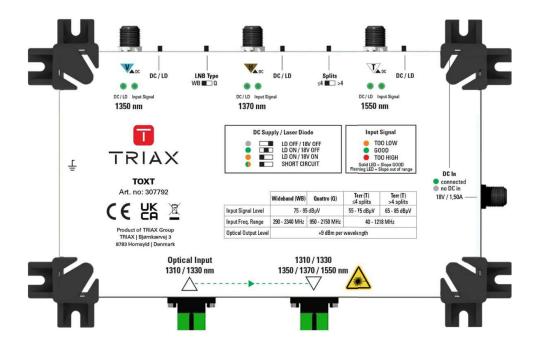


# TOXT Optical Headend



Part No.307792



# 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.
- Unfiltered Terrestrial antennas must not be connected directly to the TERR port.
- Un-used F-ports shall be terminated with DC blocked 75 Ohm terminators like TRIAX DC Blocked Terminator 305349.

For potential equalization 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 UK | Treorchy | RCT | CF42 6DL | UK

declares that the products: 307792 TOXT

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

by meeting the following harmonized standards:

EN 623368-1:2014 +/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 2023-09-04



# **Product introduction and specs**

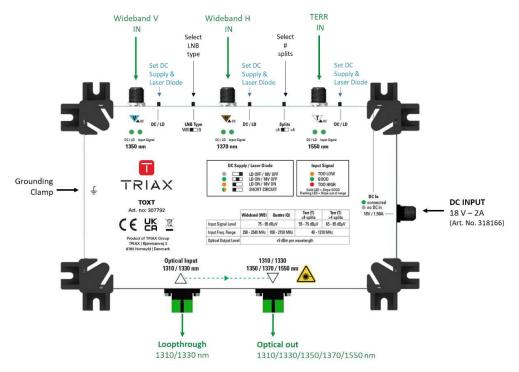
The new TOXT, Triax Optical Extra Headend converts Wideband/TERR signals to multiple optical wavelengths. Thanks to built-in Automatic Gain Control (AGC) and Automatic Slope Control (ASC), the output signal quality is optimal for your optical distribution system (9 dBm output power). The TOXT is suited for many types of optical systems: up to 64 splits, (32 Splits for FTTH) or can be easily be extended to many more!

- 2 Wideband and 1 TERR inputs
- frequency range: SAT: 290 2340 MHz (Wideband) / 950 2150 MHz (Quattro) / TERR: 40 1218 MHz
- 1 Optical output wavelengths 1350 1370 1550 (1310 1330 from optical loopthrough)

		TOXT (Part No. 307792)
RF Inputs (F-connector)	-	2 x Satellite (WB / Q)
		1 x TERR
Input frequency SAT	MHz	Wideband: 290 - 2340
		Quattro: 950 - 2150
Input frequency TERR	MHz	47 - 1218
Optical outputs (SC/APC)	-	1
Optical inputs (SC/APC)		1
Optical output wavelengths	nm	1310 – 1330 (Bypass)
		1350 – 1370 – 1550
Optical output power	dBm	+9 (per wavelength)
Minimal input level SAT	dBµV	75 - 95
Minimal input level TERR	dΒμV	55 - 75 (TERR ≤4 splits)
		65 - 85 (TERR >4 splits)
DC supply	-	18V / 400mA
DC supply TERR	-	12V / 200mA
Automatic Gain Control	dB	15
Automatic Slope Control	dB	10
Power consumption	W	27
DC input	-	18V / 2A (F-type)
Power Supply	-	Use an 18V / 2A Power Supply (Ref: 318166)
		Not included with product
Operating temperature range	°C	-10 to +50
Dimensions	Mm	221 x 141 x 50
Weight	kg	0.8



# Configuration of the Headend



### 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:

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 Quality LED:**

The signal quality LED shows the quality of the signal with different colours.

Orange Colour: Signal level is too low. In this case you should amplify the signal with an external amplifier.

