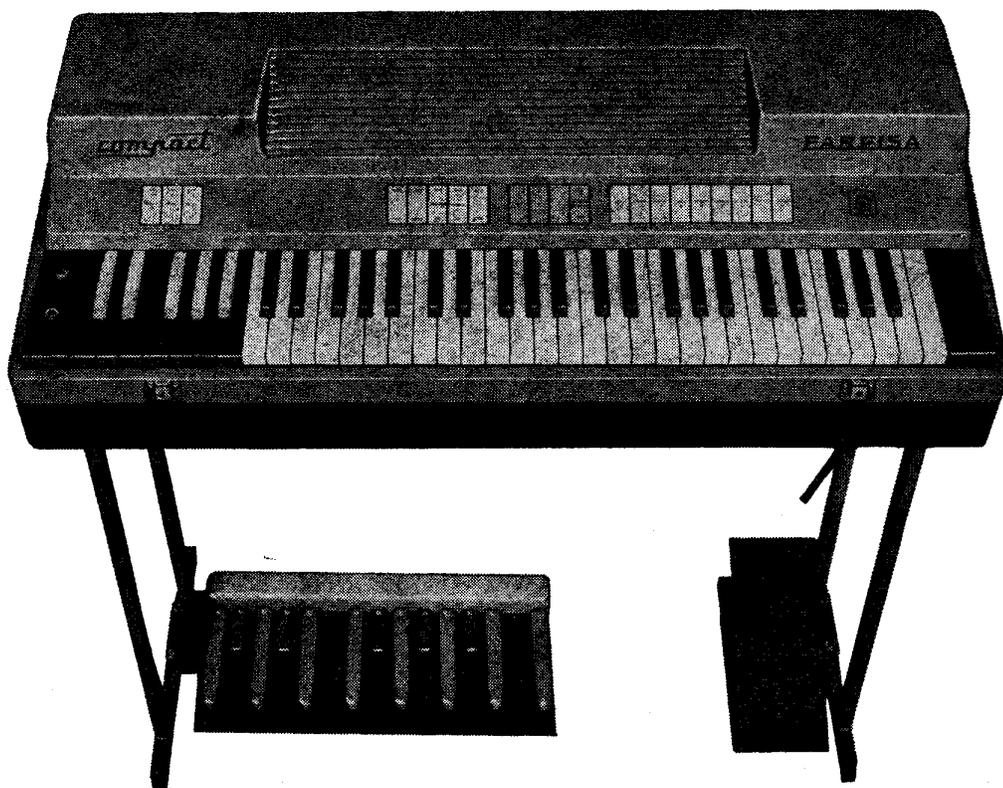


ELECTRONIC PORTABLE ORGAN

MOD. COMPACT

BY FARFISA

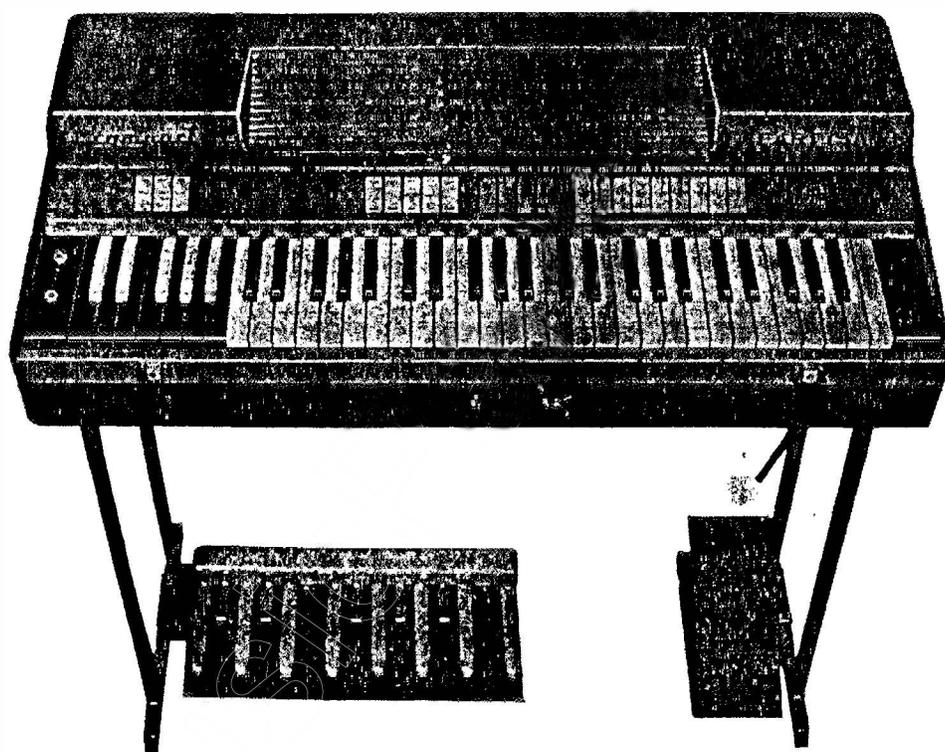


FARFISA S.P.A. - P.O. BOX 204 - ANCONA

ELECTRONIC PORTABLE ORGAN

**MOD. COMBO
COMPACT**

BY FARFISA



SERVICE AND OPERATING MANUAL

FARFISA S. P. A. - P. O. BOX 204 - ANCONA

REAR VIEW

From serial-number A 68 the position of the generator circuit-boards is as follows:

A partire dalla commessa A 68 la posizione delle piastre dei generatori è la seguente:

A	-	LA	C sharp	-	DO d	F	-	FA
E	-	MI	G sharp	-	SOL d	C	-	DO
B	-	SI	D sharp	-	RE d	G	-	SOL
F sharp	-	FA d	A sharp	-	LA d	D	-	RE

Voicing And Sounds

Church Organ 1: *Bass 16', Flute 4' or MTB 16' and 4'*

Church Organ 2: *Bass 16', Piccolo 4'*

Church Organ 3 : *Bass 16', Flute 4', Piccolo 4'*

Church Organ 4: *Piccolo 4'*

Strings Ensemble: *Strings 16', Strings 8', Strings 4' (or one of each)*

Dreamy Organ: *Strings 8', Piccolo 4' or Flute 4'*

New Wave Organ : *MTB 16', 8', 4' (using knee lever for distortion)*

Jazz Organ: *MTB 16', 4' or MTB 8' and 4'*

Reed Organ 1: *Oboe 8', Piccolo 4'*

Reed Organ 2: *Oboe 8', Flute 4'*

Reed Organ 3: *Bass 16', Oboe 8', Flute 4', Piccolo 4'*

Reed Organ 4: *Oboe 8'*

Cheese Combo 1: *Bass 16', Flute 8', Flute 4' (w/ Vibrato optional)*

Cheese Combo 2: *Bass 16', Strings 8', Flute 4' (w/ Vibrato optional)*

Cheese Combo 3: *Strings 8', Piccolo 4', Strings 4'*

Farfisa portable Electronic Organ

Maintenance and performance hints

MAIN FEATURES

- Keyboard: 49 keys C to C
- Manual Bass: 12 keys C to B, in addition to keyboard
- Pedalboard: 13 notes C to C (optional)
- Photoresistor operated Swell Pedal, volume control
- Knee lever control for Multi-Tone-Booster (Farfisa patent)
- Pre-set volume tabs for manual bass and pedalboard:
 - p (piano)
 - mf (mezzoforte)
 - f (forte)
- Vibrato: Slow-fast (speed)
 - Light-heavy (depth)
 - Vibrato ON/OFF (switch)
- Reverberation: Reverb ON/OFF (switch)
 - Med.-long (reverberation time)
- Multi-tone-Booster (Farfisa patent) an additional range of sounds and effects:
 - 16' (Bass octave)
 - 8' (Medium octave)
 - 4' (High octave)
 - 4' (All Booster)
 - Multi-tone ON/OFF (switch)
- Tone stops:
 - Bass 16'
 - Strings 16'
 - Flute 8'
 - Oboe 8'
 - Trumpet 8'
 - Strings 8'

Flute 4'
Piccolo 4'
Strings 4'

- Out signal control:
 - a) Volume
 - b) Bass
 - c) Treble

- ON/OSF switch

- Pilot light

- Earphone outlet (impedance 2000 + 2000 ohm)

- Transistors: 150 x OC 71 ; 2 x OC 74

- Rectifiers: B 30 C 400; E 250 C 50; Zener diode tube SZL 9

- Tubes: 2 x ECC 83

- 110/240 volts, 50/60 Hz, with built in transformer for perfect insulation from A.C. network

- Power absorbed: 19 watts

- Fuse: 0,5 A - 250 V

- Dimensions: 97 x 46 x 24 cms

- Weight: $\text{Kos } 31$ (without pedalboard) - Pedalboard Kos 2.800

- Wooden case covered with washable plastics.

HOW TO OPEN THE COMPACT

Lay the instrument as per fig. A. Loosen screws (1a) and (1b) and open panels (2 and 3 fig. B), overcoming the resistance of the locking spring. Take out the legs and bring back panel (3) to closed position, then tighten screws (1b fig. C). Fix panel (2) to the legs putting screws (1a) into plates (5).

Bring the instrument in upright position (fig. C) and take the lid off.

Important: Be sure the legs lie upon an even surface. The stability of the instrument may be compromised without a firm support and that, besides being uncomfortable to the player, may cause noises when the Reverb is inserted.

Open the plastic cover protecting the swell pedal and the pedalboard, turn hooks (10 fig. C) and remove the swell pedal and the pedalboard from the lid.

To assemble the Swell pedal (fig. D) loosen screws (19) and slide outwards plate (20) and fix it by tightening screws (19). Connect recesses (21) to the studs of the bar across the legs (11 fig. C) at the right of the player. Using the same procedure, the pedalboard is to be assembled at the left.

The Multi-tone-Booster lever (8 fig. B) must be taken out of the hook and put in vertical position.

CONNECTION TO THE SWELL PEDAL AND PEDALBOARD

The plug (12 fig. C) is to be inserted into the input at the back of the base of swell pedal, taking care the reference mark is downwards.

The connector of the pedalboard is to be inserted into the input under the instrument (7 fig. B). The wire of swell pedal is to be fixed to the grips (6a fig. B), while the wire of the pedalboard is to be fixed to the grips (6b fig. B).

The other two wires, the one with a plug at one end and the other one for connection to the mains, are to be fixed to the grips (6c fig. B), taking care to fix first the thinner wire.

CONNECTION TO THE FARFISA AMPLIFIERS MODELS 20 AND 40

Take care the knobs (16, 17, 18, 31, fig. C) are completely turned clockwise.

Insert plug (13 fig. C) into the « ORGAN » input of the FARFISA amplifiers. Close to the ORGAN input there is a switch for « BASS » and « TREBLE ». Switching on « BASS », you get standard performance from Compact, while switching on « TREBLE », you emphasize sharp incisive tones, particularly required by modern music.

More power can be obtained inserting plug into input No. 2 of the 2nd channel of FARFISA «20» and «40». In this case the « BASS » and « MEDIUM » push buttons are to be inserted.

When using an amplifier other than FARFISA MODEL «20» and «40», see special instructions.

SEPARATE AMPLIFICATION OF TREBLE AND BASS

Wishing to have a separate amplification of Treble and Bass insert the plug of a second amplifier for Bass (Farfisa model BT 40 is recommended) into input 32 fig. C.

CONNECTION TO CURRENT NETWORK

The cable for connection to the mains (14 fig. C) is supplied without plug and contains three wires of different colours: RED and BLACK for the mains; BLUE or GREEN for connection to ground.

The connection to ground may be useful to avoid buzz deriving from the current network. Compact works on A.C. 50/60 Hz, 110/240 V.

Before connecting to the mains, be sure the voltage switch (15 fig. C) shows the correct voltage of the network.

Important: It is dangerous to open the instrument when it is connected to the current network. When internal inspection is needed, first disconnect the mains.

USE OF EARPHONE

The earphone outlet, placed near the ON/OFF switch, is meant for the use of an earphone with impedance 2000 + 2000. In addition to silent practice, this is really useful for controlling a performance, when it is directly recorded into a tape recorder, without using the amplifier.

INTERNAL REGULATIONS

The Compact organ is delivered in perfect tune conditions.

Internal regulations may be therefore needed only in exceptional cases.

The assistance of a good technician is highly recommended.

For inside inspection, remove the plastic cover unscrewing the lateral screws.

SINGLE NOTE VOLUME REGULATION OF MANUAL BASS (AND PEDALBOARD)

Each one of the twelve notes of the Manual bass has a separate potentiometer of its own. The thirteenth potentiometer (the first from right on the inferior range) controls the thirteenth note « C » of the pedalboard. You will find the potentiometer group (fig. E) close to the Manual Bass stops. Turning the potentiometers clockwise, the volume of the single notes increases and it diminishes turning to the left.

VOLUME CONTROL OF THE MANUAL BASS (or PEDALBOARD) AS A WHOLE

Potentiometer N. 22 (fig. F) controls the volume of the whole section.

Potentiometer 31 fig. C controls the volume when Manual Bass or pedalboard are connected to a separate amplifier.

VIBRATO SPEED

Potentiometer (23 fig. F) controls the speed of Vibrato.

REVERBERATION

Insert all the tabs of reverb and, using the potentiometer, bring the Reverb to the maximum until a continuous whistle is produced. Then, with all Multi-tone-Booster tabs inserted and knee lever of Multi-tone-Booster fully at right, play chords at full volume in the right section of the keyboard (high treble), and turn potentiometer back until the whistle ceases. In this way you will have adjusted Reverb so that it gives maximum result.

TUNING

The Compact is tuned **A 440**. The tuning can be modified to the required pitch, and when one note goes out of tune, it can be tuned again. For the tuning operation the internal component must be taken out of the carrying case, as per following procedure :

A) remove wing screws (9 fig. B)

B) loosen screws fixing the frame, where the voltage switch is placed (15 fig. C), and slide the frame towards the inside of the instrument.

C) lift the internal component and then lay it on the edge of the carrying case, opposite to the keyboard, so that all potentiometers of tune generators can be seen (24 fig. H).

Every tune generator has the name of the note and controls the whole range of notes of the same name in the various octaves or registers.

The tuning is made by means of a plastic screw-driver (24 fig. G). The pitch decreases by turning clockwise and increases by turning anticlockwise.

MAINTENANCE

If the swell pedal or the Multi-tone-Booster lever does not work, it may be due to an interruption interesting the lamps which are situated inside these devices. The procedure for the substitution of such lamps, by using similar lamps type Philips 12 V - 3 W mod. 12384, is shown in fig. I and L.

