WISI TOPLINE HEADEND

THE COMPLETE SOLUTION

Full analog, digital signal processing
and optical transmission

DVB
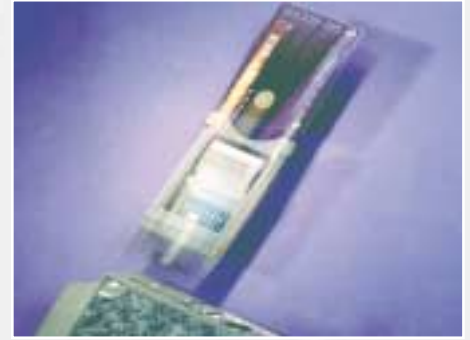Digital Video
Broadcasting

WISI

... a link to the future

Integration   *it couldn't be simpler*

Intelligence that comes with Integrated Stand Alone (ISA) technology and full agility

Besides scoring on quality and simplicity, the **WISI TOPLINE** HEADEND system convinces through completeness.
Any demand imposed upon a contemporary headend system is satisfied in the most strikingly simple fashion.

WISI's pioneering ISA technology provides the key for easy integration. Even more, WISI ISA technology stands for intelligent modules that make the „horror" of incompatibilities and complex updates a thing of the past.

WISI's agile technology facilitates tuning of the output frequency throughout the VHF and UHF range up to 862 MHz. Even the television standard can be selected. It is quite obvious that these features increase the flexibility which allows you to accede to customer demands, keeping stock-on-hand levels low at the same time.

The system provides all necessary analog and digital (DVB) processing modules and a variety of NMS integration solutions.
The **WISI TOPLINE** HEADEND also integrates optical transmitters and return channel receivers. Thus it is the complete solution for reception and transmission.

You will find these benefits in every module of the **WISI TOPLINE** HEADEND series.

WISI TOPLINE HEADEND at a glance

Basic unit with power supply module and output amplifier	OV 50 A
FM range amplifier	OV 22
Mono TV modulator A/V	OV 35 A
Stereo TV modulator A/V	OV 36 A
Video generator module for OV 35 A or OV 36 A	OV 61 A
FM converter, 4x FM - FM	OV 42 A
TV channel converter, analog / digital	OV 45 D
A/V-demodulator for OV 45 D	OV 62 A / D
Mono SAT-TV channel processing	OV 55 A
Stereo SAT-TV channel processing	OV 85 A
SAT / ADR audio subcarrier processor	OV 82 B
Optical transmitter	LT 53 / LT 54
Optical super-broadband transmitter	LT 61
Optical dual return path receiver	LR 52
Recommended fiber nodes	LR 20 / LR 21 or LR 43 / LR 63 or LR 60 (for LT 61)
"WISI Commander" remote control system	OV 52 A
Remote controller for "ROSA"	OV 51 A
SAT DVB receiver FTA with modulator, mono / stereo	OV 76 / OV 76 S
SAT DVB receiver with CI with modulator, mono / stereo	OV 77 / OV 77 S
QSPK-QAM transmodulator transparent	OV 75
QSPK-QAM transmodulator with NIT editing, PCD filtering, bit-stuffing, PCR-correction	OV 75 A
QSPK-QAM transmodulator with ASI interface	OV 75 C
Terrestrial DVB -T receiver with modulator, mono / stereo	OV 79 / OV 79 S

Configurations   *it couldn't be simpler*

From SMATV to CATV

The modular **WISI TOPLINE** HEADEND universal system covers all requirements of sophisticated channel processing systems – from the SMATV headend in a high-rise building right up to the CATV station for a whole town or an entire region.

This is where the **WISI TOPLINE** HEADEND provides consistent peak performance. The selected modules are inserted in the basic unit as required and in any order.
All modules are adjacent channel capable.

The OV 50 A can be installed as a single lockable enclosure or in a 19-inch rackmount cabinet. You never configured a headend this easily.

