TV | COMPACT HEADEND

TRIAX® Headends

a strong range of flexible solutions for hospitality and multi-dwelling units

TDX

TDH 800

NEW

TDcH

Exceptional headends
for any installation

Proud
heritage

Now including the all-new TDcH
compact headend

Trust the headend experts:
proudly innovating since 1949

TRIAX headends

NEW

T V | **HEADEND** Signal distribution

Trust TRIAX
Experts in headend technology

Proud heritage
With trailblazing technology at our core for over 70 years, we're proud of where we come from. And we're proud to keep innovating each day, connecting our customers to the future.

Our expanded headend range is the truest expression of our values of reliability and innovation.

And now, we have a headend to suit the requirements of every installation size and budget.

TV delivered your way
You know what your customers need, and our flexible headends make your choice easy. Whatever your preferred configuration, you can rest assured that each and every TRIAX headend guarantees the same quality TRIAX experience, saving you time and costs, and increasing your own customer loyalty.

Our headends are developed from the ground up at our headquarters in Denmark, with over 24,000 sold in the last decade alone.

Headend benefits

TIME SAVED
- No retuning of in-room TV sets
- Quick installation with re-configured solutions
- Remote access to all your headend installations

COSTS SAVED
- Benefits through advanced technology
- End-to-end TRIAX hardware
- One point of contact, one stop shop
- A headend for every budget

LOYALTY INCREASED
- Outstanding reliability, reduced down time
- Remote access for quick configuration changes
- Smoothly integrated solutions

FUTURE READY
- Free software updates
- Modular (TDH 800 & TDX)
- Scalable (TDX)
- IPTV ready (TDX)

NEW

TDcH Compact Headend
- Decryption of satellite, cable and terrestrial signals
- Optimised channel setup with advanced multiplexing
- No need for retuning TV sets in rooms
- Pre-configured for quick installation and reduced costs

IN	OUT
DVB-S/S2 DVB-T/T2 DVB-C	QAM COFDM

TDH 800 Modular Headend
- Modular for high flexibility and individual requirements
- Separated input and output modules for easy upgrade
- HDMI and AV input modules available
- Modules for supporting old PAL TV sets

DVB-S/S2 DVB-T/T2 DVB-C HDMI AV	QAM COFDM PAL HD

TDX Scalable Headend
- Top of the range: maximum flexibility and power
- Ready for IPTV solutions
- Scalable: combine up to 3 headends
- DRM integration for distributing premium content

DVB-S/S2 DVB-T/T2 DVB-C HDMI AV IP	QAM COFDM PAL HD IP

For more features and specifications, visit triax.com/headends.

Trust our customers

Our vision is to be the preferred connectivity partner to professionals. We take pride in our reliable products and outstanding service, but don't just take our word for it: here's what some of our customers have to say. Read more at triax.com/references.

"We have been using TRIAX's reliable headend systems for several years. This has convinced us to also rely on TRIAX for subsequent projects."

Thomas Banhardt
Owner, Feldberger Hof, Germany

"TRIAX understands what is important. Their headends are recommended for their expandability combined with low maintenance effort."

