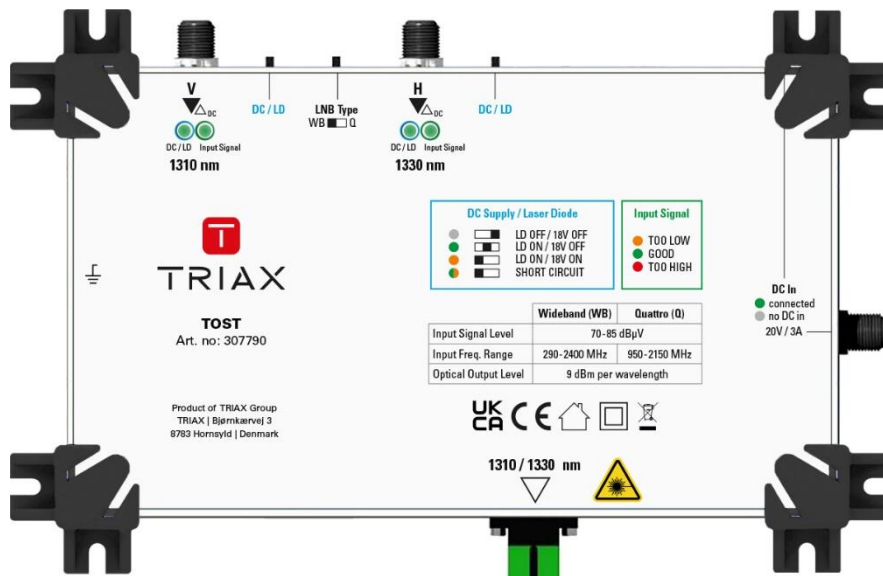


TOST

Triax Optical Satellite Transmitter

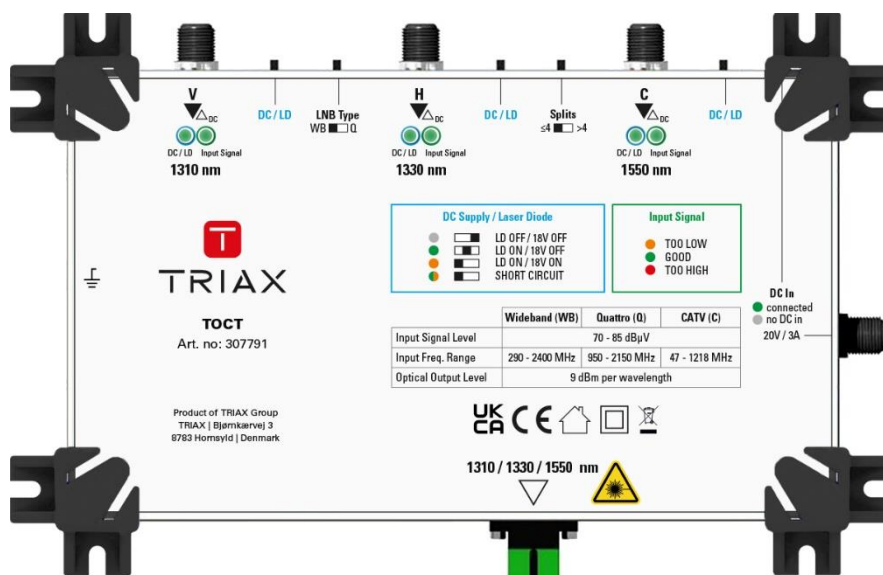
Part No.307790



TOCT

Triax Optical Combined Transmitter

Part No.307791



Attention!

The installation and commissioning may only be performed by suitably qualified persons, technicians or installers in compliance with safety regulations in EN 62368-1, EN 60825-1 (laser class 1) and EN 60728-11. Attention should also be paid to the instructions and advice you find below.

Failure to comply with the specified precautionary measures may cause serious injury to persons or damage to property. Damage due to improper installation and commissioning, defective connectors on cables or any other incorrect handling will void the warranty.

Disconnect mains power before working on electrical systems.

- A suitably qualified person should always install any additional electrical wiring requirements.
- Installation or service work should NEVER be undertaken during electrical / thunderstorms.

Waste Electrical and Electronic Equipment (WEEE) after end of life

- Do not dispose of these products in household waste! Dispose of them for recovery and recycling following the current National and European legislation and regulations.

