

GENERAL SPECIFICATION

Supply voltage	:	22-32V DC
Current consumption	:	approx. 130mA at 24V supply
Temperature range	:	0 to +45°C ambient temperature

INPUT

Frequency range, 0.5dB point	:	20Hz to 16kHz
High frequency roll-off	:	at 25kHz greater than 7dB at 40kHz greater than 20dB
Input impedance	:	20kOhm ±10%, balanced, floating
Input voltage for 0dB reading	:	1.55V rms sine (+6dBu)
Input overload level	:	8.6V rms sine (+21dBu)
Dynamic measuring range	:	55dB

MEASURING ERRORS

1kHz steady signal, 25°C	at +5 to -10dB	below -10dB
Within full frequency range, 25°C	±0.5dB	±1dB
Within full temperature range, 1kHz	+0.5/-1dB	+0.5/-2dB
Polarity shift of unsymmetrical wave	±1dB	±2dB
10% change of supply voltage	±0.5dB	±1dB
Tracking between channels	±0.2dB	±0.2dB
	better than ±0.5dB	

INTEGRATION & FALL-BACK TIME

Integration time	:	10msec. for -1dB ±0.5dB
Conforming to DIN 45406 and IEC 268-10		5msec. for -2dB ±1dB
Integration time is measured		3msec. for -4dB ±1dB
with 5kHz tonebursts		0.4msec. for -15dB ±2dB

Fall-back time, with linear scale : 1.5sec. for 0 to -20dB

Fall-back time with scale according to
DIN 45406. Conforms with IRT-ELA KE/Mr 4.5.70

PEAK STORE

Accuracy of peak storing ("Memory")	:	±1 neonsegment or ±0.25dB
in upper end of scale, above -30dB reading	:	+2/-1 neonsegment or ±1dB
in lower end of scale, below -30dB reading	:	(whatever is greatest)

EXTERNAL FUNCTIONS (available when making connections externally)

Additional gain, scales according to DIN 45406	:	+20dB ±0.5dB +40dB ±1dB for "Nordic" scales
"Display peak"	:	Displays peak storing
"Reset"	:	Clears the memory
"Fast" gives an integration time	:	100usec. for -1dB reading
Overload LED's	:	Light Emitting Diodes placed above the bar graphs
Brightness control	:	
Scale select	:	Optional scale lines

GENERAL DATA

Standard scales	:	DIN +5 to -50dB Nordic +9 to -36dB "BBC" 1 to 7 (4 = 0.775V)
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All types are available for horizontal or vertical
mounting

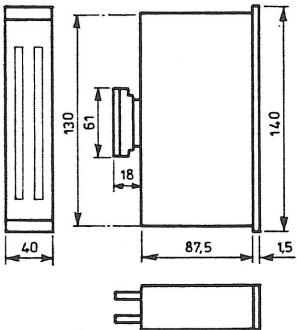
Number of single elements in the bar graph : 200 in each channel
Overload and scale lines indication : 4 times increase of light intensity
Connector : 2 pcs. 10 pole edge connector