IMPORTANT:

The envelope enclosed in the instrument contains the following repair parts:

1 Lamp Philips 12 V - 3 W mod. 12384

1 Fuse 0,5 A - 250 V.

Fig. A

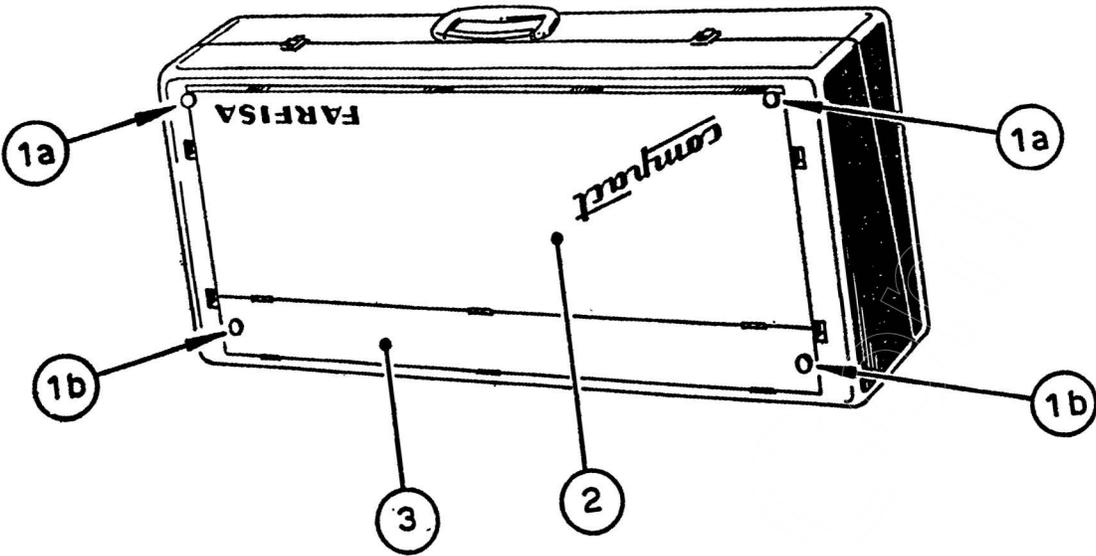


Fig. B

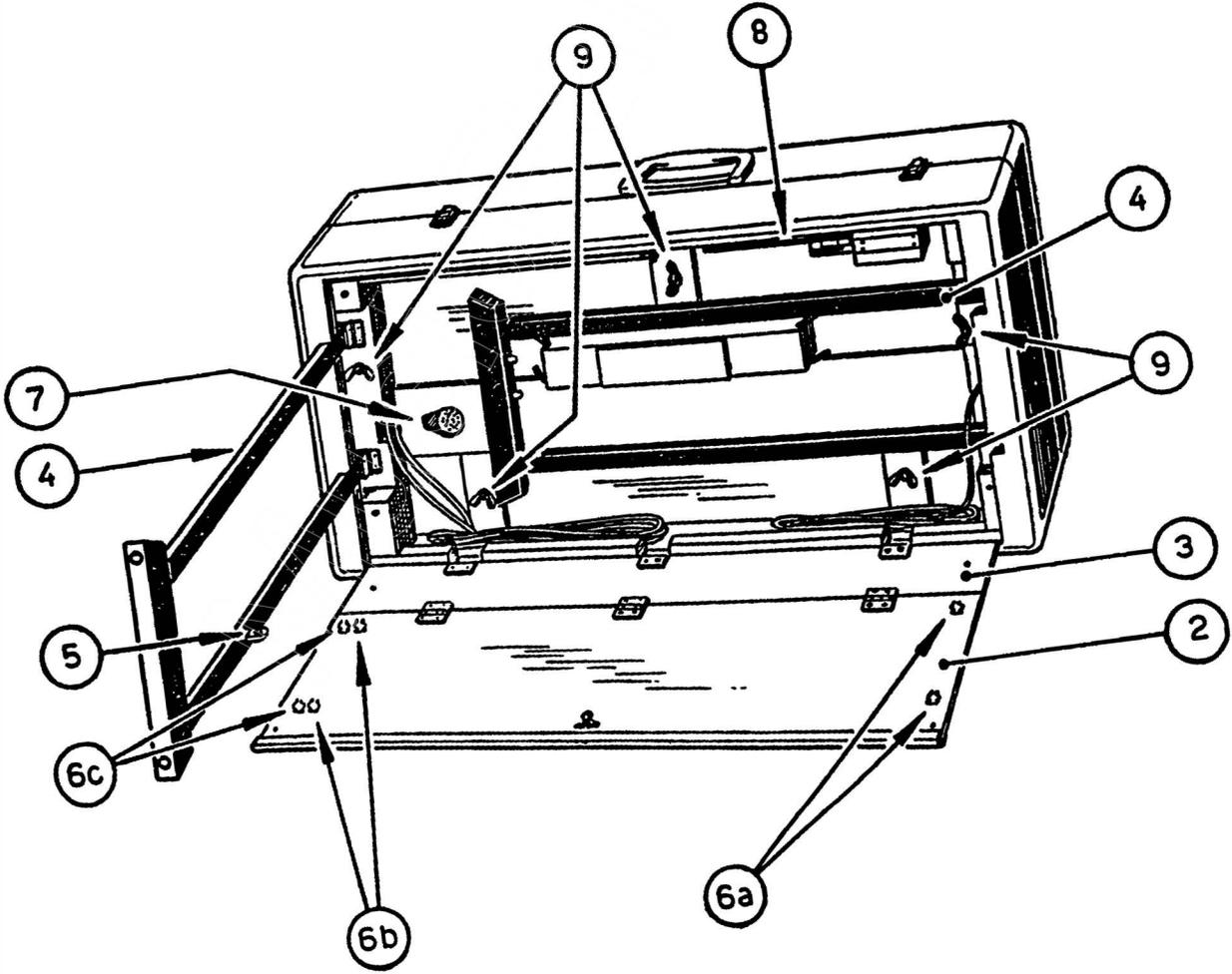


Fig. C

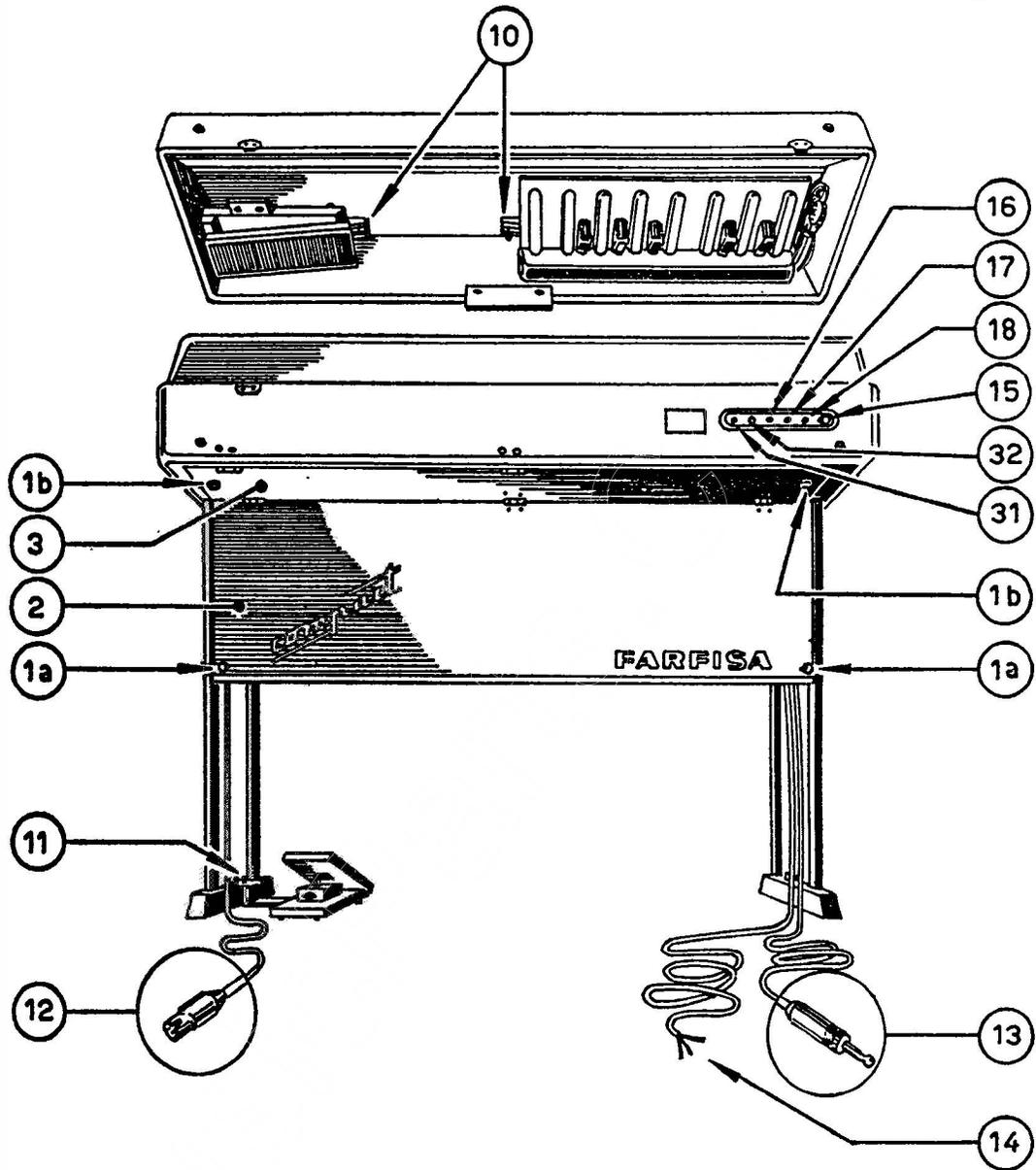


Fig. D

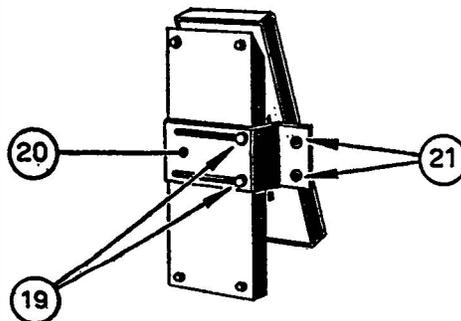


Fig. E

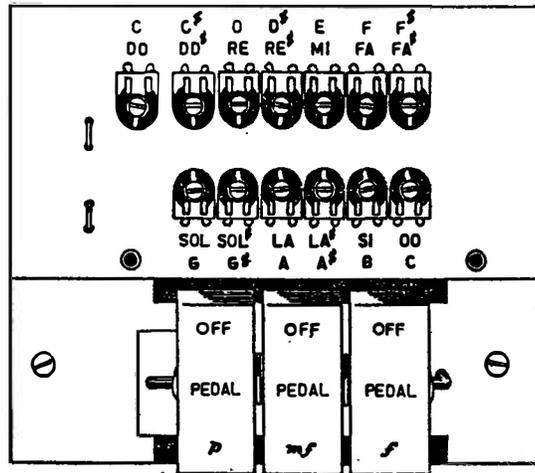


Fig. F

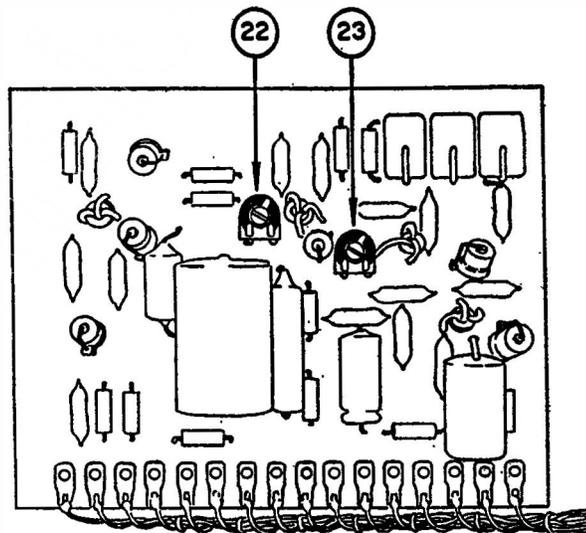


Fig. H

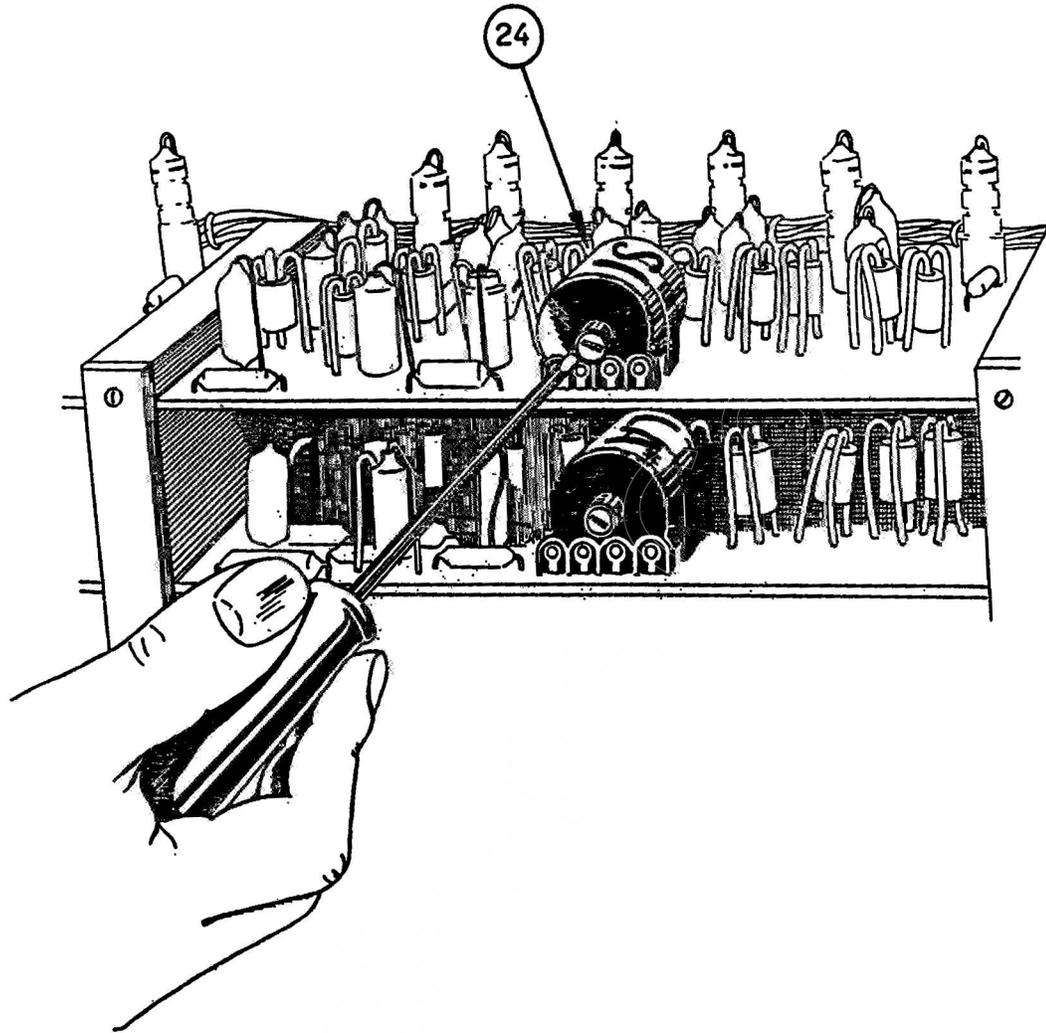


Fig. G

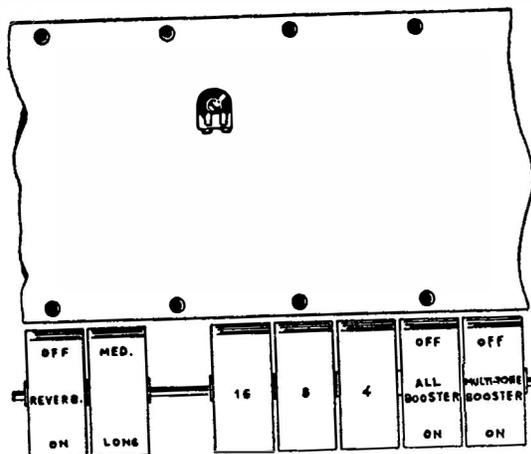


Fig. I

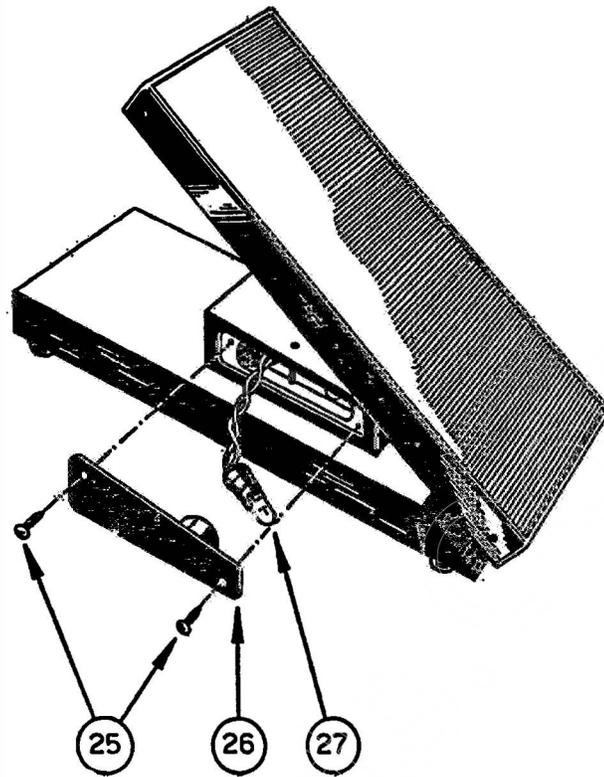
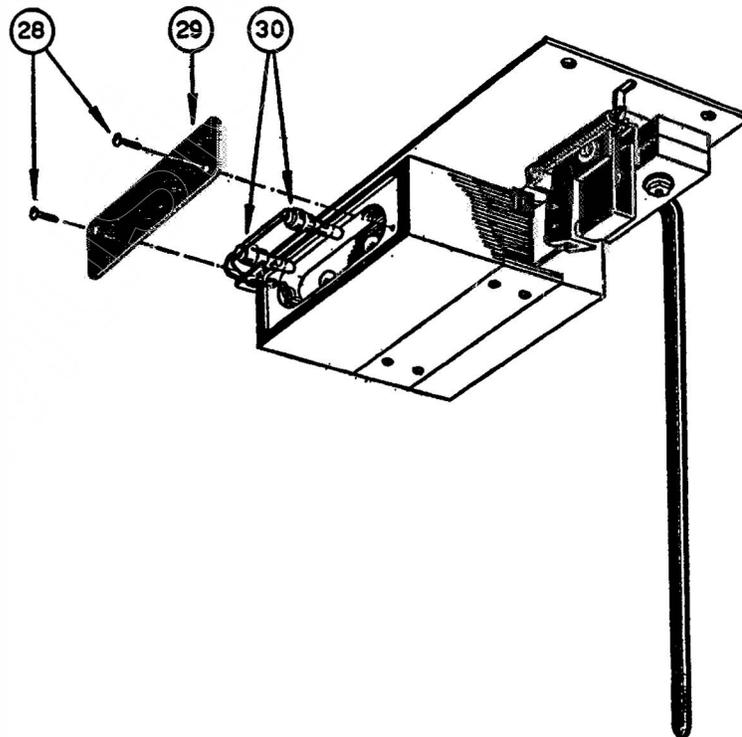


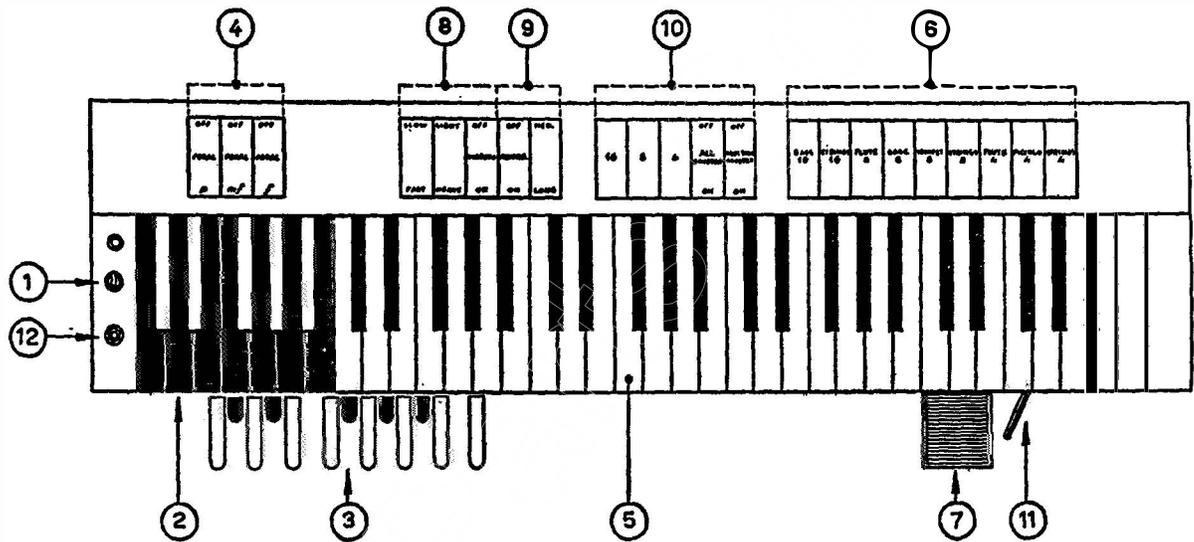
Fig. L



Within a very reduced size, which makes the instrument so easy to be carried, the Compact embodies all features of a big organ.

We are giving below some hints which are only intended to guide the player in his first contact with the instrument, feeling sure that the fancy of the performer and the versatility of the Compact will soon be allied in obtaining new interesting musical effects.

Once the Compact has been put in playing position, according to the previous instructions, follow our suggestions making reference to the drawing, where all the controls are showed.



SWITCHING ON. No. 1

Push the ON/OFF switch (1) towards the pilot light and, in about 20 seconds the instrument will be ready to be played.

SWELL PEDAL No. 7

The swell pedal controls the volume of the instrument and, having no return spring, it may be employed for playing at a prefixed volume.

KEYBOARD No. 5

It is composed of 49 keys, covering 5 octaves. C to C. The size of the keys is the same as in traditional pianos and organs.

TONE STOPS No. 6

Register tabs are inserted when pushed towards the player. There are three groups of tabs:
Low octave Bass 16' and Strings 16'

Medium octave Flute 8' - Oboe 8' - Trumpet 8' - Strings 8'

High octave Flute 4' - Piccolo 4' - Strings 4'

The colour tones may also be classified in three groups:

- Traditional round sounds: Bass 16' - Flute 8' - Flute 4'
- Penetrating clear sounds of the strings family: Strings 16' - Strings 8' - Strings 4'
- Sharp strong sounds with the characteristic attack of the brasses: Trumpet 8' - Piccolo 4'.

There is also a typical oboe which increases the colour tone range of the instrument.

All stops may be used individually or in combination, offering the performer a wide range of tone colours for every kind of music.

VIBRATO No. 8

The Vibrato effect is inserted when the tab marked Vibrato is in ON position. Pushing towards the player the tab « HEAVY », the Vibrato increases in depth, while it increases in speed pushing the tab « FAST ».

The tab marked VIBRATO operates as a switch, so that the whole section of stops is excluded when it is in OFF position.

REVERBERATION No. 9

The Reverberation is obtained when the switch marked Reverb is in ON position. The time of Reverberation may be increased by pushing on « LONG ».

MULTI-TONE-BOOSTER N. 10

All tone stops are excluded when Multi-tone-Booster tab is put in ON position and the sound can be obtained if at least one of the Multi-tone-Booster tabs is inserted.

The sounds obtained inserting the 8' tab correspond to the octave you are playing on, the 16' tab gives sounds an octave lower and the 4' tab gives sounds an octave higher. The three tabs may be combined according to the player's taste.

The sounds of the registers of the Multi-tone-Booster group are round and sweet. They are transformed into sharper tones by pushing the Multi-tone-Booster knee lever (11) towards the right.

The Multi-tone-Booster gives exceptional results when used simultaneously with swell pedal. Push down the pedal while pushing to the right the knee lever and viceversa reduce volume when letting the knee lever return to the left.

The Multi-tone-Booster tab operates as a switch and 16' - 8' - 4' tabs and knee lever effect are excluded when it is in OFF position. At this point the tone stops are automatically inserted.

« ALL BOOSTER »

When « All Booster » is inserted the upper frequencies are boosted to the maximum extent without operating the knee lever.

MANUAL BASS No. 2

Twelve keys of inverse colours, C to B, give the deep sounds of the pedalboard. This device is particularly useful for pianists and for people playing while standing.

The stops controlling the Manual Bass and the Pedalboard are showed at no. 4.

PEDALBOARD No. 3

The pedalboard (optional) repeats the sounds of the Manual Bass with an additional C: 13 notes, C to C.

MANUAL BASS AND PEDALBOARD STOPS No. 4

Three stops provide three different levels of volume: p - piano, mf - mezzoforte, f - forte.

The stops of superior volume level superpose their effects to the inferior levels without excluding them. I. e. For increasing volume, when pedal - p is inserted, it is enough to insert pedal - f, then, excluding pedal - f, pedal - p will operate again.

In the following examples the use of Multi-tone-Booster is indicated by « MTB » coupled with a shaped line showing when to employ the MTB and how to move the control knee lever.

Examples

I — TUTTI - Bass 16' and all white stops up to Strings 4'
Reverb, Long - Vibrato, Heavy, Fast - Pedal f.

II — HORN - Multi-tone-Booster, 16

without pushing on the control knee lever.

III — CARILLON - Multi-tone-Booster, 4' - Reverb, Long - Pedal p

— The control knee lever must be pushed before pressing the key and released as soon as the sound is heard.

IV — CONCERT ORGAN - Multi-tone-Booster, 16', 8', 4' - Vibrato, Heavy, Fast - Pedal f
 Please note in the introduction the sharp stresses obtained by pushing the knee lever.

M. T. B

M.D.

Ms.

Ped.

M. T. B. continued

ecc

ecc

ecc

ecc

V — OBOE - Oboe 8' - Vibrato

