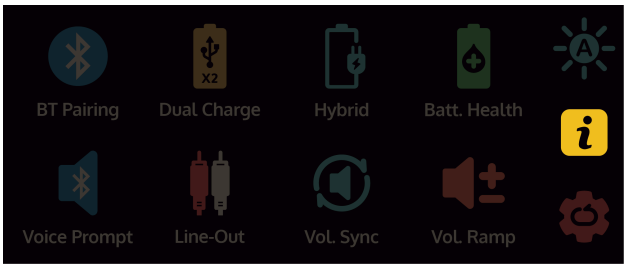


Auto

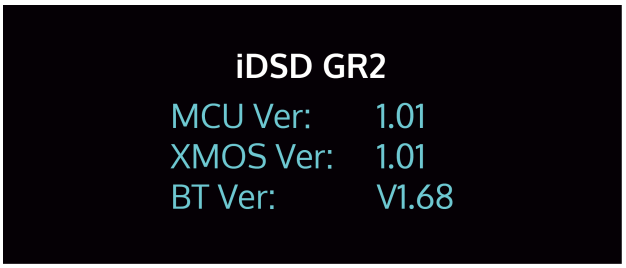
Bright	The display will be bright.
Soft	The display will be softly lit.
Auto	Auto sleep mode. If no operation is performed within 10s, the display will turn off.

X) Info

Short press the icon to view the device name and the current firmware version number.



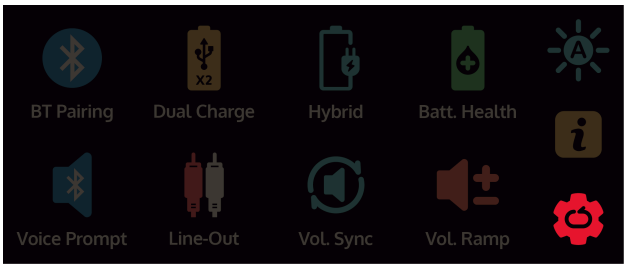
Short press the icon



Info

XI) Factory reset

Short press the icon and select 'Confirm' to perform a factory reset; the device reboots after successful operation.



Short press the icon

Confirm

Warning: Performing a factory reset will erase all saved Bluetooth pairings and restore the following default settings — Input Mode: USB; Volume: 70; Power Mode: 'Normal 0dB'; XBass+: 'Off'; XSpace: 'Off'; Digital Filter: 'STD'; Dual Charge: 'Off'; Hybrid Mode: 'On'; Battery Health Mode: 'Off'; Bluetooth Voice Prompt: 'On'; Line Out Volume Control: 'Off'; Volume Sync: 'Off'; Volume Ramp: 'Off'; Brightness: 'Soft'.

8. "K2 Technology", "K2HD" Mode LED

"K2 Technology", "K2HD" Mode indicator: press (9) briefly to turn K2/K2HD on/off; if the indicator lights up, this indicates that the K2/K2HD function is enabled (For information on "K2 Technology", "K2HD", please see the next section).

LED	Mode
Green	K2
Orange	K2HD
Off	Off

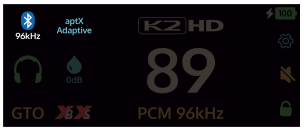
9. Input Selector/"K2 Technology", "K2HD" Settings

Input Selector (short press)

Short press button or tap the input icon to cycle through the following input sources:

USB > **Bluetooth** > **S/PDIF** > **Line (4.4mm/3.5mm)**

USB-C



Bluetooth

S/PDIF

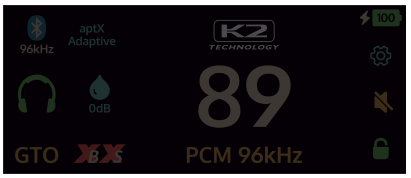
Line (4.4mm/3.5mm)

Note: Please select the input channel according to your audio source input mode. For example, you need to switch the input channel to 'USB' when using the USB input.

"K2 Technology", "K2HD" Settings (Long press)

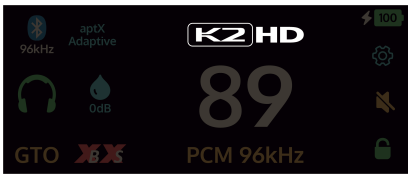
The iDSD GR 2 incorporates JVCKENWOOD's "K2 Technology" and "K2HD" to achieve high sound quality by restoring altered or degraded digital sound sources to the same quality as the original master.