NEW PRODUCTS

Terrestrial-TV channel converter / amplifier (DVB-T suitable)

OV 45 D

Input frequency range	45-862 MHz
Output frequency range	45-862 MHz
AGC range:	50-90 dBµV
OPTION:	OV 62 A/D* Programmable Audio-Video demodulator module

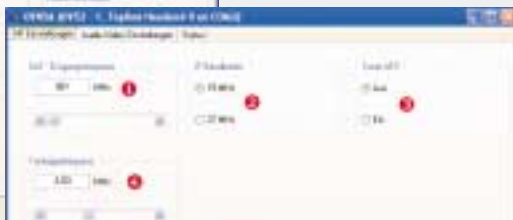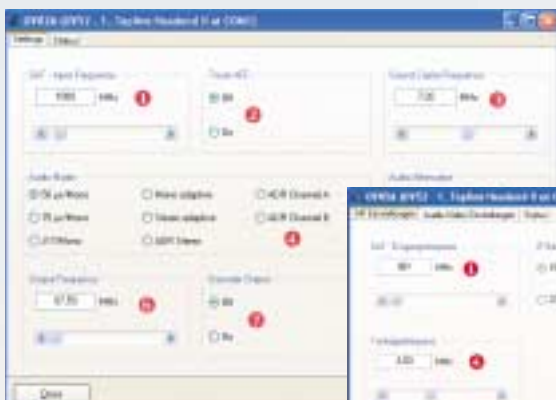* A = B/G   D = D/K

DUAL ADR-RDS SAT audio processing module

OV 82 B

Demodulator for SAT analog audio subcarrier and ADR with built-in FM-radio (stereo) modulator

Input frequency range	SAT	950-2150 MHz
Output frequency range	FM	87.5-108 MHz
	optional OIRT	66-73 MHz

"WISI Commander" remote control system

OV 52 A

Controls and configures **WISI TOPLINE** HEADEND for local and remote control of all inserted modules.

Supports:
- analog and digital modems
- GSM mobile phones
- pulse and tone dialing
- direct RS 232 send connection

Support   *it couldn't be simpler*

Our local distributors provide all-round support

NEW PRODUCTS

Digital modules

OV 75   **QPSK-QAM transmodulator**
Input frequency range   950-2150 MHz
Output frequency range   45-862 MHz
Symbol rate QPSK   2-45 MS/s
Symbol rate QAM   3.45...7 MS/s

OV 75 A   **QPSK-QAM transmodulator**
Specifications as OV 75   + PID filtering: suppress programs
                             + NIT editing: replace set NIT by Cable NIT
                             + Bit-stuffing: smooth data stream
                             + PCR correction: corrects timebase for STB's

OV 75 C   **DVB/QPSK-QAM transmodulator**
Specifications as OV 75   + ASI interface for external:
                             ● remultiplexing   ● scrambling
                             ● decoding   ● ASI -> QAM modulation

OV 76 / OV 76 S   **DVB/QPSK-FTA receiver,** mono / stereo
                             ● with multi-standard modulator
                             ● watchdog   ● 2-language subtitling
Input frequency range   950-2150 MHz
Symbol rate   2-45 MS/s
Output frequency range   45-862 MHz
TV standards   B/G, D/K, I, L, M

OV 77 / OV 77 S   **QPSK receiver with CI,** mono / stereo
Specifications as OV 76   ● with multi-standard modulator

OV 79 / OV 79 S   **Terrestrial DVB FTA receiver,** mono / stereo
                             ● with multi-standard modulator
Input frequency range   49-862 MHz
Input level range   24-89 dBµV
OFDM spectrum   2 K + 8 K
Output frequency range   45-862 MHz
TV standards   B/G, D/K, I, L, M

Optical transmitters / receiver

LT 53 / LT 54   **Optical DFB transmitter**
Optical output power   2.5 mW, 4 mW, 10 mW, 16 mW
Wavelength   1310 nm
Input frequency range   47-862 MHz

LT 61   **Optical super-broadband DFB transmitter**
Optical output power   4 dBm
Wavelength   1310 nm
Input frequency range   47-2150 MHz

LR 52   **Optical dual return path receiver**
Wavelength   1290-1600 nm
Dynamic optical input from   -12 dBm...+ 2 dBm
Frequency range   5-100 MHz
Redundancy switch

● **Regional offices**
● **Planning and design support**

Whenever you wish, our partners shall be pleased to assist you with their proven skills and their comprehensive technical knowledge. They will be at your side from initial systems planning right through to system start-up.

Our local distributors are regularly being educated in technical seminars and in individual trainings to provide you with the best possible services.

We are looking forward to your challenge!

