FURSTEIN

by FARFISA

DP 300

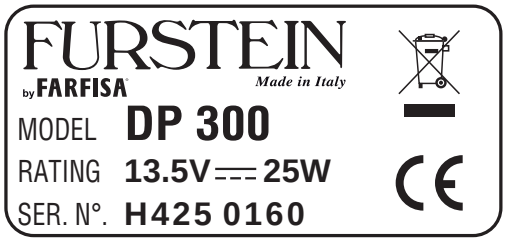
USER'S MANUAL

Table of Contents

WELCOME,
Thank you and congratulations for having chosen this Digital Piano. For its correct use, please read this guide before use and keep the manual for future consultation.

Instrument identification

For any communication, always quote the model (DP 300) reported at the bottom of the instrument.



1.Technical features

KEYBOARD:	88 keys with "hammer action"
TOUCH:	immediate exclusion and restoration of touch-sensitivity (Dynamic) on 4 levels
POLYPHONY:	64 notes at most
DISPLAY:	3 digits
BASIC SOUNDS:	21 polyphonic tones
MIXED SOUNDS:	mix of two sounds
TRANSPOSER:	shifting of +/– 12 semitones
TUNING RANGE:	A3 (from 427Hz to 453Hz step 0.5Hz)
EFFECTS:	CHORUS, 3 editable REVERBER
METRONOME:	immediate control with 6 signatures: 1/4, 2/4, 3/4, 4/4, 6/8 and 12/8 and volume adjustment
PROGRAMMES:	7 programmes for the configuration of the keyboard
SEQUENCER:	REC and PLAY to record and listen. Memorising of 3 songs or Song with 2 tracks each. The recording data permanently remains in the memory.
DEMO:	7 Demonstrative songs
AMPLIFICATION:	Stereo 15 + 15 watt (RMS) - Two high-efficiency Ø 100 mm loud speakers - Sound system: Bass Reflex
AC/DC ADAPTER:	Input Vdc= 13,5 V / I = 3,25 A (central positive – 6.3 and 3 mm)
13.5 V DC INPUT:	Socket for connecting mains adapter
LINE OUT RIGHT AND LEFT/STEREO:	Sockets for connection to external amplifier
PEDAL:	Socket for "sustain" pedal
USB TO HOST:	Connection to a computer for data reception and transmission.
MIDI OUT:	Socket to transmit MIDI data to other instruments.
PHONES:	2 Sockets for STEREO headphones
DIMENSIONI:	1312 x 390 x 143 mm
PESO:	18,5 Kg

BONTEMPI S.p.A. reserves the right to amend, without prior notice, the product features

2.Packing content

Digital piano

User's Manual

Adapter ADS 1332

Sustain pedal

Music stand

3.Accessory upon request

CN 230: Console

4.Music stand

Insert the music stand in the appropriate holes.

5.Warnings

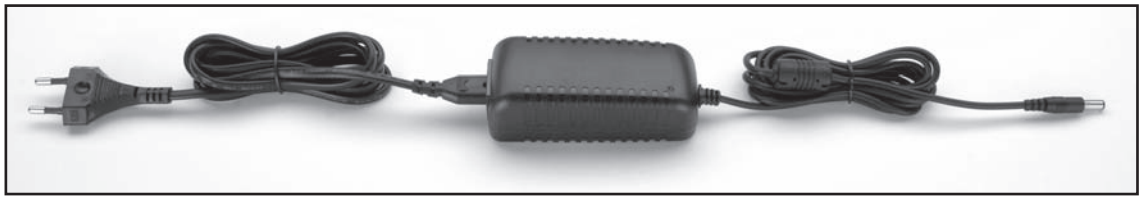
When using electric products, it is necessary to follow certain basic precautions, including:

1. Carefully read the manual before using the instrument.
2. The presence of an adult is required when the instrument is used by children.
3. Do not use the instrument near water like, for example, near a washbasin, a swimming pool, on a wet surface, etc.
4. The instrument is able to generate such sound level to cause permanent damaged to hearing. Do not use for long periods with high volume.

   If you notice a hearing loss immediately consult a doctor.
5. The instrument must be displaced in order to allow its adequate ventilation.
6. The instrument must be displaced away from heat sources like radiators, stoves, solar ray, etc.
7. Do not obstruct the air inlets of the power supplier with objects like curtains, clothes, etc.
8. Do not place objects with naked flames on the keyboard like for example ignited candles.
9. Ensure objects or liquids do not fall inside the cabinet.
10. Ensure there is sufficient ventilation to the adapter: the ventilation slots must not be covered with objects like newspapers, table cloths, curtains, etc...
11. The instrument must be taken to an after-sales assistance centre if:
    a) It has been exposed to rain.
    b) It does not seem to work normally or shows an evident decrease in performance.
    c) It has fallen or the cabinet is damaged.
    d) Objects or liquid has fallen inside.
    e) The adapter AC/DC socket is damaged.
12. Do not attempt to repair the instrument yourself; all operations must be carried out by authorised staff penalty the voiding of the warranty rules.
13. Do not clean using alcohol, solvents or similar chemical substances. Clean the instrument using a soft cloth dampened in a mild solution of water and neutral detergent. Soak the cloth in the solution and wring out until almost dry.

ADAPTER WARNINGS

1. When connecting the plug to the mains ensure:
   a) not to have wet hands (danger of electric shock);
   b) not to pull it from the cable, but from the same plug.
2. The instrument must be connected to the mains only using the AC/DC adapter envisioned by the manufacturer. Alternatively, another AC/DC adapter can be used, as long as it has the same nominal values of those of the adapter supplied with the equipment, with the same or better features. The identification and power supply data are on the bottom of the same product.
3. When the instrument is not used for long periods, the AC/DC adapter must be disconnected from the mains.
4. The AC/DC adapter must be directly connected to the mains: do not interpose other plugs.
5. Do not expose the adapter to drops or squirts of water.
6. Do not position the adapter behind furniture or in hidden positions.



6.Power supply

The power supply is supplied by the provided AC/DC **ADS 1332** adapter (V = 13.5Vdc / I = 3.25 A) ⊖—◉—⊕ central positive.
Such equipment is compliance with the national and international Standards on electrical safety.
Insert the jack in the **DC ⎓ 13,5V** socket. Alternatively, another AC/DC adapter can be used, as long as it has the same nominal values of those of the adapter supplied with the equipment, with the same or better features.

RECOMMENDATION: The network socket must be easily accessible to be able to connect the adapter's plug.

ATTENTION: Every adapter, even if equipped with safety insulation, must be regularly examined to avoid possible risks due to damages to the cable, to the plug, to the casing or to other parts. In case of faults, only contact qualified staff.

WASTE DISPOSAL STANDARDS

For information regarding the disposal of the items mentioned here below, please refer to Council Administration office regarding specialised waste collection centres.

1 - PACKAGING DISPOSAL
Take the paper, cardboard and corrugated board to the appropriate waste collection centres. Plastic material must be placed in the relevant collection containers.
The symbols indicating the various types of plastic are:

Key for the different types of plastic materials:
PET = Polyethylene terephtalate • **PE**= Polyethylene, code 02 for PE-HD, 04 for PE-LD • **PVC** =Polyvinyl chloride • **PP**= Polypropylene • **PS**= Polystyrene, Polystyrene foam • **O**= Other polymers (ABS, Laminates, etc.)

2 - WASTE DISPOSAL OF USED ELECTRICAL AND ELECTRONIC APPLIANCES
All articles displaying this symbol on the body, packaging or instruction manual of same, must not be thrown away into normal disposal bins but brought to specialised waste disposal centres. Here, the various materials will be divided by characteristics and recycled, thus making an important contribution to environmental protection.

7.Sockets

POWER - To switch the instrument on and off.

INPUT DC 13.5 V - Allows powering the instrument by means of an AC/DC adapter.

LINE OUT (LEFT/STEREO - RIGHT) - Mono audio output of the left and right channels for connection to an external amplification. The LEFT/STEREO output, by inserting a STEREO connector, allows detecting both LEFT and RIGHT signals.

PEDAL - Socket for sustain pedal.

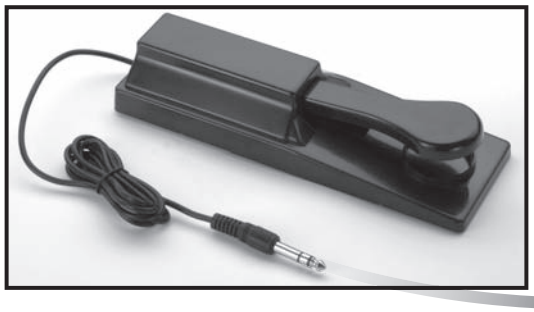
USB - Socket for connecting the digital piano to a computer using a USB cable (not included).