Wolfgang Kerz
Antennentechnik Redmann GmbH

Overview
Technical and configuration

Specification		TDcH	TDH 800	TDX
Frequency range (RF out)	MHz	306-862	47-862	47-862
Impedance (RF out)	Ohm		75	
Test point	dB		-20	
Output level max	dBµV	QAM 95/COFDM 93	93	103
POWER SUPPLY				
Operating voltage	VAC	100-264 50/60 Hz	190-260 50/60 Hz	190-260 50/60 Hz
Power consumption, max	W	90	280	280
Max. LNB control	mA	4 x 300	4 x 305	4 x 305
CONNECTORS				
AC Power in (1.8 m)			IEC 320 (cable)	
RF out			F-connector	
Test point			F-connector	
PC interface		2 x RJ 45	RJ 45	RJ 45
SFP cage for Cat or Opto		1 x SFP Module	N/A	4 x SFP Module
ENVIRONMENT				
Temperature, operating	°C		-10...+50	
Temperature, storage	°C		-20...+70	
Humidity, operating	%		20...80	
Humidity, storage	%		10...90	
MECHANICAL DATA				
Dimensions product (H x D x W)	mm/HE	90/2 x 220 x 430	265/6.5 x 240 x 440	290/6.5 x 240 x 440
Weight - net	kg	3.9	9.8	12.0
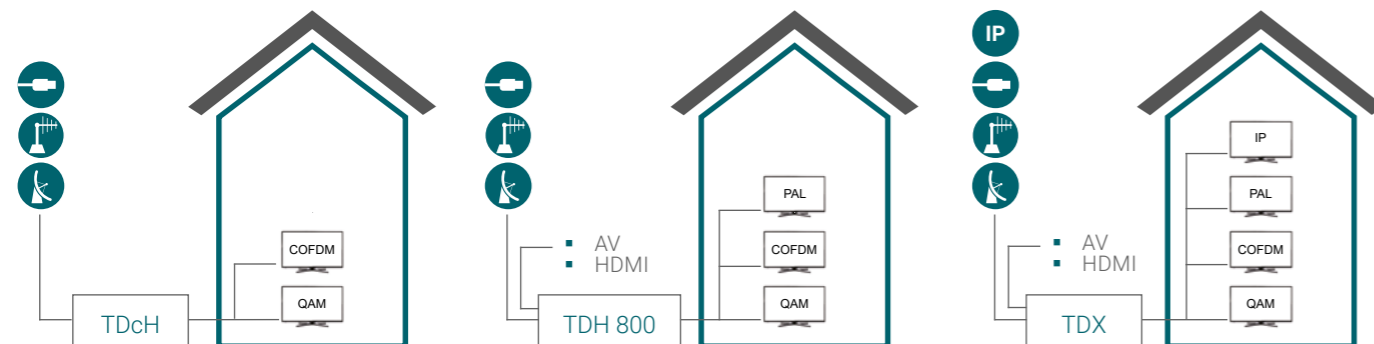
Configuration options		TDcH	TDH 800	TDX
Supported input signals	DVB-S/S2	✔	✔	✔
	Integrated SCR multiswitch	✔ 1)		
	DVB-T/T2/C	✔	✔	✔
	HDMI, AV		✔	✔
	IP-in			✔
Supported output signals	QAM	✔	✔	✔
	COFDM	✔	✔	✔
	PAL HD		✔	✔
	IP-out			✔
CI interface	CI	✔ 2)	✔	✔
	Service and Transport Stream mode support	✔	✔	✔
	BISS-CAM support	✔	✔	✔
Remote maintenance	Remote access	✔	✔	✔
	Software updates	✔	✔	✔
	Self-signed HTTPS	✔		
Signal processing	LCN (HD)	✔	✔	✔
	Network ID setting	✔	✔	✔
	Service filtering	✔	✔	✔
	Transport stream ID setting	✔	✔	✔
	NIT DVB, NorDig, FranceSAT		✔	✔
	SID Remapping	✔	✔	✔
	PID Management (NO re-tuning)	✔	✔	✔
	Multiplexing	✔	✔	✔
	Multiple language services	✔		
	PLP (DVB-T2)	✔	✔	✔
	IP-out service list			✔
	EPG Output-Management	✔		✔
	Alternative EIT Source+---			✔
	NTP Time synchronisation			✔
Configuration	Pre-configured	✔	✔	
	Freely configurable in- and output modules		✔	✔
	Hot swap			✔
	Multiunit, Common NIT and GUI			✔
DRM	CAT remove (Customer access table)	✔	✔	✔
	Pro:Idiom®*, Samsung LYNC, SimulCrypt			✔
Additional Hardware	Redundant Power supply (PSU)			✔
	IPTV EPG Server			✔

Notes: 1) Software update available September 2021
2) The TDcH is available in CI and Free-To-Air versions

The all-new TDcH compact headend from TRIAX

Compact excellence

Exquisite engineering, finely tuned for perfect performance.

Your natural choice for swift, efficient TV distribution.

TRIAX
connecting the future

Infinite possibilities

DVB-T | DVB-S | DVB-C | EASY | ECO | Warranty 2 Years

TDcH Compact Headend - New platform, new benefits

Built on our cutting edge new software platform, the opportunities with TDcH are endless. Complimentary updated software offers new and existing customers additional functions and benefits, along with new hardware configurations to match your requirements.