Specific safety instructions

- The transmitter unit needs to be installed in a dry room or cabinet with sufficient air convection.
- Never connect the PSU to the mains before all cables have been connected to the transmitter.
- Never look in to an open core of a fibre cable or fibre connector that is in operation with a laser transmitter like the TOST or TOCT.
- Unfiltered Terrestrial antennas must not be connected directly to the TERR port labelled "C".
- Un-used F-ports shall be terminated with DC blocked 75 Ohm terminators - like TRIAX RFC 75 DCB (350659).

For potential equalization the TOST or TOCT unit needs to be connected to the MET of the building. The grounding cable shall be fixed to the grounding clamp of the metal housing.

Declaration of Conformity

The manufacturer: TRIAX A/S – Bjoernkavevej 3 – DK-8783 Hornslyd

declares that the products: 307790 TOST Optical Sat Transmitter and 307791 TOCT Optical Combined Transmitter

are compliant to the directives: RED 2014/53/EU and RoHS 2011/65/EU

by meeting the following harmonized standards:

EN 62368-1:2014 +/AC:2015

EN 60825-1:2014

EN 50083-2:2012 +/A1:2015

EN 303 372-2 V1.1.1

EN 61000-3-2:2014, EN 61000-3-3:2013

EN 63000:2018

2021-11-30


TRIAX A/S
Denmark

John Berg
Quality Manager

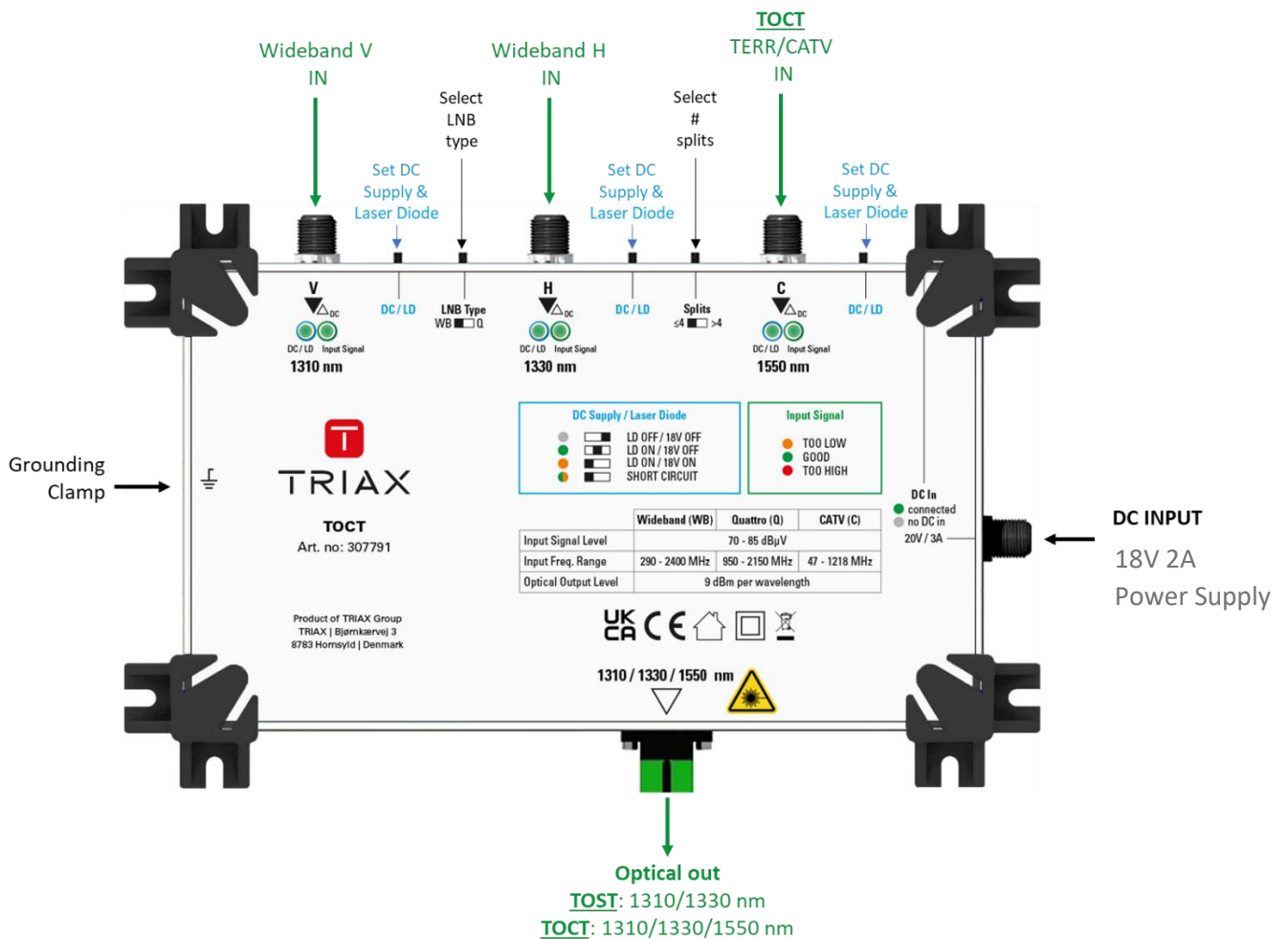
Product description

The Optical Transmitter is the core component on the headend side of the TOF (Triax Optical Fibre) system. This plug-and-play optical headend unit converts RF Wideband or Quattro SAT-IF and terrestrial FM, DAB, DVB-T or CATV signals to multiple optical wavelengths for transmission over a PON (Passive Optical Network). The TOST Optical Sat Transmitter uses two DFB lasers of wavelength 1310 and 1330nm for the V and H SAT-IF wide-bands. The TOCT Optical Combined Transmitter additionally has built-in a 1550nm laser for the CATV or terrestrial signals.

- The optimal quality of the output signal is processed by Automatic Gain Control (AGC) and Automatic Slope Control (ASC) and enables the transmitter to drive up to 64 optical splits to the optical re-converters TDC 3 or 4
- Up to 128 splits are possible when using the wideband optical receivers TWOC and TWCT.
- Terrestrial antennas connected to the “C” (CATV/TERR) input of the TOCT must be connected via a 4G filtered, selective pre-amplifier like the TMB 2500UK (360238).

Technical Specifications		TOST	TOCT
RF Inputs (F-connector)	-	2 x Satellite (WB / Q)	2 x Satellite (WB / Q) 1 x T/C