MIDI OUT - Socket for connecting the digital piano, using an appropriate cable (not included), to a MIDI unit and transmit data.

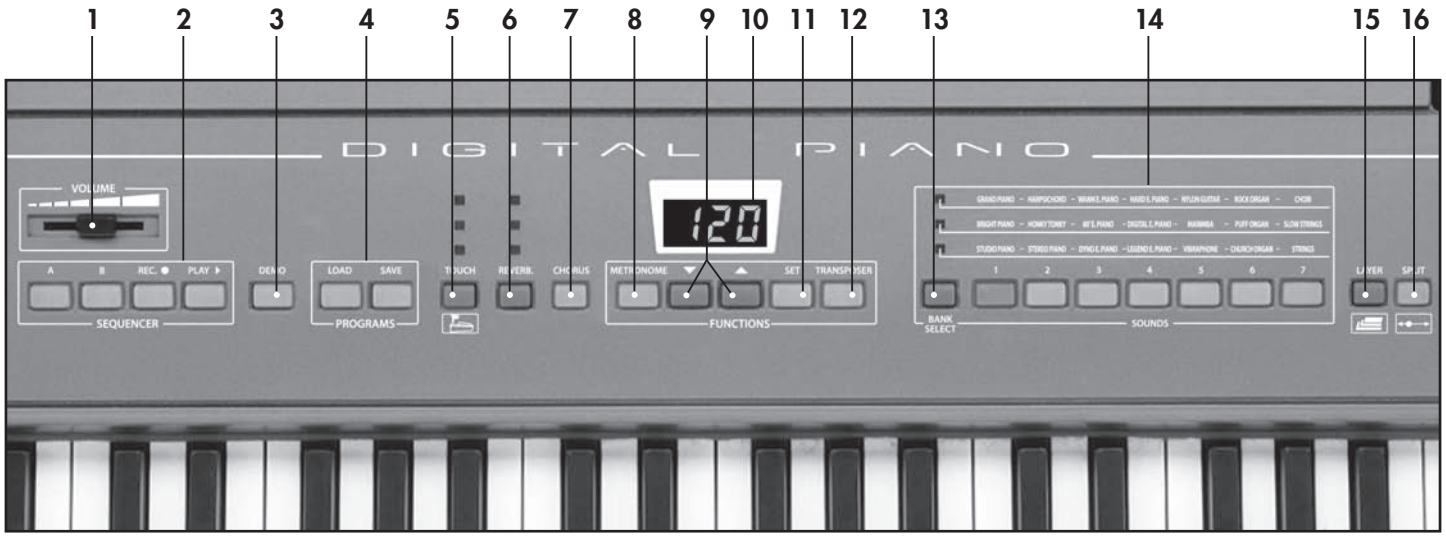
PHONES - There are 2 sockets present for headphones placed on the left front side of the instrument. The upper excludes the internal amplifier upon insertion of the headphone's jack, whereas the lower one does not. We recommend using headphones with 16-32 Ohm impedance

8.The Sustain Pedal

A normally-open pedal switch can be connected to the **PEDAL** socket.
It is used to lengthen the sound of the notes.



9.Control panel



1. VOLUME for the adjustment of the general volume

2. SEQUENCER A/B to select the A and/or B track of the Sequencer (recorder)

2. SEQUENCER REC to record what is playing

2. SEQUENCER PLAY to listen to the recording

3. DEMO to listen to the demonstrative songs

4. PROGRAMS LOAD to select the programmes

4. PROGRAMS SAVE to save the programmes

5. TOUCH to deactivate or re-activate the touch-sensitivity of the keyboard (dynamic)

6. REVERB to select the effects of the Reverb

7. CHORUS to activate or deactivate the Chorus effect

8. METRONOME to activate or deactivate the time tapped by the Metronome

9. FUNCTIONS ▼/▲ to select or set the various parameters

10. DISPLAY to display the selection of sounds, volumes and functions

11. FUNCTIONS SET to select the special functions

12. TRANSPOSER to activate or deactivate the Transposer

13. BANK SELECT to select the banks of the sounds

14. SOUNDS to select sounds

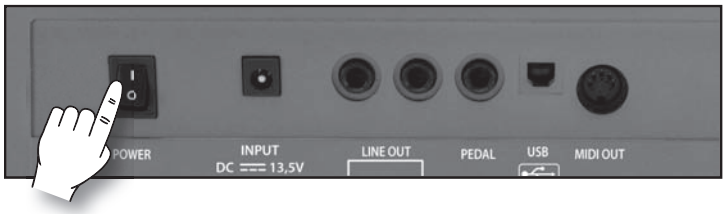
15. LAYER to set the sound, the bank and the volume

16. SPLIT to divide the keyboard between UPPER (right part) and LOWER (left part)

10.Use instructions

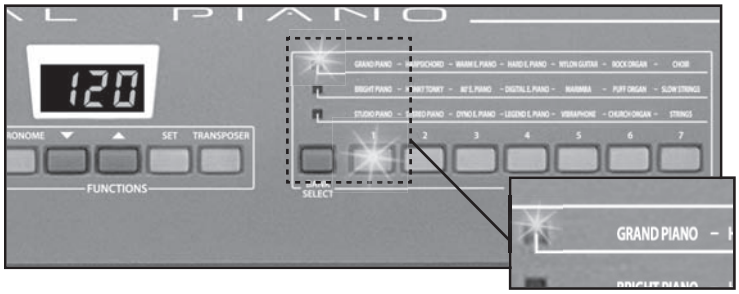
Switch on/off

The instrument is switched on by moving the switch to "**I**" and is switched off by moving it to "**O**".
The switch is on the back of the instrument.



The 3 digit display indicates 120 which is the speed of the METRONOME.

The switched on warning light on the 1st row of the SOUNDS section and switched on button 1, indicate that the **GRAND PIANO** sound is active.

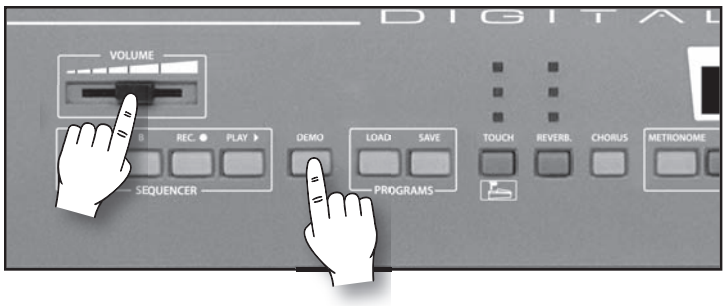


Master volume

To adjust the general volume, act on the **VOLUME** control.

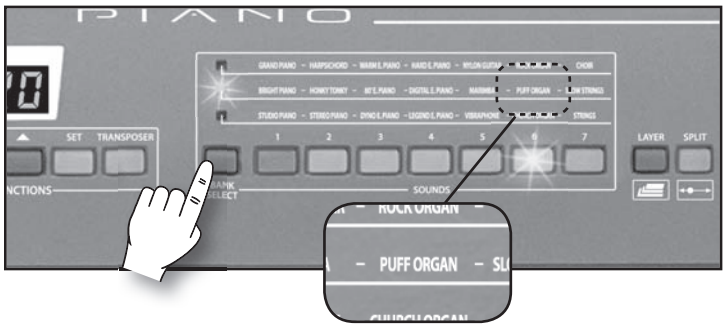
Demonstrative songs (Demosongs)

To select the demonstrative songs, press the **DEMO** control and then press one of the 7 flashing buttons from the SOUNDS section.
To interrupt the execution, press **DEMO** again.



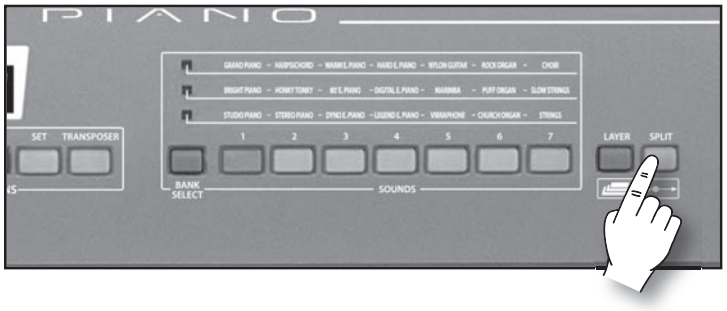
Sounds

There are **21 sounds** contained in the instrument.
To select a sound, press a key from **1** to **7** from the SOUNDS section and choose one of the **3 banks** using the **BANK SELECT** button.
The active sound is identified by the corresponding of the line of **BANK SELECT** (LED light on) with the 1 to 7 column of **SOUNDS** (LED light on). Shown in the example figure at the side, the active sound is **PUFF ORGAN**.
To select other sounds from the same family, repeatedly press the **BANK SELECT** button.