Compact excellence

- Exquisite engineering, finely tuned for perfect performance
- Your natural choice for swift, efficient TV distribution
- Save time and costs, with fast, easy installation and remote management
- Compact design fits elegantly into 19" racks
- Reliable, innovative headend expertise from TRIAX

Smooth integration

- Optimised channel setup with advanced multiplexing and IP Pool technology
- Integrated SCR multiswitch* for cost, time and space saving
- No need for retuning TV sets in rooms thanks to PID Management
- EPG Management ensures full electronic programme information for better user experience
- Pre-configured for quick installation and reduced costs
- Central decryption with CI slots, Free-To-Air version available
- Multiple language service allows for multiple distributions of a service with different audio (language) tracks
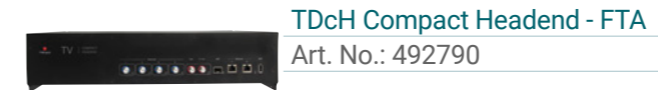
Integrated SCR Multiswitch*

- Increases the number of satellite positions that can be received in the TDcH
- Increases the number of international TV services that can be distributed
- Save time, cost and space with less cabling and no need for an external multiswitch
- Reduced hardware for a cost optimised and compact solution

IP Pool and Multiplex technology

- 16 input DVB-S/S2 and 6 DVB-T/T2/C input signals
- 16 QAM or COFDM full band modulators (switchable)
- 8 x CI interfaces for CAM
- Multiplexing at both output and CAM (CI interface)
- Optimised service line-up within the available input and output modules
- More relevant TV services due to service filtering and multiplexing

Energy-saving – long-term reliability

- Only 90 W power consumption
- Temperature controlled cooling system with integrated fans - increases the service life of the equipment
- The cooling system supports 19" rack mounting as well as wall mounting

TDcH Compact Headend - FTA
Art. No.: 492790

TDcH Compact Headend - CI
Art. No.: 492781
Art. No.: 492782

		TDcH 16S-Q Free-To-Air	TDcH 16S-I CI version	TDcH 22STC-I CI version
ORDER INFORMATION				
Art. Number		492790	492781	492782
EAN Number		5702664927901	5702664927819	5702664927826
CHARACTERISTICS				
Supported input signals		16 x DVB-S/S2	16 x DVB-S/S2	16 x DVB-S/S2, 6 x DVB-T/T2/C
Supported output signals		16 x QAM	16 x QAM/COFDM	
CI interface		0	8 CI slots	
Frequency range (RF out)	MHz	306-862		
Impedance (RF out)	Ohm	75		
Test point	dB	-20		
Output level max	dBµV	95	QAM 95/COFDM 93	
MER	dB	QAM>=43/COFDM >=40		
POWER SUPPLY				
Operating voltage	VAC	100-264 50/60 Hz		
Power consumption, max	W	90		
Max. LNB control	mA	4 x 300		
CONNECTORS				
AC Power in (1.8 m)		IEC 320 (cable)		
RF out		F-connector		
Test point		F-connector		
PC interface		2 x RJ 45		
SFP cage for Cat or Opto		1 x SFP Module		
ENVIRONMENT				
Temperature, operating	°C	-10...+50		
Temperature, storage	°C	-20...+70		
Humidity, operating	%	20...80		
Humidity, storage	%	10...90		
REMOTE MAINTENANCE				
Remote access		Yes		
Software updates		Yes		
Self-signed HTTPS		Yes		
SIGNAL PROCESSING				
LCN (HD)		Yes		
Network ID setting		Yes		
Service filtering		Yes		
CONFIGURATION				
Pre-configured		Yes		
MECHANICAL				
Product Height	mm/HE	90/2		
Product Depth	mm	220		
Product Width	mm	430		
Weight - net	kg	3.9		

Note: *) Software update available September 2021

TDH 800 Cabinet - Main Unit
Art. No.: 692890
EAN Number: 5702666928906

| DVB-T | DVB-S | DVB-C | HDMI | AV | EASY | ECO | Warranty 2 Years |
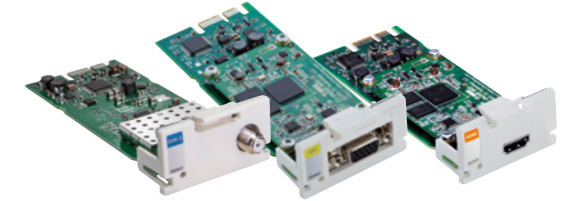
TDH 800 Modular Headend - the all-rounder with innovative Pool technology

The TDH 800 headend is ideal for those looking for a flexible, compact and reliable solution, with a range of input and output modules for all popular TV distribution formats. If you need additional features such as multi unit or IP-in/out, then please select the TDX headend.

