

8928 190 30001
8928 190 40001
Technical Data

STEREO SOUND IN SYNC

LDM 1903/00/01 (8928 190 30001)

LDM 1904/00/01 (8928 190 40001)

TECHNICAL DATA

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TECHNICAL DATA

1. GENERAL

Dimensions:

Height	:	133 mm (5.25 in) (3RU)
Width	:	480 mm (19 in)
Depth	:	381 mm (15 in)

Weight:

Coder	:	7.5 kg (17 lb)
Decoder	:	8 kg (18 lb)

Power Requirements:

Coder	:	85VA (approximately)
Decoder	:	100VA (approximately)

Ambient Temperature	:	0 - 45°C
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Audio Monitor Points	:	PO (type B) jack, for 600-ohm headphones
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Connectors:

Video	:	75-ohm BNC
Audio Input	:	5-way AXR plug
Audio Output (Stereo)	:	5-way AXR socket
Audio Output (Monitoring)	:	5-way 240° DIN socket
Monitoring	:	37-way D-type plug
Remote Control	:	25-way D-type socket
Auxiliary Input (Coder)	:	15-way D-type plug
Auxiliary Output 1 (Coder)	:	15-way D-type socket
Auxiliary Output 2 (Coder)	:	9-way D-type socket
Auxiliary Input (Decoder)	:	9-way D-type plug
Auxiliary Output 1 (Decoder)	:	9-way D-type socket
Auxiliary Output 2 (Decoder)	:	15-way D-type socket
Control and Additional Data In	:	25-way D-type plug
Control and Additional Data Out	:	25-way D-type socket
Mains Supply	:	CEE22 plug

2. VIDEO PERFORMANCE

- Notes:
1. Parameters marked with an asterisk are only checked on a batch basis.
 2. Two asterisks indicate design parameters not normally checked in production.
 3. For definitions of parameters see CCIR Rec 567-1.

Return Loss at 5MHz : better than 36dB

Non-useful DC Output Component : $0 \pm 0.1V$

Insertion Gain : $0 \pm 0.2dB$

Noise
(Relative to 700mV Luminance):

Continuous Random Noise
(RMS):

10kHz - 5MHz
weighted : better than -67dB

10kHz - 5MHz
unweighted * : better than -60dB

Periodic Noise (p-p):

Power Supply Hum * : better than -55dB

Single-frequency **
Noise 1kHz - 5.5MHz : better than -70dB

Non-linear Distortion:

Luminance Signal

Normal Level : less than 1%

+3dB Level * : less than 2%

Intermodulation Product
(Luminance to Chrominance):

Differential Gain:

Normal Level	:	less than 0.5%
+3dB Level *	:	less than 1.5%

Differential Phase:

Normal Level	:	less than 0.5°
+3dB Level *	:	less than 1°

Intermodulation Product
(Chrominance to Luminance):

Normal Level	:	less than $\pm 1\%$
+3dB Level *	:	less than $\pm 2\%$

Synchronising Signal
Distortion:

Steady State:

Normal Level	:	less than 2%
+3dB Level *	:	less than 3%

Transient:

Normal Level *	:	less than 2%
+3dB level *	:	less than 4%

Linear Distortion:

Field time Waveform Distortion *	:	less than $\pm 1\%$
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Line Time Waveform
Distortion:

Bar top *	:	less than $\pm 1\%$
Base line *	:	less than $\pm 1\%$

Short-time Waveform
Distortion:

2T Pulse to Bar	:	100 \pm 2%
2T Pulse K	:	less than 0.5%

Chrominance-luminance
Inequalities:

Gain Inequality	:	less than 0.2dB
Delay Inequality	:	less than 10ns

Teletext Decoding Margin	:	less than 5% reduction
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Spurious Signals in the Blanking Period *	:	less than 25mV p-p
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Offset of Re-inserted
Blanking Level:

Direct Connection	:	less than 9mV
Connection via Reference Circuit **	:	less than 15mV

3. AUDIO PERFORMANCE

- Notes:
1. Parameters marked with an asterisk are only checked on a batch basis.
 2. Two asterisks indicate design parameters not normally checked in production.

Coder Input Impedance	:	greater than 10k ohms, balanced.
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Decoder Output Impedance	:	typically 30 ohms, balanced.
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Voltage Gain at 1kHz : Adjusted to 0dB.

Maximum Input Level : +14.8dBm at 2kHz. At other frequencies as related to 2kHz by the CCITT J17 pre-emphasis curve shown on Sh. 595-6, subject to an absolute maximum of +21dBm.

Gain/Frequency Response
Ref 1kHz:

40 - 125Hz	:	+0.4 -1.0dB
125Hz - 10kHz	:	±0.4dB
10 - 14kHz	:	+0.4 -1.1dB
14 - 15kHz	:	+0.4 -1.8dB

Noise Level : better than -57dBq Ops
better than -60dBq Os

Programme-modulated Noise,
at +9dBu, 100Hz : better than -47dBq Ops

Total Harmonic Distortion:

100Hz at +8dBm	:	less than 0.1%
1kHz at 8dBm	:	less than 0.1%

Crosstalk *:

40Hz	:	better than -80dB
500Hz - 5kHz	:	better than -85dB
15kHz	:	better than -75dB

Difference in Phase
between Ch A and Ch B *:

40Hz	:	less than 17°
200Hz - 4kHz	:	less than 9°
14kHz	:	less than 17°
15kHz	:	less than 23°

4. LINK DISTORTIONS OCCURRING SINGLY
FOR NEGLIGIBLE DEGRADATION OF SOUND PERFORMANCE

Decoder Input Level : +3-6dB

Continuous Random Noise
(unweighted) : -36dB

Power Supply Hum : 500mV p-p

Tilt Over Four Lines : less than 10%

2T Sin² Pulse Response:

Pulse to Bar : 100 +30-15%

Line-time Waveform Distortion:

Bar K ** : less than 6%

Chrominance-Luminance
Gain Inequality * : ±24%

Chrominance-Luminance
Delay Inequality * : ±80ns