




CHP – Compact High Performance Headends

DVB headend, IP streamer,
IPQAM, IP to DVB-T2, and HDMI encoder

DVB S2X® **DVB C**® **DVB T2**® **DVB IPTV**®

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- A close-up photograph of the axing CHP device, showing the front panel with various ports and ventilation grilles.
- ✓ Multituner inputs
 - ✓ IPTV input
 - ✓ Multimodulator outputs
 - ✓ IPTV output
 - ✓ Web-based maintenance
 - ✓ Remux/Crossmultiplex
 - ✓ FTA/Pay TV

Creating room for all signals

Compact High Performance Headends



Via the optimum processing of satellite, cable, terrestrial or IP signals, subscribers receive digital programs in excellent quality through the existing in-house coaxial cable or ethernet structure.

An AXING headend is an investment in technology that meets the demands and requirements of tomorrow and it's a system that merges efficiency with reliability.

With AXING you can always rely on fast assistance and consultancy for planning, implementing and maintenance.

Headends and IPTV streamers with multituner technology

The multituner technology ensures independence. All input signals, regardless of the source (DVB-S/S2/S2x, DVB-C oder DVB-T/T2), can be received with the same module.



Each of these input signals can be converted to DVB-C, DVB-T/T2 or IPTV (SPTS/MPTS). Received programs can be easily assembled for the subscribers.

HDMI encoder/modulators

With AXING encoders/modulators it is easy to feed in an info channel in a TV distribution network to inform the guests, tenants or residents.



IPQAM | IP to DVB-T2



Due to the fast fiber optic networks, some network operators offer TV and multimedia only IP-supported. For hotels, hospitals or residential complexes with DVB-C/T/T2 terminals, new headends are needed.

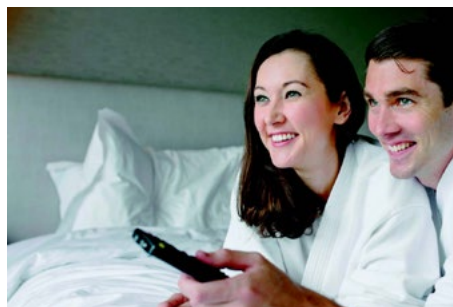
Simulcrypt functionality

Encryption based on Verimatrix, Conax or SAMSUNG LYNC DRM extends the application possibilities of the entire headend portfolio both in professional network operator applications and in the hospitality sector.



Benefits for the installer:

- ✓ Intuitive web-based programming
- ✓ Remote maintenance possible (**SMARTPortal**)
- ✓ Assistance in planning of the installation and pre-configuration
- ✓ No re-programming of the TV sets when channels change, adjustable due to SID/PID
- ✓ NIT functionality



Benefits for the user:

- ✓ User-friendly
- ✓ Great variety of programs
- ✓ Information for your guests, tenants or residents
- ✓ Advertising possibilities

Benefits at a glance:

- ✓ Performant, compact system
- ✓ Flexibly adaptable
- ✓ Fast and simple mounting
- ✓ Web-based programming
- ✓ Remote maintenance possible (**SMARTPortal**; SNMP)