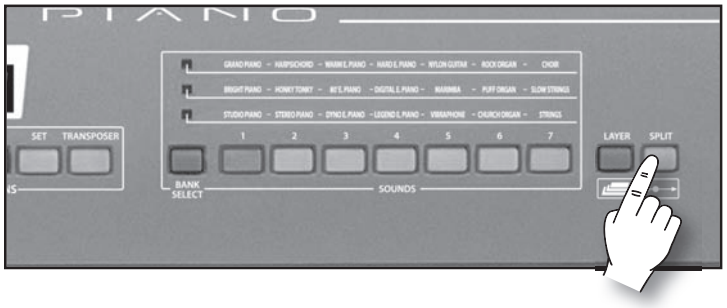


Division of the keyboard - Split

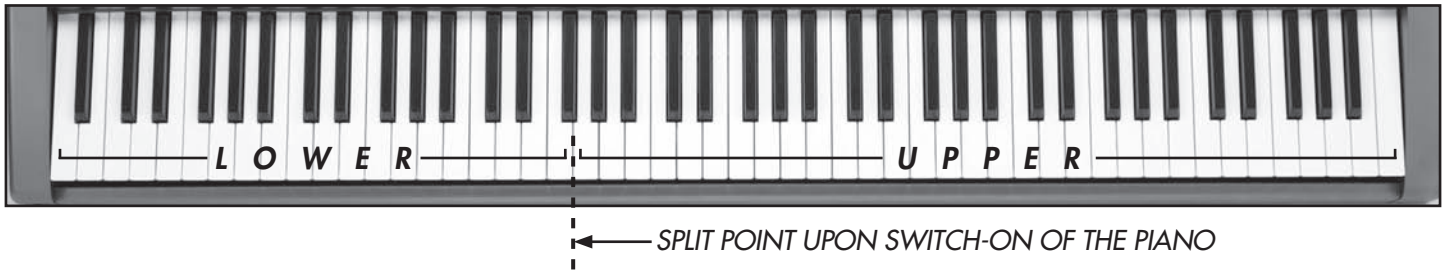
By dividing the keyboard, it is possible to set a sound in the right part and another one in the left part of the keyboard.
The **SPLIT** control divides the keyboard in two parts, the right one **Upper** and the left one **Lower**.



Press the **SPLIT** button; LED light on.
The division point upon switch-on is G3 (Sol3).
The Split or division point of the keyboard can be amended as follows:
keep the **SPLIT** button pressed and, simultaneously, press a key on the keyboard. The pressed key becomes the lowest note for the Upper sound.
The number shown by the display indicates the midi code of the pressed key.



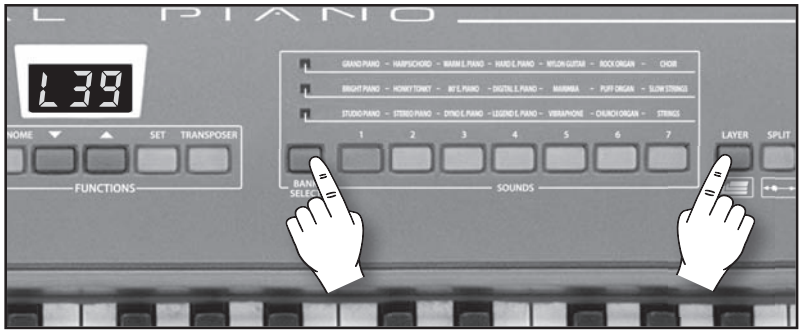
To return to the "joint" keyboard mode, press **SPLIT**, the LED light switches off.



The **LAYER** control allows changing the ***sound***, ***bank*** and the ***volume*** for the Upper and Lower sounds:

- Press the **LAYER** button once;
  the display temporarily shows "U99" :
  "U" stands for Upper meaning the ***sound on the right part***, and "99" is the ***volume*** of the Upper sound that can vary from 7 to 99.
- Press one of the **SOUNDS** buttons to select a sound for the Upper
- Press the ▼ or ▲ key to amend the volume of the Upper sound; by keeping the ▼ or ▲ key pressed, the numbers quickly change (**autorepeat**).
- Press the **BANK SELECT** key to select other sounds from the same family.

- Press the **LAYER** button again to select the sound for the Lower;
  the display shows "L 39":
  "L" stands for Lower meaning the ***sound on the left part***, and "39" is the ***volume*** of the Lower sound.
- Press one of the **SOUNDS** buttons to select a sound for the Lower.
- Press the ▼ or ▲ key to amend the volume of the Lower sound; by keeping the ▼ or ▲ key pressed, the numbers quickly change (**autorepeat**).
- Press the **BANK SELECT** key to select other sounds from the same family.

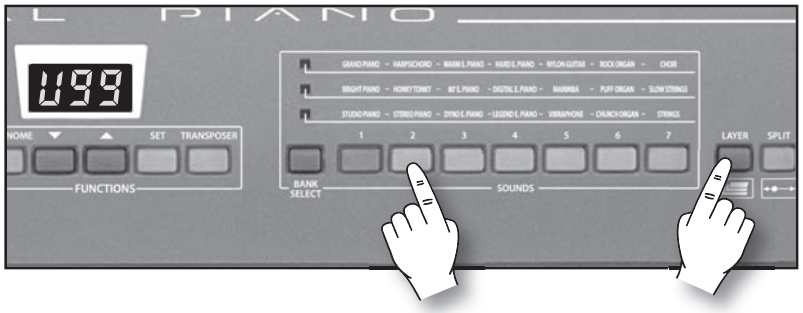


Pressing the **LAYER** button again, it returns to the "TEMPO" mode, the display indicates 120 which is the speed of the METRONOME upon switch-on.

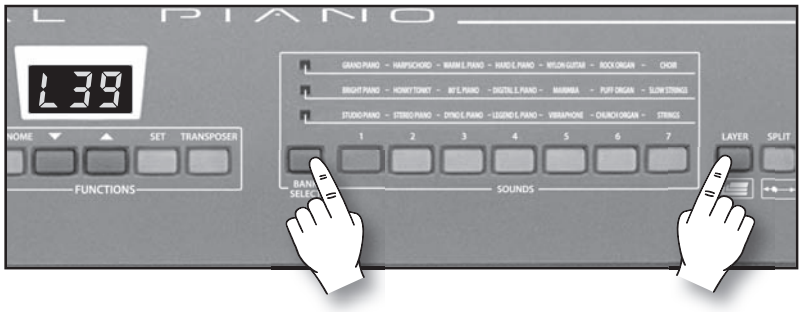
Sound combination - Dual Mode

It is possible to simultaneously play two sounds on the entire keyboard range. In this way, it is possible to simulate a "dual melody" or combine two similar voices to create an acoustically deeper sound.

- With the **SPLIT** control off, press the **LAYER** button once;
  the display temporarily shows "U99" : "U" indicates the **first sound of the mix** and "99" is the **volume**.
- To change sound, press one of the **SOUNDS** and **BANK SELECT** buttons.
- Press the ▼ or ▲ key to amend the volume.



- Press the **LAYER** button again;
  the display temporarily shows "L 39": "L" indicates the **second sound of the mix** and "39" is the **volume**.
- To change sound, press one of the **SOUNDS** and **BANK SELECT** buttons.
- Press the ▼ or ▲ to amend the volume.
- Pressing the **LAYER** button again, returns to the "Mix" mode.

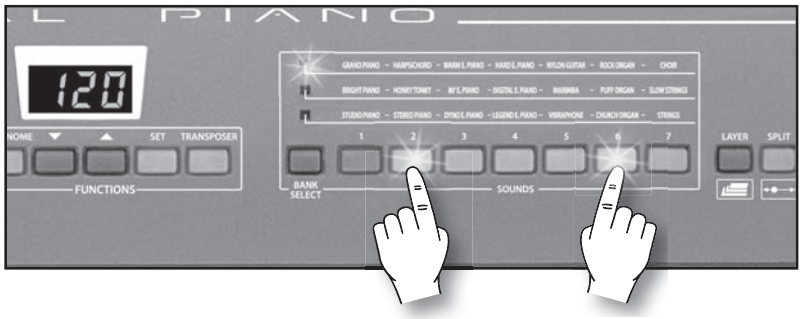


The two controls of the SOUNDS section switched on indicate the families that have been selected for the 1st and 2nd sound. If only one control is switched on, it means that two sounds from the same family have been selected.