Basic unit for up to 10 modules

OV 50 A
Aluminium enclosure   19", 9 HU
Power supply   230 VAC
Power consumption   124 W (max.)
LNC remote feed max.   2x13.5 VDC/1A
Output booster   45-862 MHz
Gain   32 dB
Output level   110 dBµV

Accessories

OV 97   **Lockable cover**
                 for OV 50 A

OV 98 A   **Mounting plate**
Power supply   12 V   5 V
Mounting space   for 3 modules

OV 99   **19" mounting kit**

Monitoring and Control *it couldn't be simpler*

Flexible operation and maintenance via remote access

Whether you wish to insert additional programs into hotel systems or into full-featured CATV headends - the *WISI TOPLINE* HEADEND is the right choice! The modular system satisfies all requirements expected from a high-grade channel processing set. *WISI TOPLINE* HEADEND is your straight forward and reliable answer to any challenge.

A top-quality headend system offers more than excellent technical features. It must also be flexible and simple to operate and maintain.

When rapid on-site diagnostics and set-up are required, the simple and self-explanatory operating steps at the module itself are a real timesaver. Setting channel parameters becomes even faster and more comfortable with the use of a laptop computer and OV 52 A or OV 51 A.

The *WISI TOPLINE* HEADEND system components can be controlled from remote via "WISI Commander" or "ROSA". This system provides the basis for remote diagnostics and remote maintenance. Communication via GSM or telephone network provides the peak of comfort in concert with simplicity and speed!
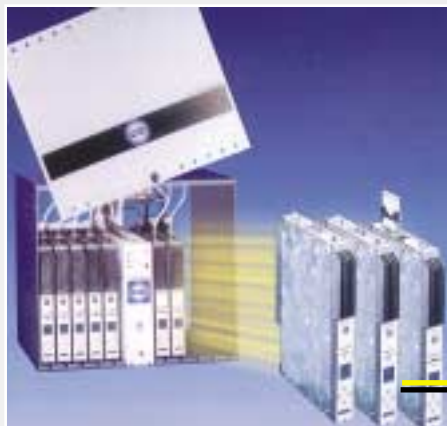
Another unique feature is the degree of compatibility with the tried-and-true *WISI TOPLINE* HEADEND system. A new NMS-capable module can be easily integrated in an existing headend configuration.

The *WISI TOPLINE* HEADEND system features a multitude of operational options. Regardless of its application the system provides solutions that are as cost-efficient as they are technically advanced. Each existing configuration can easily be extended to a fully professional system.

On one hand, the *WISI TOPLINE* HEADEND is an investment for the future which customers have every right to expect from their professional installer. On the other hand, it gives the installers the flexibility to satisfy their customer's demands while keeping costs as low as possible.
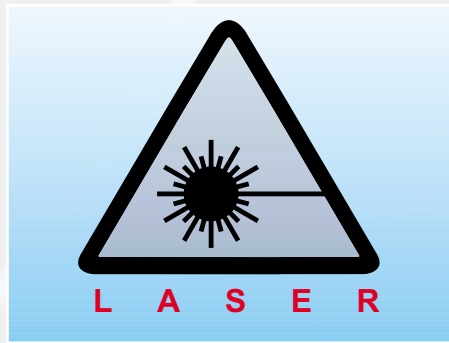
The *WISI TOPLINE* HEADEND has been designed for simplicity of both planning and installation effort. To the professional, system startup and commissioning will become child's play thanks to the plain-text display and the logical on-screen menus.

