

X7-DAC Femto

X7 DAC Femto wonderfully combines digital and analogue circuit and focuses its balance. The device contributes the most stunning sound you have ever experienced. Especially, with history of more than 10 years, device equipped technology from JAVS brings harmonious sound that cannot be seen in this price range.

MQA (Master Quality Authenticated)

X7-DAC Femto includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.

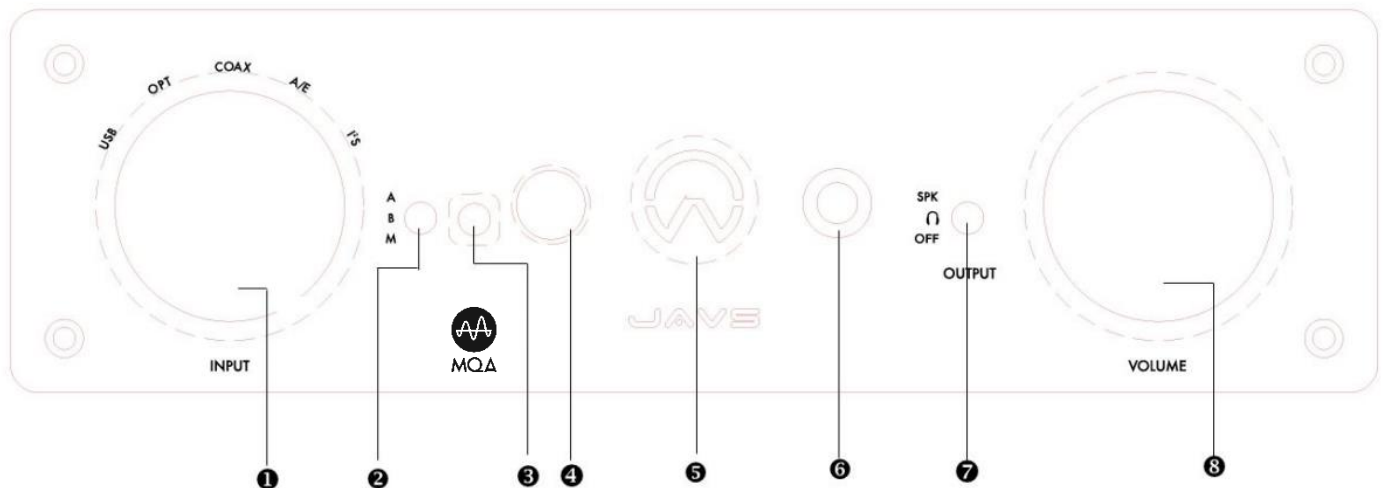
Visit mqa.co.uk for more information.

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Features

Features on the front of X7-DAC Femto



❶ Input Selector: Select Input source

USB: PCM 24BIT / 384kHz / DSD 256, When input source is PC or smartphones

OPT: PCM 24BIT / 192kHz, Optical

COAX: PCM 24BIT / 192kHz, Coaxial

AES/EBU: PCM 24BIT / 192kHz

I²S: PCM 24BIT / 384kHz / DSD 256, Receiving signal via HDMI cable

❷ USB Type

A: USB Type-A

B: USB Type-B

M: USB Mini

③ MQA LED Lights

MQA O: **Green**

MQA Studio O: **Blue**

The X7-DAC Femto's LED glows green or blue to indicate that the unit is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. It glows blue to indicate it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

④ Headphone Output (5.5mm)

⑤ Sample rate LED Lights

Display sample rate of currently playing source by LED colors.

44.1 / 48kHz: **Red**

88.2 / 96kHz: **Green**

172.4 / 192kHz: **Blue**

354.8 / 384kHz: **Purple**

DSD: **White**

⑥ Earphone Output (3.5mm)

⑦ Output Selector & Power Off

SPK: Output from Speaker.

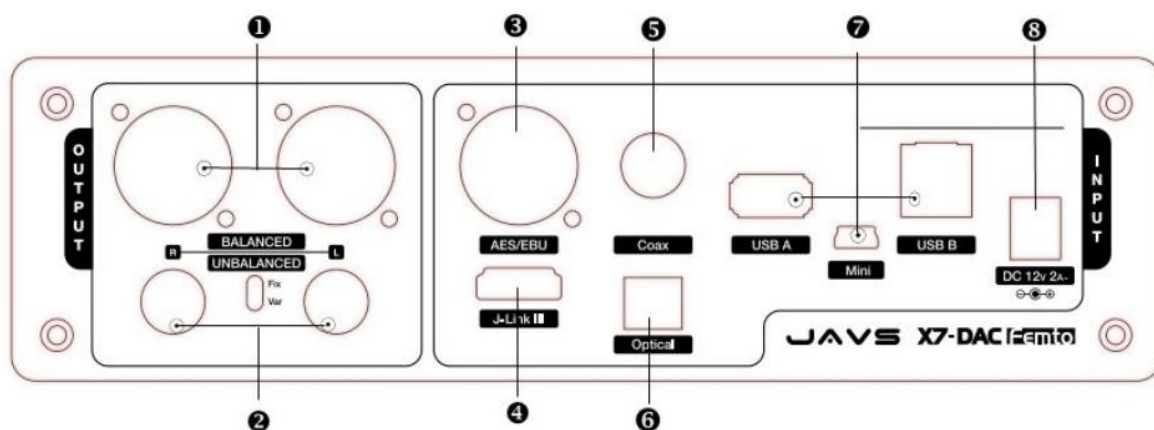
🎧 : Output from headphone or earphone.