MECHANICAL DATA

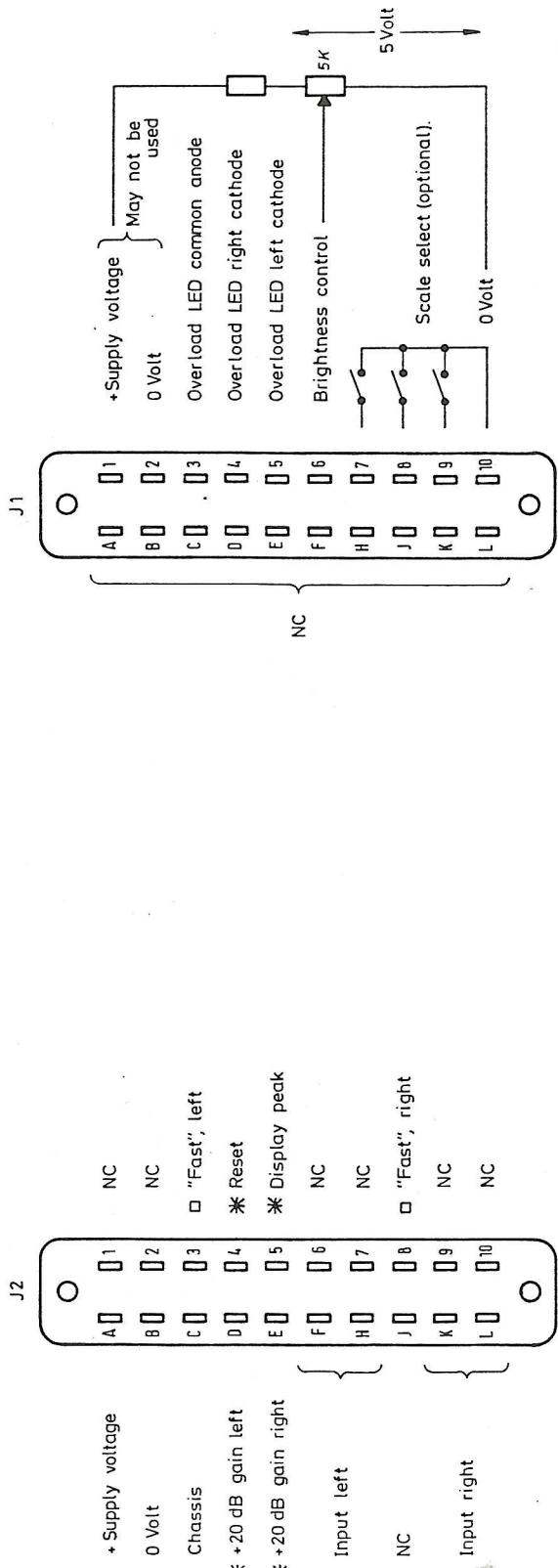
The instrument is housed in a cabinet

Height	: 130mm
Width	: 40mm
Depth	: 87.5mm
Weight	: 0.4kg
Total scale length	: 100mm

Mechanical outline:



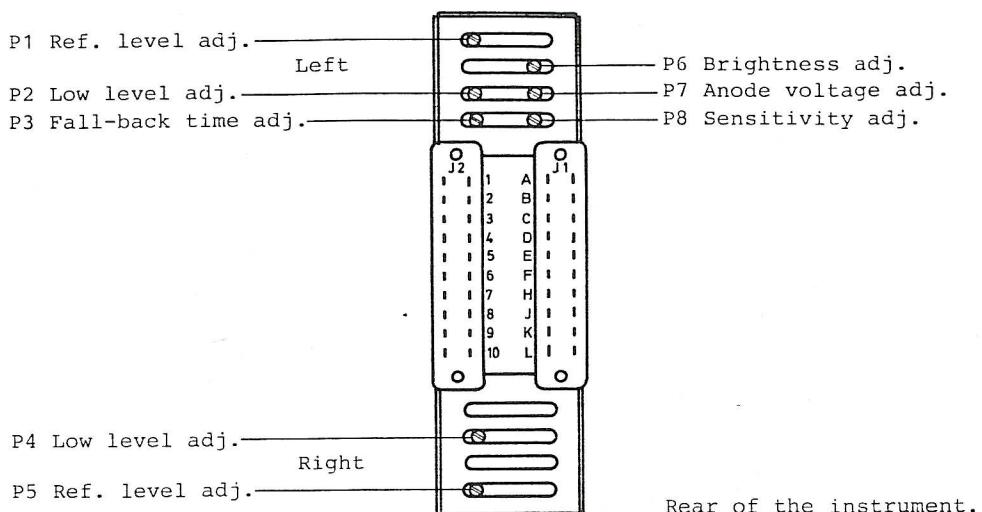
The two 20-pole connectors seen from the rearside (solder side).



* The function is established when the pin is connected to 0 Volt.

□ The function is established when the pin is connected to + Supply voltage.

Since the instrument is adjusted correctly on delivery, adjustment only has to be carried out in case of faulty mode of operation i.e. when a component has failed and has been replaced.



TEST SET-UP.

1. Connect +24V DC to pin A on J2 (0 Volt to pin B on J2).
2. Feed a signal e.g. 5 kHz sinusoidal to the input terminals for both channels i.e. pin F and H as left input and pin K and L as right input. Adjust the amplitude of the signal for max. reading on the display. (top of the scales).

ANODE VOLTAGE ADJUST.

1. Adjust P6 for max. brightness (max. CW).
2. Turn P7 slowly CCW, as far as possible without getting a flickering display.
3. Measure the current consumption.
4. Adjust P7 to obtain an increase in the current consumption of approx. 15 mA.

