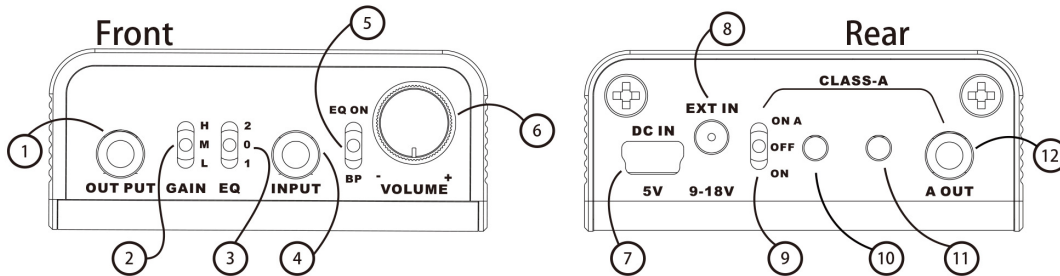


# LEAR FSM-02 V2

Portable Headphone Amplifier

# LEAR FSM-02 V2

Portable Headphone Amplifier



## Interface Description

1. Audio Output Jack: Support any standard 3.5mm stereo earphones or headphones. (Included the headphones with mic&remote, but the mic & remote function will become invalid)
2. GAIN Control: There are L / M / H three stage GAIN selections for the best matching with different headphones with different impedance. We recommend to start with L stage for most of the headphones to ensure the best quality!
3. EQ Selection Switch: There are 1 / 0 / 2 three stage selections. Stage 1 for the bass enhancing. Stage 2 for the treble enhancing. Stage 0 is used to bypass the EQ function (need to interact with the "EQ&BP" switch)
4. Audio Input Jack: Support any Analog audio devices such as MP3 players and music mobile phones.
5. EQ & ByPass switch: There is BP / Pause / EQ ON three stages. When switch to BP, the EQ function will be off. Switch to EQ On, EQ function will be turned on and interact with the EQ selection switch. (Please note that once the switch is at the middle and pause stage, the FSM-02V2 will be paused to work)
6. Volume Control: To control the most suitable volume by users
7. USB Type Charging Port: Support any DC-5V voltage, including the USB port of computer or any DC-5V power supply. FSM-02V2 can be charging and working at the same time.
8. External DC Power Supply: Support from DC5V~18V external power supply and also battery charging. A good quality and regulated power supply is recommended for the best quality!
9. Main I/O & Class-A I/O Switch: There ON / OFF / ON A three stages. Turn to "Off" will shut down the FSM-02V2. Turn to "ON" will activated the Front audio output. Turn to "ON A" will activated both front and rear (Class-A) working stage. (Please note that when Class-A is on, the operation time will be significantly shorter and slightly rising of the temperature)
10. Charging & Low Power indicator: Red lights will on if there is less than 1hour of operation time. During battery charging, red light will on and change to green when fully charged.
11. Working Condition Indicator: Blue light when operated in normal condition and purple light when turned on Class-A (ON A) condition.
12. Please run-in a few minutes at each time when turned on the CLASS-A output to ensure the best performance.

## Important Notice

- 1-Do not plug into the Class-A(A-OUT) Jack when blue LED is on!
- 2-Please fully charge the FSM-02 before first time operation or after a long period without use.(Use a standard PC USB or standard USB power charger at DC5V/500mA will takes 4~5hrs to fully charge) Red light indicator will light when charging and it will change to green light when fully charged
- 3-When you are going to use the FMS-02, please make sure the volume control is at the 7 or 8 o'clock position to prevent over output power!
- 4-Please keep away from water or any wet surfaces.
- 5-Free warranty will be voided if wrongly operated especially self modification at the not suggested parts.
- 6-Please pay attention to the playing volume, over volume will harm to your hearing
- 7-When the battery is low, the red LED will be on for indication.
- 8-It is highly recommend to having a 50hrs up, run-in time, to let the FSM-02 work at its best condition!
- 9-To ensure the best performance, we are highly recommended to charging when the red light is on. If FSM-02V2 is automatically shut down when the battery is empty, please make sure to power off it before plugging to the charger.
- 10-The temperature will be slightly rising when using an external power voltage higher than DC12 or turned on the Class-A circuit. If the temperature is abnormally too high, please disconnect the external power immediately and check that if both external power and FSM-02V2 were in a normal and good condition.
- 11-Please make sure the OPAMP which you are going to change has a voltage range higher than DC+6V(DC12V), otherwise, we will not be responsible for any damage which caused by unmatched power supply voltage.
- 12-Please do not hesitate to contact us if you have any questions or problems during the use of LEAR FSM-02, you can visit <http://lear.hk> or Email us at [info@fs-digital.net](mailto:info@fs-digital.net) for any enquiries!