Long press button or tap the "K2" icon to choose from the following options:



OFF

K2 Mode



K2HD Mode

K2 Mode **Features**

Collective term for JVCKENWOOD's "K2 Technology", used here to denote K2 Technology processing without up-sampling.

The audio file format supported by 'K2' mode is PCM, sampling frequency 44.1-96kHz. When the PCM audio sample rate exceeds 96kHz, 'K2' mode is not applicable, and it will be switched to 'K2HD' mode automatically.

The audio file format supported by 'K2HD' mode is PCM with sampling frequency 44.1-192kHz, and it can upsample audio files ≤ PCM 176.4kHz to 176.4/192kHz.

'K2' and K2HD' modes are not compatible with native DSD audio file formats - 'K2' and 'K2HD' modes cannot be enabled when the audio file format played is in DSD format.

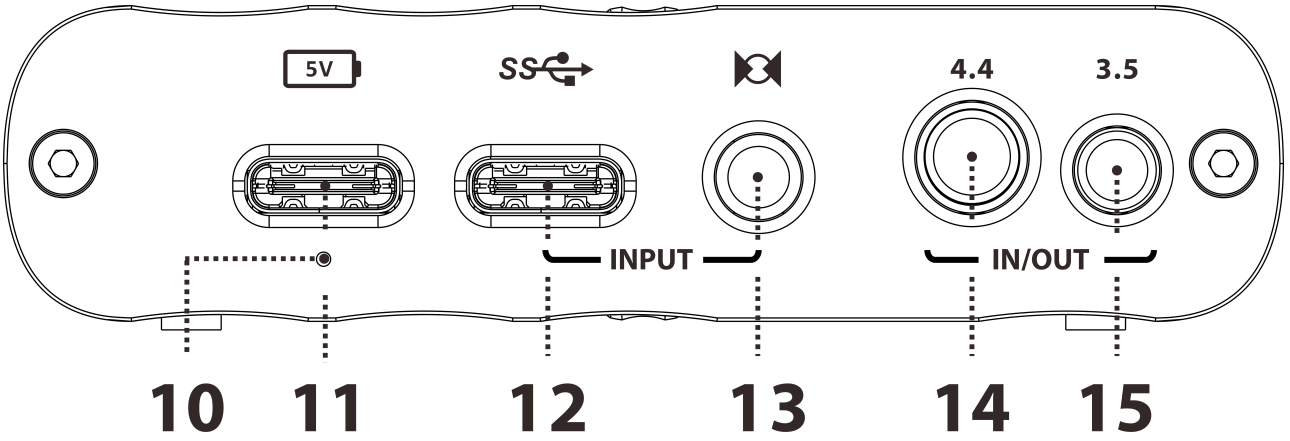
'K2HD' mode = "K2"+GTO upsampling

Tip: When "K2" mode is enabled, it will automatically switch to "K2HD" mode when the audio sample rate played is >96kHz; when the audio sample rate played is ≤96kHz, it will automatically resume 'K2' mode.

Tip: "K2HD" mode supports the GTO digital filter only. When "K2HD" mode and the GTO filter are enabled at the same time, the sampling frequency of the GTO filter is 176.4/192kHz, and when the playback audio sampling rate exceeds 176.4/192kHz, the digital filter will automatically switch to Bit-Perfect and "K2HD" mode automatically be disabled. When "K2HD" mode is not enabled, the sampling frequency of the GTO filter is 352.8/384kHz.

When "K2" mode and the GTO filter are enabled at the same time, "K2" mode will be automatically switched to "K2HD" mode, and the audio will be upsampled to 176.4/192kHz. When the playback audio sample rate exceeds 176.4/192kHz, "K2HD" mode is automatically turned off; when the playback audio sample rate is ≤176.4k/192Hz, "K2HD" mode is automatically restored.