*P6 1 MAX - JUST. P7 TIL 150mA
OG JUSTER P6 TIL 155mA*

BRIGHTNESS ADJUSTMENT.

1. Turn P6 max. CCW (min. brightness) and then slowly CW in order to obtain a uniform glow in all segments.
2. Measure the current consumption.
3. Adjust P6 to obtain an increase in the current consumption of approx. 40 mA (or to desired brightness).

VOLTMETER SENSITIVITY ADJUSTMENT.

1. Remove the instrument from the cabinet by following the drawing 277-2020-A-3, "Disassembling".

CAUTION! Become aware of that when the supply voltage is applied high voltage (250V DC) is on the circuits.
2. Connect a voltmeter to the wiper (center pin) on P8. The voltage should be 3V. If not, adjust P8.

LOW LEVEL & REF. LEVEL ADJUSTMENT.

1. Assembl the instrument and connect a signal of -40dB to the input terminals (F and H as left input, K and L as right input on J2).
2. Adjust P2 for left channel and P4 for right channel to obtain correct reading (" -40 " on DIN-scale).
3. Change the signal to ref. level and adjust P1 for left channel and P5 for right channel to obtain correct reading (" 0 " on DIN-scale).
4. Repeat the adjustments 1 - 3.

FALL-BACK TIME ADJUSTMENT.

1. Connect a burst generator e.g. NTP type 507-100 to the input terminals (F and H is left input, K and L is right input).
2. Adjust P3 to obtain recommended fall-back time. (1.5 sec. from " 0 " to " -20 " on DIN-scale).



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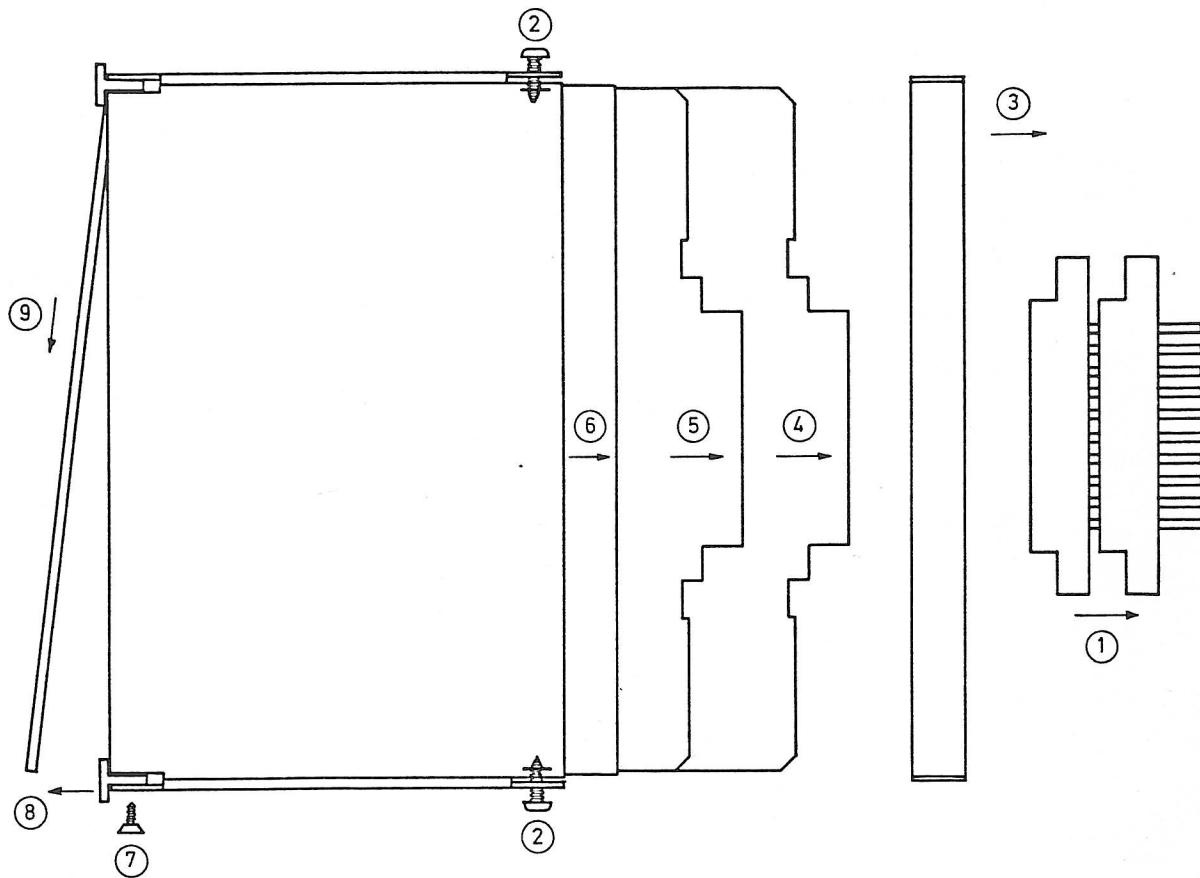
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DISASSEMBLING THE PPM 277-200.

