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HARPSICHORDS, ELECTRONIC ACCORDIONS

FARFISA P.O. BOX 204 - ANCONA (ITALY)

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### HIT IT OUT ON A FARFISA "COMPACT DUO,,

Here it is the latest sound in music. The organ leading groups have been waiting for.

This two keyboard model has big console electronic organ features as required by the most exacting and accomplished professional or soloist. The COMPACT DUO is designed to meet the requirements of the most challenging and intricate arran generits, yet still mantaining the utmost in compact portability.



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### MAIN FEATURES

- UPPER MANUAL: 49 keys -C to C-
- LOWER MANUAL: 37 keys -C to C-
- BASS MANUAL: 12 keys -C to B- which can be extended to 24 keys -C to B- including the Grey Octave.
- PEDALBOARD : 13 keys -C to C- (Optional)
- -- PHOTORESISTOR OPERATED SWELL PEDAL VOLUME CONTROL
- KNEE LEVER FOR MULTI-TONE-BOOSTER CONTROL (Farfisa Patent)
- UPPER MANUAL TONE STOPS:

Bass	16'
Strings_	16'
Flute	8'
Oboe	8'
Trumpet	8'
Strings	8'
Flute	4'
Strings	4'
2 - 2/3'	
Brilliant	

- MULTI-TONE-BOOSTER STOPS:

16' (low octave)
8' (medium octave)
4' (high octave)
2-2/3'
All-Booster
Multi-Tone-Booster On/Off (switch)

- LOWER MANUAL TONE STOPS:

Dolce 8' Principale 8' Ottava 4'

- LOWER MANUAL VOLUME CONTROL
- MANUAL BASS AND PEDALBOARD STOP: Soft/Sharp
- MANUAL BASS AND PEDALBOARD VOLUME CONTROL
- PRESET PERCUSSION/REPEAT (red tab)
- PERCUSSION UPPER MANUAL (red tab)
- PERCUSSION LOWER MANUAL (red tab)
- PERCUSSION ATTACK-TIME REGULATOR
- REPEAT SPEED REGULATOR
- PERCUSSION ON MANUAL BASS AND PEDALBOARD: Percussion On/Off Percussion Long/Short

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### ASSEMBLY AND OPERATING INSTRUCTIONS

- TREMOLO ON UPPER MANUAL (black tab)
- TREMOLO ON LOWER MANUAL (black tab)
- TREMOLO SPEED REGULATOR
- REVERBERATION (yellow tab)
- VIBRATO STOPS:

Vibrato On/Off (switch) Light / Heavy (depth) Slow / Fast (speed)

- GREY KEYS SELECTOR (grey tab): for the extension of the Manual Bass to 24 notes including the Grey Octave

- MANUAL BASS AND PEDALBOARD OUTLET FOR AN ADDITIONAL AMPLIFIER

- PILOT LIGHT FOR MAINS AND MANUAL BASS RANGE

- TRANSISTORS:

148 x SFT 352 ; 5 x SFT 353 ; 4 x SFT 337 3 x AC 128 ; 1 x BSX 21 ; 1 x OC 76

- DIODES:

60 x OA 70 ; 3 x OA 81 ; 1 x 2E05 ; 1 x SZL 9 ; 1 x BA100

- MEASUREMENTS:

39" x 24" x 11" - cm (99 x 61 x 28)

- WEIGHT:

90 lbs. - Kg 40,8

- WOODEN CASE COVERED WITH WASHABLE PLASTIC

HOW TO OPEN THE COMPACT DUO

Lay the instrument as per Fig. A. Turn plastic knobs (1/1a and 2/2a in Fig. A) through 90° and open panels (3 and 4 in Fig. A). Take out the cables and the legs (5 in Fig. B) and bring back panel (3) to closed position by fix ing it turning plastic knobs (2 and 2a in Fig. A) through 90° again. Fix panel (4) to the legs inserting screws (6 in Fig. B).



Bring the instrument to an upright position (Fig. C) and remove lid (44 Fig. C). IMPORTANT:

IMPORTANT:

Be sure the legs rest on an even surface. The stability of the instrument may suffer without a firm support.



### SWELL PEDAL AND PEDALBOARD

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These are contained in the lid. To remove them, open the plastic cover protecting them and turn nuts (12 Fig. C) which will free both items. Remember that the Pedalboard is ontional.

