

MP-D2 MK3 Deluxe DAC Quick Setup Manual

Faceplate

1. Power button is on the most left hand side.
2. Variable button controls either fixed line level output or variable preamp output. When variable light is on, preamp output is active. Volume can be adjusted by the volume pot on the right of the faceplate. When variable light is off, fixed RCA and XLR outputs are active. Preamp output is disabled.
3. Input source button chooses an input source which can be USB, coaxial, AES or Bluetooth (OPTI).
4. DSD ON light is turned on automatically when playing SACD DSD file over USB connection.

Rear Panel

1. Variable RCA output is preamp output which is used to connected power amp or active speakers. It can provide up to 8V RMS output signal with 6H6/12AU7/12BH7 and 16V with 6922/E88CC/6DJ8.
2. Fixed outputs section includes fixed line level single ended RCA outputs and XLR balanced outputs. They are used to connect integrated amplifiers or pre-amplifier. When using RCA outputs, both gain switches should be set to H position with 6H6/12AU7/12BH7 tubes and L position with 6922/E88CC/6DJ8. When using XLR outputs, both gain switches should be set to H position.
3. Inputs section includes AES, COAXIAL, Bluetooth Antenna, and USB input port. The switch close to the USB input selects either external clock (e.clk) or internal clock (i.clk) for the USB input. It should be set to i.clk unless a proper external clock is connected. An external 22.5792Mhz, 24.576Mhz, 45.1584Mhz and 49.152Mhz 3.3V external clocks are supported.

Internal

1. V1, V2, V3, V4 are output signal tubes which can be 6N11, 6H6, 6H23P, E88CC, 6922, 6DJ8, 12BH7, 12AU7 and E80CC tubes. When using 6N11, 6H6, 6H23P, E88CC, 6922 and 6DJ8 tubes, switch S1 on the right corner of the mother board must be set to 6.3V filament voltage position. When using 12BH7, 12AU7 and E80CC tubes, switch S1 must be set to 12.6V filament voltage position.

2. If you use RCA outputs only, when upgrading signal tubes, only V1 and V3 need to be upgraded, V2 and V4 can use existing ones as long as the filament voltages are the same. For example, V1 and V3 use E88CC, V2 and V4 use Russian 6H6. V1 and V3 use 12BH7, V2 and V4 use Shuguang 12AU7. These combinations can significantly lower the upgrade cost if you only use RCA outputs. Remember, 4 tubes are always required. Do not just run with 2 tubes.

3. If you use RCA output only, when upgrading output coupling caps, you just need to change C53 and C64, do not need to change C57 and C65, C57 and C65 can also be removed if you need more space for C53 and C64.

4. If you need to use XLR outputs, V1, V2, V3, V4 tubes and C53, C57, C64, C65 capacitors must be the same brand and same model. Tubes need to be matched.

5. Output coupling capacitors voltage must be at least 400V or up; capacitance must be between 1uf and 4.7uf. Stock one is 630V 2.2uf.

7. P3 location is a rectifier tube. 5R4, 5AR4, 5U4G, 5Y3, GZ34, 274B, GZ37, 5BC3(with adapter) are supported 5V filament rectifier tubes. 6Z5P (stock) and 6X5 are supported 6.3V filament rectifier tubes. When using 5V rectifier tubes, toggle S2 switch beside P3 socket to 5AR4 position. When using 6.3V rectifier tubes, it must be set to 6X5 position.

8. Since 2020-1-10 firmware version, users can choose different digital filters when using ES9038Pro modules. After startup, long press left variable button to choose different ES9038Pro digital filters. Variable LED status indicates which filter are being used and stored. Once a new filter is selected, it will be applied and saved, so don't need to choose again after reboot.

Flashing 1 time: Apodizing, fast roll-off, linear phase filter. (default)

Flashing 2 times: Slow roll-off, minimum phase filter.

Flashing 3 times: Fast roll-off, minimum phase filter.

Flashing 4 times: Slow roll-off, linear phase filter.

Flashing 5 times: Fast roll-off, linear phase filter.

Flashing 6 times: Brickwall filter.

Flashing 7 times: Hybrid, fast roll-off, minimum phase filter.

Caution: When changing signal and rectifier tubes, before powering on, please double check to confirm the model is supported, and the filament voltage(s) are set properly. Tubes are aligned and plugged into the sockets

securely. Fail to do so, might cause damage to the tube(s) and/or the DAC.

If you cannot find and pair MP-D2 Bluetooth device "BT Speaker" on your cell phone, please make sure all other mobile devices were not paired or connected to "BT Speaker".