1. Remove the two 20-pole connectors (1)
2. Loosen the two screws (2)
3. Remove the rearplate (3)
4. Remove the two screws (2) and the lockplates
5. Pull out the two PCB's (4) and (5)
6. Pull out the third PCB (Motherboard) (6)

Or pull out all three PCB's together.

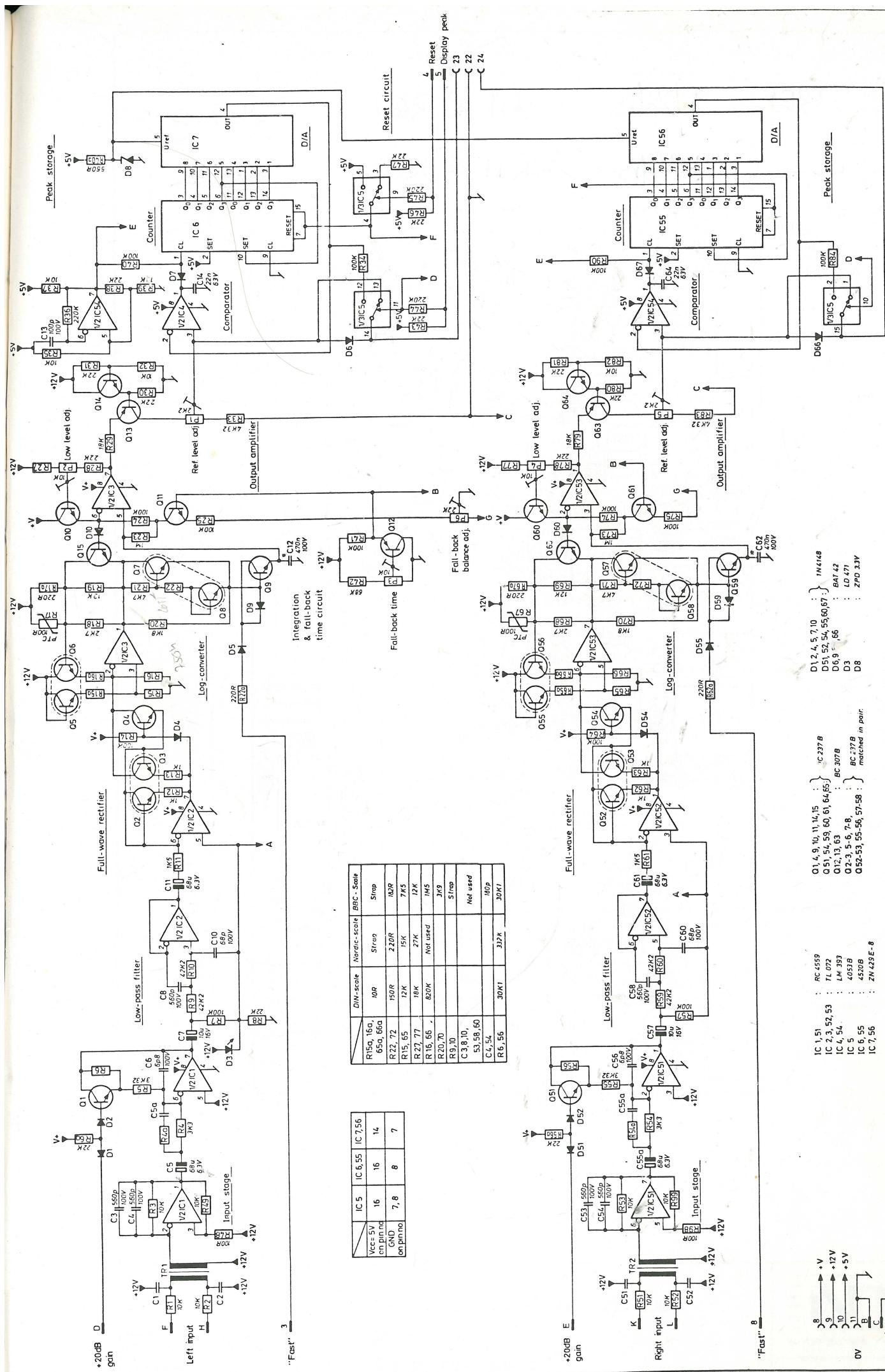
If the frontplate must be replaced:

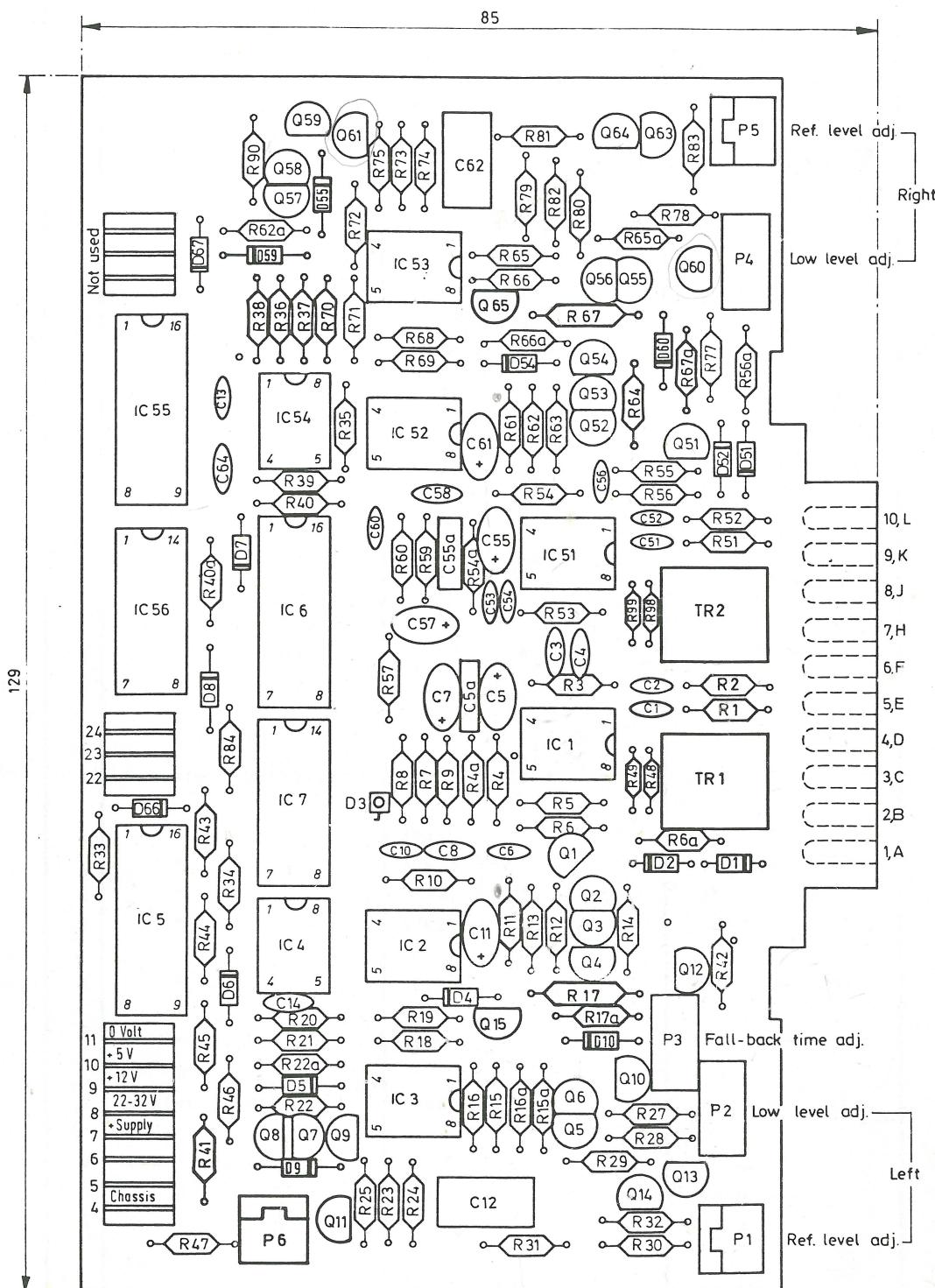
1. Remove the two screws (7)
2. Pull out the front panel (8)
3. Remove the frontplate (9)

Stereo Peak Programme Meter 277-200

Input board, diagram.