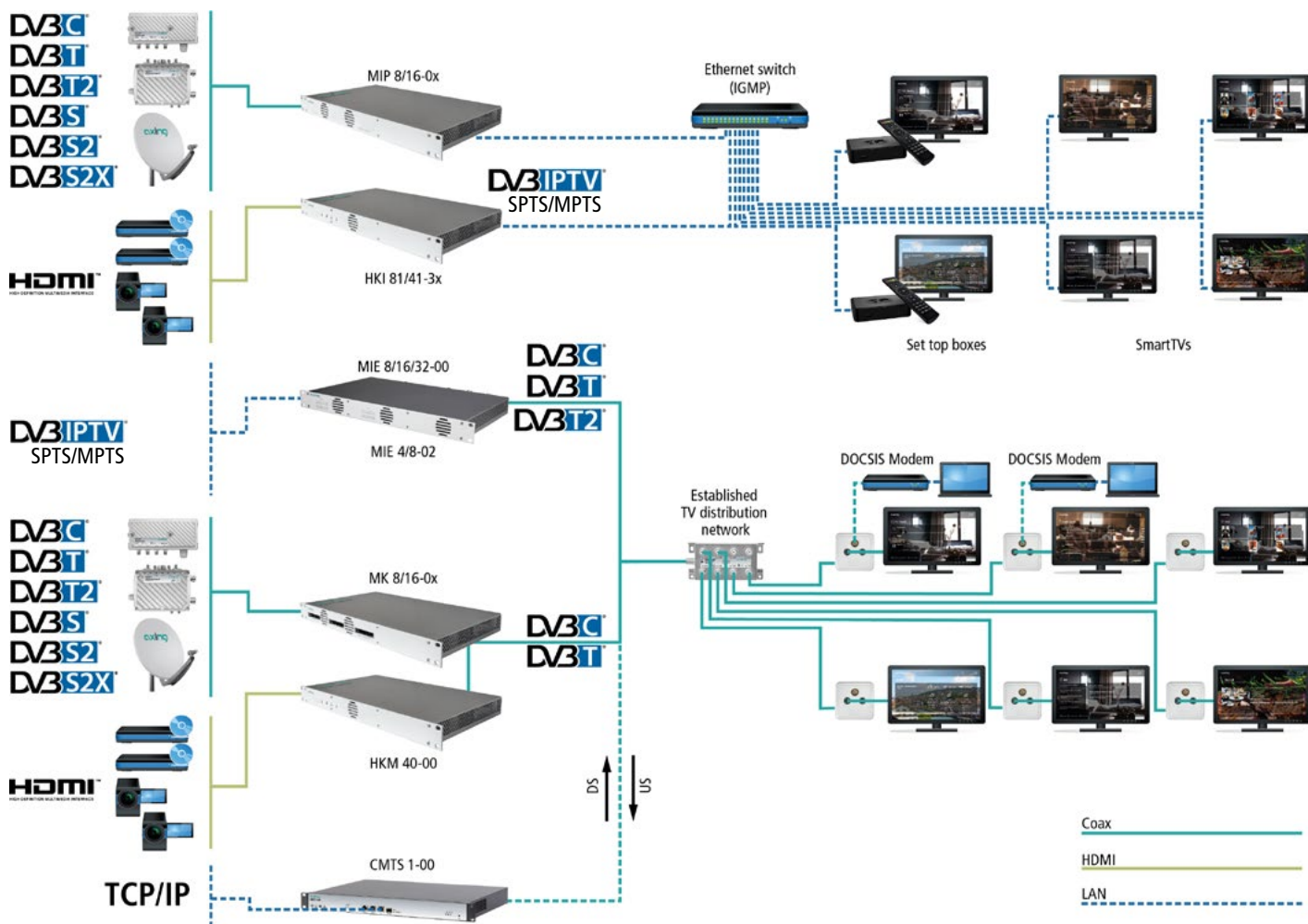
Flexible signal processing solutions



The multituner technology ensures that all input signals, regardless of the source (DVB-S/S2/S2x, DVB-C or DVB-T/T2), can be received and be converted with the same module to DVB-C, DVB-T, or IPTV (SPTS/MPTS). With AXING encoders and modulators, additional information channels can be fed into a TV or Ethernet distribution network.

Furthermore IPTV (SPTS/MPTS) can be converted to either to DVB-C, to DVB-T or to DVB-T2.

AXING's CMTS feeds in internet services in small cable systems according to EuroDOCSIS/DOCSIS 2.0 or 3.0.



Web-based user interface

All headends can be configured via a web-based user interface. The system configuration is performed quickly and reliably. No additional software is required.