The display indicates 120 which is the speed of the METRONOME upon switch-on.

To exit the "Mix" mode, press the button of a single sound.

To create a combination of two sound in ***immediate mode***, keep a button of the SOUNDS section pressed (1st sound), and simultaneously press another (2nd sound).



By pressing **SPLIT** in "Mix" mode, the two sounds will be distributed, one for the Upper, right part, and one for the Lower, left part, of the keyboard. The sounds will be automatically set with pre-defined octave.

Transposition of the notes - Transposer

The transposition of the keyboard is available in the interval –12 / +12 semitones.

By pressing the **TRANSPOSER** control, the display indicates the current transposition value which upon switch-on is "0".

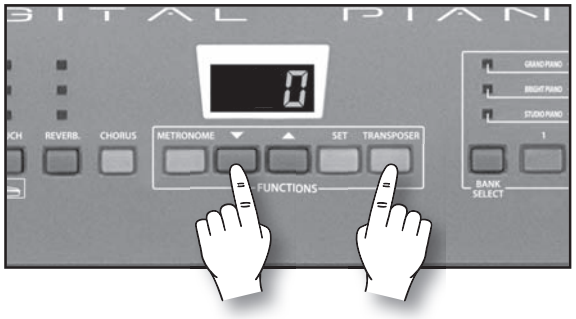
To activate a transposition, keep the **TRANSPOSER** button pressed, and act on the ▼ or ▲ keys to set the wanted value.

The **TRANSPOSER** key switched on, indicates that the set value is different from "0".

The Transposition is active only when the **TRANSPOSER** key is switched on.

To cancel the transposition, select the value "0" or press the **TRANSPOSER** button again to switch-off the LED.

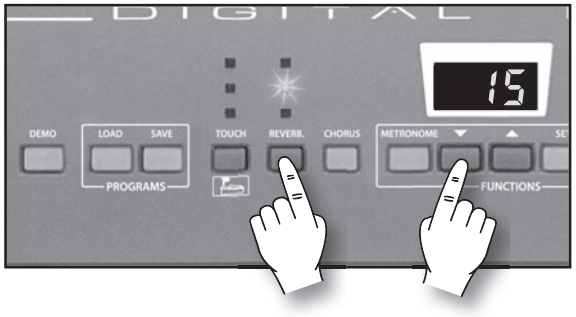
The value of the Transposition remains memorised until switch-off.



The effects

The sounds can be enhanced by adding Reverb and Chorus effects.

Reverberation



It is possible to select 3 types of reverberation: **Room 1**, **Room 2** and **Hall** and also set the depth that can vary from 0 to 20.
Upon switch-on the central LED comes on and the Room 2 effect with depth 10 is active; by pressing the **REVERB.** control, the highest LED switches on and the Hall effect is active,
by pressing the **REVERB.** control again, the lowest LED switches on and the Room 1 effect is active,
by pressing the **REVER.B** control again, all LED are switched off therefore the Reverb effect is excluded.

How to display and set the depth of the reverb:

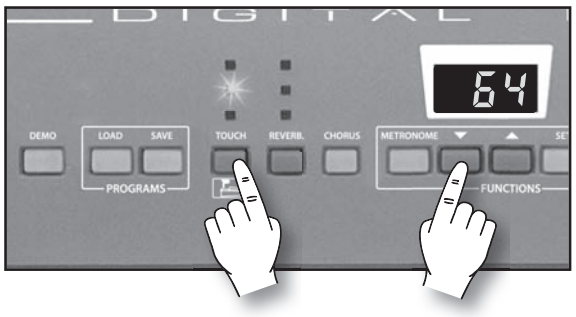
To display the depth value, keep the **REVERB.** key pressed, the display indicates the current value.
To set the depth, select an effect (Room 1, Room 2 or Hall), keep the **REVERB.** control pressed and then act on the ▼ and ▲ controls to choose the depth that can vary from 0 to 20. The display indicates the selected value. By keeping the ▼ or ▲ key pressed, the numbers quickly change (**autorepeat**).

Chorus

Upon switch-on the Chorus is not active.
To activate the effect, press the **CHORUS** control, the LED light switches on.
To adjust the depth, keep the **CHORUS** control pressed for a few seconds (the LED light switches on) and then act on the ▼ and ▲ control; the interval varies from 0 to 20. The standard value is 10.

The Dynamic or touch-sensitivity

The instrument is able to issue sounds with more or less high volume, depending on the pressure exercised on the keys like in a traditional piano.



It is possible to choose between dynamic: **Light**, **Normal** or **Hard**.
Upon switch-on, the Normal type touch-sensitivity is active.
To select the other types of dynamic, repeatedly press the **TOUCH** control: the Light type of dynamic activates when the lowest LED is switched on, Normal with the central LED and Hard with the top LED.
When the LED light are switched off, the touch-sensitivity is excluded. It is possible to adjust the Volume of the sound by keeping the **TOUCH** control pressed and then act on the ▼ and ▲ controls; the interval varies from 0 to 127; it is usually 64.

The Metronome

The metronome helps learn music, tapping time during the exercises and simulates the classic instrument that beats the time.

To activate the metronome, press the **METRONOME** control, the LED light is switched on.

How to adjust the metronome speed

To adjust the speed, act on the ▼ and ▲ controls; the interval varies from a minimum of 32 to a maximum of 250.
To set the standard value of 120, press ▼ and ▲ together.

Voice in musical scores	TEMPO
Largo	32 - 60
Larghetto	60 - 66
Adagio	66 - 76
Andante	76 - 108
Moderato	108 - 120
Allegro	120 - 168
Presto	168 - 200
Prestissimo	200 - 250

Table of the TIMES indicative for the METRONOME

How to set the divisions of the metronome

The divisions available are 1/4, 2/4, 3/4, 4/4, 6/4, 6/8, 12/8 .
To set a division, keep the **METRONOME** control pressed for a few seconds, the display indicates 1.4 which is the division set upon switch-on; using the ▼ and ▲ controls , choose the wanted division.

How to set the volume of the metronome

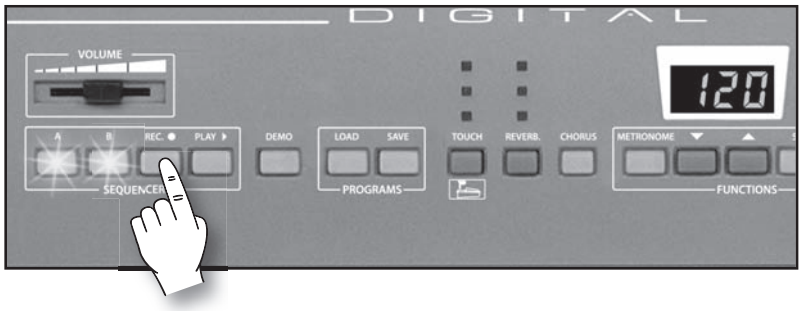
To adjust the volume of the metronome, keep the **METRONOME** pressed for a few seconds, act on the **SET** control, the display indicates 10 which is the value upon switch-on; using the ▼ and ▲ controls, choose the wanted volume. The volume of the METRONOME varies from 0 to 20.

The Recorder – Sequencer

With the Sequencer section it is possible to record and then to listen to all that played.
The Sequencer allows you to test your musical learning level.
It is possible to record three musical songs with two tracks.
Upon switch-on, the Sequencer controls are switched off.

How to record the 1st track (for example A)

- Press the **REC** control, the **A** and **B** buttons flash.
- Press the **A** button which continues flashing (B switches off), therefore, two initial metronome beats are sounded to indicate it is possible to start recording by playing the keyboard.
- Press **REC** to stop recording and then PLAY to listed to what was played.
- To stop execution, press **PLAY**.



