

Ultra-Slim Magnetic DAC & Headphone Amplifier

Khadas Tea Pro



High-Resolution Audio

USB: PCM up to 768 kHz, DSD512 (Native)
Bluetooth: SBC/AAC/LDAC/aptX/
aptX HD/aptX Adaptive



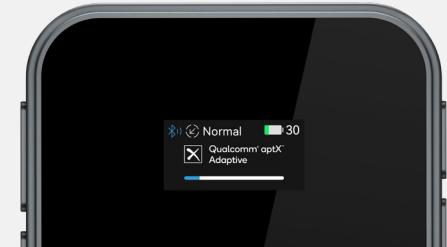
Ultra-Slim Magnetic Design

7.85 mm thin, 96 g, groundbreakingly slim
Attaches to phones via built-in magnets*



Color Screen

0.95-inch AMOLED screen
for smart display



Premium Audio Chips

Bluetooth: Qualcomm QCC5181
USB: XMOS XU316-1024 DAC: ESS ES9039Q2M



8 to 11 Hours of Listening

Built-in 2100 mAh battery
Up to 11 hours (Bluetooth) / 8 hours (USB) playback



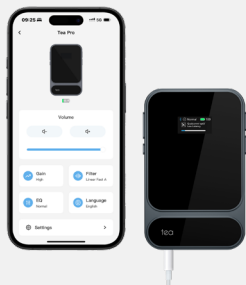
Dual Headphone Outputs

Standard 3.5 mm +
balanced 4.4 mm headphone jacks



Khadas Audio App

Customizable 10-Band EQ, Gain, and Filter settings



Apple MFi-Certified



* Tea Pro magnetically attaches to iPhone 12 and newer. A magnetic ring is required for Android devices or older iPhones.

Target Audience



Design-Conscious Listeners

Passionate not just about music, but also craftsmanship—build quality and elegant design matter.



Music Lovers

Unsatisfied with phone + earphones alone, seeking a next-level listening experience.



Musicians & Creators

Needing a reliable tool for composing, transcribing, or creative work on the go—in cafés or during business trips.



Audiophiles

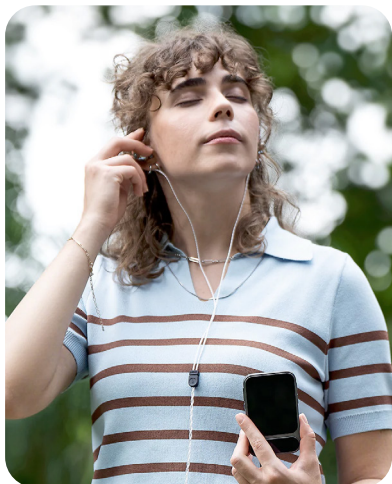
Frequent commuters or travelers who want portable DAC/amp performance with exceptional audio quality.



iPhone Users

Looking for a portable DAC/amp that pairs seamlessly with their phone's design and performance.

Use Scenarios



Wireless Freedom

High-quality Bluetooth streaming with aptX Adaptive and LDAC.



All-Day Listening

Enjoy up to 11 hours of wireless hi-fi music.



Creative Work on the Go

Connect to laptop/tablet for ultra-clean audio in recording, mixing, composing.



Balanced Listening

4.4 mm balanced output to power high-end headsets with full nuance.












Commute & Travel

Studio-quality sound on the move—pocket-sized, and wireless when you want it.

Product Diagram



-  **Power**
-  **Color Screen**
-  **Menu**
-  **Volume Up**
-  **Volume Down**
-  **3.5 mm Headphone Jack***
-  **Microphone**
-  **USB-C**
-  **4.4 mm Headphone Jack**

* CTIA 4-Segment Headset: Supports all functions
OMTP 4-Segment Headset: Supports audio output only

Tech Specs

Audio Performance

4.4 mm Headphone Jack

THD+N (1 kHz, No load): 0.000126% (-118dB)
Max Noise: < 3.5 μ Vrms
SNR (1 kHz, No load): 122 dB
DNR (1 kHz, No load): 121 dB
Max Output @600 Ω : 41.67 mW (5.0Vrms), THD+N < -90dB
Max Output @150 Ω : 167 mW (5.0Vrms), THD+N < -90dB
Max Output @33 Ω : 165 mW (2.33Vrms), THD+N < -90dB
Max Output @16.5 Ω : 180 mW (1.72Vrms), THD+N < -90dB

3.5 mm Headphone Jack

THD+N (1 kHz, No load): 0.000158% (-116dB)
Max Noise: < 2.5 μ Vrms
SNR (1 kHz, No load): 120 dB
DNR (1 kHz, No load): 119 dB
Max Output @300 Ω : 20.8 mW (2.5Vrms), THD+N < -90dB
Max Output @150 Ω : 42 mW (2.5Vrms), THD+N < -90dB
Max Output @33 Ω : 120 mW (2.0Vrms), THD+N < -90dB
Max Output @16.5 Ω : 100 mW (1.28Vrms), THD+N < -90dB