Easy installation

- Housing designed to accommodate up to 16 input and 6 quad output modules, making it possible to support 12 CAM modules
- Can easily be installed on a wall or a 19" cabinet
- All input and output modules as well as all cables can be accessed and operated easily from the front
- Input and output modules identified via TRIAX supplied labels
- DiSEqC 1.0 functionality
- Saves time on installation

Intuitive configuration

- Browser-based user interface configuration without additional software
- Easy, intuitive step-by-step configuration
- The four adjacent output channels per output module can be freely selected across the full frequency range
- MUX bandwidth monitor to ensure that the MUX is not overloaded
- PID Management – No need for retuning TV sets in rooms when services are changed
- LED to indicate operation and errors on each module

Effortless service handling

- Input modules are independent of output modules, resulting in a smaller number of modules overall. Fewer modules – allows easy spare part handling
- Log file on all TDH 800
- On-location access to the TDH system for installer and/or TRIAX support

IP Pool and Multiplex technology

- Up to 16 input modules in a combination of DVB-S/S2, DVB-T/T2, DVB-C, AV and HDMI in
- Up to 6 Quad-output modules for up to 24 channels in any combination of PAL, QAM, COFDM
- More relevant TV services because of service filtering and multiplexing
- Output modules support up to 2 CAM modules. With full configuration per base up to 12 CAM modules possible
- IP Pool-Technology - Input and Output modules are independent of each other

Energy-saving – long-term reliability

- 16 tuners and 6 backends fully loaded - only 280 W power consumption
- Intelligent cooling system with integrated fans – increases the service life of the equipment
- The cooling system supports 19 "rack/cabinet mounting

		TDH 811 Frontend DVB-S/S2 [QPSK/8PSK]	TDH 813 Frontend DVB-T/T2 [COFDM]	TDH 816 Frontend DVB-C	TDH 814 Frontend AV encoder module	TDH 815 Frontend HDMI
ORDER INFORMATION						
Art. Number		692820	692823	692824	692880	692830
EAN Number		5702666928203	5702666928234	5702666928241	5702666928807	5702666928302
CHARACTERISTICS						
Code rates DVB-T			1/2, 2/3, 3/4, 5/6, 7/8			
Code rates DVB-T2			1/2, 2/3, 3/4, 5/6			
Constallations DVB-T			QPSK, 16QAM, 64QAM			
Constallations DVB-T2			QPSK, 16QAM, 64QAM, 256QAM			
Demodulator Symbolrate	Msym/s			1.8 to 7.2		
Demodulator Type			COFDM	QAM		
DiSEqC level		1.1				
Input Aspect Ratio					4:3, 16:9	
Input level	dBµV	50...85	40...85	45 ... 85		
Input QAM modes				16QAM, 64QAM, 128QAM, 256QAM		
Input Video S/N Ratio	dB				> 52	
Input video standards					PAL, Secam	720x480i30, 720x480p60, 720x576i25, 720x576p50, 1080x720p50, 1280x720p60, 1920x1080i25, 1920x1080i30, 1920x1080p25, 1920x1080p30
LNB LO/HI programmable	kHz	0/22				
LNB V/H programmable	V/mA	0-13-18/300				
Output Video Codec					MPEG-2, MPEG-4	MPEG-2, MPEG-4
FREQUENCY						
Bandwidth	MHz		7/8	8		
Input frequency range	MHz	950...2150	VHF III 177.5 - 226.5 MHz /UHF 474 - 858	114 - 858		
RETURN LOSS						
Input return loss	dB	> 10	> 6	> 10	> 26	
ELECTRICAL						
Impedance	Ω			75		
Input Audio Impedance	kΩ				10 ± 1	
Physical Interface					CVBS	
CONNECTORS						
Input connector		F-female	F-female	F - female	15pol Sub-D	HDMI female
Input Type						HDMI (HDCP compliant)

TDH 800 Cabinet - Main Unit
Art. No.: 692890
EAN Number: 5702666928906

		TDH 843 Backend COFDM	TDH 844 Backend COFDM 2CI	TDH 845 Backend QAM	TDH 846 Backend QAM 2CI
ORDER INFORMATION					
Art. Number		692860	692861	692855	692856
EAN Number		5702666928609	5702666928616	5702666928555	5702666928562
CHARACTERISTICS					
Carrier supported		2K	2K		
MER	dB	≥ 35.0	≥ 35.0	≥ 38.0	≥ 38.0
Output Audio S/N Ratio	dB				
Output level adjustment	dB	+3...-17			
Output Level System	dBμV	90.0 ± 1.5			
Output QAM Modes		16QAM, 64QAM, QPSK	16QAM, 64QAM, QPSK	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Output symbol rate	Mbit/s			3.15...7.2	3.15...7.2
Output Video S/N Ratio	dB				
Sound sub carrier	MHz				
Spurious Signals	dB	> 60			
FREQUENCY					
Channel Raster	MHz	7, 8, 8.5			
Output frequency range	MHz	50.5 - 858			
RETURN LOSS					
Output Return Loss	dB	> 10			
ELECTRICAL					
Impedance	Ω	75			
OPERATIONAL					
CI slots		0	2	0	2
CONNECTORS					
Connector Type		F-female			