**"K2 TECHNOLOGY" and "K2HD" are trademarks or registered trademarks of JVCKENWOOD Corporation."*



10. Battery Status LED

LED	Status
Green	>49%
Yellow	≤ 49%
Red (flashing)	≤ 20%

**The battery status LED will flash during charging, and the LED will go out when fully charged.*

11. USB-C (5V) Charging Input

For charging only. Due to the very high-power nature of iDSD GR 2, it will take ~7-8 hours and ~3-4 hours for a standard and high-powered charger, respectively, to fully recharge.

Tip: When the iDSD GR 2 is off and a 5V USB power supply is detected, the LED will change colour to show the various states of charge (see next section).

Tip: We recommend charging the iDSD GR 2 while the device is off, otherwise the following two situations will occur:

- *You can listen to music while charging, but it may take longer to charge, depending on the volume level and the headphones used.*
- *The iDSD GR 2 may be slightly warm to the touch when it is simultaneously in use and being charged. This is normal, and there is no cause for concern.*

12. USB-C Data Input

USB-C input, primarily used for data transmission, allows you to connect an audio source device to the iDSD GR 2 using a USB-C cable. You can also configure the following two modes via the 'Dual Charging' option in the menu:

Mode	Status
OFF	This port supports data input only.
ON	This port supports both charging and data input through a single USB connection.

Note: When the 'Dual Charging' function is enabled via the menu, the USB-C Data Input will also charge the device, but the charging current will be limited. For faster charging, it is recommended to use the dedicated USB-C (5V) Charging Input (11).

Note: Drivers may be required when connecting to a Windows PC or laptop, to ensure bit-perfect playback.

Tip: For the required driver and all the latest firmware updates please refer to our website: www.ifi-audio.com/download-hub/

13. S/PDIF 3.5mm Coaxial/Optical Input

When USB is not used, connect to a coaxial cable (3.5mm TS), or an optical cable through a Toslink to 3.5mm Mini-Plug.

Tip: A 3.5mm optical mini-plug to Toslink adaptor is included for connecting a Toslink optical cable.

Tip: The S/PDIF standard supports PCM only up to 192kHz.

14. Balanced 4.4mm Line In/Out

a) Output - when input mode is S/PDIF, USB or Bluetooth.

b) Input - when there is no S/PDIF, USB or Bluetooth input, the 4.4mm line input is available.

Tip: Analogue output via 4.4mm > XLR or other balanced interconnects may be used when in fixed line output mode. You can use this to connect to active speakers or amplifiers that have a volume control.

Warning: The volume level is fixed from this 4.4mm connector in line out mode. The volume control and headphone amp settings have no influence on it. Do not insert 4.4mm headphones to this source as the full volume is likely to damage your headphones or your hearing.