- **One channel per module**
- **Menu and dialogue self-explanatory**
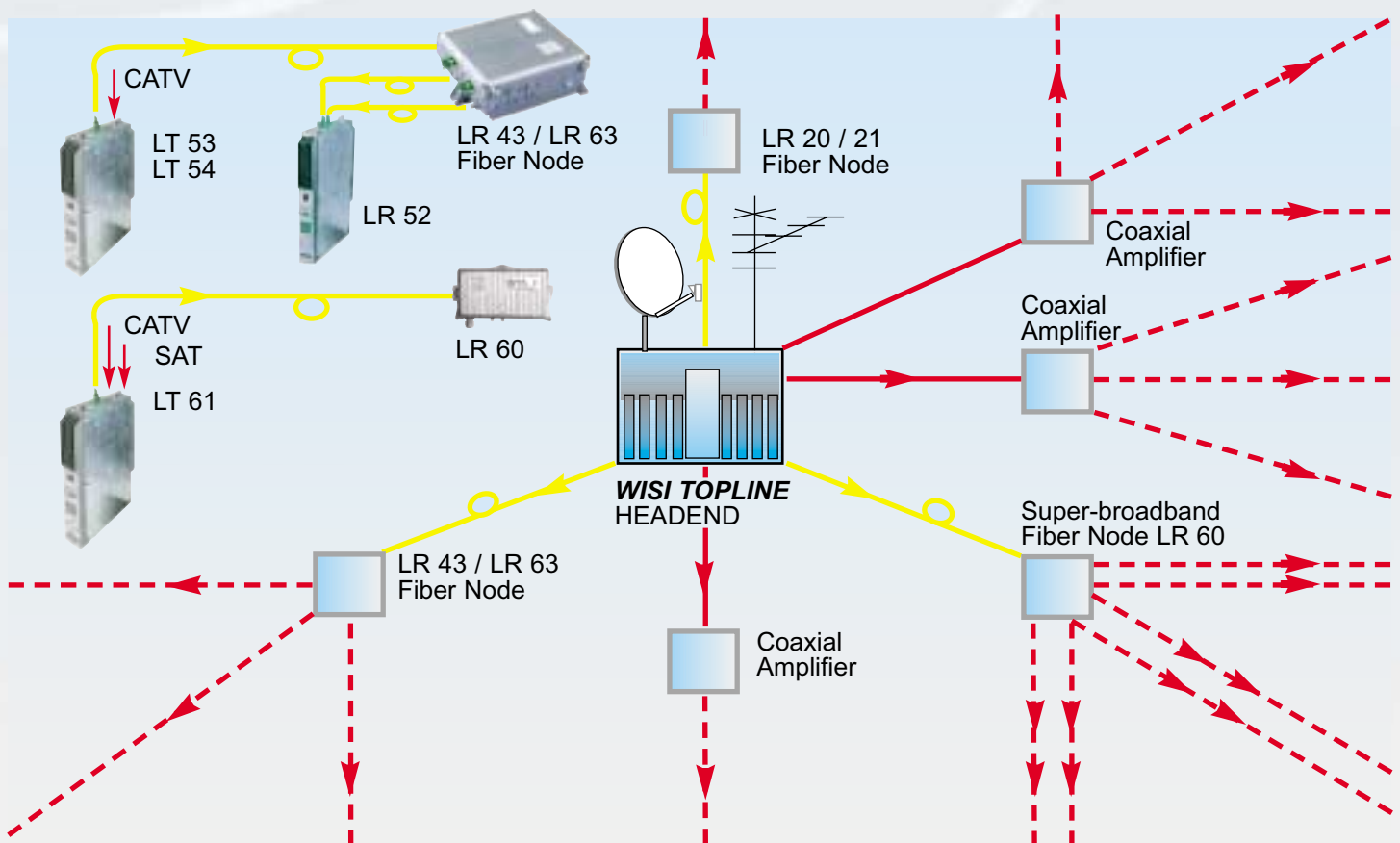- **Telephone remote control**

Perfect for large-scale solutions

WISI TOPLINE HEADEND

L A S E R

In a hybrid fiber-coax network (HFC), delivering up- and downstream signals through *WISI's FIBER* LINE and *WISI COMPACT* LINE products, the *WISI TOPLINE* HEADEND provides all features required of a professional headend system. Equipped with various management configurations, the *WISI TOPLINE* HEADEND meets all requirements of multimedia service providers.

The ISA technology provides each module with its own intelligence. This not only translates into a noticeable increase in operational reliability, but also simplifies adding new channel modules, modulators, converters etc. to the system.

CATV

LT 53
LT 54

LR 43 / LR 63
Fiber Node

LR 52

LR 20 / 21
Fiber Node

Coaxial
Amplifier

Coaxial
Amplifier

LR 60

CATV
SAT

LT 61

WISI TOPLINE
HEADEND

Super-broadband
Fiber Node LR 60

LR 43 / LR 63
Fiber Node

Coaxial
Amplifier

... a link to the future

Specifications subject to change without notice

083409/2/4.04/sch. Printed in Germany