OFF: Power off.

⑧ Volume

Volume control(Only available when switch on the back is selected as Var).

Features on the back of X7-DAC Femto



① Balanced Output

Bypassing volume circuit, full range balanced output coming out using XLR jack.

② Unbalanced Output

Using RCA jack, unbalanced output coming out.

③ AES/EBU Input

AES/EBU input(up to 192kHz).

④ I²S(HDMI) Input

Connect to X7-DAC Femto using HDMI cable. Supports up to PCM 384 & Native DSD256.

⑤ COAX Input

Coaxial input(up to 192kHz).

⑥ Optical Input

Optical input(up to 192kHz).

⑦ USB Input

Input for USB Type-A & Type-B & Mini, It is recommended to use cable provided with the device. Using other cable may cause noise or even not connected to the device.

⑧ DC 12V 2A~



Use adaptor that provided or equivalent DC adaptor(over 12V 2A, 5.5mm of outside diameter, 2.5mm of inside diameter, polarity inside diameter +).

Precaution

Please note that the output of this unit would be larger than typical DAC. So, it is recommended to lower the volume (#8 on the front panel) and adjust the volume after playing.

Also, when output is being fixed as balanced or unbalanced, the volume is set at the maximum level. Please operate the device after adjusting the volume of amplifier or active speakers appropriately.

1. Connecting to PC

- Using the adaptor provided, connect to the socket on the back panel (#8 on the back). And, using USB (A to B) cable, connect PC and the device to #7 on the back panel.
- Connect output to #1,2 on the back or #4,6 on the front.
- Turn on the power of PC & the device and visit www.javs.co.kr to download the latest firmware (for Windows).
- Select INPUT of the front panel (#1 on the front) as USB and put select switch (#2 on the front) to PC
- If using Balanced or Unbalanced, put OUTPUT select switch to . If using headphones (#4 on the front) or earphones (#6 on the front), put the OUTPUT switch to .

(Warning: Analogue on the back and headphones on the front do not simultaneously output)

Set the volume knob (#8 on the front) to the minimum, then adjust the volume once music is played.

(Warning: Adjusting volume is only available on headphones, earphones and Unbalanced Var)

Volume on the PC: Set this device as a standard device.

Operate desired player and play (Settings are various depends on the players).

For Foobar2000 and Jriver, please refer to user manual from the manufacturer's website

2. Connecting to smartphone

- For Android smartphone using Micro USB type, please use cable provided (micro to mini) to connect smartphone and the device (#7 on the back).
- Set the INPUT select knob to USB and set the select switch
- Start play songs on the smartphone and adjust volume.
- Note: to charge Android smartphone, please put the select switch to USB A or USB B.

3. Digital source input (Coaxial, Optical, AES/EBU, & HDMI)

- Connect any digital input devices using appropriate cable type to the device (#3,4,5 or 6 on the back).
- Set INPUT select knob (#1 on the front) to the currently connected device (Coax : Coaxial, OPT : Optical, A/E : AES/EBU, I²S: HDMI).

4. Connecting JAVS LINK III

- JAVS LINK III is a port that transferring I²S signal between X7 DDC Femto and this X7-DAC Femto via HDMI cable. Using this port, it is possible to receive PCM 384 or DSD sources which can not be done on SPDIF or AES/EBU.
- Connect JLINK III output port on the back of X7-DDC and input port of X7-DAC Femto using HDMI cable.
- Set INPUT select knob (#1 on the front) to I²S.

5. Selecting output

- Analogue output of this device supports Balanced (XLR cable), Unbalanced (RCA cable), 5.5mm headphones and 3.5mm earphones type.
- Balanced: Using XLR cable, connect to amplifier that Balanced input is available or to active speakers. Please note that the volume will be set at the maximum level. To avoid damage on the device, adjust the volume smoothly on the device in advance.
- Unbalanced: Connect to amplifier or active speaker using RCA cable. Select switch on the back (near #2 on the back) is needed when connecting only Unbalanced connection. Volume is fixed at the maximum level on Fix mode. When Var is selected, adjusting volume is possible by using volume knob on the front (#8 on the front).