TDH 800 Cabinet - Main Unit
Art. No.: 692890
EAN Number: 5702666928906

		TDH 848 Backend PAL-HD Downscale FTA	TDH 849 Backend PAL-HD Downscale CI	TDH 847 Backend 2CI
ORDER INFORMATION				
Art. Number		692852	692853	692870
EAN Number		5702666928524	5702666928531	5702666928708
CHARACTERISTICS				
Carrier supported				
MER	dB			
Output Audio S/N Ratio	dB	50	50	
Output level adjustment	dB	+3...-17	+3...-17	
Output Level System	dBμV	93	93	
Output QAM Modes				
Output symbol rate	Mbit/s			
Output Video S/N Ratio	dB	≥ 57	≥ 57	
Sound sub carrier	MHz	5.5 / 5.74 / 6.0 / 6.5	5.5 / 5.74 / 6.0 / 6.5	
Spurious Signals	dB	> 60	> 60	
FREQUENCY				
Channel Raster	MHz	7, 8	7, 8	
Output frequency range	MHz	47 - 862	47 - 862	
RETURN LOSS				
Output Return Loss	dB	> 10	> 10	
ELECTRICAL				
Impedance	Ω	75	75	
OPERATIONAL				
CI slots		0	2	2
CONNECTORS				
Connector Type		F-female		

DVB-T	DVB-S	DVB-C	HDMI	AV	IPTV	EASY	ECO	Warranty 2 Years

TDX Scalable Headend - quite simply a revolution

The professional TDX headend is cutting edge technology for those who place the highest demands on flexibility and performance. It is a true IP headend with revolutionary technology – ideal for the supply of all TV signals.

Smooth installation and configuration

- Easy installation on a wall or a 19" cabinet
- All input/output modules and cables are easily accessible from the front
- Browser-based user interface configuration without additional software
- Simple and intuitive step-by-step configuration
- DiSEqC-compatible when using a multi-switch as for input distribution
- MUX bandwidth monitoring to avoid overfilling MUX
- Halved installation times due to easy programming

Maintenance and service made easy

- New modules are automatically recognised and configured
- Log file on all TDX activity
- Easy on-site or remote access to the TDX for the installer and/or the TRIAX support
- Fewer modules – allows easy spare part handling
- SID/PID remapping: no re-programming of the TV sets following channel changes
- LCN (logic channel numbering): create individual programme list and save it as SD and HD programme
- Manage and customize EPG data

IP Pool and Multiplex technology

- Up to 16 input modules in a combination of DVB-S/S2, DVB-T/T2, DVB-C, AV, HDMI and IP-in
- Up to 6 Quad-output modules for up to 24 channels in any combination of PAL, QAM, COFDM and IP out
- More relevant TV services because of service filtering and multiplexing
- Output modules support up to 2 CAM modules. With full configuration per base up to 12 CAM modules possible.
- IP Pool-Technology - Input- and Output modules are independent of each other

Multi-Unit for more power

- Combine up to three TDX-Headends as one system
- Up to 72 PAL, QAM or COFDM channels (around 280 HD-programs or 570 SD-programs)
- High output level at 103 dBµV for interference free reception

Future-proof and energy-saving

- IPTV to support different end-user devices.
- Scalable to adapt to new requirements (additional TV services or new technologies)
- A fully loaded headend with 16 inputs and 6 outputs modules consumes only 280 watts
- Intelligent cooling system with integrated fans increases the life of the equipment