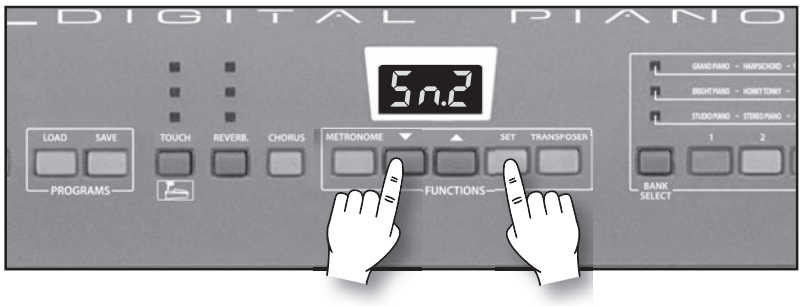
How to record the 2nd track (for example B)

- Press the **REC** control, the **A** and **B** buttons flash.
- Press the **B** button (ATTENTION, if the previously recorded track is chose, track A, the content will be deleted by the new recording), the A LED light remains switched on to indicate that it is in execution or PLAY and that of B flashes, initial beats of the metronome are sounded to indicate recording has started for track B, it is therefore possible to start recording by playing the keyboard.
- Press **REC** to stop recording, the A and B LED light remain switched on. By pressing **PLAY**, the two recorded tracks can be listened to simultaneously.

N.B.: During recording of the 2nd track, if not wanting to listen to the 1st recorded track, switch-off the LED light of the 1st track before recording on the 2nd track.

How to record another two songs

Act on the **SET** control, the display indicates Sn.1 which is the song recorded first.
Using the ▼ and ▲ control, it is possible to select Sn.1, Sn.2 or Sn.3 meaning Song 1, Song 2 and Song 3.
To record another two songs and listed to them, select Sn.2 or Sn.3 and follow the above described procedure.



How to delete a recording

To delete a recording, keep the **REC** control pressed,
and also press the **PLAY** control, the two A and B LED light will switch-off.

The Sequencer also records any sound changes. The recording carried out on the three songs permanently remains in the memory even if the instrument is switched off. If upon instrument switch-on, the warning lights LED of tracks A or B are switched on, it means there is previously recorded data present.

The Programs

A program is a function that allows setting certain keyboard parameters.
It is possible to memorise and recall 7 programmes in the controls from 1 to 7 from the SOUNDS section.
The following functions can be programmed:

1 Upper Sound
2 Upper Sound Bank
3 Upper Sound Volume
4 Lower Sound
5 Lower Sound Bank
6 Lower Sound Volume
7 Split Yes or No
8 Dual Yes or No

How to recall a program

To recall a program, press the **LOAD** control from the PROGRAMS section, the LED light switches on, then press one of the seven flashing controls from the SOUNDS section.

How to save a program

Set sounds and functions.
To save, press the **SAVE** control from the PROGRAMS section, the LED light switches on, then press one of the seven flashing controls from the SOUNDS section.

The data is kept on the internal memory even when the power supply is disconnected.

N.B.: By pressing **SAVE** *and then* **BANK SELECT** *the original programs will be restored.*

Special Functions (SET)

It is possible to configure certain special functions by repeatedly pressing the **SET** control.

1. Selection of the three songs of the Sequencer

Upon first pressing of the **SET** control the LED light switches on and the display show Sn.1 to indicate that the first song of the Sequencer is selected.
By pressing the ▼ and ▲ controls, it is possible to choose the other songs Sn.2 or Sn.3 .

2. Selection of the functions

Upon subsequently pressing the **SET** control, the LED light switches on and the display shows Fnc .

Moving of the octave of the Lower sound

By pressing the **1** control from the SOUNDS section, the display shows L.OS. to indicate the moving of the octave for the Lower sound.
By pressing the ▼ and ▲ controls, it is possible to choose the moving of the octave for the Lower, from 0, 1 or 2.
The standard value is 1 .

Assigning of pedal

By pressing the **2** control from the SOUNDS section, the display indicates d.Pd meaning the assigning of the "sustain" effect activated by acting on the pedal.
The "sustain" effect can be assigned to the Upper or Lower sound or to both.
By pressing the ▼ and ▲ controls, it is possible to assign the "sustain" effect only to the Upper sound when the display indicates _U , or only to the Lower sound when the display indicates L_, or to both with L_U. The standard value _U .

Tuning range

By pressing the **3** control from the SOUNDS section, the display shows t.un. indicating the tuning range.
By pressing the ▼ and ▲ controls, it is possible to set the tuning range with values of 0.5 from a minimum of 427.0 Hz (27.0 on the display) to a maximum of 453.0 Hz (53.0 on the display). The standard value is 440 Hz (40.0 on the display) .

3. Selection of the MIDI settings

Upon third pressing of the **SET** control, LED light on, the display shows MId to indicate certain settings for the MIDI.

MIDI transmit channel

It is possible to set the MIDI transmission channel for the note of the Upper sound.
The Lower sound will be automatically transmitted on the subsequent channel.
By pressing the 1 control from the SOUNDS section, the display shows tr.C indicating the MIDI transmission channel.
By pressing the ▼ and ▲ controls, it is possible to select the MIDI transmission channel from 1 to 16.
Channel 1 is active upon switch-on.

Local Control On / Off

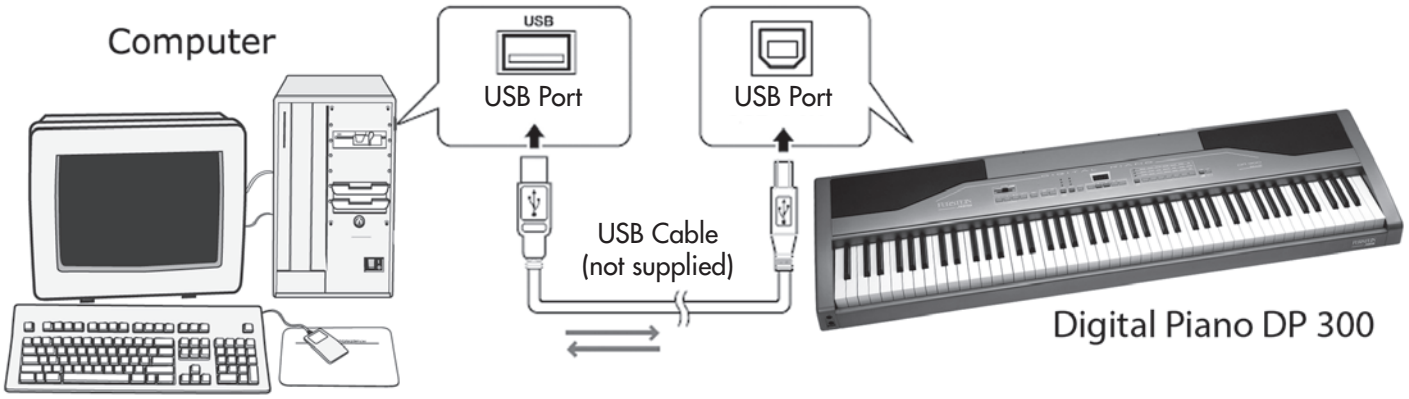
By pressing the **2** control, the display shows Lcl indicating the "Local Control" function.
The "Local Control" function allows connecting or not the sound generator to the keyboard.
If "Local Control" is enabled (On), the keyboard will play and send the MIDI information.
If "Local Control" is deactivated (OFF), the keyboard will no longer play, but will continue to send information of the notes via MIDI.
By pressing the ▼ and ▲ controls, it can be configured at On (enabled) or OFF (disabled).
The standard value is On.

Program Change On / Off

By pressing the **3** control, the display shows PG.C indicating the Program Change (sound change) received and transmitted by the instrument.
By pressing the ▼ and ▲ controls, the transmission and receipt can be configured at On (enabled) or OFF (disabled).
The standard value is On .

11.Connection to a computer

The **DP 300** Digital piano is equipped with a USB-MIDI socket for connection to a personal computer. Connection is carried out using a USB cable (not included) as shown in the figure:

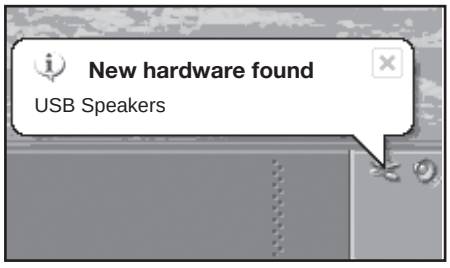


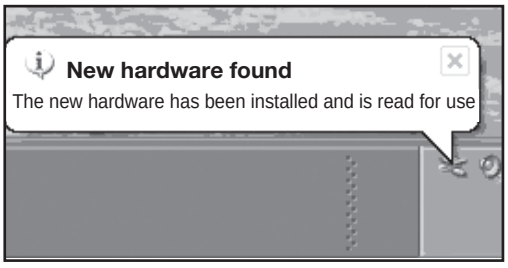
Minimum system requisites

Personal Computer with Pentium3 processor at 800Mhz equipped with USB socket. Windows XP, Windows VISTA or Windows 7 operational system.