VI — STRINGS - Strings 8', Strings 4' - Vibrato, Heavy, Fast - Reverb

M. D.

M. S.

VII — JAZZ ORGAN - Multi-tone-Booster, 16' 8' - Pedal f
Control knee lever always pushed.

M. T. B.

STACCATO

MANUAL BASS

VIII — TRUMPET - Trumpet 8' - Vibrato - Reverb

IX — CHURCH ORGAN - Bass 16' - Flute 4' - Pedal f

Ped. | 0

X — HAWAIIAN MELODY - Multi-tone-Booster, 4 - Vibrato, Heavy, Fast - Reverb - Pedal p
 The change of tone is obtained by pushing slightly on the control knee lever.

XI — BASS - Strings 16' - Strings 4' - Vibrato, Fast - Reverb - Pedal f

Musical score for XI - Bass - Strings 16' - Strings 4' - Vibrato, Fast - Reverb - Pedal f. The score consists of three staves: Treble, Middle, and Bass. The Treble staff has a melodic line with vibrato and fast vibrato markings. The Middle and Bass staves have accompaniment with vibrato and fast vibrato markings.

Musical score for XI - Bass - Strings 16' - Strings 4' - Vibrato, Fast - Reverb - Pedal f. The score consists of three staves: Treble, Middle, and Bass. The Treble staff has a melodic line with vibrato and fast vibrato markings. The Middle and Bass staves have accompaniment with vibrato and fast vibrato markings.

XII — CELLO - Multi-tone-Booster, 16' - Vibrato - Pedal p

The expressivity of the melody is obtained by pushing softly on the control knee lever, which is released when playing chords.

M. T. B.

Musical score for XII - Cello - Multi-tone-Booster, 16' - Vibrato - Pedal p. The score consists of three staves: Treble, Middle, and Bass. The Treble staff has a melodic line with vibrato and fast vibrato markings. The Middle and Bass staves have accompaniment with vibrato and fast vibrato markings.

XIII — MELODIOUS ORGAN - Multi-tone-Booster, 16', 8' - Vibrato - Pedal mf
or Bass 16' - Oboe 8' - Vibrato - Pedal mf

XIV — BRASS SECTION - Multi-tone-Booster, 16' - Pedal mf

XVI — MANUAL BASS - Multi-tone-Booster, 16', 8' - Reverb - Pedal f
Control knee lever always pushed

M. T. B.

The musical score consists of four systems, each with a piano (treble clef) and bass (bass clef) staff. The key signature is one sharp (F#) and the time signature is common time (C). The first system includes the handwritten text "MANUAL BASS" in the bass staff. The piano part features a melodic line with various accidentals and dynamics. The bass part provides a steady accompaniment with quarter and eighth notes. The fourth system includes a dashed line above the piano staff with the number "8" above it, indicating an 8-measure rest. The bass part in the fourth system has a "2" written below it, indicating a 2-measure rest.

XVII — TWO MANUAL ORGAN - Multi-tone-Booster, 16', 8', 4' - Reverb - Vibrato, Heavy, Fast - Pedal f

To obtain the contrast of tones, imitating the two manuals, use control knee lever as showed.

The image displays a handwritten musical score for a two-manual organ. It consists of three systems of staves, each with three staves (treble, middle, and bass clefs). The first system is labeled 'M.T. 6' in the top left. The notation includes various notes, rests, and dynamic markings such as 'f' (forte). There are also some handwritten annotations and symbols, including a circled '7' and some scribbles. The score is divided into measures by vertical bar lines. The overall style is that of a working manuscript or a composer's sketch.

Some explanation on schematics

SE - 10: Operating schematics

The schematics show the general principles, which are the following ones :

a) The signals are originated by oscillators G 10. Each one of them produces all the frequencies of same name (i. e. G 10 - C produces all Cs, G 10 - A produces all As, etc.).

b) The Vibrato is obtained operating directly on the oscillators of the various notes.

c) Every key has three contacts: the lower one operates on 16' frequencies, the medium one operates on 8' frequencies, the upper one operates on 4' frequencies.

d) All the contacts related to every octave, C - B, for 16' or 8' or 4', have common ends for connection to filters; these ends are represented by common bars and each one them is connected by means of a shielded cable to a series of switches operated by the MTB ON/OFF tab.

e) The MTB switches are meant to convey the signals to the tone stops when the MTB tab is in OFF position. In this case, inserting one tone stop (or several stops at the same time), the signals are conveyed to filter FD 10, where part of the signals is blended and then conveyed to filter FA 10 for the formation of the sharp tones (oboe, trumpet, strings).

The signals proceeding from filter FA 10 return to the tone stops and through the inserted tab, they are conveyed to the L.F. preamplifier. At the same time, in the filter FD 10, an attenuation of the higher harmonics, interesting the signals conveyed to the low pass filter, takes place, giving way to an output of sweet tune signals, ready to be conveyed, through the special tone stops (bass, flute), to the L. F. preamplifier.

f) When MTB is inserted, the switches convey the signals proceeding from the common bars to filter FD 10 through MTB stops (16' - 8' - 4'). The total blending of signals in FD 10 is then conveyed directly to the special in take of MTB, where the filtered signals, available at the outlet No. 10 of FD 10 (sweet tune) are conveyed to the outlet of MTB.

The L.F. preamplifier is connected only to the outlet of MTB and amplifies therefore only the signals conveyed to this device through 16' - 8' - 4' stops (Green tabs) with the exclusion of the tone stops (white tabs).

g) When « All Booster » is inserted, the signals proceeding from the common bars are permanently conveyed, at constant level, to filter FD-10 through MTB stops 16', 8', 4'.

SE - 11: Simplified keying schematics for Treble and Manual Bass.