Input frequency SAT	MHz	Wideband: 290 – 2340 / Quatro: 950 - 2150	
Input frequency T/C	MHz	-	47 - 1218
Optical outputs (SC/APC)	-	1	
Optical output wavelengths	nm	1310 - 1330	1310 - 1330 - 1550
Optical output power	dBm	+9 (per wavelength)	
Minimal input level SAT	dB μ V	70	
Minimal input level T/C	dB μ V	-	70
DC supply Sat LNB	-	18V / 400mA	
DC supply T/C	-	-	12V / 200mA
Automatic Gain Control	dB	15	
Automatic Slope Control	dB	10	
Power consumption	W	Max. 30	
DC input	-	18-20 V / 1.5A	
Power Supply	-	18-20V/2-3 A PSU adapter, preferred: 318166	
Operating temperature range	°C	-10 to +50	
Dimensions	Mm	221 x 141 x 50	
Weight	kg	0.8	

Configuration of the module



Select LNB Type:

With this switch you can select the frequency range of the Sat input signal. This is necessary to make the Automatic Slope Control (ASC) work properly. If signals of a Quattro LNB are inserted, then set the switch to "Q". If Wideband signals are inserted, set the switch to "WB".

Select # splits (only for TOCT):

With this switch you can select the number of splits in your system, this is necessary to make the Automatic Gain Control work properly.

Signal Level LED:

The signal level LED indicates the level of the signal with different colours:

- Orange:** Signal level is too low.
In this case you should amplify the signal with an external amplifier.
- Green:** Signal level is within the AGC supported range.
- Red:** Signal level is too high. You need to attenuate the signal with external attenuator(s).

NOTE: Dish alignment, as well as the LNB skew and focal length adjustment to achieve optimum signal quality at the input are critical to a successful installation. As is the use of the Terrestrial Channel Processor (TMB 2500 – TOCT only) to filter, level and equalise the Terrestrial input.

Set DC Supply and Laser Diode:

With this switch you can set the DC (18V) supply to the RF input and switch off the Laser Diode (LD) in order to measure each optical signal separately. To measure the signal strength of a certain wavelength, you need to switch off both of the other Laser Diodes.
Don't forget to switch all LDs back on after measurement.

The LED is **off** if no DC is supplied to the RF input and if no DC is supplied to the Laser Diode. If no DC is supplied to the laser diode, the related signal is not converted into an optical signal. Please make sure to switch on at least the laser diode for proper operation.

