MOS16 USER GUIDE

Unpacking

Info Remove the protective sheet from the lid of the MOS16.

Warning

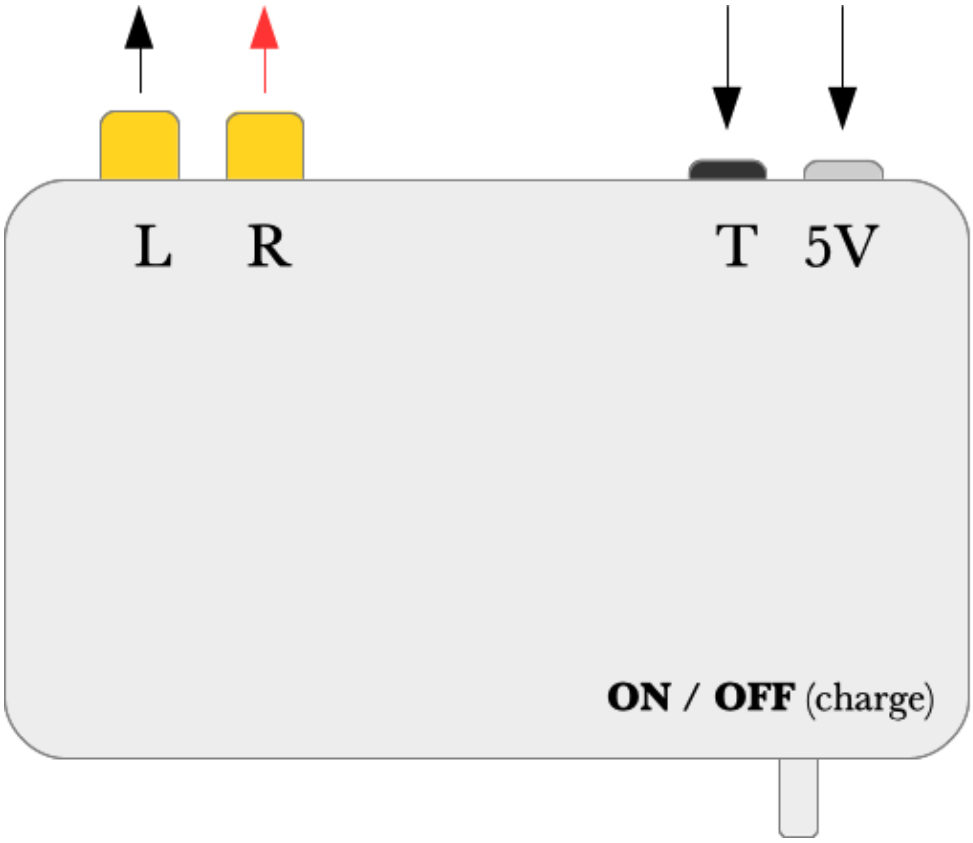
Sharp edges Our cases are milled from plexiglass and anodised aluminum and could have sharp edges !

Fire Hazard The MOS16 is equipped with a LiPo rechargeable battery with built-in overcharge and short protection circuit (PCM).

Fire Hazard:
Do not use batteries without build-in protection circuit, this is a fire hazard !

Fire Hazard:
Do not puncture the MOS16 battery, this is a fire hazard !

Connections



L	Left channel fixed output RCA
R	Right channel fixed output RCA
T	Toslink 44-96 kHz optical digital input
5V	USB-A 5V DC 1A charger input
ON/OFF	ON = Battery connected to MOS16 but completely disconnected from charger OFF = Battery disconnected from MOS16 but connected to charger

Cables

Standard Toslink cable

Mini-Toslink (UTOS)

Charging Cable USB-A to USB-B

Charging

Charger	Use a 5V/1A charger with USB A socket to charge internal battery.
ON/OFF	The **MOS16** will only charge when **ON/OFF** switch is in the **OFF** position (switch down). In the **ON** position (switch up) charger is completely disconnected from internal battery.
Cable	Use a thick and not too long **USB A** to **USB B** cable to charge the internal **MOS16** battery. (Use a thick and not too long **USB A** to **USB mini B** cable to charge the internal **RC** battery.)
Info	Studies have shown that a rechargeable battery lasts longer when charging regularly and frequently, discharging completely before charging reduces the battery life.
Replace battery	If battery needs to be replaced make sure that it is the same type, the battery installed in the MOS16 has build-in protection circuit (PCM) that prevents over charging and short circuit currents. **Batteries without this protection circuit should not be used in the MOS16 (fire hazard)**

Display

Sample-rate display for MOS16	
Not locked	**- -**
Locked to 44.1 kHz	**4 4.**
Locked to 48 kHz	**4 8**
Locked to 88.2 kHz	**8 8.**
Locked to 96 kHz	**9 6**

i	It is possible that the MOS16 locks on 176.4 kHz or 192 kHz but this will result in cracks and/or distortion in one or both channels. In this case the display will also show **4 4**

Operating instructions

Source	The MOS16 can be connected to any source that can output digital audio over **Toslink**. Depending on the source you need either a standard **Toslink** or a **Mini-Toslink** cable. Note that the Mini-Toslink plug has the same dimensions as a 3.5 mm Jack plug. The MOS16 supports Toslink 44-96 kHz, 16 or 24 bit format, but only outputs 16 bits. The Mini Toslink is often used in combined 3.5 mm Jack headphone + Mini Toslink out. Many Apple computers are equipped with this combined output connector. Often the digital Toslink output will only become visible in the OS Software after inserting the Mini Toslink connector. Check your computer specifications if you have built-in mini Toslink support (Digital out). To check if Toslink is active, you could plugin Toslink cable into your digital audio source and send audio through Toslink output, then the not connected Toslink plug shows a red visible light. If there is no red visible light, check your source settings. The UTOS can be used to convert a PC/iPad/iPhone or Android phone USB output to Mini Toslink. Other Toslink digital audio output devices: UPL16, UPL24, Apple Airport Express, Google Chromecast Audio, many CD players, many Televisions and dedicated streamer solutions.
Cable	Use a normal cable and make sure that the Toslink plug fits correctly into the Toslink connector. On some Mini-Toslink cables the 3.5mm plug is too thick to correctly fit in the Mini-Toslink connector. In this case the optical fiber is not properly aligned with the receiver in the Mini-Toslink connecter, this could affect sound quality. Also do not use Toslink cables that are longer than 1.5 mtr. Longer cables could affect sound quality.
Volume	When using a streaming device connected to the MOS16, **do not use software volume control**. Always set set software volume control to 100% and use an analog attenuator (like SVC) between MOS16 and Amplifier.
Digital processing	When using a streaming device connected to the MOS16, **do not use any digital processing** like equaliser, normalise, compression etc. Use our UPL16/24 + SCV for the cleanest digital source without any processing.

Specifications

Width	24 cm
Length	15 cm
Height	2.3 cm
Weight	635 gr
Power supply	Built-in re-chargable Lithium Polymer battery 3.7V
Power consumption	80 milliwatts
Charger (not included)	DC 5V/1A - USB A socket + cable to USB B
Output sockets	2x RCA
Input sockets	1x Toslink, 1x USB B for charging
Supported sample rates	44.1 / 48 / 88.2 / 96
Supported bit-depth	16