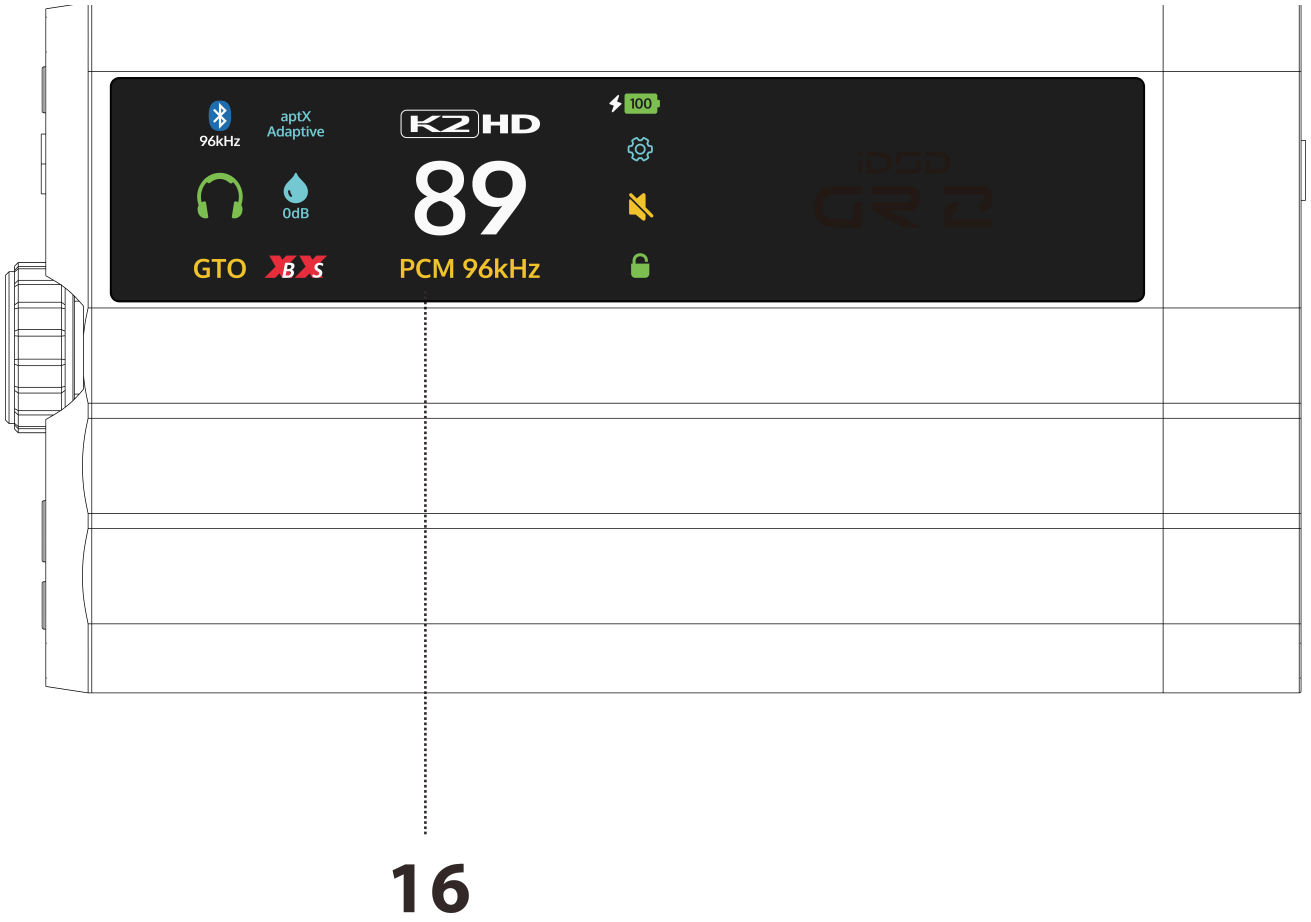
15. Single-Ended 3.5mm Line In/Out

a) Output - when input mode is S/PDIF, USB or Bluetooth.

b) Input - when there is no S/PDIF, USB or Bluetooth input, the Single-Ended 3.5mm line input is available.

Tip: Analogue output via 3.5mm > XLR or other interconnects may be used when in fixed line output mode. You can use this to connect to active speakers or amplifiers that have a volume control.

Warning: The volume level is fixed from this 3.5mm connector in line out mode. The volume control and headphone amp settings have no influence on it. Do not insert 3.5mm headphones to this source as the full volume is likely to damage your headphones or your hearing.



16. OLED Display

The OLED display shows the audio format, sampling rate, power mode, digital filter, K2/K2HD setting, volume, input mode, XSpace/XBass+, and battery level.

You can tap the relevant icons directly on the screen to switch between modes and settings.

17. Power Mode

Press and hold the icon, then swipe to select the corresponding icon to choose from the following driver mode options:

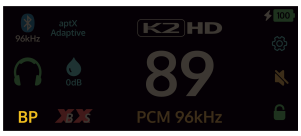
iEMatch -12dB **Normal 0dB** **Turbo +6dB**

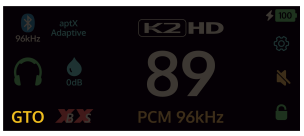
iEMatch transparently reduces the output level by -12dB, so that even the most sensitive In-Ear-Monitors (IEMs) can be used with the iDSD GR 2.

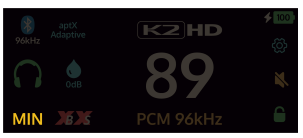
iEMatch can effectively increase the dynamic range of sensitive IEMs by reducing background amplifier hiss.