Messschleife
Toleranz: mm
Teigert: 16,782 15
Glocken: 200 3,3V
Neuerwert:



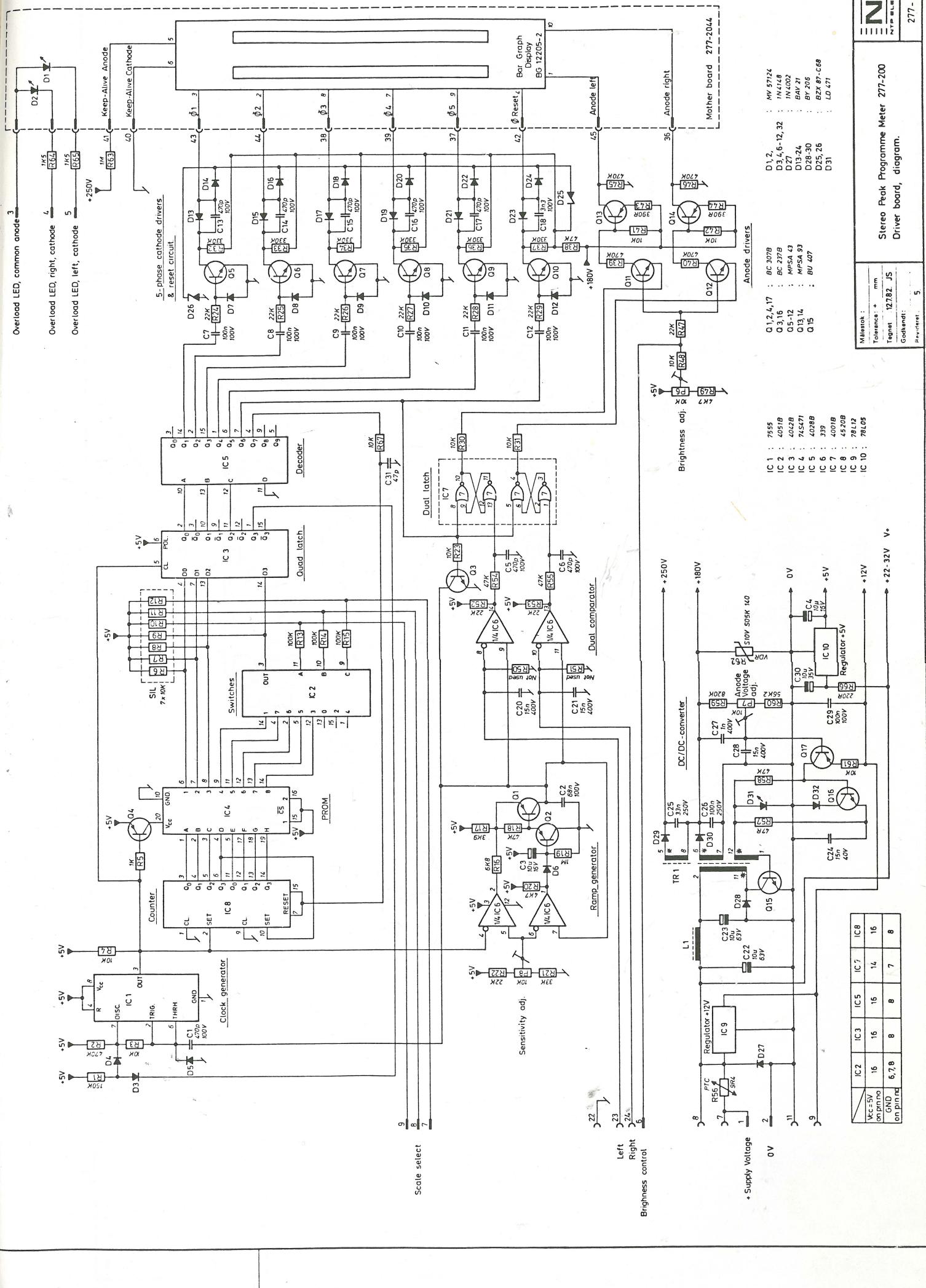


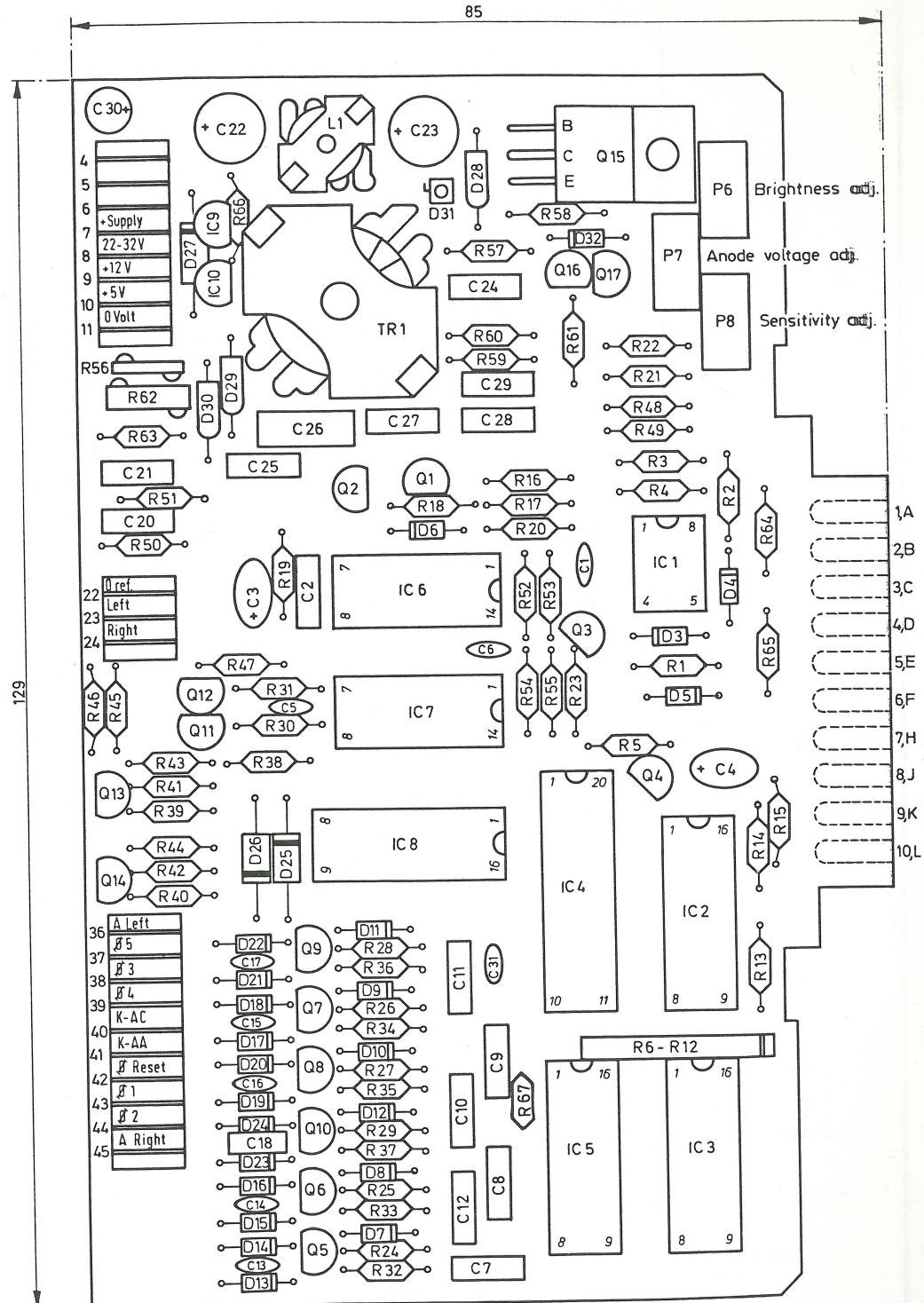
Målestok :	2 : 1
Konstruktør:	B.J.
Tegnet :	21.3.84. LS.
Godkendt :	BS.
Revideret :	5.

Peak Programme Meter 277-200
Input board
Component Lay-out.

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277 - 2043 - A - 3





Målestok :	2:1
Konstruktør :	B.J.
Tegnet :	4.2.82. JS.
Godkendt :	
Revideret :	3

Peak Programme Meter 277-200
Driver board
Component Lay-out.

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277 - 2041 - A - 3