It shows the wiring of the various notes, making reference to one note only (A).

SE - 12: Circuit diagram of Treble registers

The drawing reports the connections interesting the tone stops and the connections between the registers and the filters.

In the left top corner, framed in a square, it is shown the schematic diagram of MTB device.

SE - 13: Circuit diagram of Pedal registers, Vibrato and Reverb.

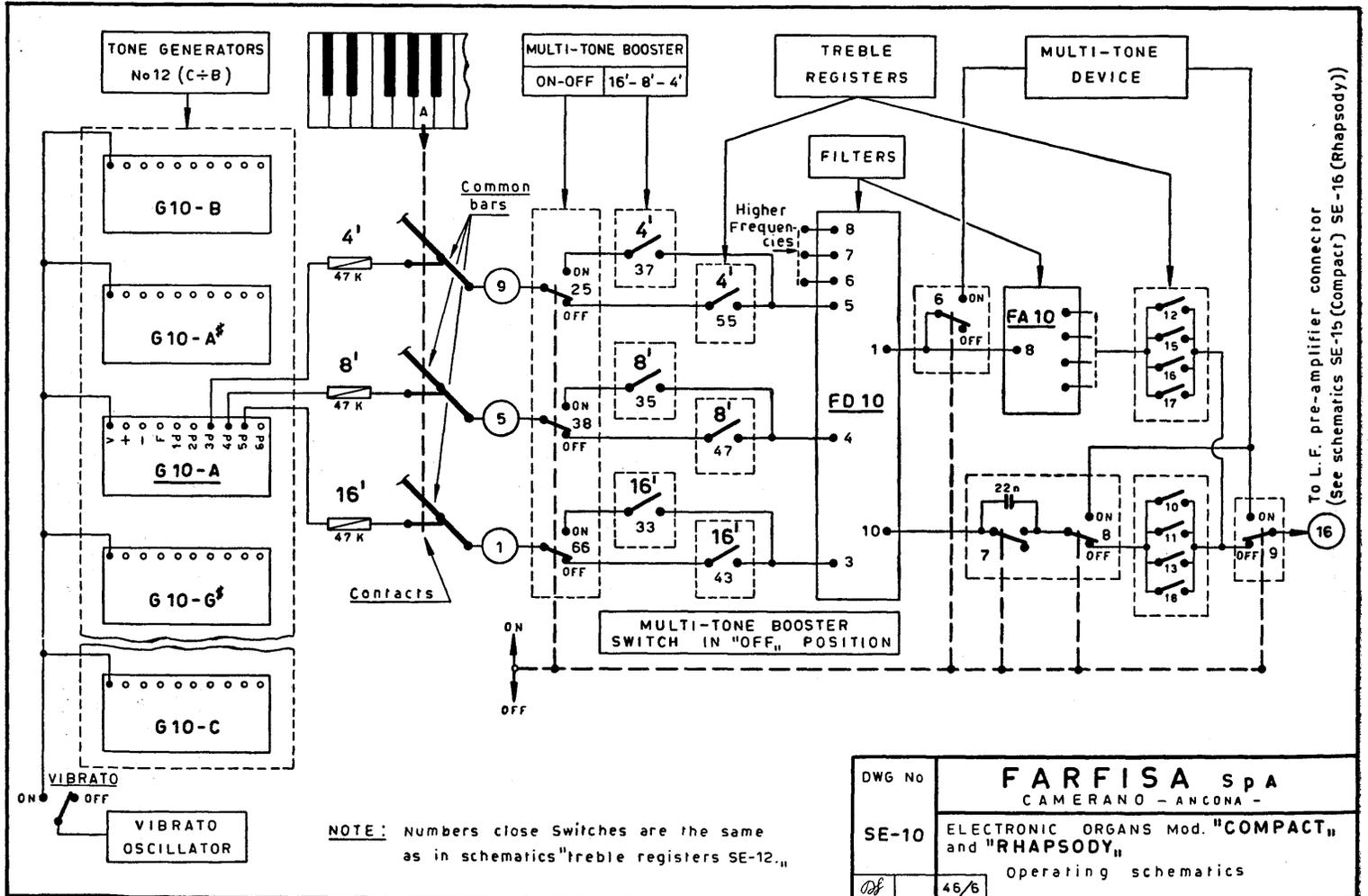
The drawing showing the Manual Bass and the Pedalboard stops indicates the potentiometers for the volume regulation of single notes, while the drawing related to Vibrato and Reverb shows Potentiometer R 536 for the regulation of the time of Reverberation.

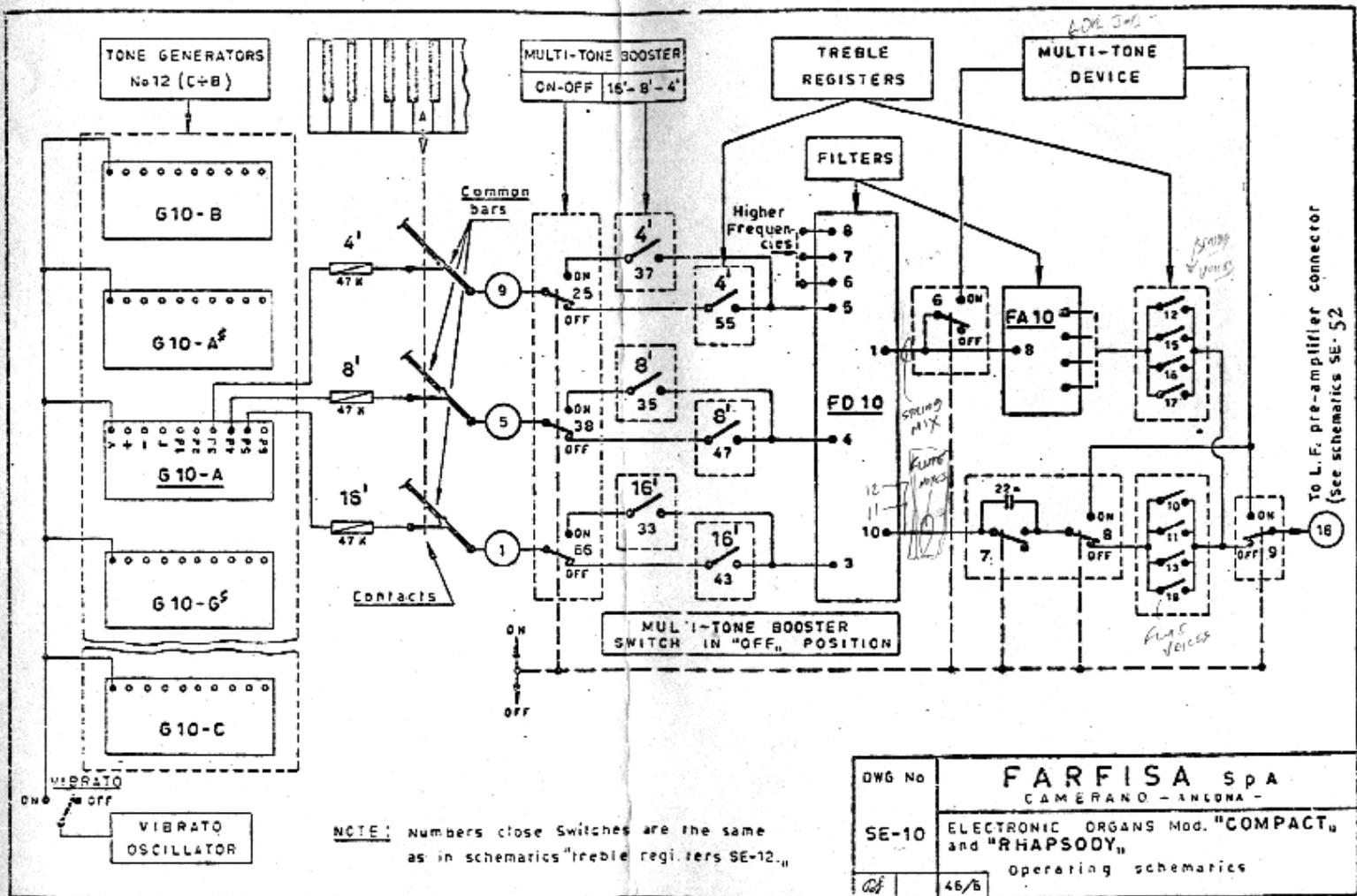
SE - 14: Schematics of Master oscillators (G 10), filters (FD 10), (FA 10), Vibrato circuit and Pedal amplifier (PS 10).

The schematics show the values of all components assembled in the printed circuits for repair purpose.

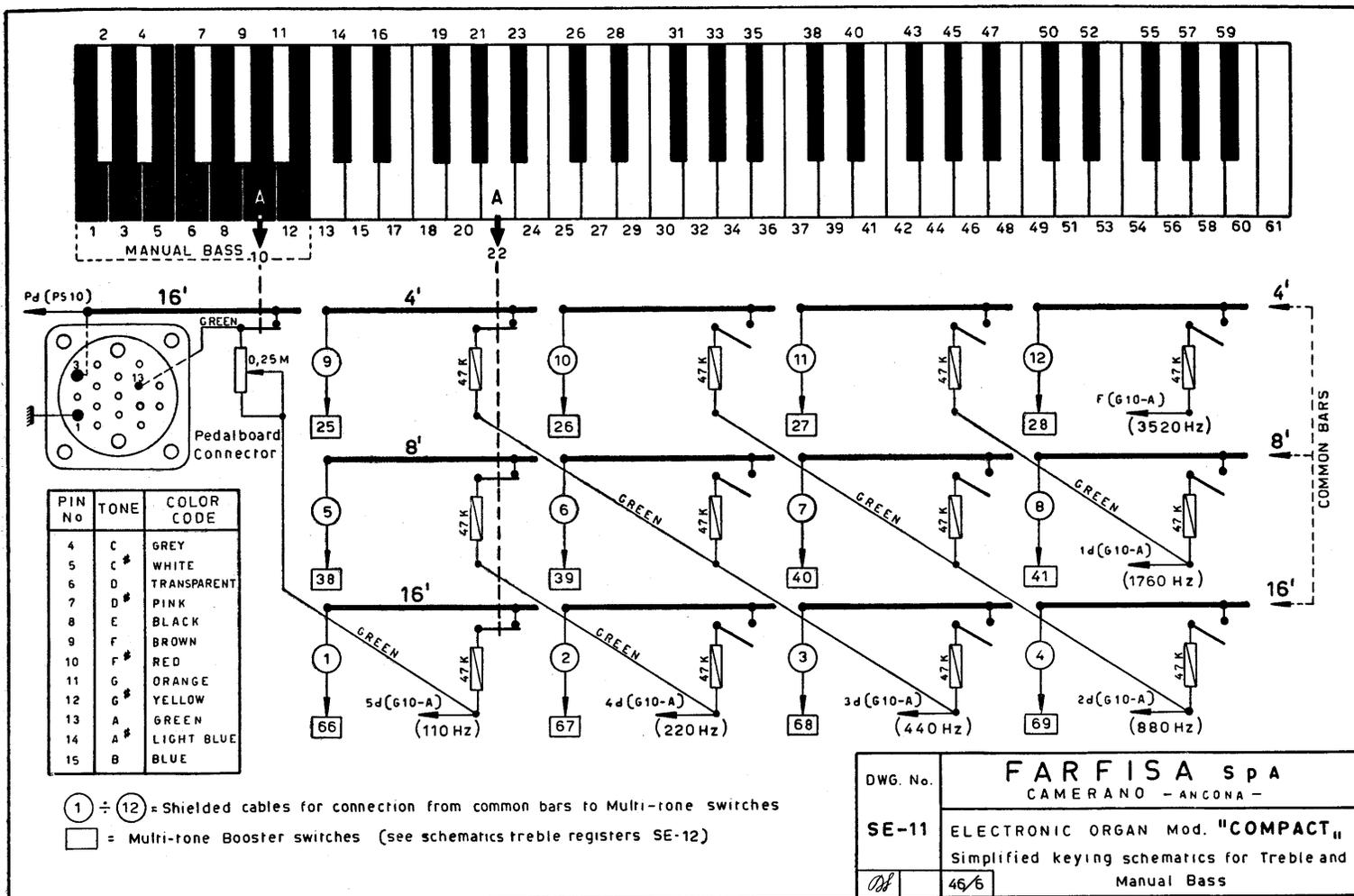
SE - 15: Circuit diagram of Power Supply, Preamplifier and Reverb.

Complete electric schematis, showing the voltage rating and the features of electric components. Almost in the centre of the page it is indicated the Swell Pedal photoresistor operating as volume control.