To assamble the Swell Pedal (Fig. D) loosen screws (17) and slide the plate (18) outwards and fix it by tightening the screws (17). Insert holes (19) in the studs on the base of the legs (13 Fig. C) - the right of the player.

Use the same procedure for the Pedalboard which is assembled on the left hand side.

## WIRES OF SWELL PEDAL AND PEDALBOARD

The plug (15) in Fig. C, should be inserted into the input at the back of the Swell Pedal base. The connection plug on the Pedalboard lead should be inserted into the input under the instrument (8 Fig. B). The cable from the Swell Pedal should be fixed to the Terryclips (7c) Fig. B, and the cable from the Pedalboard should be fixed to the Terryclips (7b) Fig. B. The wire from the amplifier should be fixed to the Terryclips (7a) Fig. B.

#### MULTI-TONE-BOOSTER KNEE-LEVER

The Multi-Tone-Booster knee-lever (10 Fig. B) should be taken out of its retaining clip and pulled down into a vertical position turning the flag of the lever so that it faces outwards.

### INSTRUCTION FOR CONNECTION TO THE AMPLIFIER

The COMPACT DUO cannot be plugged directly into a mains outlet. Power must be derived from the special FARFISA ampl<u>i</u> fier model TR/60, or from the appropriate FARFISA Power Supply Box F/AR, when an amplifier other than FARFISA TR/60 is employed.

FIG. D



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### CONNECTION TO THE FARFISA AMPLIFIER MODEL TR/60

Be sure that the voltage-selector of the amplifier shows the correct voltage of the mains. The choice of the voltage is made by rotating the voltage-selector (20 Fig. E) by means of a coin until the correct figure is visible through the aperture. Then unlock the Reverberation Unit (21 Fig. E) rotating the knob.

Connect the power cable of the COMPACT DUO (16 Fig. C) to the amplifier, inserting the plug in the socket of the amplifier (22 Fig. E).

Connect the mains lead from the amplifier to a suitable outlet, preferably one which is well earthed.

Push the slider switch (23 Fig. E) upwards and place the mains switch (24 Fig. E) in the ON position. Now the pilot light should indicate that the instrument are working. At the same time the red pilot lamps placed at the left side of the organ should light up.

### OVERALL VOLUME ADJUSTMENT

Press down all the green tabs of the Multi-Tone-Booster range, depress the Swell Pedal and play full chords in the central part of the Upper Manual.

Then rotate the knob 25 (Fig. E) until the desired volume is obtained.

#### REVERBERATION ADJUSTMENT

Unlock the knob 21 (Fig. E) and rotate the potentiometer knob (26 Fig. E) fully clockwise. Press down all the green tabs of the organ and play some "Staccato" chords to control efficiency of the Reverberation whilst pushing the yellow Reverb tab in the ON position.

This should be done with the Swell Pedal fully depressed.

### IMPORTANT:

For further information on the use of the TR/60 amplifier see special instructions accompanying that amplifier.



### CONNECTION TO AN AMPLIFIER OTHER THAN FARFISA TR/60

Amplifiers other than Farfisa TR/60 can be employed but only by using the special FARFISA POWER SUPPLY BOX (F/AR) which is shown in Fig. F. After loosening the screw (29) open the panel (30) and take out the cables (31) and (32). The Power Supply Box can now be closed as the cables pass through the appropriate aperture. Rotate the voltage selector (33) until the correct voltage figure is visible.

Connect the power cable of the Compact Duo (16 in Fig. C) to the socket (34) of the Power Supply Box, and unlock the Reverberation unit by moving the knob (35) in the "Unlocked" position. Connect the cable plug (32) to the amplifier input and the mains cable (31) to the wall outlet. Switch on the Power Supply Box by operating the switch (36) and verify whether pilot light (37) is On. It is also necessary to connect the amplifier to the mains.

#### VOLUME AND TONE ADJUSTMENT

Rotate the three potentiometer knobs (38 in Fig. F) clockwise; press down all the green tabs of the Multi-Tone-Booster and play full chords on the Upper Manual whilst depressing the Swell Pedal. Adjust the amplifier controls until any distorsion is eliminated. If the results are not completely satisfactory, adjust the controls (38) of the Power Box.