What's in the box

1 x X7-DAC Femto

1 x micro USB Cable

1 x USB A to USB B Cable

1 x Power Adaptor

1 x Power Cable

Specifications

Dimensions / Weight

215mm x 260mm x 67mm / 2.6kg

USB Audio

USB A: MAX PCM 32Bit 384kHz, DSD Native 256, DOP 128

USB B: MAX PCM 32Bit 384kHz, DSD Native 256, DOP 128

USB Mini: MAX PCM 32Bit 384kHz, DSD Native 256, DOP 128

Digital Input

OPT: MAX PCM 32Bit 192kHz

COAX: MAX PCM 32Bit 192kHz

AES/EBU: MAX PCM 32Bit 192kHz

JAVS Link3(HDMI): MAX PCM 32Bit 192kHz, DSD Native 256, DOP 256

Line Output

Type: Balanced XLR (Fix out) MAX 3.0 Vrms

Unbalanced RCA (VAR / Fix out) MAX 2.5 Vrms

Ear/Headphone Output

Earphone: 3.5mm Stereo mini jack

Max Out Level: $\pm 5V_{pp}$ @ 160 Ω

Output Impedance: 2 Ω (Load: 16 Ω ~ 300 Ω)

Headphone: 6.35mm Stereo phone jack

Max Out Level: $\pm 10V_{pp}$ @ 600 Ω

Output Impedance: 2 Ω (Load: 16 Ω ~ 300 Ω)

DA Converter

AK4497EQ, THD+N: -116dB DR, S/N: 131dB(2.6 Vrms Output)

OPAMP

IV Converter: LME49710MA (SMD x 4) PCB Type

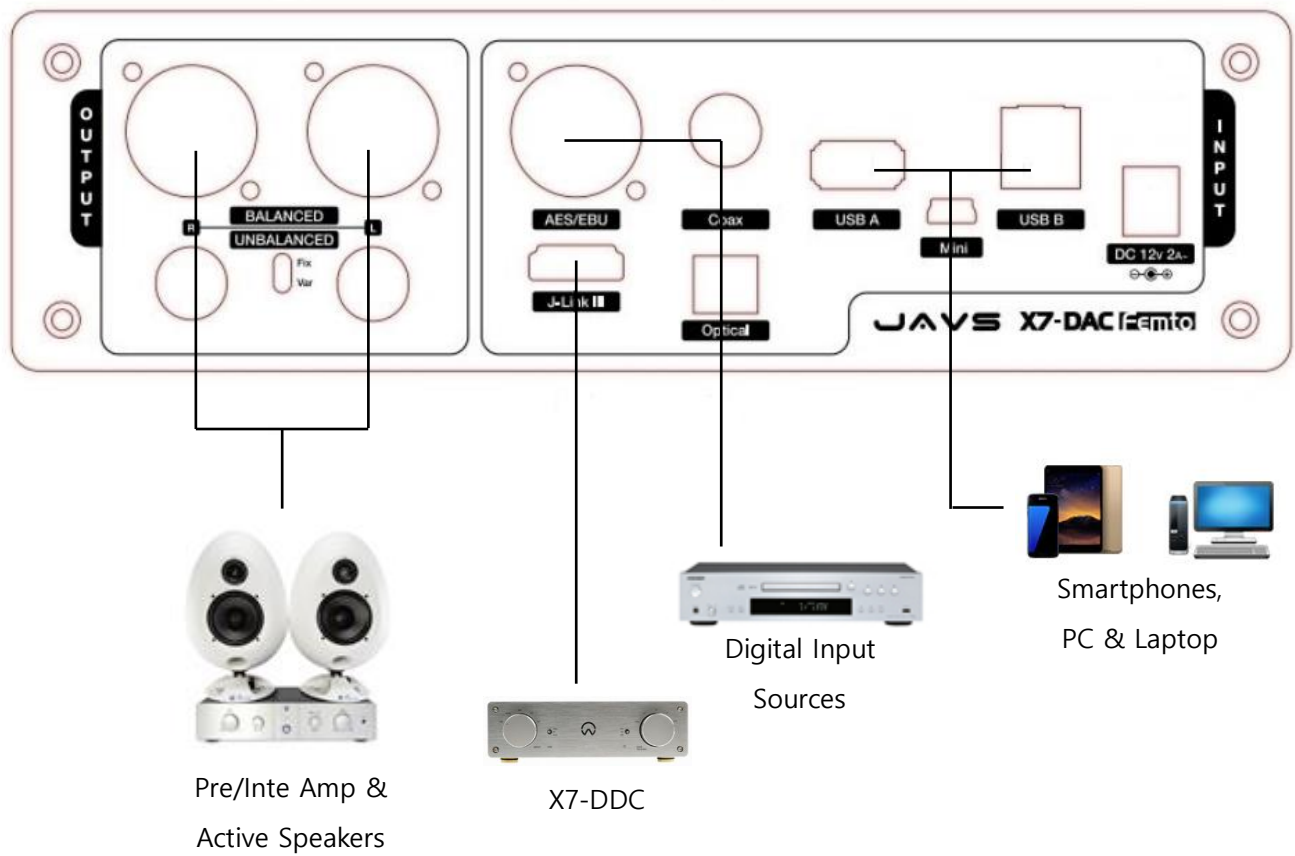
Differential Amplifier: LME49710MA (SMD x 2) PCB Type

Balanced Out: LT1126 (DIP x 2)

Unbalanced Out: LT1126 (DIP)

Ear/Headphone: LT1126 (DIP) + TR Discrete

Connetion Diagram





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