Chipset

Bluetooth: Qualcomm QCC5181

USB: XMOS XU316-1024

DAC: ESS ES9039Q2M

Operational Amplifier

- I/V Conversion: TI OPA1612 \times 2
- Low-pass Filter (LPF): TI OPA1612 \times 2
- Buffer: Ricore RT6863 \times 2

Volume Control: NJU72315 \times 2

Ultra-low Noise LDO: ESS ES9311Q (1.3 μ Vrms)

Apple MFi: Apple Authentication 3.0 Coprocessor

Gain Levels

High Gain

- 4.4 mm (at 0dB): 5.0 Vrms
- 3.5 mm (at 0dB): 2.5 Vrms

Low Gain

- 4.4 mm (at 0dB): 2.5 Vrms
 - 3.5 mm (at 0dB): 1.25 Vrms
-

Sampling Rate

UAC1.0: Up to PCM 96 kHz/24 bit (DSD not supported, incompatible with iPhone)
UAC2.0: Up to PCM 768 kHz, DSD512 (Native)
Bluetooth: Up to PCM 96 kHz/24 bit (DSD not supported)

EQ Mode

7 Presets: Default / Classic / Jazz / Rock / Pop / Bass / Blues
Custom EQ: 10-band equalizer, adjustable gain from -12dB to +12dB

Audio Formats

Supports SBC / AAC / aptX / aptX Adaptive / aptX HD / LDAC

Tech Specs

OS Compatibility

iOS / iPadOS: Natively supported (MFi certified)
Android: Plug and play
macOS: Natively supported
Windows 7 / 8 / 10 / 11: Requires Khadas USB ASIO driver
Linux: Compatible with systems running UAC2.0-compliant kernels

Power & Battery

Capacity: 2100 mAh
Battery Life:

- ≥ 11 hours (Bluetooth AAC)
- ≥ 8 hours (USB-C, 44.1 kHz)

Designs

0.95" Color AMOLED
120 × 240 RGB

Body Materials

CNC-machined aluminum chassis,
Corning® Gorilla® Glass 3, Premium
wear-resistant leather back panel

Buttons

Power × 1
Menu × 1
Volume Up (+) × 1
Volume Down (−) × 1

Khadas Audio App

Supports gain adjustment, EQ tuning,
filter selection, language switching,
firmware updates, and more.

Ports

3.5 mm Headphone Jack × 1
4.4 mm Headphone Jack × 1
USB-C × 1 (Audio input + Charging)

Size

102.7 × 64.0 × 7.8 mm
(excluding button height)

Microphone

Analog Microphone × 1, SNR ≈ 59 dBA

Weight



96 g*

* Weight may vary slightly due to manufacturing variability.

Explore Tea Series

	 Tea	 Tea Pro
Chipset	Bluetooth: Qualcomm QCC5125 DAC: ESS ES9281ACPRO	Bluetooth: Qualcomm QCC5181 USB: XMOS XU316-1024 DAC: ESS ES9039Q2M
Bluetooth Version	5.1	5.4
Bluetooth Codec Support	SBC / AAC / LDAC / aptX / aptX Low Latency / aptX HD	SBC / AAC / LDAC / aptX / aptX HD / aptX Adaptive
Max Sampling Rate	PCM 384 kHz/32 bit DSD256 (Native)	PCM 768 kHz/32 bit DSD512 (Native)
USB Mode Support	UAC 2.0	UAC 2.0 UAC 1.0
Precision Resistors	None	32 high-precision resistors
Audio Performance	THD+N (1 kHz, 300Ω): 0.000355% (-109 dB) SNR (1 kHz, 300Ω): 116 dB DNR (1 kHz, 300Ω): 115 dB	THD+N (1 kHz, No load): 0.000126% (-118dB) SNR (1 kHz, no load): 122 dB DNR (1 kHz, no load): 121 dB
Headphone Jack	3.5 mm headphone jack	3.5 mm headphone jack 4.4 mm headphone jack

Explore Tea Series

	 Tea	 Tea Pro
Headphone Compatibility	Supports 4-pole headphones CTIA: Audio only OMTP: Audio only	Supports 4-pole headphones CTIA: Full functionality (audio, mic, inline control) OMTP: Audio only
Screen	None	0.95" AMOLED color display
Back Panel Material	Glass	Premium wear-resistant leather
Volume Control	Hardware DAC tuning	Analog tuning with independent volume control chip for reduced noise
Power Management	Integrated power module in Bluetooth chip ~3 hrs to full charge	Independent MPS power management chip ~2 hrs to full charge JEITA-compliant