### REVERBERATION ADJUSTMENT

Turn the control (39) fully clockwise and proceed as outlined at page 10.





### STEREOPHONIC COMPACT DUO

If you wish to have a separate amplification for Treble and Bass thus obtaining a stereophonic effect from your COMPACT DUO, insert the plug of a further Bass Amplifier in the input (9) Fig. C. -FARFISA has developed the special BT/40 Bass Amplifier for this purpose.

IMPORTANT: Should the above method be used, it will be noticed that the Swell Pedal will only control the volume of the Upper and Lower Manuals. The Volume of the Bass section can be adjusted by the controls on the Bass Amplifier and by the regulation of the Manual Bass Volume Control (black knob at the left of the Lower Manual)

Figure G shows the connection of the COMPACT DUO with TR/60 and BT/40 amplifiers.

FIG. G





# PLAYING INSTRUCTIONS

Despite its size, which makes this instrument easily transportable, the COMPACT DUO embodies all the fea tures of a large organ and many more. It is undoubtedly the most up-to-date and sought after electronic organ for professional use. Fully transistorized it will satisfy the most exacting player. We offer below some hints which are intended to guide the player on his first contact with the instrument, fee ling sure that the desires of the performer and the versatility of the COMPACT DUO are allied in obtaining many new and wonderful musical effects. Once the COMPACT DUO has been set in playing position, as outlined in the Assembly and Operating Instructions, follow our suggestions by making reference to the illustration of the instrument where all controls are shown.

# THE SWELL PEDAL (

The Swell Pedal controls the volume of the instrument and having no return spring, it may be employed for playing at a preset volume.

# THE UPPER MANUAL (2)

The Upper Manual consists of 49 keys -C to C-. The size of the keys is the same as in traditional pianos and organs. The four footages extend the range of the Upper Manual to seven polyphonic octaves.

# THE LOWER MANUAL (3)

The Lower Manual consists of 37 keys -C to C-. The two footages extend the range of the Lower Manual to four polyphonic octaves.

THE BASS MANUAL (

Twelve keys of reversed colours, -C to B- produce the deep sound of the Pedalboard. This device is particularly useful for pianists and for persons playing while standing.

### THE MANUAL BASS EXTENSION (5)

According to the position of the "Grey Keys Selector" tab the Manual Bass can be extended up to 24 notes -C to B- inclusive of the Grey Octave.

# THE GREY KEYS SELECTOR 6

When this tab in the TREBLE position the Lower Manual has 37 notes and the Manual Bass has 12 notes. When the tab is in the BASS position the Lower Manual is reduced to 25 notes while the Manual Bass is extended to 24 notes, inclusive of the Grey Octave.

# THE PEDALBOARD (7)

The Pedalboard (optional extra) repeats the sounds of the Manual Bass with an additional C-rote (13 notes -C to C-).

### THE UPPER MANUAL TONE-STOPS (White Tabs) (8)

The tabs are operative when depressed towards the player. There are three groups:

- Low Octave: Bass 16' Strings 16'
- Medium Octave: Flute 8' Trumpet 8' Strings 8'
- High Octave: Flute 4' Strings 4' 2-2/3'

The "Brilliant" tab makes the colour of the 2-2/3' tone more aggressive by adding rich overtones. The 2-2/3' stop should be used in combination with at least one of the other stops.

The colour of the tones may also be classified in three groups:

- Traditional Round Sounds: Bass Flute
- Penetrating Clear Sounds of the string family: Strings
- Sharp Strong Sounds with the characteristic brass attack: Trumpet 2-2/3'.

There is also a typical Oboe 8' which increases the colour range of the instrument.

All stops -except 2-2/3'- may be played individually or in any combination, offering the performer a wide range of tone colours for every kind of music.

- 16 -

- 17 -

# THE MULTI TONE BOOSTER STOPS ( 9

All Treble tone stops are xcluded when the Multi-Tone-Booster tab is in its ON position and the effect of the Multi-Tone-Booster will be obtained if at least one of the Multi-Tone-Booster tabs is depressed.

The tones obtained by the 8' correspond to the octave you are playing on: the 16' tab sounds an octave lower and the 4' tab an octave higher.

By adding the 2-2/3' tab you obtain an "edge" so useful in modern music.