TDX Black Edition Main Unit
Art. No.: 492091
EAN Number: 5702664920919

		TDX Frontend DVB-S/S2 [QPSK/8PSK]	TDX Frontend DVB-T/T2 [COFDM]	TDX Frontend DVB-C [QAM]	TDX Frontend AV [Encoder module]	TDX Frontend HDMI [Encoder modul]
ORDER INFORMATION						
Art. Number		492020	492023	492024	492080	492030
EAN Number		5702664920209	5702664920230	5702664920247	5702664920803	5702664920308
CHARACTERISTICS						
Code rates DVB-T			1/2, 2/3, 3/4, 5/6, 7/8			
Code rates DVB-T2			1/2, 2/3, 3/4, 5/6			
Constallations DVB-T			QPSK, 16QAM, 64QAM			
Constallations DVB-T2			QPSK, 16QAM, 64QAM, 256QAM			
Demodulator			QPSK, 16QAM, 64QAM, 256QAM / 1k, 2k, 8k, 16k, 32k	16 QAM, 64 QAM, 128 QAM, 256 QAM		
Demodulator Symbolrate	Msym/s			1.8 ...7.2		
Demodulator Type		QPSK/8PSK	COFDM	QAM		
DiSEqC level		1.1				
Input Aspect Ratio					4:3 or 16:9	
Input level	dBµV	50 ... 85	40...85	45 ... 85		
Input video standards					PAL, Secam	720x480i30, 720x480p60, 720x576i25, 720x576p50, 1080x720p50, 1280x720p60, 1920x1080i25, 1920x1080i30, 1920x1080p25, 1920x1080p30
LNB LO/HI programmable	kHz	0/22				
LNB V/H programmable	V/mA	0...13...18/300				
Output Video Codec					MPEG-2/MPEG-4	MPEG-2/MPEG-4
FREQUENCY						
Bandwidth	MHz		7/8	8		
Input frequency range	MHz	950-2150	177.5 - 226.5 / 474 - 858	114 - 858		
RETURN LOSS						
Input return loss	dB	>10	> 6.0	> 7.0	> 26	
ELECTRICAL						
Impedance	Ω	75	75	75		
Input Audio Impedance	kΩ				10 ± 1	
Input video impedance	Ω				75	
Physical Interface					CVBS	HDMI
CONNECTORS						
Connector IN		F-female	F-female	F-female	15pol Sub-D	HDMI female
Input Type					A/V	HDMI (HDCP compliant)

TDX Black Edition Main Unit
Art. No.: 492091
EAN Number: 5702664920919

		TDX Backend QAM	TDX Backend QAM 2CI	TDX Backend COFDM	TDX Backend COFDM 2CI
ORDER INFORMATION					
Art. Number		492055	492056	492060	492061
EAN Number		5702664920551	5702664920568	5702664920605	5702664920612
CHARACTERISTICS					
Carrier supported				2K	2K
MER	dB	≥ 41.0 (typ. 42)	≥ 41.0 (typ. 42)	≥ 36 (typ. 38)	≥ 36 (typ. 38)
Output Audio S/N Ratio	dB				
Output format					
Output level adjustment	dB	+3...-17			
Output Level System	dBµV	100			
Output peak bandwidth max.	Mbit/s				
Output QAM Modes		16QAM, 32QAM, 64QAM,128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 64QAM, QPSK	16QAM, 64QAM, QPSK
Output symbol rate	Mbit/s	3.15 - 7.2	3.15 - 7.2		
Output total bandwidth max.	Mbit/s				
Output Video S/N Ratio	dB				
Sound sub carrier	MHz				
Spurious Signals	dB	> 60			
FREQUENCY					
Bandwidth	MHz	7, 8	7, 8	6, 7, 8	6, 7, 8
Channel Raster	MHz	7, 8, 8.5			
Output frequency range	MHz	50.5 - 858			
RETURN LOSS					
Output Return Loss	dB	> 10			
ELECTRICAL					
Impedance	Ω	75			
OPERATIONAL					
CI slots		0	2	0	2
Output protocol					
TV-norm					
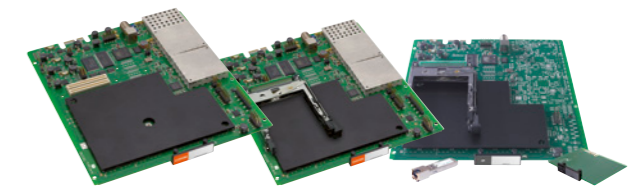
|		TDX Backend PAL HD FTA downscale	TDX Backend PAL HD downscale 2CI	TDX Backend 2CI	TDX Backend 2CI IP	TDX Backend Pro:Idiom® IP
ORDER INFORMATION						
Art. Number		492052	492053	492070	492072	492073
EAN Number		5702664920520	5702664920537	5702664920704	5702664920728	5702664920735
CHARACTERISTICS						
Carrier supported						
MER	dB					
Output Audio S/N Ratio	dB	50	50			
Output format					MPEG/DVB compliant SPTS UDP/IP multicast via GbE	MPEG/DVB compliant SPTS UDP/IP multicast via GbE
Output level adjustment	dB	+3...-17	+3...-17			
Output Level System	dBµV	103	103			
Output peak bandwidth max.	Mbit/s				940	940
Output QAM Modes						
Output symbol rate	Mbit/s					
Output total bandwidth max.	Mbit/s				720	720
Output Video S/N Ratio	dB	≥ 57	≥ 57			
Sound sub carrier	MHz	5.5 / 5.74 6.0 / 6.5	5.5 / 5.74 6.0 / 6.5			
Spurious Signals	dB	> 60	> 60			
FREQUENCY						
Bandwidth	MHz					
Channel Raster	MHz	7, 8	7, 8			
Output frequency range	MHz	47 - 862	47 - 862			
RETURN LOSS						
Output Return Loss	dB	> 10	> 10			
ELECTRICAL						
Impedance	Ω			75		
OPERATIONAL						
CI slots		0	2	2	2	2
Output protocol					3-7:1 TS / IP packet ratio (configurable via GUI), RTP (optional via GUI)	3-7:1 TS / IP packet ratio (configurable via GUI), RTP (optional via GUI)
TV-norm		Pal(B/G, I, L, D/K), Secam	Pal(B/G, I, L, D/K), Secam			