The diagram shows a three-phase configuration process:

- PHASE 1**: Setting up transponders for tuners
- PHASE 2**: Selecting programs from tuners to modulators
- PHASE 3**: Modifying settings for modulators

The screenshot shows the **TUNER 1 - TRANSPONDER SETTINGS** interface. It includes a sidebar with buttons for TUNER 1 through TUNER 8. The main area contains the following settings:

- Freq (MHz)**: 11836
- Low LNB LO Freq (MHz)**: 9750
- High LNB LO Freq (MHz)**: 10600
- Polarisation**: Horizontal
- DISEqC**: 1
- LNB Power**: On
- Stream ID (optional)**: 001
- PLS Mode**: Root
- PLS Code (optional)**: 000008

A **SAVE & SCAN** button is located at the bottom.

The configuration takes place in several consecutive phases. The interface guides the user through the configuration steps.

Modulator	LCN	Program Name	Type	Encryption	Decrypt	Service ID	Audio Lan
Das Erste HD		Das Erste HD	TV	FTA	Yes/No		ALL
ario HD		ario HD	TV	FTA	Yes/No		ALL
SWR BW HD		SWR BW HD	TV	FTA	Yes/No		ALL
SWR RP HD		SWR RP HD	TV	FTA	Yes/No		ALL

Benefits at a glance:

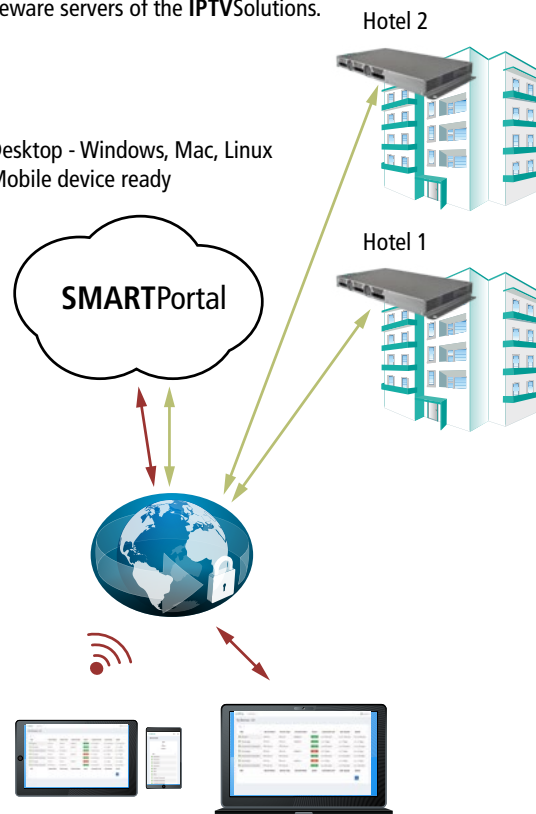
- ✓ Intuitive web-based programming
- ✓ Configuration step by step
- ✓ Device configuration can be saved as backup or for duplication
- ✓ Log entries for the system and status can be called up



AXING SMARTPortal

AXING ensures with its **SMARTPortal**, a web-based cloud application, an easy remote access on web configuration surfaces of its headends and middleware servers of the **IPTVSolutions**.

- ✓ Desktop - Windows, Mac, Linux
- ✓ Mobile device ready



AXING SMARTPortal

The AXING **SMARTPortal** allows to connect any headend device to a cloud-based portal. When connected the customer has access to any device via the internet. The connection is password-protected and scrambled. The system will give the customer error messages to a dedicated e-mail address. Error messages occur in the following cases:

- ✓ Processor, airflow, power supply temperature to high
- ✓ Power supply failure
- ✓ Input stream overflow
- ✓ Modulator overflow
- ✓ RF output-level not according to settings

Why AXING in particular?

We Swiss don't waste words. But what we do, we do thoroughly. Which is why AXING products are always state of the art. The compact design and easy installation are equally impressive.

What is more, with AXING you have a partner at your side offering you all the services you need as a one-stop provider – from planning via preparation through to delivery and operation. Contact us now; we would be pleased to advise you on site and make you a detailed offer.

Our AXING commitment:

- ✓ Very easy handling and installation of all AXING products
- ✓ Short-term and reliable delivery capability
- ✓ Consistently high quality
- ✓ Highly modern technology – state of the art
- ✓ Great flexibility due to wide variety of products
- ✓ Optimum support via competent planning and installation service
- ✓ Technical service / after sales




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