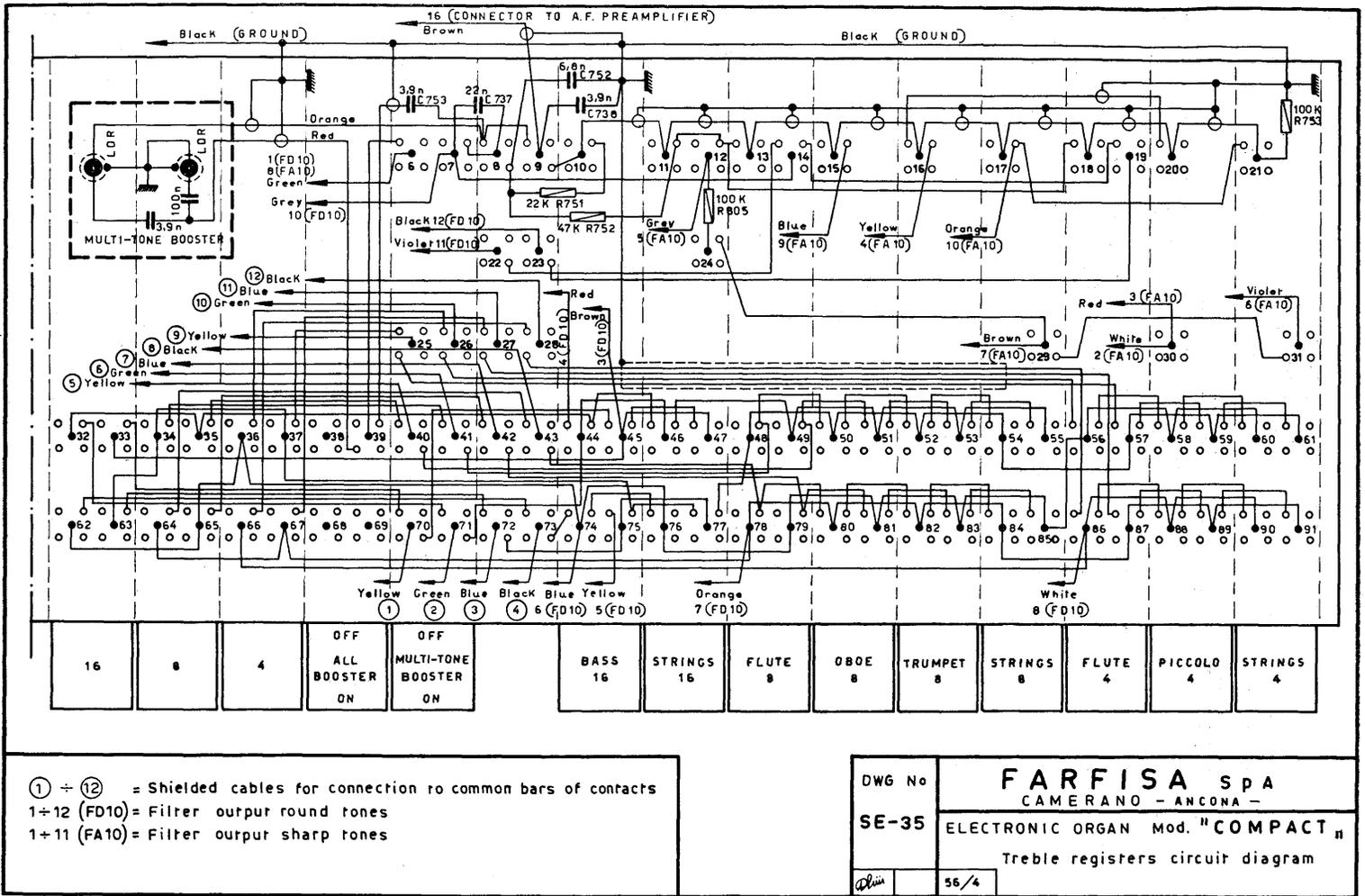
CC 23

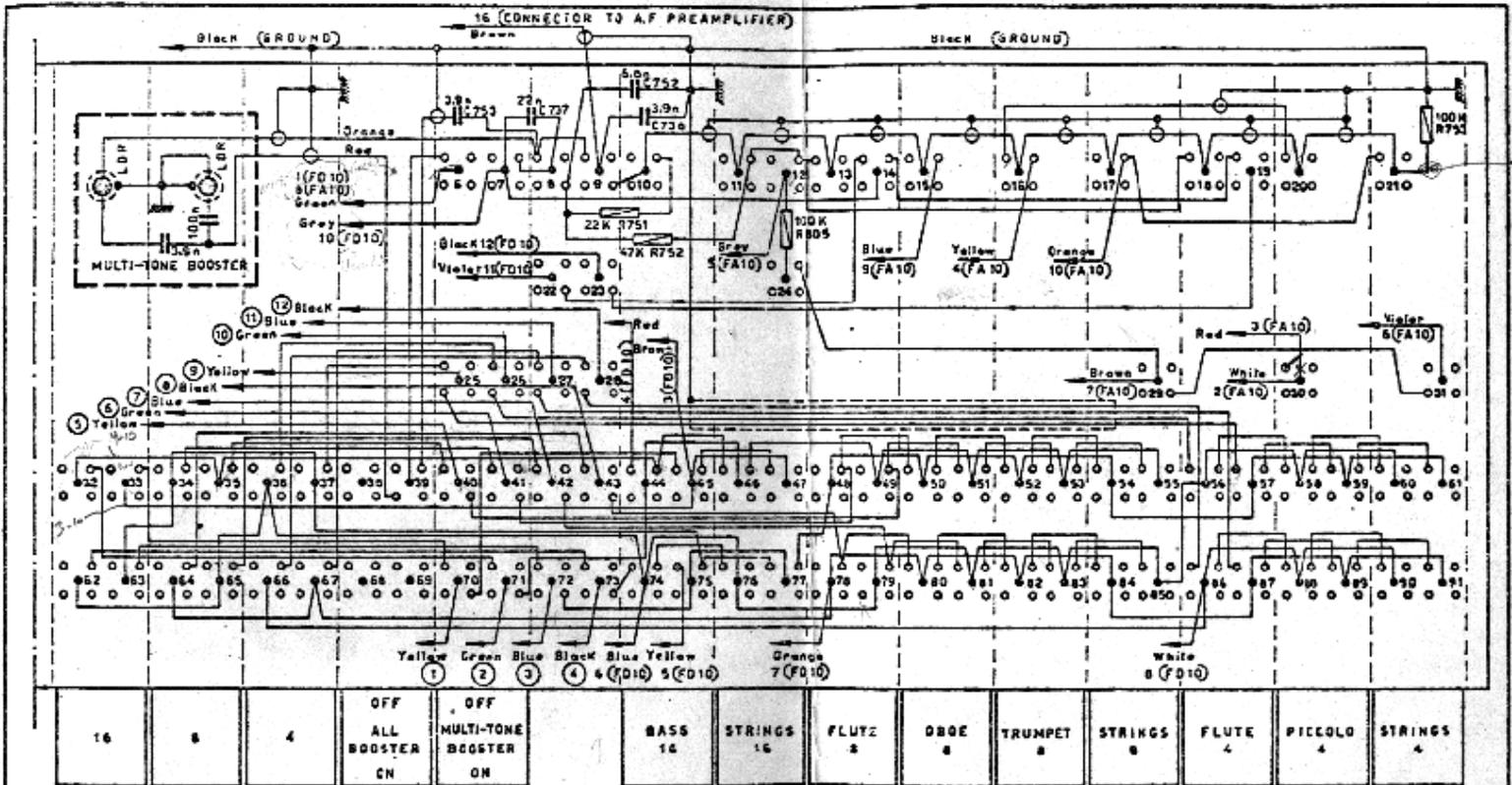


PIN No	TONE	COLOR CODE
4	C	GREY
5	C #	WHITE
6	D	TRANSPARENT
7	D #	PINK
8	E	BLACK
9	F	BROWN
10	F #	RED
11	G	ORANGE
12	G #	YELLOW
13	A	GREEN
14	A #	LIGHT BLUE
15	B	BLUE

① ÷ ⑫ = Shielded cables for connection from common bars to Multi-tone switches
 □ = Multi-tone Booster switches (see schematics treble registers SE-12)

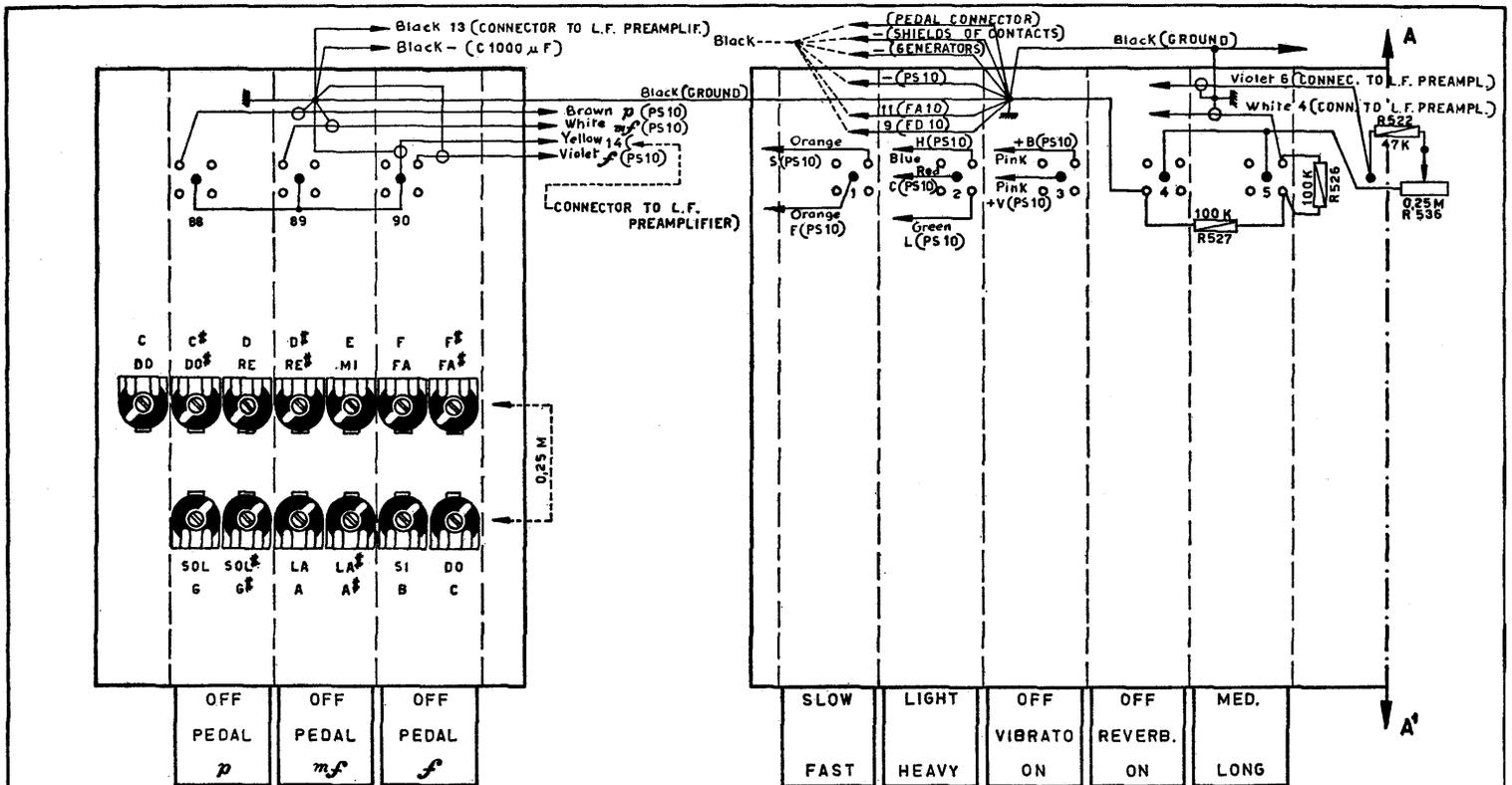
DWG. No.	FARFISA spa CAMERANO - ANCONA -
SE-11	ELECTRONIC ORGAN Mod. "COMPACT"
	Simplified keying schematics for Treble and Manual Bass
<i>df</i>	46/6





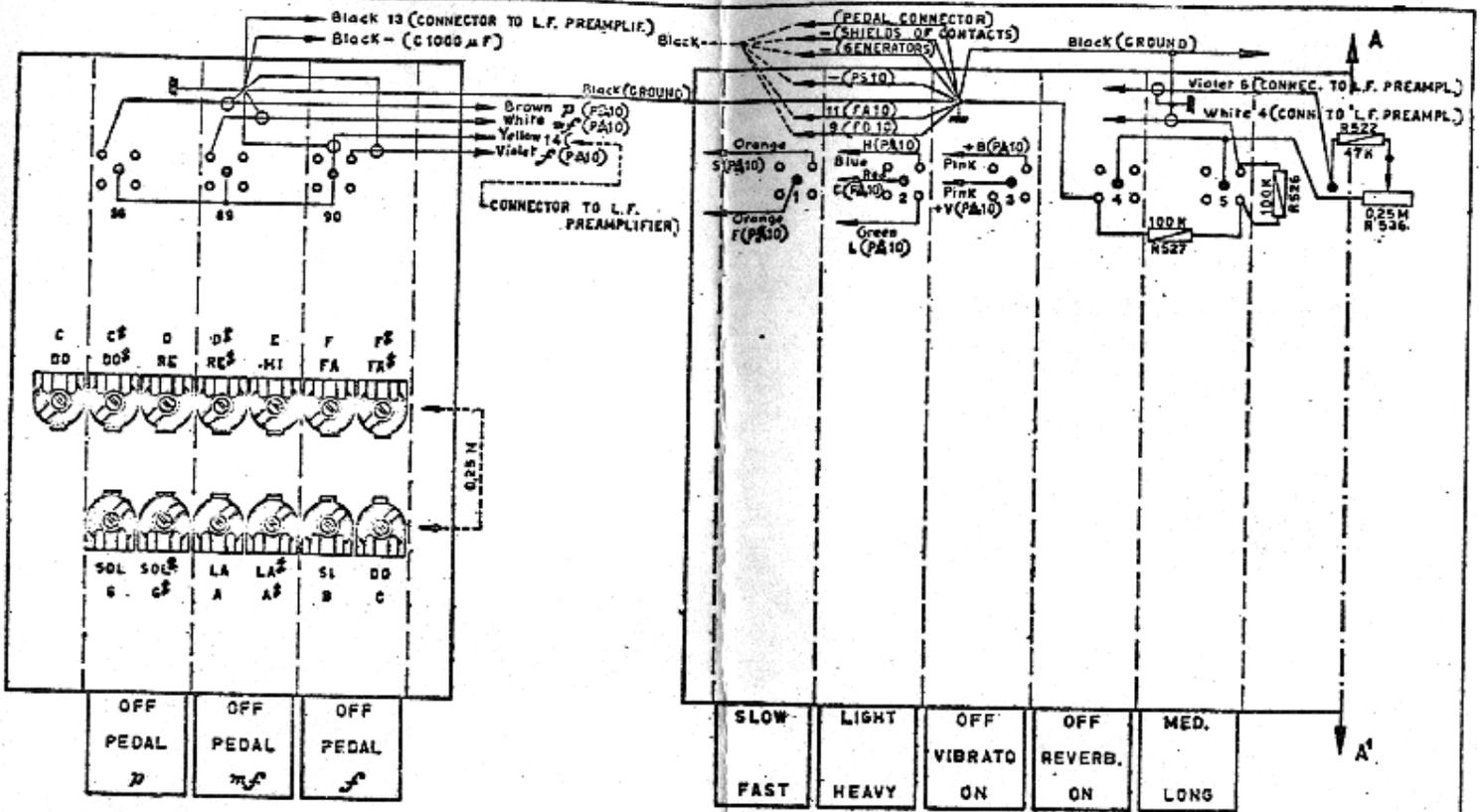
① ÷ ⑫ = Shielded cables for connection to common bars of contacts
 1+12 (FD10) = Filter output round tones
 1+11 (FA10) = Filter output sharp tones

DWG No	FARFISA spa CAMERANO - ANCONA -
SE-12	ELECTRONIC ORGAN Mod. "COMPACT" Treble registers circuit diagram
56/4	



(PS 10) = Printed circuit "Vibrato" and amplifier of "Pedal"

DWG No	FARFISA spa CAMERANO - ANCONA -
SE-13	ELECTRONIC ORGANS Mod. "COMPACT" and "RHAPSODY"
	Circuit diagram of Pedal registers, Vibrato and Reverb.
46/6	

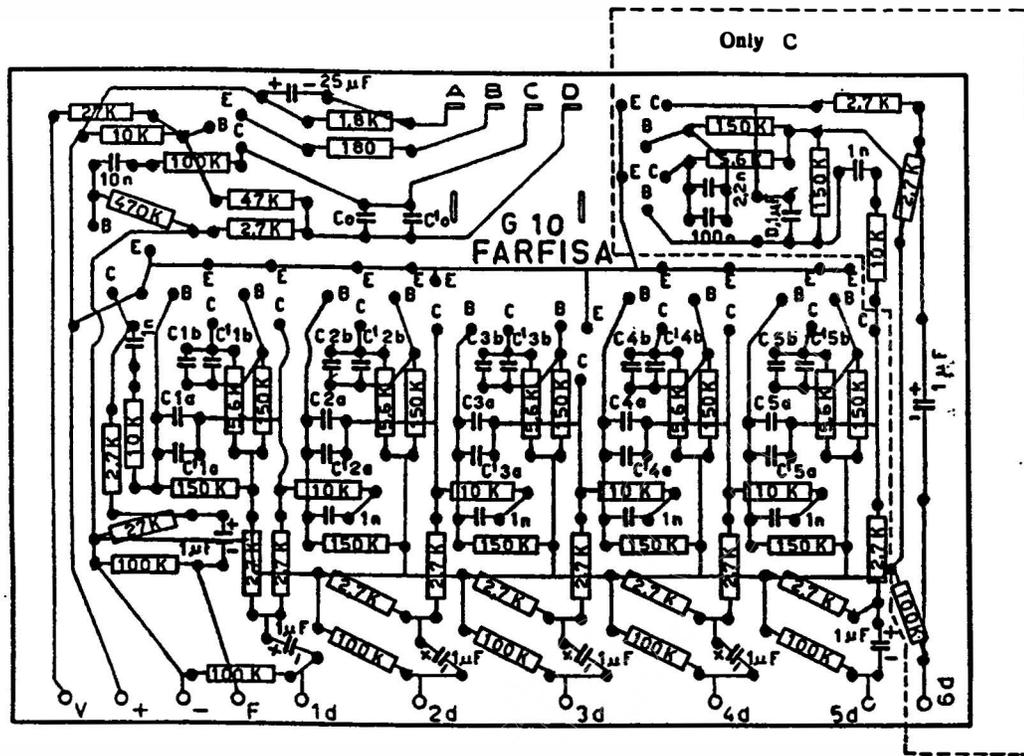


(PA10) = Printed circuit "Vibrato" and amplifier of "Pedal."