Distribute premium IPTV services
Using the TRIAX TDX headend

Distributing premium content across multiple rooms in a secure way is an increasing challenge thathotels need to solve. Therefore headends and TV solutions with DRM technology are a good and safe choice.

TRIAX TDX headends have a solution for this challenge. They now offer DRM solutions for both LG and Samsung hospitality TVs.

Once again the modular concept of the TRIAX TDX headend proves to be a future proof choice. The DRM functionalities can be included in both new installations and TDX headends already running in the market.

Content provider   Headend
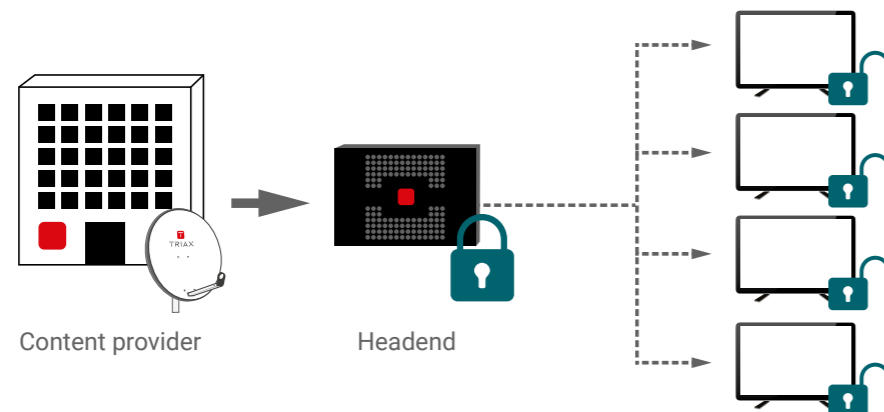
Software licences

	Art. No.	EAN Number
IPTV-in		
TDX IPTV-in 4 service - Start	418047	5702664180474
TDX IPTV-in 12 service - Start	418045	5702664180450
TDX IPTV-in 4 service - Expand	418048	5702664180481
TDX IPTV-in 12 service - Expand	418046	5702664180467
IPTV-out		
TDX IPTV-out 12 service - Start	418040	5702664180405
TDX IPTV-out 12 service - Expand	418041	5702664180412
Other		
TDX Samsung DRM backend license	418073	5702664180733
TDX Alternative EIT source	418050	5702664180504
TDX PAL AC3 activation license	418051	5702664180511
TDX SimulCrypt 24 service	418072	5702664180726
TDX SNMP License	418062	5702664180627
TDX PID Management	418063	5702664180634

Accessories

	Art. No.	EAN Number	Data rate	Reaching area	Remarks
TDX SFP Modules					
Copper RJ45 EOLT - C12-02 plug	492086	5702664920865	1000	100 m	Copper SFP (RJ45)
Fibre LC 850nm EOLT - 8512 MXX plug	492087	5702664920872	1000	550 m	Fibre LC - 850 nm
Fibre LC 1310nm EOLT - 1324-02XX plug	492088	5702664920889	1000	2000 .	Fibre LC - 1310 nm
Other					
IPTV EPG Server	492095	5702664920957			
TDX redundant power supply	492006	5702664920063			

Spare parts

Spare parts	Art. No.	EAN Number
TDX Controller	492000	5702664920001
TDX SD card	492084	5702664920841
TDX Double fan kit	775365	5702667753651
TDX power supply	492005	5702664920056

MOD101C HDMI to QAM Modulator

The MOD101C modulator has a high definition HDMI input (1080p, MPEG4), and a QAM output which is combined with the RF input. The HDMI input content can be supplied by a number of sources: blu-ray player, satellite set-top box, CCTV etc. The input signal is modulated as a QAM output and can be distributed to a number of TVs over an existing private coaxial network. The modulator can combine existing RF with the modulated output channel on the RF output. The modulator has adjustable level control to balance the QAM channel with the incoming RF channels. The MOD101C Modulator can be set up via the front panel and LCD screen.

