



PHILIPS

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Scientific & Analytical Equipment
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Scientific &
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780130

TEST AND MEASURING EQUIPMENT

SGS 9

PM 5165

Already published: -

Re: A Versions -/01 and -/02

B From Version -/01, Serial No. LO 854, onward

C From Version -/02 onward

D From Version -/03 onward

E Modification of the Parts List

A. Versions -/01 and -/02

- IC pos.414, resistor pos.834 and capacitors pos.538 and 550 which are included in the first edition of the instruction manual have been omitted before the instrument going into production. The pinholes 1 and 14 in the initial position of pos. 414 are interconnected by resistor pos. 834

- An insulated wire is soldered to the rear side of Unit 1 interconnecting pin 2a3 of pos.253 and pin 14 of pos.407.

B. From Version -/01, Serial No.854, onward

- Capacitor pos.536 on Unit 1 has been deleted in order to eliminate frequency drift effects around 100 kHz

- To improve peak-shape of triangular signal an insulated wire is soldered to the rear side of Unit 1 acc. to fig.1.

C. From Version -/02 onward

- To improve frequency aligning procedure the value of capacitor pos.517 has been fixed to 180 pF and paralleled by a trimmer pos.544, 5.5...65 pF

- To eliminate observed malfunctions of the oscillator at fast sweep speeds over wide frequency ranges the value of resistors pos.824 and 825 have been changed into 2.49 k Ω for pos.824 and to 27.4 k Ω for pos. 825.

9499 458 02411

- To suppress possible amplitude modulation of the LOG (f/f_H)-signal by the oscillator frequency a low-pass is connected to the LOG (f/f_H)-output. The bare wire originally fitted between the center terminal of BNC-connector pos.201 and Unit 1 has been replaced by a 1 k Ω resistor pos.620 and, additionally, a 1 nF ceramic plate capacitor pos.530 is soldered across center- and sleeve-contacts of the BNC-connector.

This low-pass is incorrectly drawn in the circuit-diagram, fig.21 of the second edition of the instruction manual. For correct representation see fig.2 of this amendment sheet.

Consequently, technical specifications of the instrument have been amended as follows:

LOG (f/f_H) output

Internal resistance	1 k Ω
max.current load	4 mA

SWEEP IN input

Input impedance	10 k Ω // 1 nF
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- Since the main oscillator tended to stop for about 1s immediately after being switched from $f_H \sim 100$ Hz by pushing SET f_L control, following modifications have been introduced:
 - . The resistance value of resistors pos.634,637 and 641 has been changed into 5.11 k Ω
 - . Resistor pos.629 has been paralleled by an additional resistor pos.630. The resistance of pos.630 has been evaluated to the highest value which still eliminates the effect.

Possibly only one of both measures has been realized.

- A ceramic plate capacitor pos.536, 22 nF, has been soldered to the rear side of Unit 1 across the two source terminals of dual-FET BFQ11, pos.371. This improves indication accuracy at high frequencies.

D. From Version -/03 onward

- To eliminate inductive hum-pickup on low-level output signals a redesigned mains-transformer has been introduced.

E. Modifications of the Parts List

Versions -/01 and -/02

- Unit 1

Pos.	Old ord.no.	New ord.no.	Description
414	5322 209 84017	-	SN 74121-00
538	4822 121 40257	-	330 nF,10%,100V Polyester foil
550	4822 122 30103	-	22 nF,-20+80%, 63V, Ceramic plate
834	5322 116 50451	-	21,5 k Ω ,1%,MR25, Metalfilm
834	-	4822 111 30069	39 Ω ,5%,CR 16,Carbon

From Version -/01, Serial no. L0 854, onward

- Unit 1

Pos.	Old ord.no.	New ord.no.	Description
536	4822 122 30103	-	22 nF, -20+80%, 63V, Ceramic plate

From Version -/02 onward

- Not on Units

Pos.	Old ord.no.	New ord.no.	Description
530	-	4822 122 30027	1 nF, 20%, 63V, Ceramic plate
620	-	5322 116 54549	1 k Ω , 1%, MR25, Metal film

- Unit 1

Pos.	Old ord.no.	New ord.no.	Description
517	4822 122 31173	4822 122 31172	180 pF, 2%, 100V, Ceramic plate
544	-	4822 125 50017	5.5...65 pF
536	-	4822 122 30103	22nF, -20+80%, 63V, Ceramic plate
634	5322 116 54469	5322 116 54595	5.11 k Ω
637	5322 116 50479	5322 116 54595	5.11 k Ω
641	5322 116 50479	5322 116 54595	5.11 k Ω
824	5322 116 54012	5322 116 50581	2.49 k Ω
825	5322 116 50481	5322 116 50559	27.4 k Ω

} 1%, MR25,
Metal film

From Version -/03 onward

- Miscellaneous

Pos.	Old ord.no.	New ord.no.	Description
150	5322 146 34075		Mains transformer

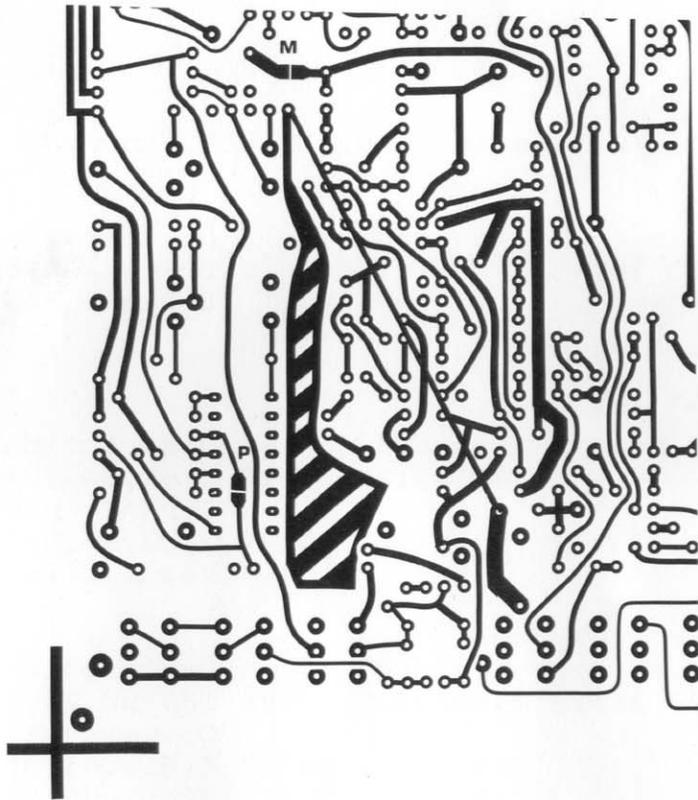


Fig. 1

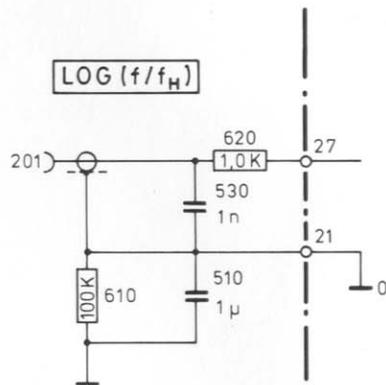


Fig. 2