Synchro-Mesh
Reclocker/Resampler
User Manual Rev 2.0

The Synchro-Mesh was developed to replace our Pace-Car reclocker, providing a method to reduce jitter for a wide variety of digital source devices without requiring modifications to these devices.

In order for the Synchro-Mesh to reclock these digital devices, it performs what is called Asynchronous Sample-Rate Conversion or "ASRC". This means that the Synchro-Mesh re-samples the data-stream and outputs only one sample-rate. This output sample-rate can be specified at the time of ordering to be either 44.1 or 96. If you input 192 or 44.1 files to the SM, and it is set for 96, then it will output 96, either down-sampling or up-sampling. If you input 96 to the same SM, it will output 96, but it will not be bit-perfect.

Typically, we recommend 96 output because most DAC digital filtering sounds better than the filter for 44.1. If you have an older NOS DAC that only takes 16-bit, then 44.1 output is more compatible.

Synchro-Mesh typically needs 2-3 days of break-in.

Synchro-Mesh

16   Toslink In
24   Coax In

No Reg
Error
Power

Front Panel indicators:

No Reg is a failure of the output voltage regulator – return for repair.

Error LED indicates no audio data detected.

Power LED indicates DC power is applied.

Controls:

The Synchro-Mesh is essentially plug-and-play, but there are two toggle switches on the front panel.

The Toslink in/Coax in toggle switch selects between two inputs, the Toslink (optical) or the RCA/BNC coax connectors. Only one of the RCA or BNC can be used at a time.

The 16/24 toggle switch selects the word length for output. It is only sampled on power-up, so changing it on the fly while playing music will have no effect. Unplug the DC connector and replug after changing the switch position. 16-Bit is primarily for older DACs that are not compatible with 24-bit data, so 24-bit setting should be used when possible.

Input Connectors:

The inputs are Toslink and RCA or BNC. Connect only one coax cable. It does not matter what source device or cable quality you choose for the inputs. The outputs will sound identical. No need to buy expensive cables for the inputs or mod the source devices.

Output Connectors:

The outputs are Toslink and BNC or RCA. Connect only one coax cable. This is where a good quality cable makes a huge difference. Buy the best cable for the money. Typically, a BNC cable will give you the highest sound quality, followed by the RCA and then the Toslink. A glass Toslink can be excellent however.

The input power is 12VDC on a 2.5mm connector. Powering the Synchro-Mesh can be from the AC adapter being plugged in the AC outlet or by connecting the DC connector.

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