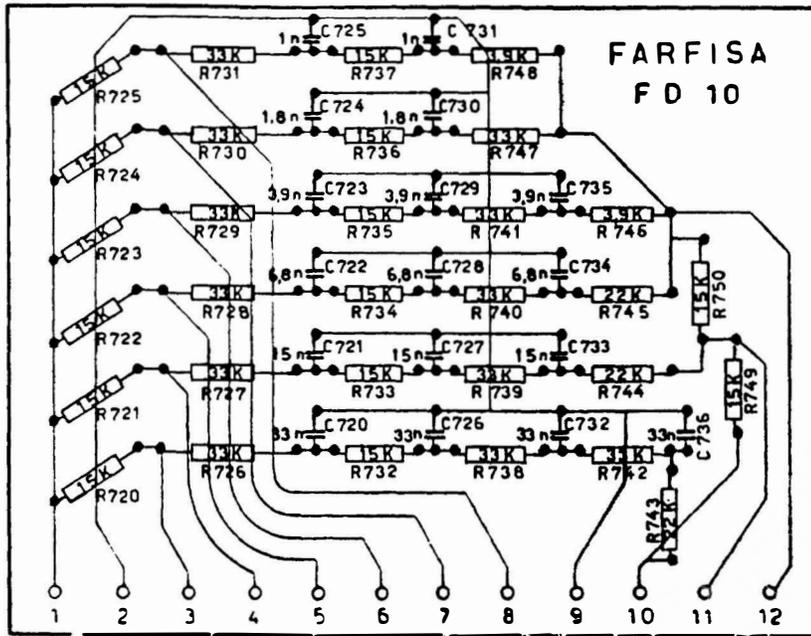
DWG No	FARFISA s.p.a
	CAMERANO - ANCONA -
SE-13	ELECTRONIC ORGANS Mod. "COMPACT"
	Circuit diagram of Pedal registers, Vibrato and Reverb.
45/5	

PRINTED CIRCUIT G 10 - TONE GENERATOR C ÷ B

DWG No SE - 14 46 / 6

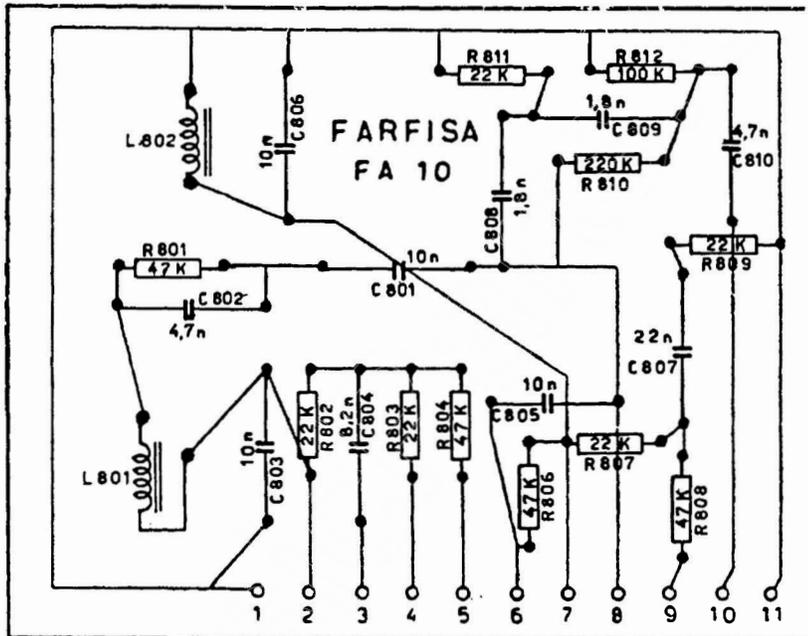


	C ₀	C' ₀	C _{1a+} C' _{1a}	C _{1b+} C' _{1b}	C _{2a+} C' _{2a}	C _{2b+} C' _{2b}	C _{3a+} C' _{3a}	C _{3b+} C' _{3b}	C _{4a+} C' _{4a}	C _{4b+} C' _{4b}	C _{5a+} C' _{5a}	C _{5b+} C' _{5b}
C DO	5,6 n	0,82 n	3,3 n	3,9 n	6,6 n	8,2 n	13,6 n	18 n	28 n	33 n	54 n	68 n
C # DO	15 n	—	6,5 n	8,2 n	13,4 n	18 n	27 n	33 n	52 n	68 n	104 n	120 n
D RE	12 n	1,5 n	6 n	6,8 n	12 n	15 n	25 n	33 n	50 n	56 n	98 n	120 n
D # RE	12 n	—	5,7 n	6,8 n	11,3 n	15 n	23 n	27 n	46 n	56 n	92 n	120 n
E MI	8,2 n	1 n	5,5 n	6,8 n	11 n	15 n	22 n	27 n	43 n	56 n	84 n	100 n
F FA	8,2 n	—	5 n	5,6 n	10 n	12 n	21 n	27 n	41 n	47 n	82 n	100 n
F # FA	6,8 n	1 n	4,6 n	5,6 n	9,2 n	12 n	18 n	22 n	37 n	47 n	74 n	100 n
G SOL	5,6 n	0,82 n	4,3 n	5,6 n	8,6 n	10 n	18 n	22 n	36 n	47 n	72 n	82 n
G # SOL	10 n	—	3,8 n	4,7 n	8,2 n	10 n	17 n	22 n	35 n	47 n	69 n	82 n
A LA	8,2 n	1,5 n	3,6 n	4,7 n	7,8 n	10 n	16 n	22 n	33 n	39 n	64 n	82 n
A # LA	8,2 n	—	3,4 n	3,9 n	7,2 n	8,2 n	16 n	22 n	29 n	39 n	59 n	68 n
B SI	6,8 n	1 n	3,1 n	3,9 n	6,2 n	8,2 n	13,5 n	18 n	28 n	33 n	56 n	68 n

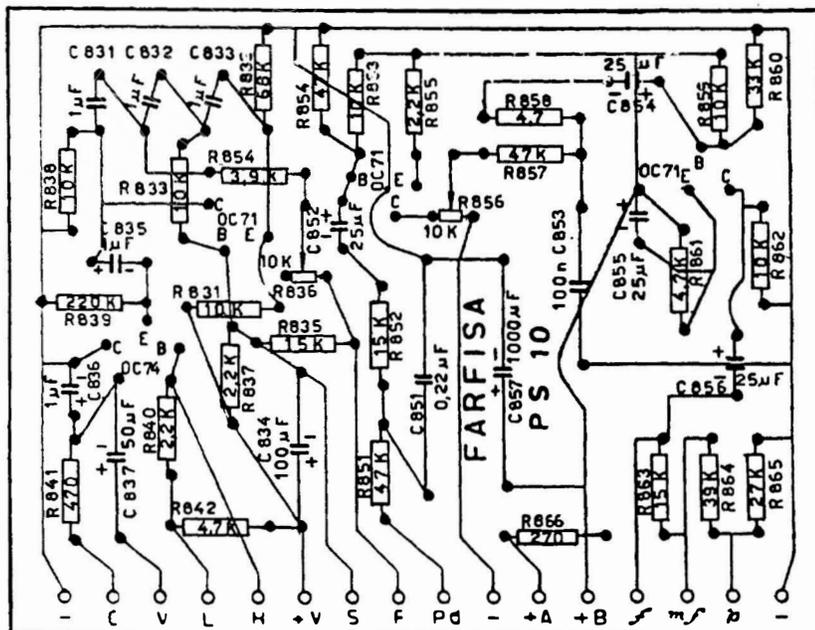


SE - 14

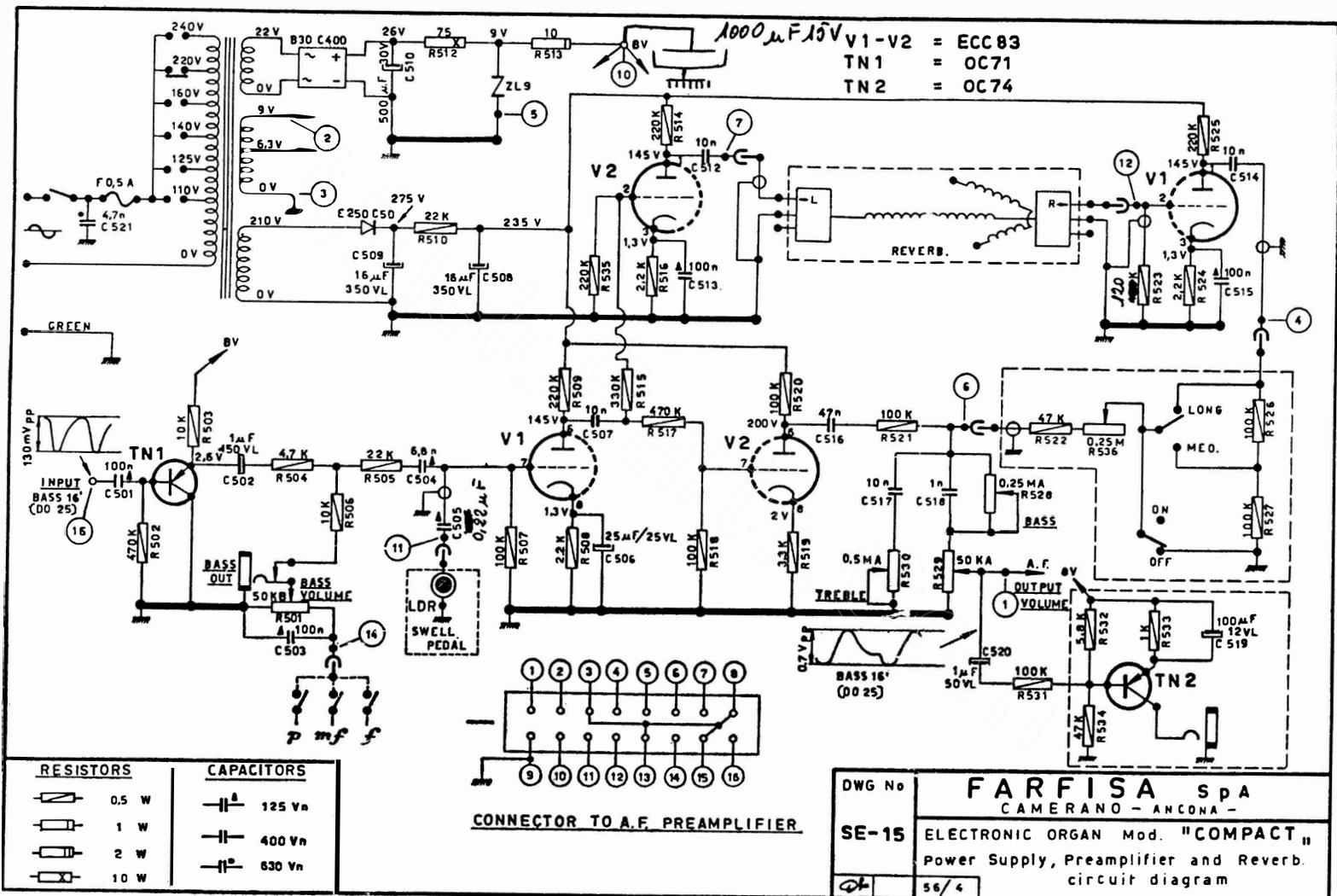
Printed circuit FD 10
round tones filter