- Auto detection of HDMI format
- HDMI input supports multiple video format compatibility up to 1080p and multiple audio format compatibility including MPEG-1 Layer II.
- Editable video and audio parameters, PMT, PCR, PIDs, NIT, LCN, Service Name
- All inputs and outputs on one side for ease of installation
- Combine existing RF with the modulated output channel
- Fully agile QAM output frequency
- Adjustable level control to balance the QAM channel with the incoming RF channels
- Set up via the front panel and LCD screen

MOD103T HDMI to COFDM Modulator

The MOD103T modulator has an HDMI input with local loop through, and a COFDM output which is combined with the RF input. The HDMI input content can be supplied by a number of sources, Blu-ray player, Satellite Set top box, CCTV etc. The input signal is modulated as a COFDM output and can be distributed to a number of TVs over an existing private coaxial network. It has an HDMI loop through to connect to the local TV, and can also combine existing RF with the modulated output channel on RF Out 1 and RF Out 2. The modulator has adjustable level control to balance the COFDM channel with the incoming RF channels. The source set top box can be controlled from another TV location via the IR remote control over the coaxial cable, using an IR transmitter and a digital link. The coaxial network must be connected to the RF Out, with the 9vdc able to pass through the network, to remotely power the digital link. The MOD103T Modulator can be set up via the front panel and LCD screen.

- New compact design
- All inputs and outputs on one side for ease of installation
- HDMI loop through for connection to the local TV
- Combine existing RF with the modulated output channel on RF Out 1 and RF Out 2
- Fully agile COFDM output frequency
- Adjustable level control to balance the COFDM channel with the incoming RF channels (1dB steps)
- Source set top box etc. can be controlled from another TV location using an IR emitter and a digital link (included)
- Set up via the front panel and LCD screen
- Firmware update via USB interface

		MOD 101C HDMI-QAM	MOD103T HDMI to COFDM
ORDER INFORMATION			
Art. Number		300126	300128
EAN Number		5702663001268	5702663001282
CHARACTERISTICS			
Audio Compression		MPEG-1 Audio Layer II (ISO/IEC 11172-3)	MPEG-2, AAC
Audio Input		Stereo, HDMI	Stereo, HDMI
Code rate			1/2, 2/3, 3/4, 5/6, 7/8
Constellation			QPSK/16QAM/64QAM
Guard Interval			1/4, 1/8, 1/16, 1/32
MER	dB	>36	<30
Number of carriers			2K / 8K
Output level	dBµV	75 - 90	< 95
Video Compression		H.264/AV	H.264 4.0
Video Input		HDMI	
Video resolution	Pixel	Up to 1080p@30Hz	
FREQUENCY			
Bandwidth	MHz	6/7/8	
Frequency range	MHz	100 - 860	177...858
RETURN LOSS			
LCN		Up to 1023	1...999
PID settings		PMT/Video & Audio / PCR	
PSI		HID/ONID/P.D.S/TS ID	
Screen Resolution		800x600 / 1024x768 / 1280X600 / 1280x/720 / 1280x768 / 1360x768 / 1366x768	
ELECTRICAL			
Impedance	Ω	75	
OPERATIONAL			
DC Operating voltage	VDC	12	
Power Consumption (typ.)	W	8	
PSU/adapter INFO		Included Euro Plug (CEE 7/17)	
CONNECTORS			
Connector IN		HDMI female (Type A)	
Connector OUT		F-female	
Input connector		HDMI, F-terrestrial loop through	
MECHANICAL			
Display		LCD panel and buttons	LCD panel and buttons
Mounting		Wall mount	
Net Weight	kg	0,480	0,760
Packing QTY		1	
Product Depth	mm	150	32
Product Height	mm	36.5	106
Product Width	mm	150	220

TRIAX

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TRIAX is a global supplier of reliable, innovative products and solutions for the reception and distribution of video, audio and data signals.

Our Products are used in homes, businesses and operator networks by broadcasters, satellite, cable and telecom operators.

Our Solutions combine our hardware and software expertise to deliver value to hospitality and related markets, through a partner network of system integrators, large installers and operators.

TRIAX's headquarters, production and R&D base is in Denmark. With 9 international sales subsidiaries we operate in more than 60 distributor countries. In 2021 TRIAX merged with Ikusi Multimedia to form a combined company of 300 employees jointly owned by Polaris Private Equity and Velatia Group. See www.triax.com for further info.

07-2021

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