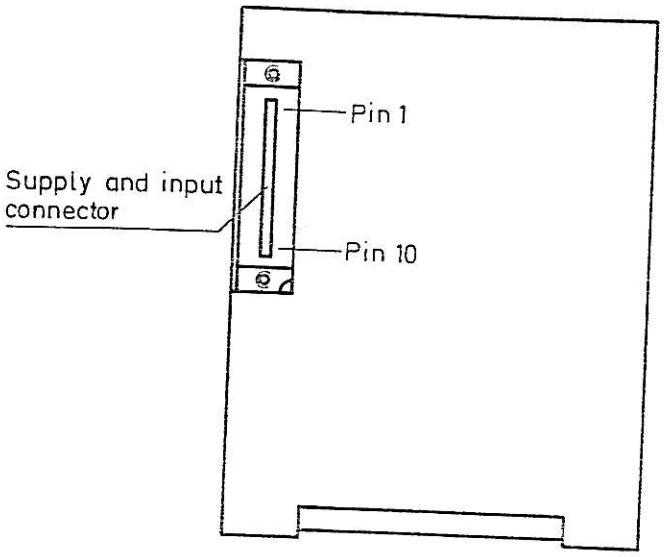
NTP ELEKTRONIK A/S

OSCILLOSCOPE 277-500
TECHNICAL SPECIFICATIONS

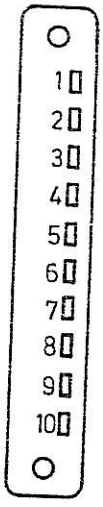
277-5011-A-4

Supply voltage	:	22 - 32 V DC
Power dissapation	:	6W
Ambient temperature range	:	0 - 50°C
Frequency range -0,5dB point	:	40Hz to 20kHz
Maximum input level	:	+22 dBu
Nominal input level	:	+ 6 dBu
Gain control range, input level	:	from +18 dBu to -30 dBu
Gain regulation time constants	:	attack time 0,5 dB/msec. recovery time 10 dB/s
Fixed gain, AGC off	:	+6 dBu
Gain tracking between channels	:	$\pm$0,3 dB or 2 degrees
Phase error between channels	:	less than 4 degrees
Threshold of light reduction	:	approx. -50dBu
Compatibility meter sensitivity	:	20 dB below full screen deflection.
Response time compatibility meter	:	approx. 1s center to full scale.
Mechanical outline	:	h x w x d 140 x 120 x 184 mm
Cut out for panel mounting	:	h : $135,5^{+0,5}_{-0}$ mm w : $120,5^{+0,5}_{-0}$ mm
Weight	:	approx. 1,6 kilos
Connector	:	10 pole edge connector Elco 00.6007.01.09.40.012



Rear view

Pin 1	+22 to 32 Volt		
2	0 Volt		
3	Chassis		
4	AGC off		
5	Screen		
6	Balanced input	Left channel	
7			
8	Screen		
9	Balanced input	Right channel	
10			



Connector: Elco 00.6007.01.09.40.012

Connector terminations

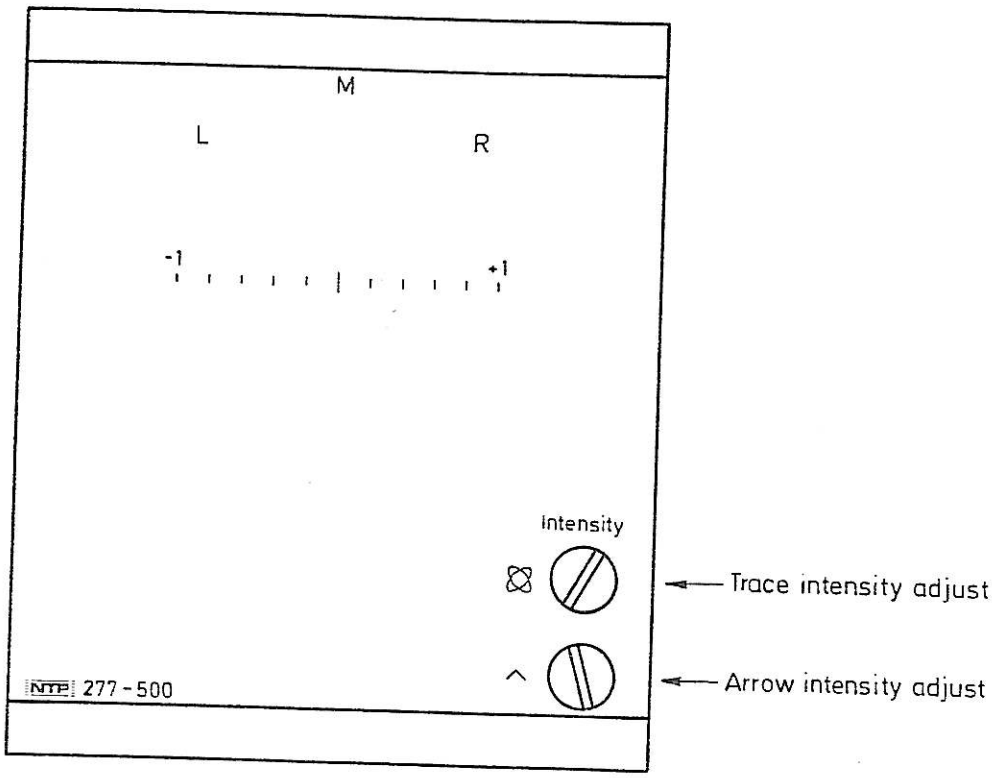
Målestok	:
Konstruktør:	B.S.
Tegnet	:15.12.80.T.L.
Godkendt	:
Revideret	:

Oscilloscope 277-500

Terminals & Interconnections

NTP ELEKTRONIK A/S

277-5002-A-4



Front view.

The NTP 277-500, based on a 7 cm CRT, is a combination of a stereo monitor oscilloscope and a compatibility meter, providing the sound engineer with a clear and easy-to-read information of the phase- and amplitude-relationship between left and right in the stereo-signal. It indicates, if the stereo-signal is monocompatible.

The stereo monitor oscilloscope shows the contents of left, right, mono or stereo information of the signal. A vertical dash pointing at the M indicates mono only, signals in phase. A horizontal dash indicates mono, signals 180° out of phase. A complex stereo-signal which contains some mono- as well as stereo-information will provide a sort of eliptical shaped figure, primarily in the up-down direction.

The transformercoupled input amplifiers are provided with dual-channel automatic gain control AGC which will enable the trace to fill out the whole screen, even for very weak signals. The AGC can be switched off by grounding pin 4 on the edge connector.

The compatibility meter has the shape of an arrow-pointer moving along a horizontal scale which goes from +1 to -1 equaling phasedifference from 0^{o} to -180^{o}. Center reading is obtained for 90^{o} phase difference, or random phase on complex signals, or if one or both input signals are missing. A typical stereo signal will read between 0 and +1, while the reading between 0 and -1 indicates signals out of phase and risk that they cancel out one another.

Individual light intensity adjustments are provided on the front plate, enabling the sound engineer to balance the intensity between the monitor scope and the compatibility meter. The light intensity of the monitor scope will be dimmed automatically to prevent the tube to burn-in, when no signals are present. When operating in mono only, the intensity of the dash will automatically be slightly reduced.