Procedure for computer connection

Before connecting the keyboard, ensure that the computer is switched on and the keyboard is switched off.
Once the connection with the USB cable (not included) is carried out, switch-on the instrument.
After a few seconds, a series of messages will appear on the computer:





Now the keyboard is correctly connected and recognised by the computer.

Notes:
The recognition of the keyboard by the computer happens upon first connection; no message will appear on subsequent connections, but a characteristic acoustic signal will be heard made by the computer to indicate the insertion of a USB device.
Should the keyboard not be recognised by the computer and an error of unrecognised peripheral appears, repeat the operation; if the problem persists, check if the minimum requisites have been complied with.

Free musical software downloadable from internet

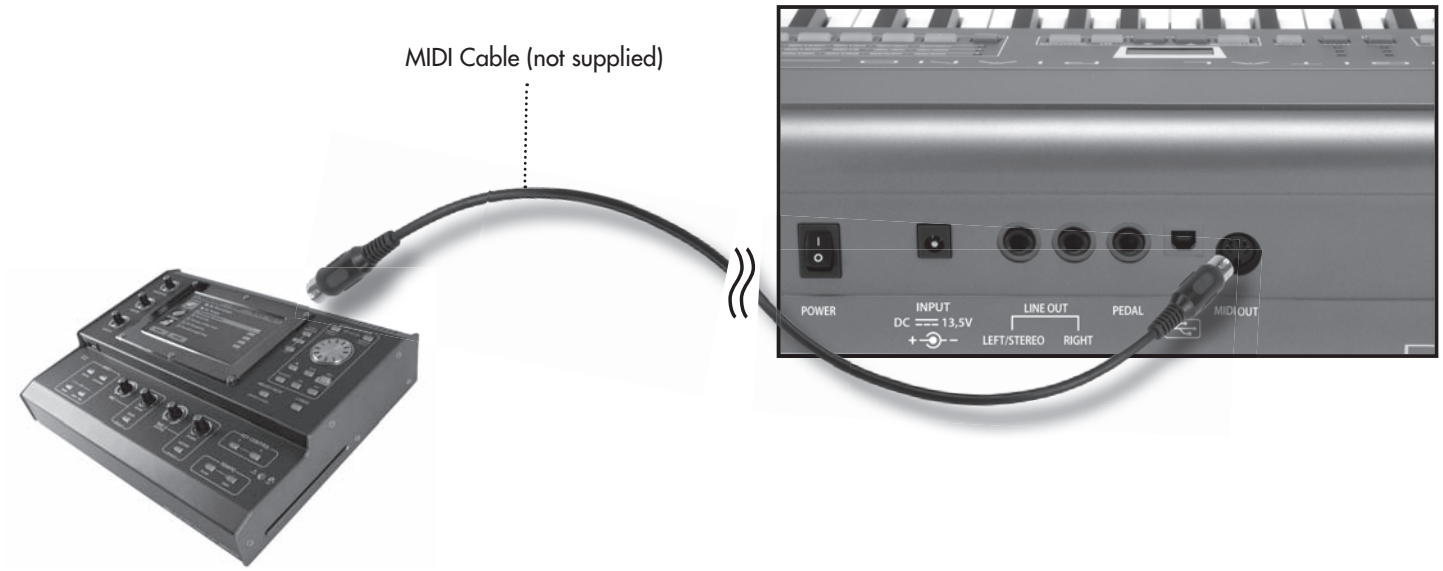
A free musical software is available from **www.farfisa.eu**, with instructions in various languages, to be downloaded from your computer to record, amend and listen to the MIDI musical songs using the keyboard.

12.MIDI connection

What is MIDI

The initials MIDI is the abbreviation of "***M***usical ***I***nstrument ***D***igital ***I***nterface" and represents a standard for the transmission of data via cable to another electronic musical instrument.

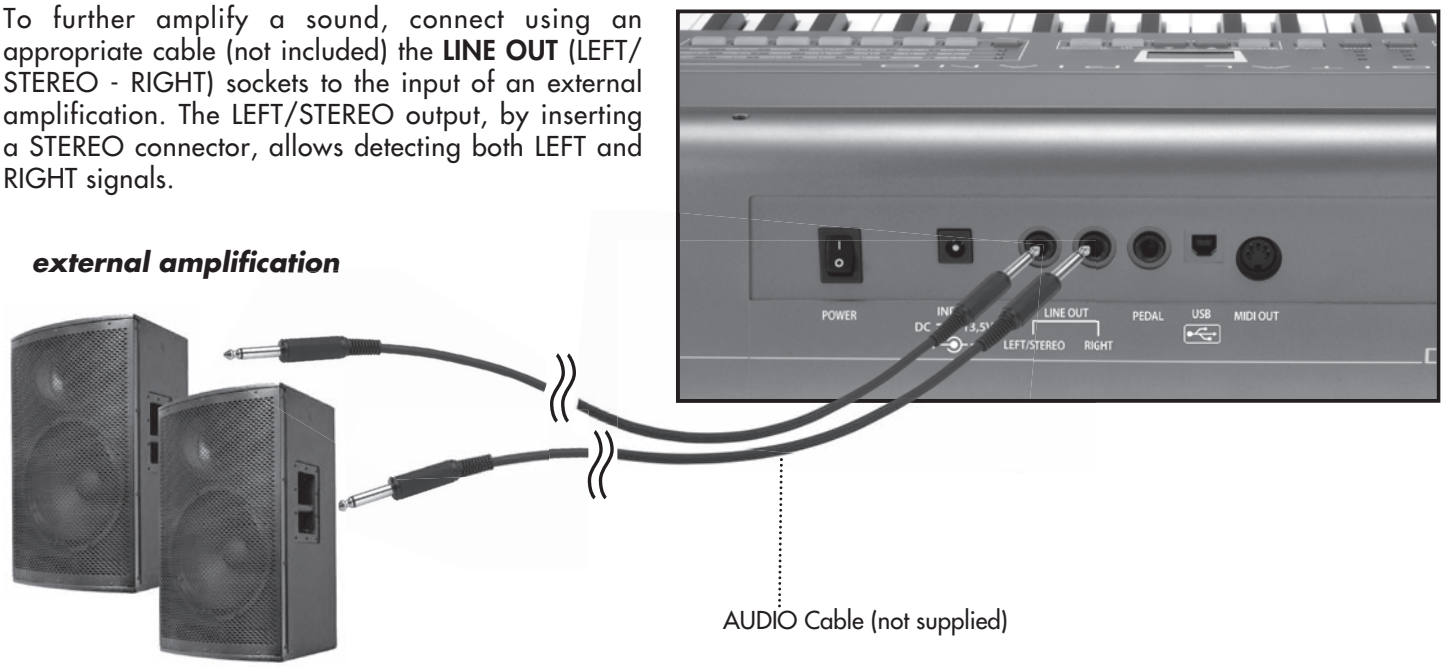
Connect a MIDI cable (not included) between the **MIDI OUT** socket of the DP 300 and the MIDI IN socket of another musical equipment.



13.Connection to an external amplifier

To further amplify a sound, connect using an appropriate cable (not included) the **LINE OUT** (LEFT/ STEREO - RIGHT) sockets to the input of an external amplification. The LEFT/STEREO output, by inserting a STEREO connector, allows detecting both LEFT and RIGHT signals.

external amplification



14.Trouble shooting guide

Problem	Cause/Corrective action
When it is switched on, no sounds are heard when the keys are pressed	Check the main volume and if the headphones are connected The headphones are inserted in the Phones socket: disconnect it.
Noise when using the mobile telephone	Avoid having the mobile telephone near the piano.
The external unit connected via MIDI to the piano does not play	The instrument transmits on MIDI channels different from those of receipt of the external unit.
The sound is distorted and/or the LED light show an anomalous brightness	Check that the network adapter is that provided or another with the same features

15.Table of sounds and relative Program Change (PrCn)

SOUND	PrCn	SOUND	PrCn	SOUND	PrCn	SOUND	PrCn	SOUND	PrCn	SOUND	PrCn	SOUND	PrCn
GRAND PIANO	2	HARPSICHORD	5	WARM E. PIANO	8	HARD E. PIANO	11	NYLON GUITAR	14	ROCK ORGAN	17	CHOIR	20
BRIGHT PIANO	1	HONKY TONKY	4	80'E. PIANO	7	DIGITAL E. PIANO	10	MARIMBA	13	PUFF ORGAN	16	SLOW STRINGS	19
STUDIO PIANO	0	STEREO PIANO	3	DYNO E. PIANO	6	LEGEND E. PIANO	9	VIBRAPHONE	12	CHURCH ORGAN	15	STRINGS	18

