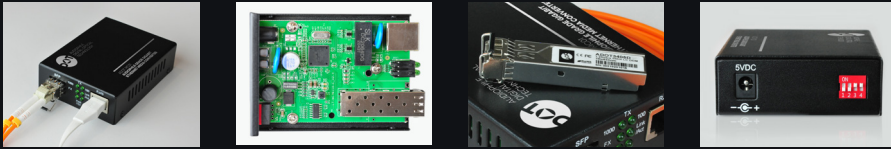


The components



MC01 Media Converter

Designing a fibre unit for hi-fi systems is a challenge. Because fibre is used in IT systems primarily for speed, and hi-fi doesn't need fibre for speed, it needs it for clarity!

In fact reducing the comms speed of the MC01 to 100Mb/s improves the sound quality of a network player. This is possible simply by setting a couple of switches.

Internally, the construction of MC01 is to Enterprise Standards and this extends to the massive Ethernet magnetics that couple to the copper part of the network.

SFP adapters

There are many choices of fibre configuration and wavelength (colour) of the optical transfer. Audiophile DOT simplifies the decision by supplying a matched pair of Duplex SFP adapters with matched fibre.

Fibre

The fibre has to match the design parameters of the SFP adapters and so the Duplex fibre that is supplied is paired with the SFP adapters. Connectivity of the fibre adapters is critical and the terminations are all factory-made in clean-room conditions. 1.5m lengths mean that the devices can be tucked out of the way behind a hi-fi system.

There is a limit of several hundred metres for the fibre link. The fibre is also less than 3mm in diameter, and so is ideally suited for making the connection between the router and the hi-fi system, even in the largest homes or between buildings.

Audiophile DOT can supply standard lengths of optical fibre up to 50 m, or supply custom cables up to 200 m; all are clean-room-assembled with individual performance tables supplied with each cable.

Simple power supply upgrade options

The MC01 kit

Supplied as a complete kit with a universal voltage power adapter in EU or UK fitting

SFP adapters

Powered from their host devices.

The MC02 kit

Supplied with a linear power supply that ensures no additional noise is generated

MC Accessory

Single MC01 Media Converter with an adapter lead to use existing power supply.

The MC03 kit

The ultimate solution, supplied with a custom build PLiXiR low noise power supply with 3 stage noise reduction.



AUDIOPHILE
DIGITAL OPTICAL
TECHNOLOGY



AUDIOPHILE DIGITAL
MUSIC MASTERS LTD
Sandy Farm Business Centre,
Sands Road FARNHAM,
Surrey GU10 1PX

sales@admm.uk.com
www.audiophiledigitalmusicmasters.com/adot

Concept and origination in the UK
Manufactured in China.



AUDIOPHILE
DIGITAL OPTICAL
TECHNOLOGY

MC01
FIBRE NETWORK KIT



EXPERIENCE GLORIOUS ISOLATION

Audiophile Fibre Network Connectivity kits; for when copper just isn't good enough.

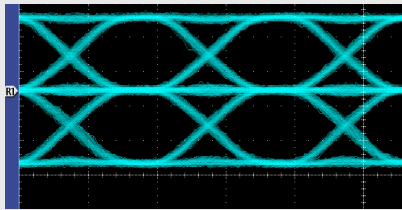
- A suite of audiophile-grade kits to simplify the isolation of high-end audio systems using fibre optic components carefully optimised for hi-fi use.
- Plug and play with no computer configuration required.
- System operation is completely unchanged.
- Suitable for use with all network-connected audio systems whether NAS—or streaming-based.

Why upgrade?

Analogue audio is delicate. Digital audio is just as delicate, plus digital data needs to be treated with the utmost respect to achieve the results that today's high-resolution digital music files promise.

The reason is simple.

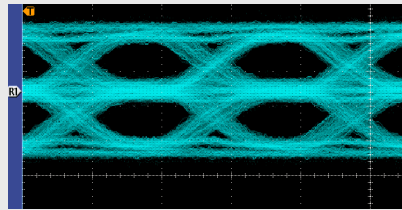
Behind the 0's and 1's, hi-fi electrical signals are still analogue, and just as susceptible to the influence from noise and interference. This additional noise damages the integrity of the pulse edges. This uncertain transition point, of a noisy pulse edge, results in timing errors and jitter.



Ethernet data packets transferred over networks should be clean and precise.

The open area between the data edges 'the eye', represents the data integrity.

This is an un-retouched eye pattern of Ethernet traffic between MC01 and network player.



System noise confuses the vertical levels. Packet timing jitter gives uncertainty in the horizontal time domain.

Data integrity is reduced as 'the eye' closes.

Audio designers go to great lengths to minimise noise problems within hardware, but external influences are a different matter. Network-connected components are at risk from noise and interference, as well as malformed data.

Using a high-performance audiophile data switch, such as the Melco S100, ensures that the data is as pristine as possible and switch management ensures that errant data packets are not presented to the hi-fi system.

But, the Ethernet cabling is still a risk, being connected to noisy IT-type devices in the home and the cable is also an effective antenna, capturing EMC from the environment. Copper wire, used for Ethernet cables, is effective at conducting data, but is equally effective at conducting all manner of interference as well.

The solution is to break the conducted signal, including interference and isolate the hi-fi system. By using fibre optics, the data can still be communicated to the digital components, but without any risk of introducing any conducted interference and noise.

Fibre optic isolation kits.

Only a short length of fibre is necessary to achieve isolation and the standard DOT kits have a 1.5m fibre included; much longer fibres can be supplied to allow even a totally fibre link from the main router or even between buildings.

The principle is again very simple.

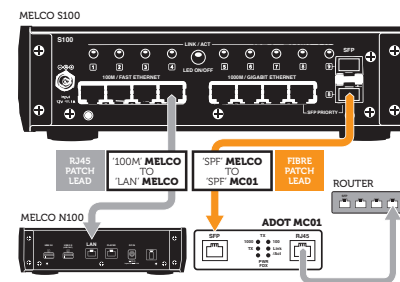
The Ethernet cable from the router, which normally connects to the data switch feeding the hi-fi system, is simply broken by the insertion of a media converter which converts copper to fibre, and then, after a length of fibre which gives the isolation, the data is converted back to copper, but without any noise or interference.

The basic Audiophile DOT MC01 Fibre kit comprises.

- A single Audiophile DOT Media Converter (and power supply)
- A 1.5m fibre
- A pair of fibre terminations known as SFP adapters

Using an MC01 with a Melco S100 is very easy.

The S100 will accept fibre directly, meaning that only one media converter is required.



Don't worry if your system doesn't use a Melco S100.

All audio and control data is transported without any degradation, including external streaming services and file management by a networked PC if required. But, all electrically conducted noise is completely eliminated.

Systems that do not have a Melco S100, will require a second media converter, available as an accessory to the main kit. This applies to installations using network players that normally simply connect to the residential network.