## 注意事項

- 1-青色のLEDが点灯しているときにクラスA (A OUT) ジャックにプラグを差し込まないでください。
- 2-FSM-02の最初のご使用や本器をしばらくの間ご使用にならなかったときは、一般的なパソコンのUSBやDC5V/500mAのUSB充電器を用いてフル充電を行ってください。フル充電に4~5時間かかります。充電中は表示が赤色に点灯し、充電が完了すると緑色に変わります。
- 3-FSM-02をご使用いただく際は、過剰な出力バフーを防ぐために必ず音量の調整を7時から8時の位置にしてください。
- 4-水や濡れた表面からは遠ざけてご使用ください。
- 5-推定しては、ない部品の改良や間違った操作による故障は保証適用外となります。
- 6-再生音量は十分に注意してください。大音量は聴力に悪影響を及ぼす可能性があります。
- 7-バッテリー残量が少なくなるとLEDが赤く点灯してお知らせします。
- 8-FSM-02を最高の状態でご使用頂くため、最初に50時間の慣らし運転を推奨しております。
- 9-LEAR FSM-02に関するご質問や問題はお気軽にお問い合わせください。

## Specification

Frequency response: 5Hz~100 kHz (20Hz~20kHz EQ=Flat +0.031dB)

Output: 0.1%THD 16mW @16ohm(OPA2134) built-in battery  
0.1%THD 18mW @300ohm(OPA2134) built-in battery  
0.1%THD 516mW @16ohm(AD8397) built-in battery  
0.1%THD 40mW @300ohm(AD8397) built-in battery

S/N ratio: ≥100dB A-Weighted

Noise Level: ≤25 dB A-weighted

THD+N Distortion: 0.0006% @1kHz

IMD Distortion: 0.001% CCIF, 0.001% SMPTE

Operation time: About 12hrs up@ front output, about 4hours @ Back Class-A output

Charging time: About 5hrs (DC 5V, 500mA)

Charging: DC5V 1000mA (MAX)

EXT power: DC4.5V~18V 1000mA (MAX)

(Note: Due to continuing product improvement, specification and design are subject to change without notice.)

## 仕様

周波数特性: 5Hz~100kHz (20Hz=20kHz EQ=フラット ±0.031dB)

出力: 0.1%THD 16mW @16Ω(OPA2134) 内蔵バッテリー  
0.1%THD 18mW @300Ω(OPA2134) 内蔵バッテリー  
0.1%THD 516mW @16Ω(AD8397) 内蔵バッテリー  
0.1%THD 40mW @300Ω(AD8397) 内蔵バッテリー

S/N 比: ≥100dB A-weighted

雑音レベル: ≤25dB A-weighted

全高調波歪+雑音: 0.0006% @1kHz

相互変調歪: 0.001% CCIF, 0.001% SMPTE

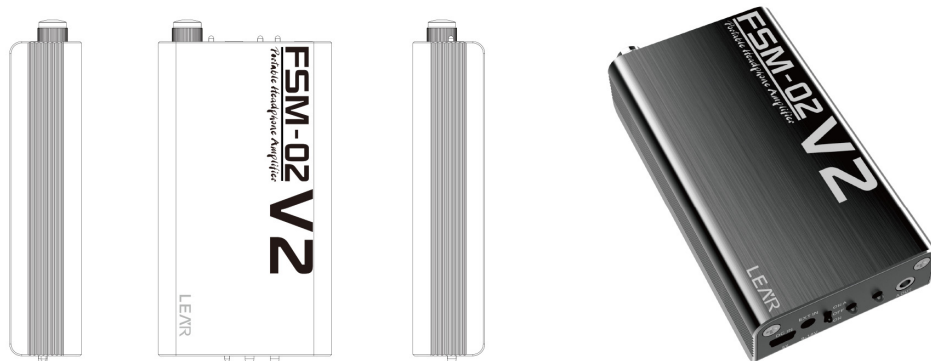
駆動時間: 約12時間 (前面出力時)、約4時間 (背面クラスA出力時)

充電時間: 約5時間 (DC5V 500mA)

充電電圧: DC5V 1000mA (最大)

外部電力: DC4.5V~18V 1000mA (最大)

(※継続的な製品の改良のため、仕様やデザインは予告なく変更する場合があります)



PREMIUM GRADE PORTABLE HEADPHONE AMPLIFIER PREMIUM GRADE PORTABLE HEADPHONE AMPLIFIER