16.Midi implementation chart

MIDI MESSAGE	HEX CODE	DESCRIPTION	COMPATIBILITY
NOTE ON	9nH kk vv	Midi channel n(0-15) note ON #kk(1-127), velocity vv(1-127). vv=0 means NOTE OFF	MIDI
NOTE OFF	8nH kk vv	Midi channel n(0-15) note OFF #kk(1-127), vv is don't care.	MIDI
PITCH BEND	EnH bl bh	Pitch bend as specified by bh|bl (14 bits) Maximum swing is +/- 1 tone (power-up). Can be changed using « pitch bend sensitivity ». Center position is 00H 40H.	GM
PROGRAM CHANGE	CnH pp	Program (patch) change. Midi channel n (0-15) Program change pp (0-20)	GM/GS
CHANNEL AFTERTOUCH	DnH vv	vv pressure value. Effect set using Sys. Ex. 40H 2nH 20H-26H	MIDI
MIDI RESET	FFH	Reset to power-up condition	
CTRL 01	BnH 01H cc	Modulation wheel. Rate and maximum depth can be set using SYSEX	MIDI
CTRL 05	BnH 05H cc	Portamento time.	MIDI
CTRL 06	BnH 06H cc	Data entry : provides data to RPN and NRPN	MIDI
CTRL 07	BnH 07H cc	Volume (default=100)	MIDI
CTRL 10	BnH 0AH cc	Pan (default=64 center)	MIDI
CTRL 11	BnH 0BH cc	Expression (default=127)	MIDI/GM
CTRL 64	BnH 40H cc	Sustain (damper) pedal	MIDI
CTRL 65	BnH 41H cc	Portamento ON/OFF	MIDI
CTRL 66	BnH 42H cc	Sostenuto pedal	MIDI
CTRL 67	BnH 43H cc	Soft pedal	MIDI
CTRL 80	BnH 50H vv	Reverb program vv=00H to 07H (default 04H) 00H : Room1 01H : Room2 02H : Room3 03H : Hall1 04H : Hall2 05H : Plate 06H : Delay 07H : Pan delay	FARFISA
CTRL 81	BnH 51H vv	Chorus program vv=00H to 07H (default 02H) 00H : Chorus1 01H : Chorus2 02H : Chorus3 03H : Chorus4 04H : Feedback 05H : Flanger 06H : Short delay 07H : FB delay	FARFISA
CTRL 91	BnH 5BH vv	Reverb send level vv=00H to 7FH	GS
CTRL 93	BnH 5DH vv	Chorus send level vv=00H to 7FH	GS
CTRL 120	BnH 78H 00H	All sound off (abrupt stop of sound on channel n)	MIDI
CTRL 121	BnH 79H 00H	Reset all controllers	MIDI
CTRL 123	BnH 7BH 00H	All notes off	MIDI
CTRL 126	BnH 7EH 00H	Mono on	MIDI
CTRL 127	BnH 7FH 00H	Poly on (default power-up)	MIDI
CTRL CC1	BnH ccH vvH	Assignable Controller 1. cc=Controller number (0-5Fh), vv=Control value (0-7Fh). Control number (ccH) can be set on CC1 CONTROLLER NUMBER (Sys. Ex 40 1x 1F). The resulting effect is determined by CC1 controller function (Sys.Ex. 40 2x 40-4A)	GS
CTRL CC2	BnH ccH vvH	Assignable Controller 2. cc=Controller number (00h-5Fh), vv=control value (0-7Fh). Control number can be set on CC2 CONTROLLER NUMBER (Sys.Ex. 40 1x 20). The resulting effect is determined by CC2 controller function (Sys.Ex.40 2x 50-5A).	

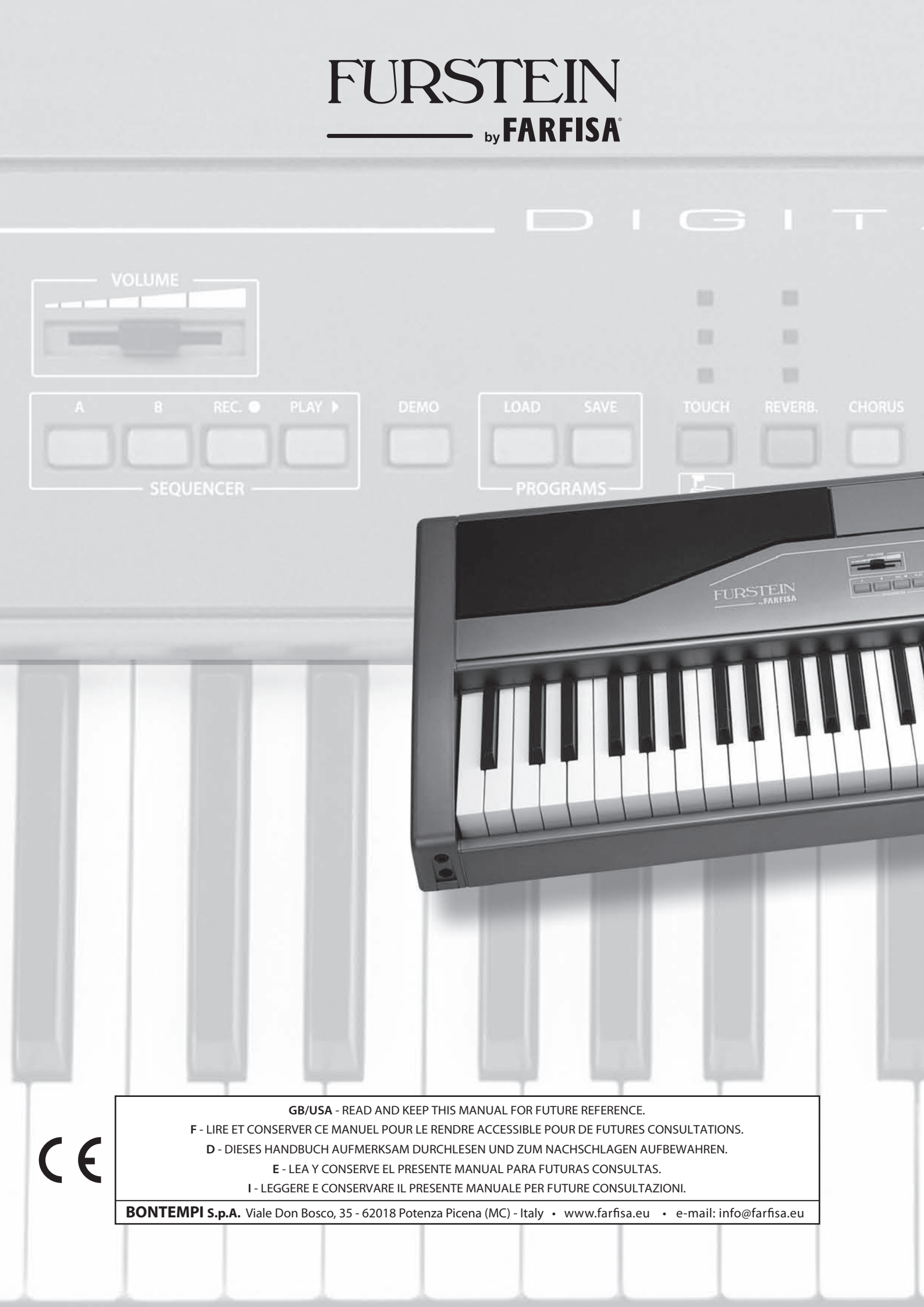
MIDI MESSAGE	HEX CODE	DESCRIPTION	COMPATIBI-LITY
RPN 0001H	BnH 65H 00H 64H 01H 06H vv	Fine tuning in cents (vv=00 - 100, vv=40H 0, vv=7FH +100	MIDI
RPN 0002H	BnH 65H 00H 64H 02H 06H vv	Coarse tuning in half-tones (vv=00 -64, vv=40H 0, vv=7FH +64	MIDI
NRPN 0108H	BnH 63H 01H 62H 08H 06H vv	Vibrate rate modify (vv=40h-> no modif)	GS
NRPN 0109H	BnH 63H 01H 62H 09H 06H vv	Vibrate depth modify (vv=40h-> no modif)	GS
NRPN 010AH	BnN 63H 01H 62H 0AH 06H vv	Vibrate delay modify (vv=40h-> no modif)	GS
NRPN 0120H	Bnh 63H 01H 62H 20H 06H vv	TVF custoff freq modify (vv=40h-> no modif)	GS
NRPN 0121H	BnH 63H 01H 62H 21H 06H vv	TVF resonance modify (vv=40h-> no modif) GS	
NRPN 0163H	Bnh 63H 01H 62H 63H 06H vv	Env. attack time modify (vv=40h-> no modif)	GS
NRPN 0164H	BnH 63H 01H 62H 64H 06H vv	Env. decay time modify (vv=40h-> no modif)	GS
NRPN 0166H	BnH 63H 01H 62H 66H 06H vv	Env. release time modify (vv=40h-> no modif)	GS
NRPN 18rrH	BnH 63H 18H 62H rr 06H vv	Pitch coarse of drum instr. note rr in semitones (vv=40H -> no modif)	GS
NRPN 1ArrH	BnH 63H 1AH 62H rr 06H vv	Level of drum instrument note rr (vv=00 to 7FH)	GS
NRPN 1CrrH	BnH 63H 1CH 62H rr 06H vv	Pan of drum instrument note rr (40H = middle)	GS
NRPN 1DrrH	BnH 63H 1DH 62H rr 06H vv	Reverb send level of drum instrument note rr (vv=00 to 7FH)	GS
NRPN 1ErrH	BnH 63H 1EH 62H rr 06H vv	Chorus send level of drum instrument note rr (vv=00 to 7FH)	GS
Standard Sysex	F0H 7EH 7FH 09H 01H F7H	General MIDI reset	GM
Standard Sysex	F0H 7FH 7FH 04H 01H 00H ll F7H	Master volume (ll=0 to 127, default 127)	GM
SYSEX	F0H 41H 00H 42H 12H 40H 00H 00H dd dd dd dd xx F7H	Master tune (default dd= 00H 04H 00H 00H) -100.0 to +100.0 cents. Nibblized data should be used (always four bytes). For example, to tune to +100.0 cents, sent data should be 00H 07H 0EH 08H	GS
SYSEX	F0H 41H 00H 42H 12H 40H 00H 04H vv xx F7H	Master volume (default vv=7FH)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 00H 05H vv xx F7H	Master key-shift (default vv=40H, no transpose)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 00H 06H vv xx F7H	Master pan (default vv=40H, center)	
SYSEX	F0H 41H 00H 42H 12H 40H 00H 7FH 00H xx F7H	GS reset	GS
SYSEX	F0H 41H 00H 42H 12H 40 01H 10H vv1 vv2 vv3 vv4 vv5 vv6 vv7 vv8 vv9 vv10 vv11 vv12 vv13 vv14 vv15 vv16 xx F7h	Voice reserve : vv1= Part 10 (Default vv=2) vv2 to vv10 = Part 1 to 9 (Default vv=2) vv11 to vv16= Part 11 to 16 (Default vv=0)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 30H vv xx F7H	Reverb type (vv=0 to 7), default = 04H 00H : Room1 01H : Room2 02H : Room3 03H : Hall1 04H : Hall2 05H : Plate 06H : Delay 07H : Pan delay	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 31H vv xx F7H	Reverb character, default 04H	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 32H vv xx F7H	Reverb Pre-LPF, 0 to 7, default = 0	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 33H vv xx F7H	Reverb master level, default = 64	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 34H vv xx F7H	Reverb time	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 35H vv xx F7H	Reverb delay feedback. Only if reverb number=6 or 7 (delays)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 38H vv xx F7H	Chorus type (vv=0 to 7), default = 02H 00H : Chorus1 01H : Chorus2 02H : Chorus3 03H : Chorus4 04H : Feedback 05H : Flanger 06H : Short delay 07H : FB delay	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 39H vv xx F7H	Chorus Pre-LPF, 0 to 7, default = 0	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 3AH vv xx F7H	Chorus master level, default = 64	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 3BH vv xx F7H	Chorus feedback	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 3CH vv xx F7H	Chorus delay	GS