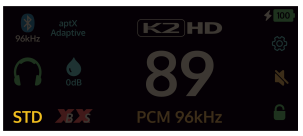
18. Digital Filters Mode

Short press the display icon to cycle between the following digital filter options:









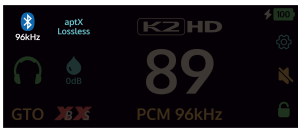
Bit-Perfect **Gibbs Transient Optimised** **Minimum Phase** **Standard**

'BP' (Bit-Perfect**)** Bit-Perfect, no digital filtering

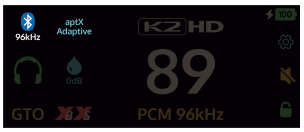
'GTO' (Gibbs Transient Optimised**)**	Upsampled to 352/384kHz, minimum filtering, no pre-ringing, minimum post ringing
'MIN' (Minimum **)**	Minimum phase, slow roll-off, minimum pre and post-ringing
'STD' (Standard**)**	Modest filtering, modest pre and post ringing

19. Bluetooth Codec

The iDSD GR 2 receives Bluetooth signals via aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC/HWA, AAC and SBC.



aptX Lossless

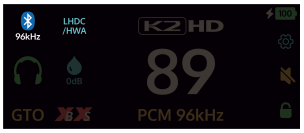


aptX Adaptive

aptX HD

aptX

LDAC



LHDC/HWA

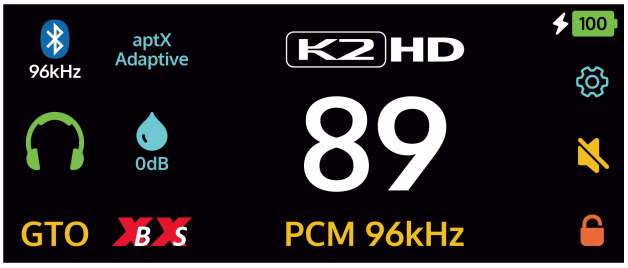
AAC

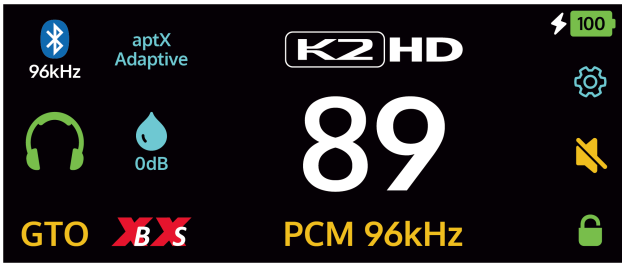
SBC

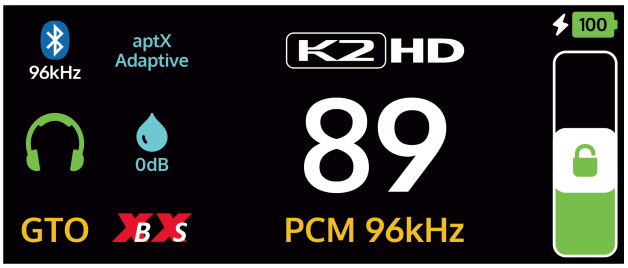
20. Device Lock

Hold lock icon and swipe up to lock/unlock (When device in lock or unlock mode)

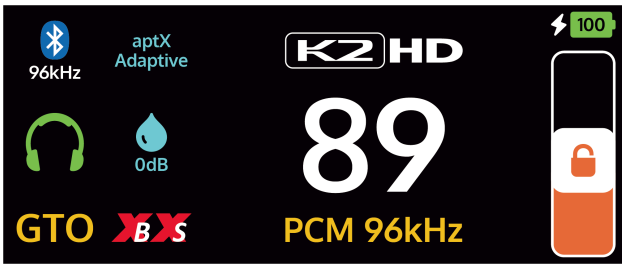
This prevents accidental turning of the volume knob and accidental pressing of the function buttons while travelling or commuting, which can result in sudden volume or setting changes. The display (16) shows the device lock interface.







Unlock
(When device in lock mode)



Lock
(When device in unlock mode)

Tip: When Device Lock is activated, all operations are locked out and cannot be operated. If you need to operate the iDSD GR 2, please switch off the device lock first.

Set up your iDSD GR 2 using our iFi Nexis App

“iFi Nexis”

Available on the App Store

GET IT ON Google Play

Download the Nexis app for added features and future updates

Please search for "iDSD GR 2" within the iFi Nexis app.