The four 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 towards the right. The Multi-Tone-Booster knee-lever glves exceptional results when used simultaneously with the Swell Pedal.

The tab marked "MULTI-TONE-BOOSTER" operates as a switch and 16' - 8' - 4' - 2-2/3' tabs and knee-lever effects are excluded when it is in the OFF position.

At this point the Treble Tene-Stops automatically become effective, provided at least one is depressed.

When "ALL BOOSTER" tab is inserted, the upper frequencies are boosted to the maximum extent without operating the knee-lever.

# THE LOWER MANUAL TONE STOPS (10)

The Lower Manual tone colours may be obtained through the following three stops which may be used singly or in combination: DOLCE 8' - PRINCIPALE 8' - OTTAVA 4'.

The Lower Manual is also provided with a volume balance control (black knob at the left).

Turning this knob clockwise the Volume of the Lower Manual is increased while turning it anticlockwise the Volume is decreased. THE MANUAL BASS AND PEDALBOARD STOP (11)



This stop marked "PEDAL BASS MANUAL" provides two different effects for the Manual Bass and Pedalboard: SOFT and SHARP.

Here too a volume balance control is provided (black knob at the extreme left).

# THE REVERBERATION STOP (12)

Reverberation is obtained when the yellow tab is in its ON position. The addition of reverberation will render most music more pleasing.

THE VIBRATO STOPS (13)

The Vibrato effect is operative when the tab marked "VIBRATO" is in the ON position.

By using the tab at the "HEAVY" position the Vibrato increases in depth, while it increases in speed by using the tab marked "FAST".

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

THE TREMOLO STOPS 14

These stops will provide a separate Tremolo effect for the Upper and Lower Manuals.

When both black tabs are in the ON position you obtain Tremolo on both manuals.

The Tremolo speed may be regulated by the control knob at the right of the tabs.

By turning this knob cloxkwise the speed decreases.

The use of Tremolo effect combined with the Vibrato will create pleasing wavering effect.

# THE UPPER MANUAL PERCUSSION STOPS (16)

### THE PERCUSSION

The Percussion opens the door to many new fascinating effects.

This is particularly true in the COMPACT DUO which has two completely separate Percussion devices for Bass and for Manuals.

So you may play at will Percussion on the Manual Bass and Sustain on the Manuals: or Percussion on Upper Manual and sustained music on the Lower Manual.

In addition to the above the COMPACT DUO offers three different "Percussion-Attack-Time" for the Manuals: SLOW -MEDIUM - FAST and SHORT or LONG Percussion-Decay for the Manual Bass.

The Upper and Lower Manual Percussion used simultaneously, will also provide a kind of synchronized repetition effect.

# THE MANUAL BASS AND PEDALBOARD PERCUSSION STOPS 15

The Percussion on the Manual Bass and Pedalboard is controlled by two stops.

Percussion is available when the tab marked "PERCUSSION" is in its ON position.

The "LONG/SHORT" tab controls the Percussion-Decay.

Some example of the Manual Bass Percussion effects:

- To obtain a "Counter Bass": Percussion Manual Bass/LONG with PEDAL/SOFT
- To obtain a "Drum" effect: Percussion Manual Bass/SHORT with PEDAL/SOFT
- To obtain a "Bass Guitar": Percussion Manual Bass/SHORT with PEDAL/SHARP

Even if rarely used, on the Manual-Bass you can obtain a synchronized repetition effect when Percussion is inserted.

If you mantain a note on the Manual Bass, you have this note repeated and synchronized with each other Manual Bass note you will play.

To obtain the percussion effect on the Upper Manual operate as follows.

Push the preset PERCUSSION/REPEAT tab into it's PERCUSSION position. Choose the desired attack-time of percussion by use of the regulator knob placed at the right of the PERCUSSION/REPEAT tab (the knob has three positions for the attack-time: Fast-Medium-Slow).

After the above has been carried out, depress the Upper Manual red tab in the ON position. The attack-time may be regulated through the knob even whilst playing.

To disconnect the percussion effect, bring the Upper Manual red tab in the OFF position.

With the Upper Manual Percussion On, and playing both hands on the Upper Manual only, you may obtain the synchronized repetition as already outlined for the Manual Bass.

