

## CW-4884 MPEG-2 Decoder Quad

Four independent MPEG-2 decoders with loop-through ASI input and PAL output\* each

## CW-4882 MPEG-2 Decoder Duo\*\*

Two independent MPEG-2 decoders with loop-through ASI input and PAL output\* each

## CW-4984 MPEG-2 Decoder Quad

Four independent MPEG-2 decoders with common Gigabit Ethernet input and PAL outputs\*

## CW-4982 MPEG-2 Decoder Duo\*\*

Two independent MPEG-2 decoders with common Gigabit Ethernet input and PAL outputs\*



*In spite of the rapid spreading of digital television technology input signals for earlier analogue TV modulators and monitors will still be needed in the next few years. The models of CableWorld's MPEG-2 Decoder Quad series comprise four independent MPEG-2 decoders each. In the CW-4884 version the decoders are equipped with loop-through ASI input. The CW-4984 belongs already to the next generation, has no ASI inputs; the decoders are fed from the unit's gigabit Ethernet input.*

*The models of the MPEG-2 Decoder Quad series are capable of receiving both MPTS (Multi Program Transport Stream) and SPTS (Single Program Transport Stream) signals; the channel to be received will be set by programming its video PID and audio PID value.*

*The CW-4984 version receives the input signal with four independently programmable unicast/multicast receivers. When programmed to multicast mode, the receiver handles the IGMPv1 protocol at level-2 specification: at switching on it automatically logs in the multicast group and in the course of operation it sends IGMP reports to the router and the switches with programmable repetition time. When programmed to unicast mode receiver, it features adjustable repetition time for sending signal-feeding request to the switch.*

*At the IP input the data packets will be received by CableWorld's CW-4901 Gigabit Ethernet Controller module. This gigabit module can operate beside 1000Base-T also in 100Base-T mode; the actual application determines the mode, which is more suitable to use.*

- 4 independent MPEG-2 decoders with loop-through ASI inputs (CW-4884) or with a single common 100/1000Base-T IP input (CW-4984)
- New generation MPEG-2 decoder with PAL output\*
- Stereo, joint stereo, dual or mono sound output
- Reception configurable to unicast or multicast by programming (CW-4984)
- Multicast, ARP, ICMP Ping, IGMP, SNMP protocol, device prepared for IPv6
- Automatic 100Base-T and 1000Base-T network recognition and display, full duplex operation mode
- Up-to-date programmable circuitries, low power consumption

\* Multistandard device, see the data of the Output signal.

\*\* The device is available also in Duo version. Here the technical data refer logically to two decoder units.

## Scope of application

Use of the MPEG-2 Decoder Quad allows providing input signals for analogue TV modulators in an easy way in the transition period of changing to digital systems. The analogue PAL encoded\* video and sound signals will be retrieved by the CW-4884 model from the ASI signals of local digital headend devices, and by the CW-4984 from distant systems' signals sent over IP network. The four decoders are capable of feeding 4 analogue channels simultaneously.

In many cases analogue A/V signals have to be transmitted over long distances, in measuring and monitoring systems earth loops may cause problems. The IP transmission - especially through optical cable - fully removes problems caused by both long distances and metallic connection. At designing and installing new systems it is worth using MPEG compression and IP transmission.

In supervising and monitoring systems the quality of the PAL output is less and less acceptable: the monitors of fully digital systems require DVI or HDMI input signal. For the requirements of fully digital systems containing no analogue signals anymore the HDMI-output versions of the MPEG-2 decoder family, the CW-4885 and CW-4985 serve.

The monitoring systems of IP TV headends require high quality IP TV measuring receivers for continuous service. The four IP receivers of the CW-4984 can be used as measuring and monitoring receivers with both unicast and multicast transmission.

## General features

The software for configuring the models of the MPEG-2 decoder series is available for free download at [www.cableworld.eu](http://www.cableworld.eu). The SW-4884 software serves the configuration of the decoders in all versions. The software for configuring the receivers of the IP-input versions is the SW-4901. The IP receivers receive the UDP packets with 1 ... 7 packets/UDP data content, and 188 or 204 byte/packet size, but they are also capable of receiving CW-Net format signals. The configuration procedure of the Gigabit Ethernet Controller and the IP network is described in details in CableWorld's „Transport Stream Managing Over IP” file.

The MPEG decoder chip used in the devices represents the most sophisticated generation of its category. Its fast operation and wide scope of application is assured by the ARC RISC CPU working with 130.5 MHz clock signal.

For analysing and reproducing the input ASI transport streams or the transport streams arriving through IP the device is equipped with an integrated transport stream analyser; the device is suitable for working together with all devices and software of CableWorld's CW-Net system.

Beyond the remote control possibility through the IP network, the device can be remote controlled and programmed with SNMP messages, and in case of working troubles it signals the error by sending Trap messages.

## Technical data

### ASI input (CW-4884)

Number of inputs	4
Input type	loop-through (2 × BNC socket)
ASI performance	according to EN 50083-9 (DVB-TM 1449 Rec.1)
Input voltage	200 ... 880 mV <sub>(P-P)</sub>
Loop-through output voltage	min. 800 mV <sub>(P-P)</sub>
Input and output impedance	75 Ω
Data rate	max. 90 Mbit/s per decoder

### IP input (CW-4984)

Number of inputs	1
Input	RJ-45 100 / 1000Base-T
Modes	unicast, multicast (IGMPv1)

### MPEG-2 decoder

<i>Video decoder</i>	MPEG2 video ISO/IEC 13818-2 (MP@ML... SP@ML)
Video resizing	×1/16 ... ×2
Features	teletext, WSS, VPS, VBID and CC insertion, frame frequency conversion, last picture hold, storing an optional logo screen
Output signal	PAL, PAL60, PAL-N, PAL-M, SECAM, NTSC, NTSC 4.43 encoded composite video signal
Output voltage	1 V <sub>p-p</sub> /75 Ω
Connector type	BNC socket
<i>Audio decoder</i>	MPEG audio layer 1/2
Modes	mono, stereo, joint stereo, dual
Sound sampling frequency	32, 44.1, 48 kHz
Sound output level	0 dBm/ approx. 22 Ω
Connector type	RCA socket
Adjustable range	0 ... -10 dB (reading 0 ... 255)

### General data

Service period	continuous
Power requirements	90 ~ 264 V / 47 ~ 440 Hz
Power consumption	max. 35 VA
Mass	approx. 3.8 kg
Physical dimensions: Width × Height × Depth	19" × 1 HU 483.0 × 43.6 × 473.0 mm
Operating temperature range	+5...+40°C
Relative humidity	max. 80 %
Storage temperature range	-25 ... +45°C
Relative humidity	max. 95 %, non-condensing

Budapest XI., Kondorfa u. 6/B  
Hungary  
Tel.: +36 1 204 7815  
Fax: +36 1 204 7839



Internet: [www.cableworld.eu](http://www.cableworld.eu)  
E-mail: [cableworld@cableworld.hu](mailto:cableworld@cableworld.hu)