The colour of the LED appears

- Green:** if the Laser diode is switched on and the related output voltage is off.
- Orange:** if the Laser diode is switched on and the related output voltage supplied to the RF input is on.

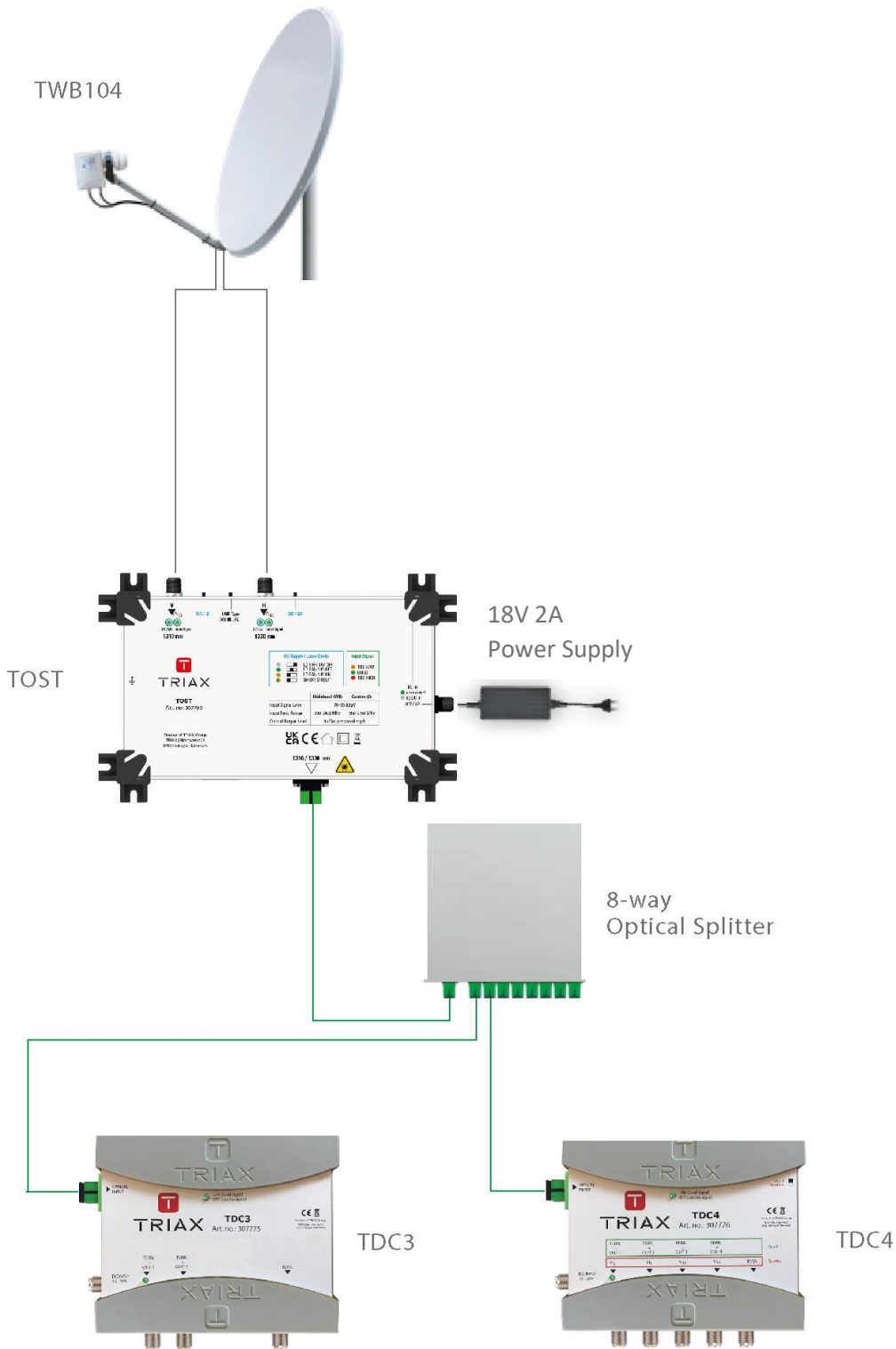
Flashing

Green/Orange: if DC is supplied to the RF input and the device has recognized a short circuit.