THE LOWER MANUAL PERCUSSION STOPS (17)



(18)

Proceed in the same way as for the Upper Manual Percus sion. The only difference is that to obtain Percussion on the Lower Manual, you have to depress the LOWER MANUAL red tab in the ON position instead of the UPPER MANUAL red tab.

### SYNCHRONIZED UPPER AND LOWER MANUALS

When both the LOWER and UPPER MANUAL red tabs are in the ON position you may obtain pleasing effect.

Mantaining a note or a chord on the Lower Manual you have it automatically repeated and perfectly sinchronized to every Upper Manual key you depress and vice versa.

#### INDIPENDENT PERCUSSION

According to the performer's taste, Percussion may be inserted into the Manual Bass while playing Sustain on Upper Manual or Lower Manual.

You may also have Percussion on Manual Bass and Lower Manual and not on the Upper Manual etc.

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### INTERNAL ADJUSTMENTS

THE REPEAT EFFECT 16 17 18

The Repeat effect works separately or simultaneously on both the Upper and Lower Manuals.

To obtain the repeat effect depress the PERCUSSION/RE-PEAT red tab into the REPEAT position.

If you want to have the Repeat on the Upper Manual only just depress the Upper Manual red tab in the ON position. If you want it on the Lower Manual depress the Lower Manual red tao into the On position: or depress both tabs if you want the Repeat on both Manuals.

The repeat speed may be regulated by the potentiometer knob placed between the red tabs.

To disconnect the Repeat effect put the Upper and Lower Manual red tabs into the Off position. The COMPACT DUO organ is delivered in perfect tune. Internal adjustments should be needed only in exceptional cases, whereon the assistance of a good technician is highly recommended. For internal inspection remove the top (45 Fig. C) by unscrewing the two lateral screws, by extracting the three knobs on the control panel and by disconnecting the earth wire (40 Fig. H)

IMPORTANT: Before replacing the top, be sure to connect earth wire again.

### TUNING

The COMPACT DUO is tuned A 440. The tuning may be modified to a required pitch and should a note go out of tune, it may be retuned as follows.

The twelve tone-generators are accessible from the back of the organ by removing the top (45) Fig. C.

Every tuning coil is marked with the name of the corresponding note and controls all the notes of the same name in all octaves.

Figure H shows exact location of the twelve tone generators.

By means of a screwdriver of insulating material, operate the tuning coil as shown in the picture.

The pitch increases by rotating the screw counterclockwise and decreases by rotating clockwise.

#### MANUAL BASS AND PEDALBOARD VOLUME ADJUSTMENT

The volume of the whole Bass section can be regulated by adjusting the trimmer-potentiometer (42) in Fig. H.

### VIBRATO SPEED ADJUSTMENT

The speed of Vibrato can be regulated by adjusting the trimmer-potentiometer (41) in Fig. H.

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### TREMOLO DEPTH ADJUSTMENT

The depth of tremolo can be regulated by adjusting the potentiometer (46) in Fig. I for the upper manual and the potentiometer (47) for the lower manual.



# MAINTENANCE

If the Swell Pedal or the Multi-Tone-Booster lever fails to function, it may be due to a failure of the lamps which are situated within these devices. The procedure for substituting such lamps (by using similar lamps to Philips 12 V - 3 W mod 12384) is shown in Fig. L and M.



### THE MAKER OF COMPACT DUO

COMPACT DUO is a product of FARFISA -the largest European maker of electronic musical instruments. FARFISA, one of the most distinguished names in the musical instrument industry, is today among the biggest manufactures of electronic organs in the world. Diversification, based on a century old background of experience in the production of musical instruments, is the reason for the tremendous achievements attained.

Creative imagination and ingenuity plus the industry's finest machinery and most modern facilities have assured that FARFISA products have the most encouraging acceptance in more than 80 countries covered by its export operation.

FARFISA's family of employees is of over 2,100 and total covered space of the FAR-FISA plants of Castelfidardo, Camerano and Aspio is of 500,000 square feet.

FARFISA's lines of instruments are:

Scandalli and Settimio Soprani accordions, Electronic Organs for Professional and Home use, Electronic Accordions, Amplifiers, Guitars, Reed-Organs, Pianos and Harpsichords -all leading products resulting from extensive research, careful development, advance design and top quality construction.

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