**Green** Color: Signal level is within the AGC supported range.

Red Color: Signal level is too high. You need to attenuate the signal with external attenuator(s).

Solid LED: Slope is OK

Flashing LED: Slope is out of range

### 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 of the other. To measure the signal strength of a certain wavelength, you need to switch off both other Laser Diodes. Don't forget to switch all LDs 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 LED is green if the Laser diode is switched on and the related output voltage is off.

The LED is **orange** if the Laser diode is switched on and the related output voltage is supplied to the RF input.

The LED is flashing **green/orange** if the DC is supplied to the RF input and the device recognized a short circuit.

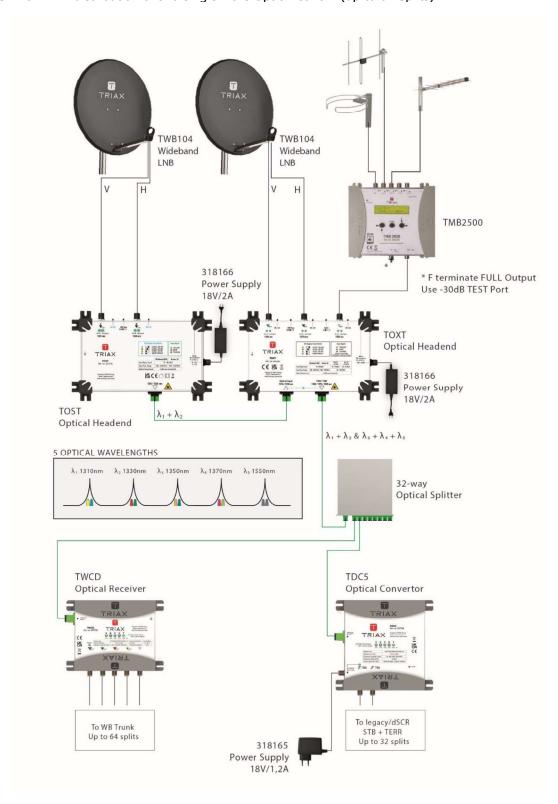
### **Optical output:**

The optical transmitter has an optical output power of +9 dBm per wavelength. Make sure to select the right number of splits using the split switch.



# **Product installation**

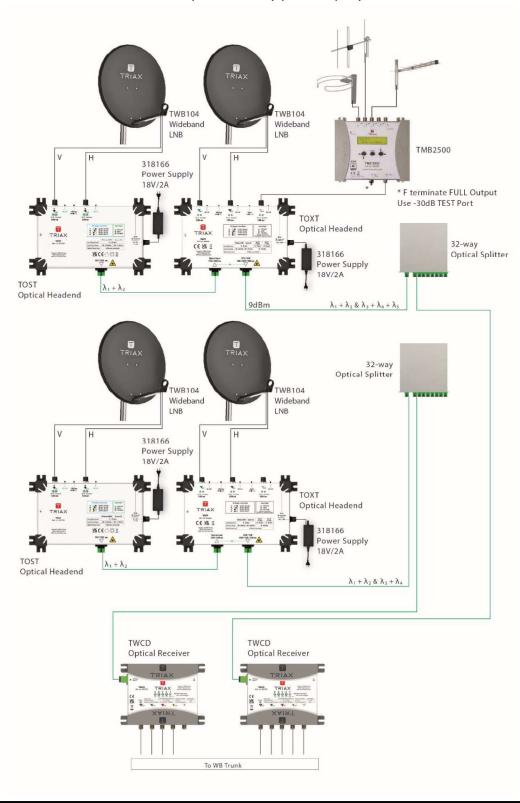
Dual SAT & TERR distribution over a single Fibre Optic Network (up to 64 Splits)





# **Product installation**

4 x SAT & TERR distribution over Fibre Optic Network (up to 64 Splits)



# **Notes**



### 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:



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