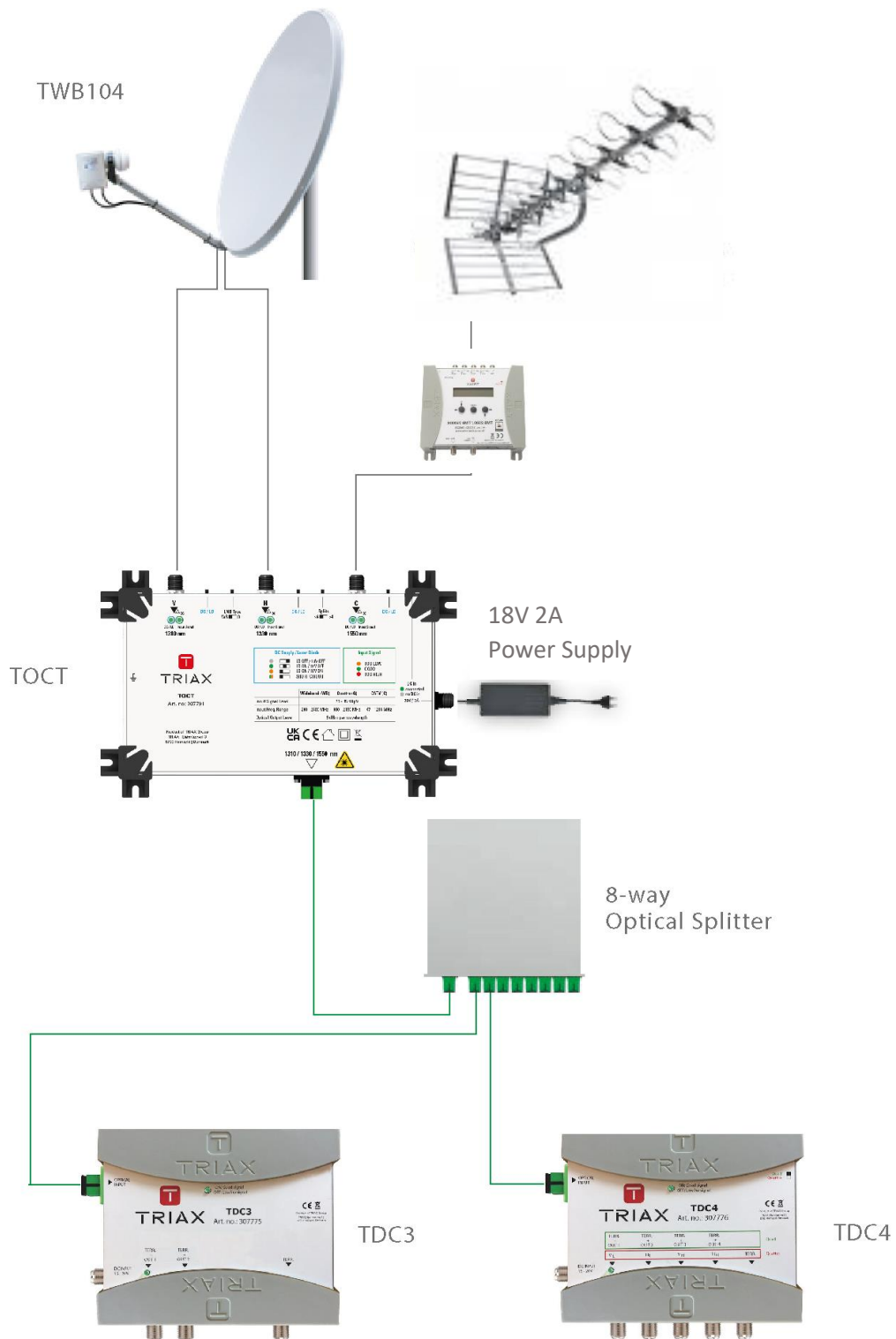
Optical output:

The optical transmitters each have an optical output power of +9 dBm per wavelength. For TOCT, make sure to select the right number of splits using the split switch.

Installation of the TOST



Installation of the TOCT



Information and manuals:

Information og brugervejledninger:
Information och manualer:
Information und Bedienungsanleitungen:
Informations et modes d'emploi:
Información y manuales:
Lisätietoja ja oppaita:
információk és útmutatók:

triax.com

triax.dk - triax.se - triax-gmbh.de - triax.fr -
triaxmultimedia.es - triax.uk
triax.at – triax.hu

Subject to change without notice
Änderungen vorbehalten
Peut être sujet à modification sans préavis