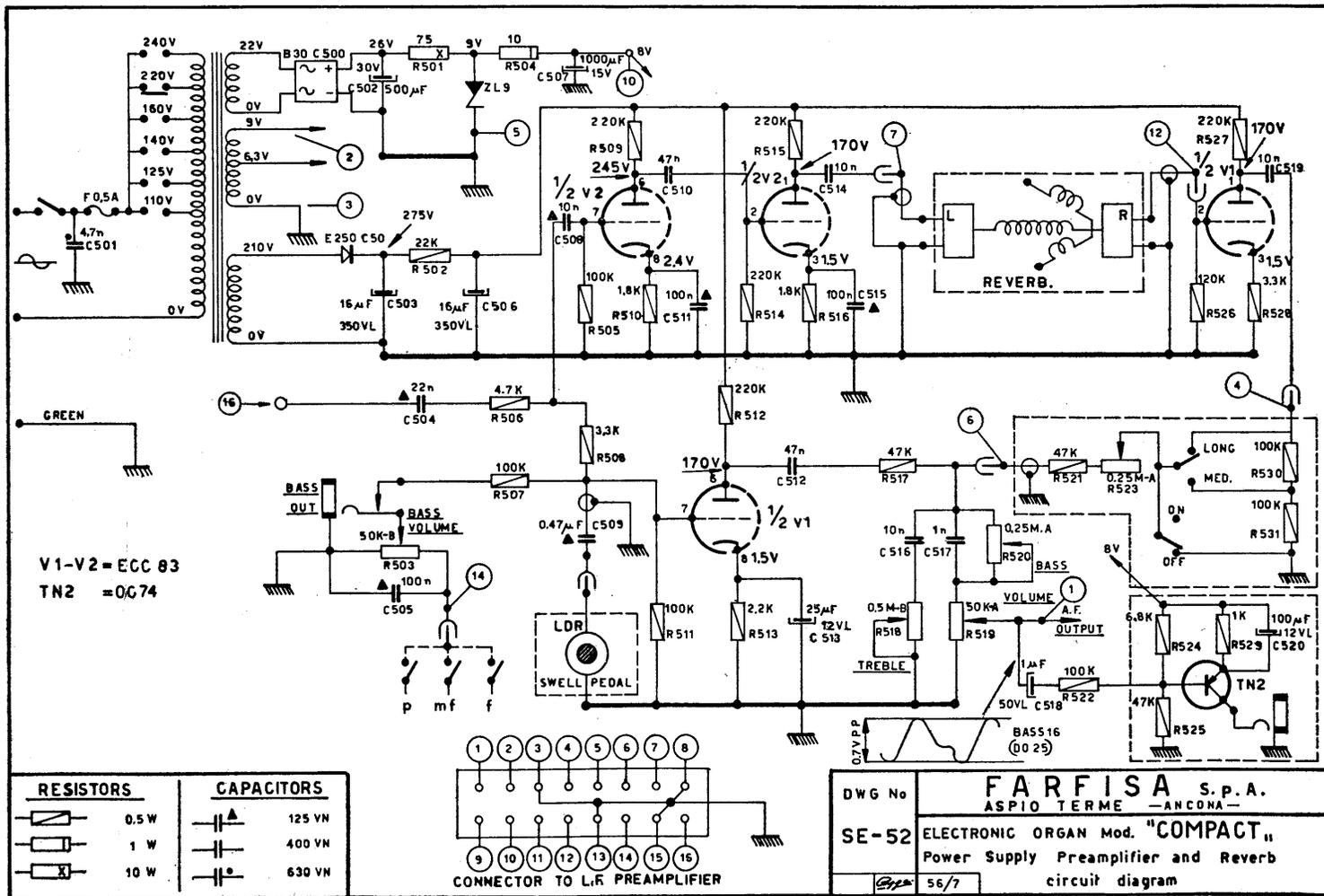


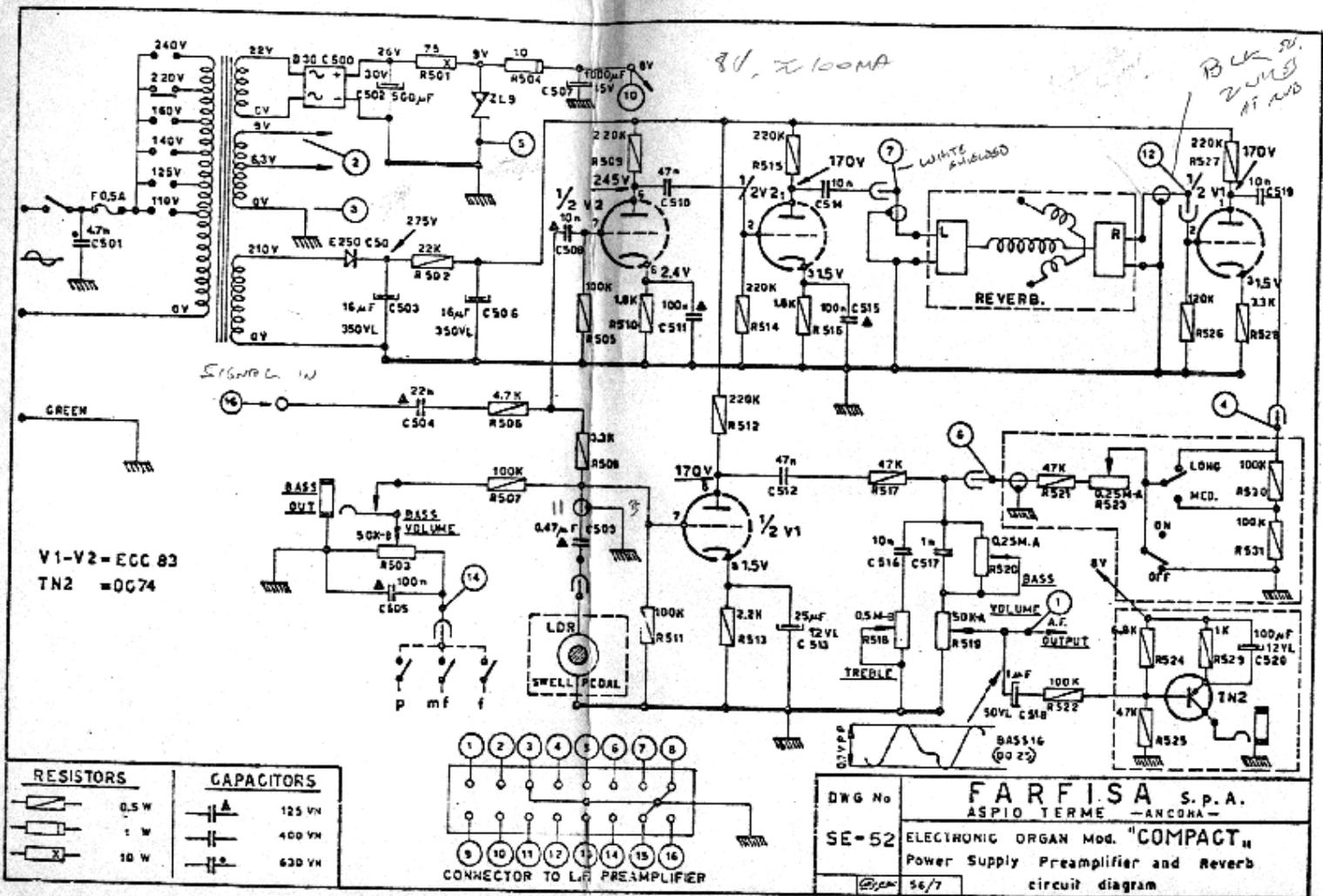
Printed circuit FA 10
sharp tones filter

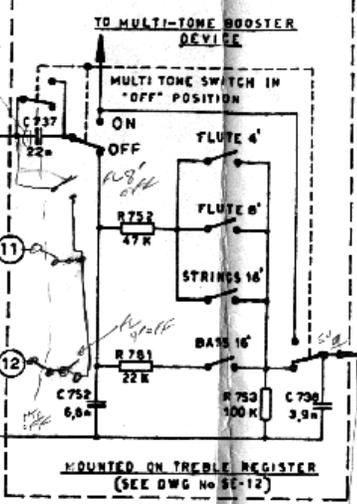
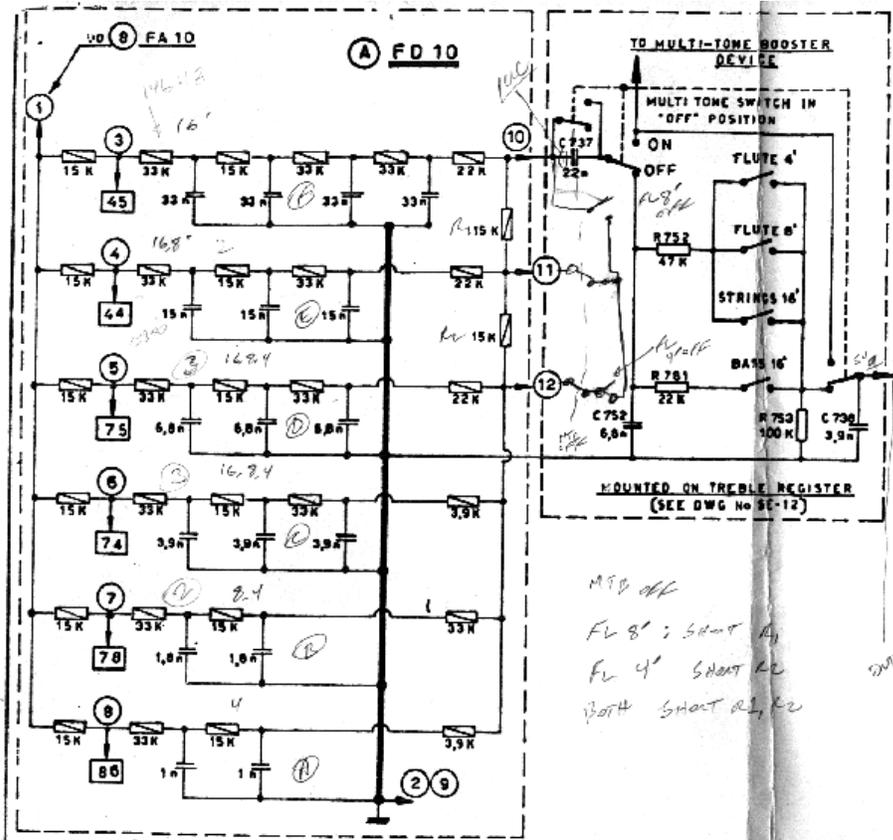


Printed circuit PS 10
vibrato and amplifier
of pedal

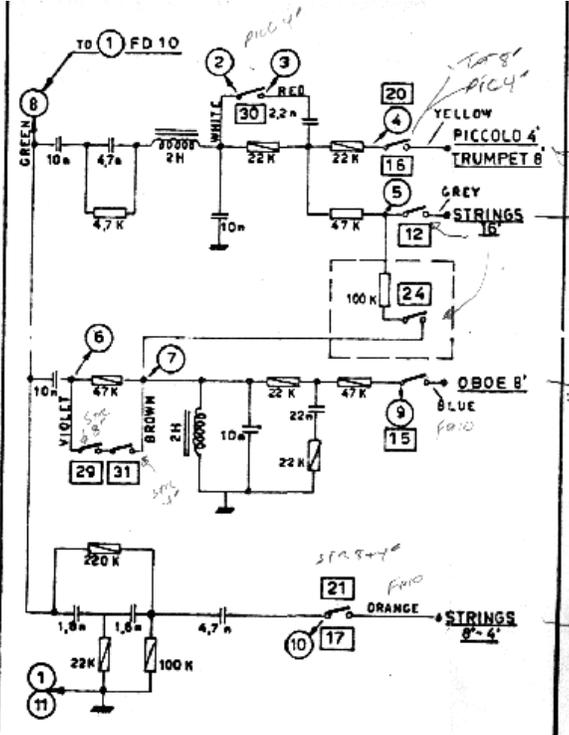






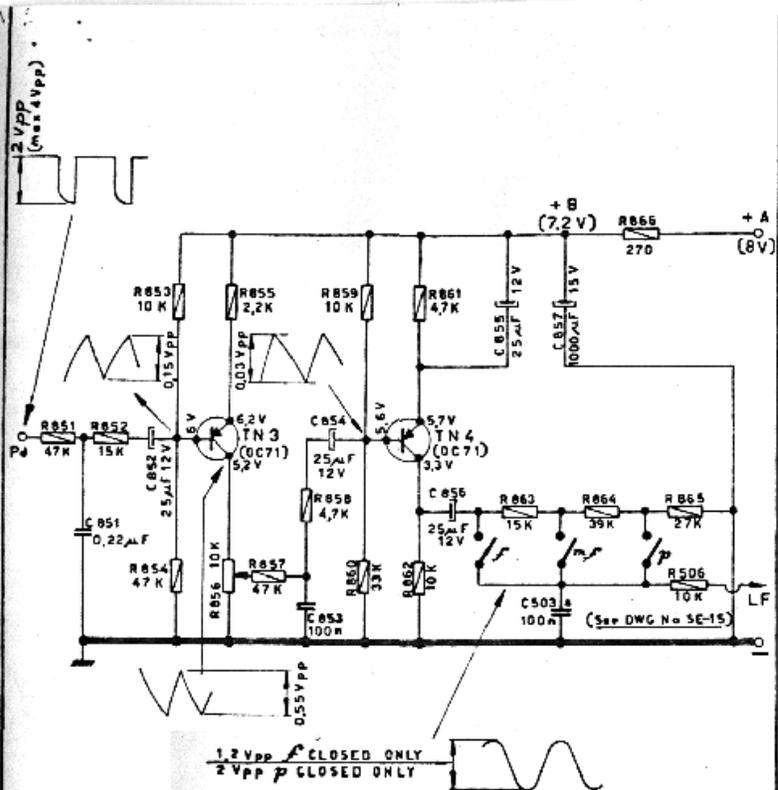


MSB off
 Fl 8' SHORT R1
 Fl 4' SHORT R2
 BOTH SHORT R1, R2



SM 56 CC 23

DWG No	FARFISA s.p.a CAMERANO-ANCONA-	
SE-26	A) Round tones filter FD 10	B) Sharp tones filter FA 10
	Circuit diagram of printed circuits	