MIDI MESSAGE	HEX CODE	DESCRIPTION	COMPATIBI-LITY
SYSEX	F0H 41H 00H 42H 12H 40H 01H 3DH vv xx F7H	Chorus rate	GS
SYSEX	F0H 41H 00H 42H 12H 40H 01H 3EH vv xx F7H	Chorus depth	GS
SYSEX	F0H 41H 00H 42H 12H 40H 1pH 40H v1 v2 ... v12 xx F7H	Scale tuning, p is part (0H to FH), v1 to v12 are 12 semi-tones tuning values (C, C#, D, ... A#, B), in the range -64 (00H) 0 (40H) +63(7FH) cents. This SYSEX allows non chromatic tuning of the musical scale on a given MIDI channel. Default v1, v2, ... ,v12 = 40H, 40H,...,40H (chromatic tuning). Scale tuning has no effect if the part is assigned to a rhythm channel or if the sound played is not of chromatic type.	GS
SYSEX	F0H 41H 00H 42H 12H 40H 1pH 1AH vv xx F7H	Velocity slope from 00H to 7FH (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 1pH 1BH vv xx F7H	Velocity offset from 00H to 7FH (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 1pH 1FH vv xx F7H	CC1 Controller number (00-5FH) (default = 10H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 1pH 20H vv xx F7H	CC2 Controller number (00-5FH) (default = 11H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 00H vv xx F7H	Mod pitch control (-24,+24 semitone) (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 01H vv xx F7H	Mod tvf cutoff control (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 02H vv xx F7H	Mod Amplitude control (-100%-+100%) (default=40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 03H vv xx F7H	Mod lfo1 rate control (default = 40H). n is don't care. Rate is common on all channels	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 04H vv xx F7H	Mod lfo1 pitch depth (0-600 cents) (default=0AH)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 05H vv xx F7H	Mod lfo1 tvf depth (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 06H vv xx F7H	Mod lfo1 tva depth (0-100%) (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 10H vv xx F7H	Bend pitch control (-24,+24 semitone) (default = 42H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 11H vv xx F7H	Bend tvf cutoff control (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 12H vv xx F7H	Bend Amplitude control (-100%-+100%) (default=40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 14H vv xx F7H	Bend lfo1 pitch depth (0-600 cents) (default=0AH)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 15H vv xx F7H	Bend lfo1 tvf depth (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 16H vv xx F7H	Bend lfo1 tva depth (0-100%) (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 20H vv xx F7H	CAF pitch control (-24,+24 semitone) (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 21H vv xx F7H	CAF tvf cutoff control (default = 40H)	GS

MIDI MESSAGE	HEX CODE	DESCRIPTION	COMPATIBI-LITY
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 22H vv xx F7H	CAF Amplitude control (-100%-+100%) (default=40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 24H vv xx F7H	CAF lfo1 pitch depth (0-600 cents) (default=0AH)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 25H vv xx F7H	CAF lfo1 tvf depth (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 26H vv xx F7H	CAF lfo1 tva depth (0-100%) (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 40H vv xx F7H	CC1 pitch control (-24,+24 semitone) (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 41H vv xx F7H	CC1 tvf cutoff control (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 42H vv xx F7H	CC1 Amplitude control (-100%-+100%) (default=40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 44H vv xx F7H	CC1 lfo1 pitch depth (0-600 cents) (default=0AH)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 45H vv xx F7H	CC1 lfo1 tvf depth (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 46H vv xx F7H	CC1 lfo1 tva depth (0-100%) (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 50H vv xx F7H	CC2 pitch control (-24,+24 semitone) (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 51H vv xx F7H	CC2 tvf cutoff control (default = 40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 52H vv xx F7H	CC2 Amplitude control (-100%-+100%) (default=40H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 54H vv xx F7H	CC2 lfo1 pitch depth (0-600 cents) (default=0AH)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 55H vv xx F7H	CC2 lfo1 tvf depth (default = 0H)	GS
SYSEX	F0H 41H 00H 42H 12H 40H 2pH 56H vv xx F7H	CC2 lfo1 tva depth (0-100%) (default = 0H)	GS

FURSTEIN

by FARFISA



GB/USA - READ AND KEEP THIS MANUAL FOR FUTURE REFERENCE.

F - LIRE ET CONSERVER CE MANUEL POUR LE RENDRE ACCESSIBLE POUR DE FUTURES CONSULTATIONS.

D - DIESES HANDBUCH AUFMERKSAM DURCHLESEN UND ZUM NACHSCHLAGEN AUFBEWAHREN.

E - LEA Y CONSERVE EL PRESENTE MANUAL PARA FUTURAS CONSULTAS.

I - LEGGERE E CONSERVARE IL PRESENTE MANUALE PER FUTURE CONSULTAZIONI.

BONTEMPI S.p.A. Viale Don Bosco, 35 - 62018 Potenza Picena (MC) - Italy • www.farfisa.eu • e-mail: info@farfisa.eu