

Analog Sync / Video Fiber Optic Transmitter (CWDM)

- Supports analog black burst, bi-Level, tri-Level sync signals and NTSC and PAL composite video
- Passive loop output
- Broadcast quality performance
- 18 wavelength selections (ITU-T G.694.2)
- Error free optical transmission
- Up to 40km (24.8 miles) singlemode
- Supports hot swapping and hot plugging



The OTX 1742 is a compact analog sync or NTSC/PAL composite video to fiber optic transmitter (CWDM compatible). This device is specifically designed to combat the restrictions involved with the distribution of broadcast quality analog reference and composite video signals over long distances.

When paired with the fiber optic receiver ORX 1702 you have a cost-effective optical transmission system for analog sync reference signals or NTSC/PAL composite video. This device is particularly useful for reference sync distribution between remote installations to maintain correct synchronization.

Unlike other very basic analog to fiber conversion solutions, the OTX 1842 incorporates technology to maintain a very high degree of sync and burst phase stability during the conversion and fiber transmission.

The module converts the NTSC/PAL video signal to an SDI signal (including reference and other relevant information) before it is converted to fiber. Therefore when the OTX 1742 is used for NTSC or PAL video sources it is possible to convert the fiber signal directly to SDI if required using an SDI receiver (e.g. ORX 1802).

The basic module does not include a Fiber SFP sub module and an option MUST be selected from the tables below:

CWDM Wavelength Options. ITU-T G.694.2 (select one)

Wavelength	Power	Option #	Wavelength	Power	Option #
1270nm	-1dBm	OH-TX-4-1270	1450nm	-1dBm	OH-TX-4-1450
1290nm	-1dBm	OH-TX-4-1290	1470nm	-1dBm	OH-TX-4-1470
1310nm	-1dBm	OH-TX-4-1310	1490nm	-1dBm	OH-TX-4-1490
1330nm	-1dBm	OH-TX-4-1330	1510nm	-1dBm	OH-TX-4-1510
1350nm	-1dBm	OH-TX-4-1350	1530nm	-1dBm	OH-TX-4-1530
1370nm	-1dBm	OH-TX-4-1370	1550nm	-1dBm	OH-TX-4-1550
1390nm	-1dBm	OH-TX-4-1390	1570nm	-1dBm	OH-TX-4-1570
1410nm	-1dBm	OH-TX-4-1410	1590nm	-1dBm	OH-TX-4-1590
1430nm	-1dBm	OH-TX-4-1430	1610nm	-1dBm	OH-TX-4-1610

Technical Specifications

Analog Input	Sync = analog black burst / SDTV bi-level / HDTV tri-level Video = NTSC / PAL Composite video 1 x passive loop output (terminate if not used) 75 Ohm BNC connectors
	NTSC SMPTE 170M, PAL CCIR624 Analog tri-level sync SMPTE ST 274, ST 276
	Multi-standard operation, auto-detect
	Return loss: 31dB to 10MHz
Fiber Out Singlemode	1 x fiber optic singlemode output LC connection
	SMPTE 297M - 2006
	18 Wavelength selections per ITU-T G.694.2 (see table)
	TX active LED on side of module Max. distance: 40km (24.8 miles - approx)
Power	+12VDC power supply (included) Power LED on side of module Power consumption: 5W
Size	105mm x 40mm x 22mm (4.13" x 1.57" x 0.86")
Model #	OTX 1742 (module only - select fiber wavelength)
Includes	Module, 12V DC power supply and plastic transport case

Fiber Optic Connection

LC Simplex (singlemode) up to 40km (24.8 miles)
(not included)



Non CWDM Version

Wavelength	Power	Option #
1550nm	-1dBm	OH-TX-3-1550

Specifications subject to change