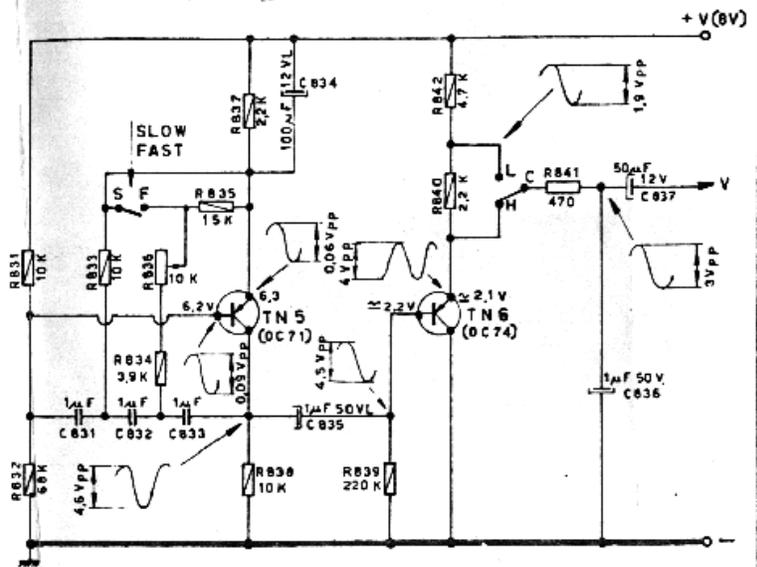


PS 10 - PEDAL AMPLIFIER

OC 71 + 21A + 24,7A

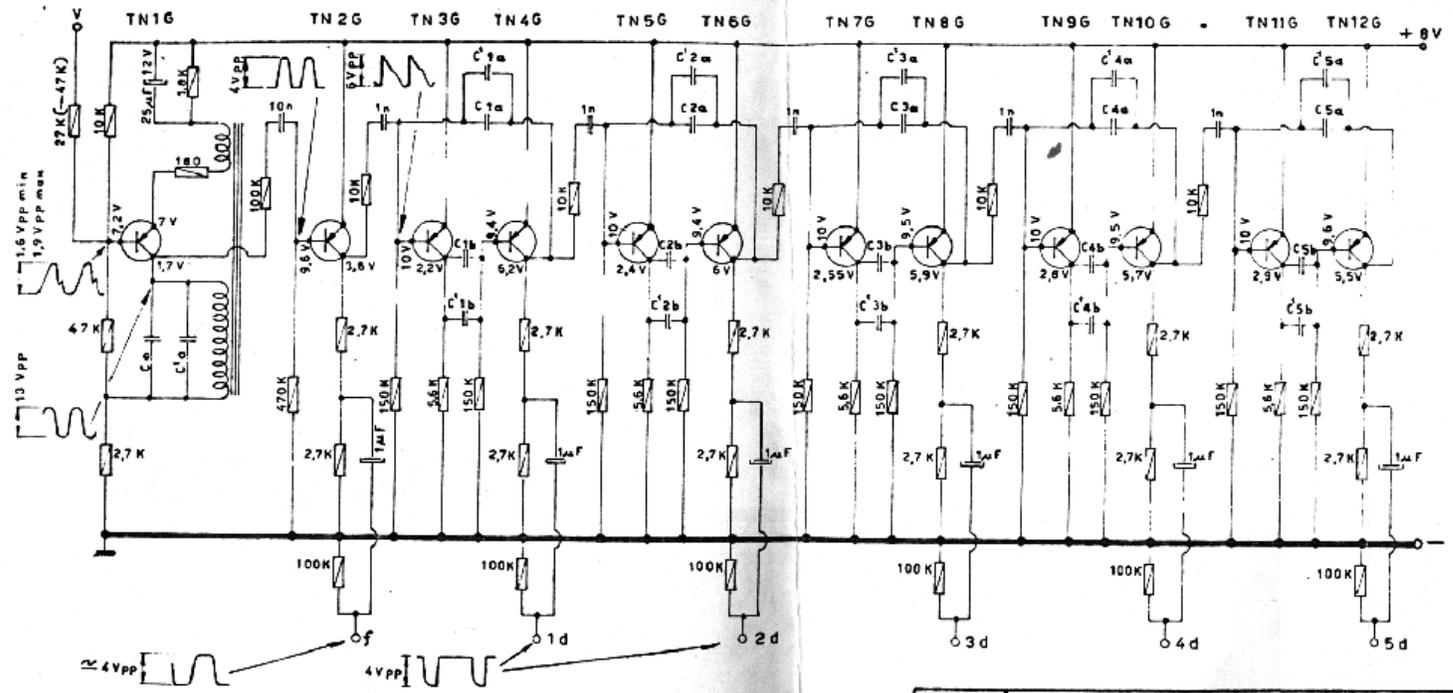
ECG-102

IMP 650mA - VCE=16V ICES=0.04A HFC=40

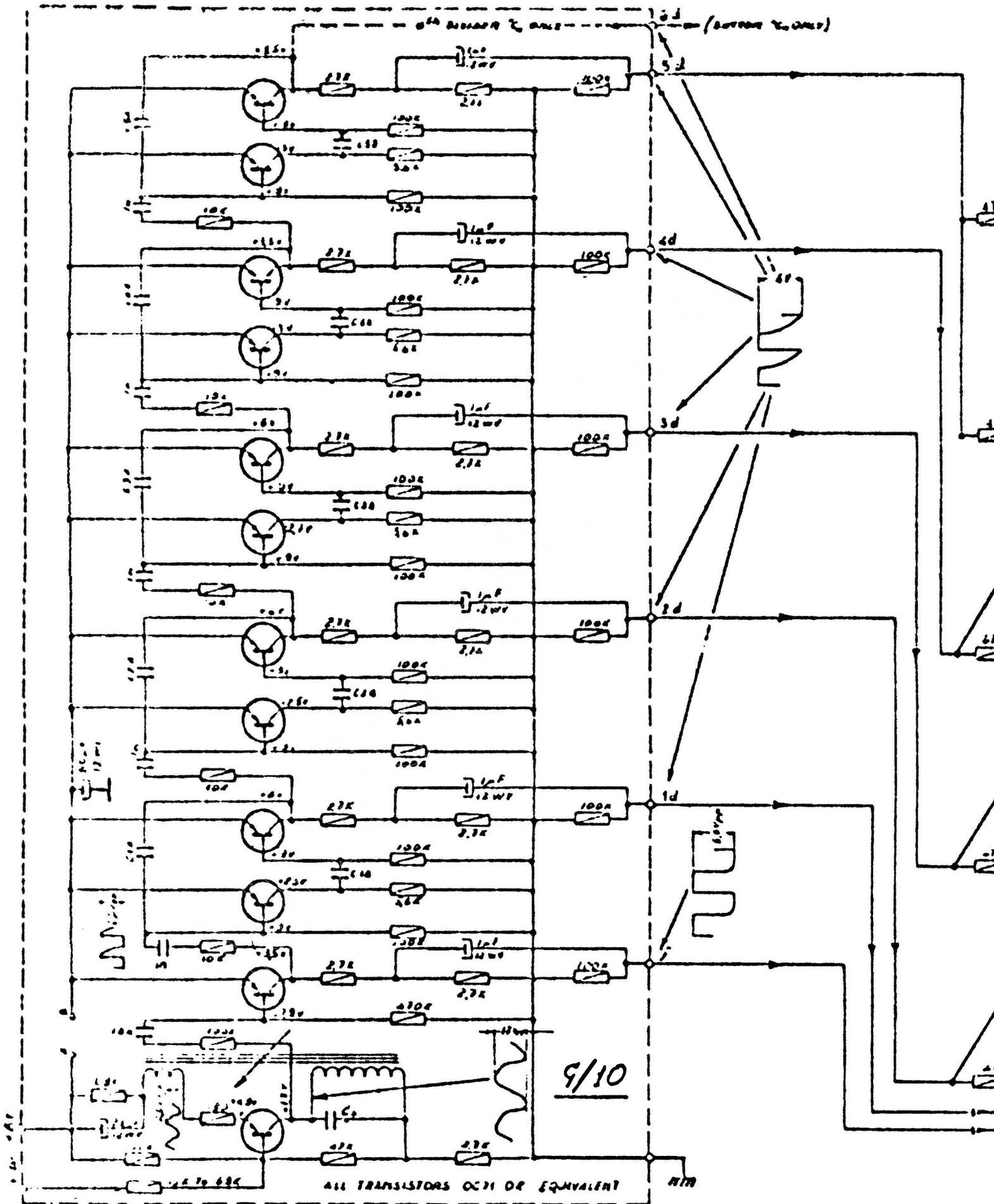


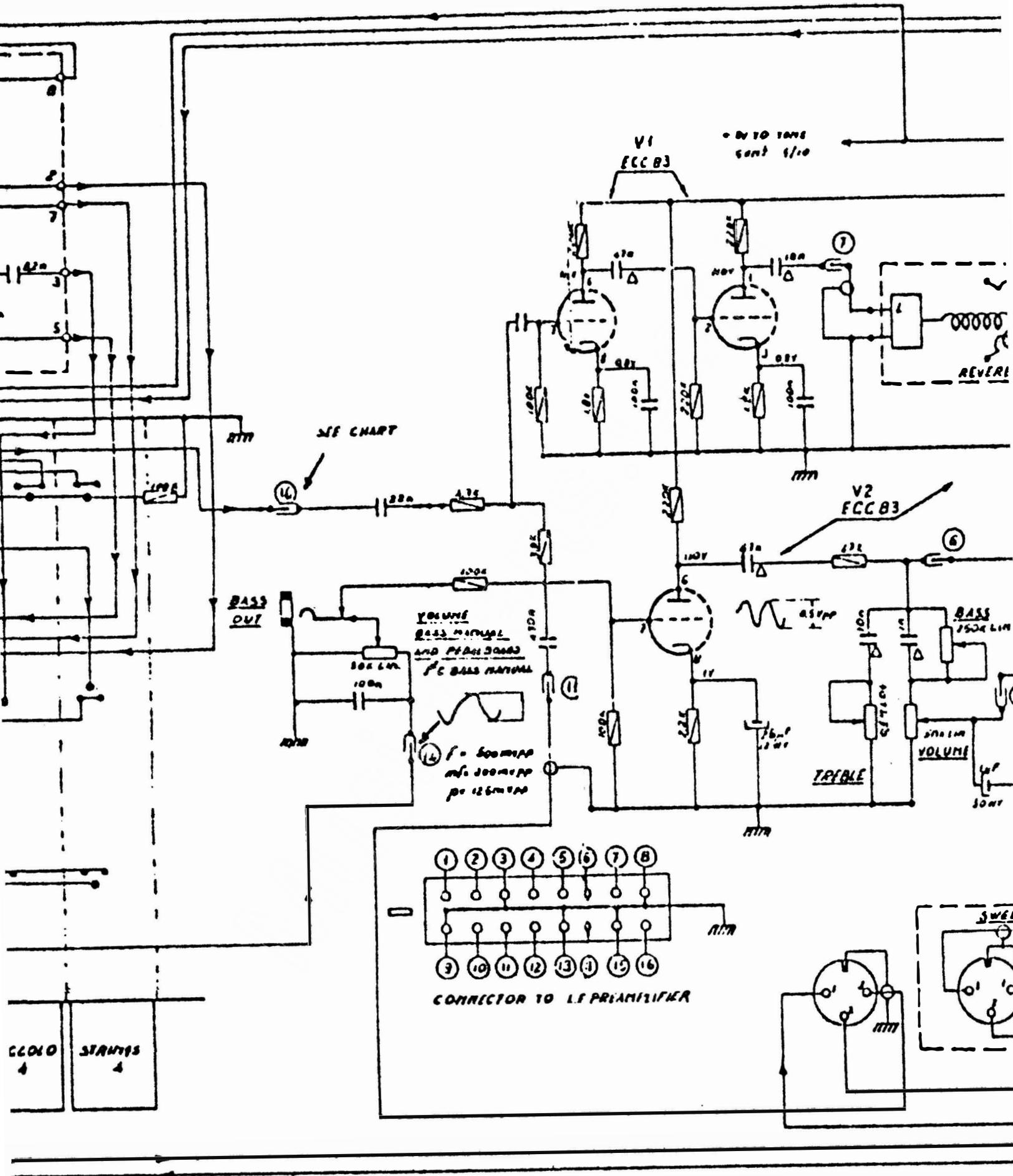
PS 10 - VIBRATO

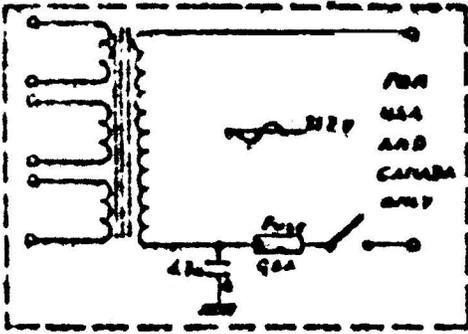
DWG No	FARFISA spA
SE-27	CAMERANO - ANCONA -
	Circuit diagram of printed circuit PS 10
1/1	46/71



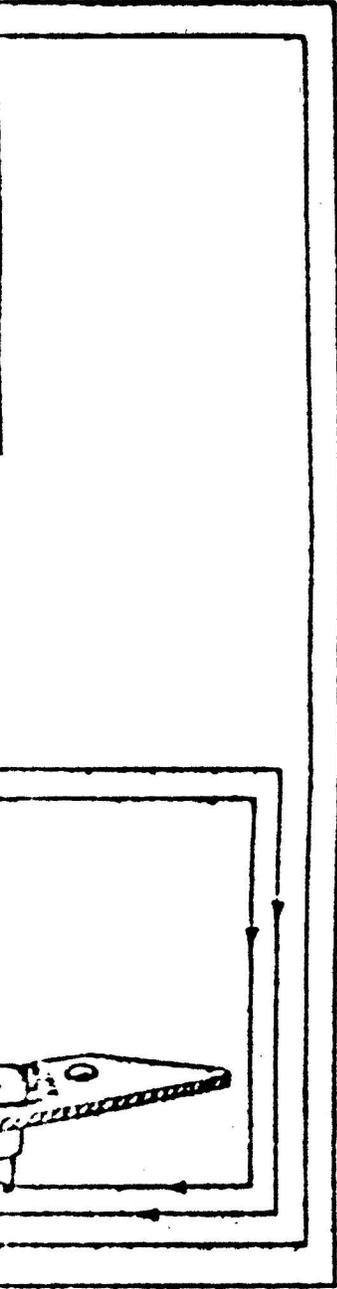
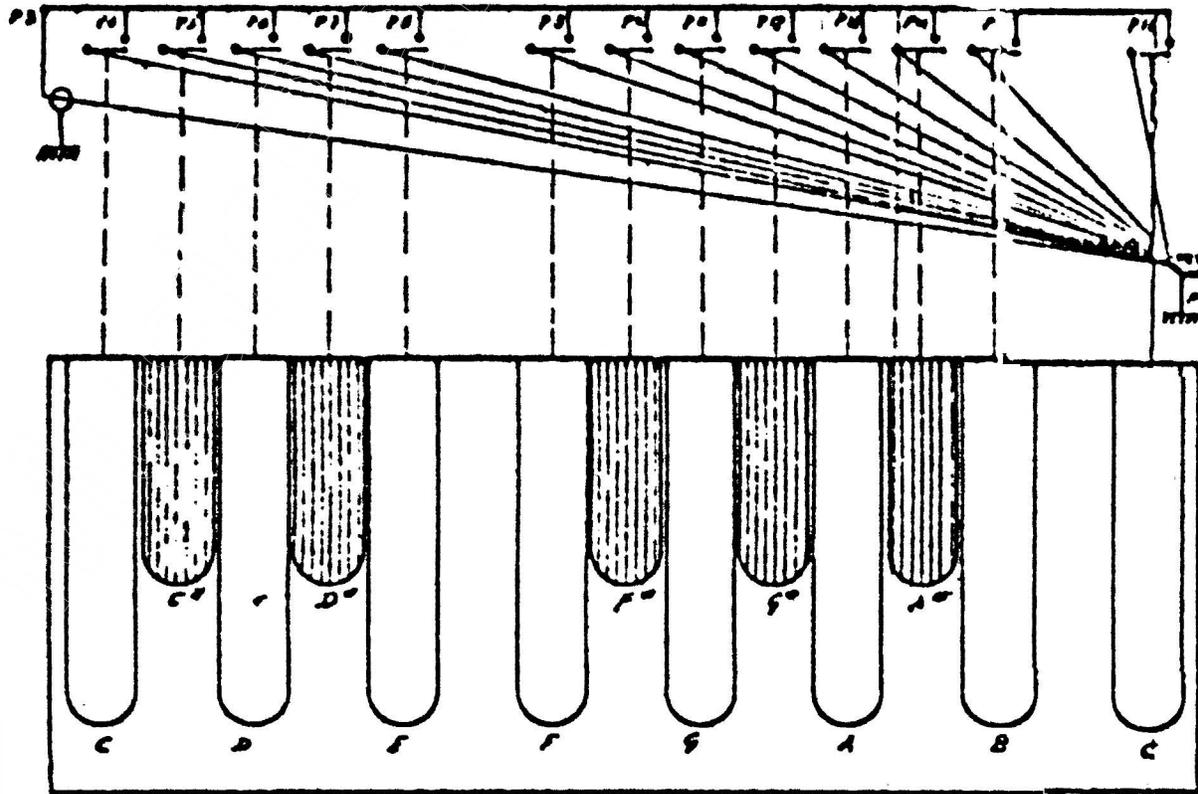
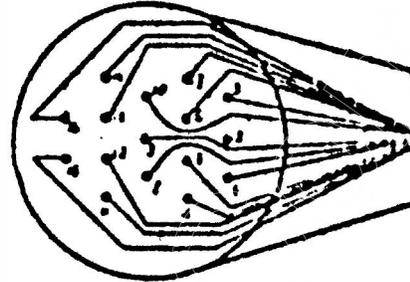
DWG No SE-28	FARFISA SpA CAMERANO-ANCONA- Printed circuit Tone generator G10 (A-LA)
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PEDALBOARD CONNECTOR (PLUG)



values of 5/10 gamma boards' diodes

		C ₁	C _{1A}	C _{1B}	C ₂	C _{2A}	C _{2B}	C ₃	C _{3A}	C _{3B}	C ₄	C _{4A}	C _{4B}	C ₅	C _{5A}	C _{5B}	C ₆	C _{6A}	C _{6B}
C	D ₀	75n	36n	60n	10n	12n	77n	27n	39n	47n	82n	100n	150n	170n					
C ^o	D ₀ ^o	10n	22n	47n	10n	27n	33n	39n	68n	82n	120n	150n							
D	R ₁	47n	82n	10n	15n	22n	33n	39n	68n	82n	120n	150n							
D ^o	R ₁ ^o	15n	22n	10n	15n	22n	33n	39n	68n	82n	120n	150n							
E	M ₁	120	48n	10n	15n	22n	27n	39n	56n	82n	120n	150n							
F	FA	10n	48n	10n	15n	18n	27n	39n	56n	68n	120n	150n							
F ^o	FA ^o	9n	48n	10n	12n	18n	27n	33n	56n	68n	100n	120n							
G	SOL	70n	36n	10n	12n	15n	22n	33n	56n	68n	100n	150n							
G ^o	SOL ^o	21n	50n	22n	12n	15n	22n	33n	47n	68n	82n	100n							
A	LA	58n	56n	82n	10n	15n	22n	33n	47n	68n	82n	100n							
A ^o	LA ^o	10n	56n	48n	10n	12n	22n	33n	47n	56n	82n	100n							
B	SI	22n	47n	48n	22n	12n	18n	27n	39n	47n	82n	100n							



WAVE FORMS OF THE VARIOUS TONES TAKEN FROM THE CONNECTOR TO L.R. PIN NO. 16 IN C WAVE SET.		PIN NO.	NOTE	COLOR CODE
STRINGS 4		4	C	GREY
PIANO 4		5	C ^o	WHITE
FLUTE 4		6	D	CAMOUFLAGE
STRINGS 8		7	D ^o	PINK
TRUMPET 8		8	E	BLACK
OBOE 8		9	E ^o	BROWN
FLUTE 8		10	F	RED
STRINGS 16		11	F ^o	ORANGE
BASS 16		12	G	YELLOW
		13	A	GREEN
		14	A ^o	LIGHT BLUE
		15	B	BLUE
		16	C	WHITE

FARFISA Combo Compact Organ

RESISTORS	CAPACITORS
= 1/2 WATT	= .125 WV
= 1 WATT	= 100 WV
= 10 WATT	= 500 WV