The iFi Nexis app helps you to use all the features and settings of the iDSD GR 2, such as OTA upgrades* more. You can connect your device via USB or Bluetooth.

**OTA (Over-the-Air) technology enables automatic firmware updates via the network.*

Cautions

1. Avoid extreme heat, cold and humidity.
2. Avoid dropping or crushing the iDSD GR 2.
3. If you experience discomfort or pain, try lowering the volume or temporarily discontinuing use.
4. To prevent possible hearing damage, do not listen at high volume levels for long periods.
5. Always check the actual output volume on your earphone, headphone, or loudspeakers before playing audio, as many music player software and operating systems do not appropriately apply industrial standards governing volume control (e.g., USB Device Class Definition for Human Interface Devices). If in doubt, before

playing any music, turn off Volume Sync on the iDSD GR 2 and bring the volume down to the lowest setting.

Prolonged Heat Exposure

Your iDSD GR 2 may become warm during normal use. This is not a cause for concern, but it is important to keep it on a hard, stable, and well-ventilated work surface when in use.

SPECIFICATIONS

Digital Inputs:	USB-C; S/PDIF (optical/coaxial); Bluetooth 5.4™
Analogue Inputs/Outputs:	Balanced 4.4mm; Single-Ended 3.5mm
Headphone Outputs	Balanced 4.4mm; S-Balanced* 3.5mm
Analogue Outputs:	Balanced 4.4mm; Single-Ended 3.5mm
Power/Charging:	USB-C
Hi-Res Support:	PCM 768kHz; Native DSD512 (22.6MHz)
Bluetooth Formats:	aptX Lossless, aptX Adaptive, aptX HD, aptX, LDAC, LHDC/HWA, AAC, SBC
DAC:	Bit-Perfect DSD & DXD DAC by Burr Brown

Line Output Section

Line Outputs:

Balanced	4.4mm
Single-Ended	3.5mm

Power Output:

Balanced	4.37V max. (FIX)
Single-Ended	2.20V max. (FIX)
Output Impedance:	
Balanced	≤205Ω
Single-Ended	≤105Ω
SNR:	
Balanced	≥115dB(A) @ 0dBFS
Single-Ended	≥115dB(A) @ 0dBFS
DNR:	
Balanced	≥115dB(A) @ 0dBFS
Single-Ended	≥115dB(A) @ 0dBFS
THD + N:	
Balanced	0.0005% @ 0dBFS (20-20kHz)
Single-Ended	0.0005% @ 0dBFS (20-20kHz)

Headphone Outputs:	
Balanced	4.4mm
S-Balanced^	3.5mm
Power Output:	
Balanced (RMS)	≥6.94V/1,513mW @ 32Ω; ≥8.60V/119mW @ 600Ω
S-Balanced^ (RMS)	≥4.26V/567mW @ 32Ω; ≥4.27V/30mW @ 600Ω
Output Impedance:	
Balanced	≤0.4Ω (≤4.5Ω with iEMatch)
S-Balanced^	≤0.2Ω (≤4.4Ω with iEMatch)
SNR:	
Balanced	≥115dB(A) @ 0dBFS
S-Balanced^	≥115dB(A) @ 0dBFS
DNR:	
Balanced	≥115dB(A) @ 0dBFS

S-Balanced^	≥115dB(A) @ 0dBFS
THD + N:	
Balanced	<0.006% (2.40V @ 16Ω) (20-20kHz)
S-Balanced^	<0.006% (1.27V @ 16Ω) (20-20kHz)

Frequency Response:	20Hz - 45kHz (-3dB)
Power Consumption:	Turbo 2.89W; Normal 2.37W; iEmatch 2.37W
Battery:	Lithium-polymer 4,900mAh; ~7h Battery Life
Power System:	5V/≥1.8A, Charging via USB-C; ~3.5h Charging Time
Dimensions:	141 x 75 x19 mm (5.55" x2.95" x 0.75")
Net weight:	268 g (0.59 lbs)
Limited Warranty:	12 months**

^Single-Ended Compatible Balanced.

***12 months typical or as permitted/required by local reseller laws.*

Specifications are subject to change without notice.

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