th•mann

DP-28 Plus, DP-28 Plus WH

User Manual

Digital Piano

Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
Internet: www.thomann.de

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1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under *www.thomann.de*.

1.1 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this document.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used for electronic sound generation using a piano keyboard. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety



DANGER!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.



DANGER!

Danger to life due to electric current!

Within the device there are areas where high voltages may be present. Never remove any covers. There are no user-serviceable parts inside. Do not use the device when covers, safety equipment or optical components are missing or damaged.



WARNING!

Possible hearing damage due to high volumes on speakers or headphones!

With speakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage. Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.



NOTICE!

Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the “Technical specifications” chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.



NOTICE!

Damage to the external power supply due to high voltages!

The device is powered by an external power supply. The external power supply can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the external power supply matches the local power grid before plugging in the power supply. Only operate the external power supply from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). Ensure that the power cord plug is easily accessible at all times if it is the only device to safely disconnect the device from the mains supply. As a precaution, disconnect the power supply from the power grid when storms are approaching or it the device will not be used for a longer period.



NOTICE!

Damage to the device due to use of unsuitable external power supplies!

If the device is operated with an unsuitable external power supply, the device can be damaged by overvoltage or incorrect polarity. If things go badly, using an unsuitable power supply can also cause a risk of injury and fire. Only use the external power supply designated for the device or an equivalent external power supply with identical parameters. If in doubt, compare the voltage specifications on the external power supply and the polarity (+/-) with the specifications in this manual and printed on the device. Voltage and polarity must always match.

NOTICE!

Damage to the speaker due to excessive volume!

If the volume is too high, this can damage the speakers. Avoid operating the device at excessively high volumes over an extended period of time. Turn the volume down to “Minimum” before you connect other devices.

NOTICE!

Possible staining due to plasticiser in rubber feet!

The plasticiser in the rubber feet of this product may react with the coating of the floor, resulting in permanent dark stains after a while. If necessary, use a suitable mat or felt pads to prevent direct contact between the product’s rubber feet and the floor.

3 Features

The digital piano offers the following features:

- 88 weighted keys with hammer action
- 25 sounds
- Metronome with 50 rhythms
- 192-voice polyphony
- Layer mode
- Split mode
- TWINOVA (duo mode)
- 100 practise songs and accompaniment songs
- D.A.S (Dynamic Acoustic System)
- Reverb effect
- Chorus effect
- Transpose function
- Automatic shutoff, can be deactivated
- Built-in speakers
- Bluetooth® MIDI, e.g. for instrument management via app
- Connections:
  - 2 × headphone
  - USB to host (MIDI/audio)
  - MIDI Out
  - LINE out
  - Sustain pedal
  - Aux In
- Power supply: Power adapter (included)
- Operating system:
  - Windows® 8 and later or
  - Mac OS X® 10.8 and later
- Music stand (included)
- Sustain pedal (included)
- Bag optionally available (item no. 146377)
- Stand optionally available (item no. 352262)



Many of the functions can be easily controlled from a mobile device using suitable apps (e.g. "PianoToolBox"), which can be downloaded from the App Store or Google Play.

4 Installation

NOTICE!

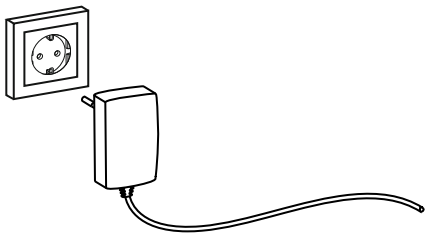
Potential property damage due to unsuitable stands!

If the device is mounted on an unsuitable stand, there is a risk that the stand will fall over and cause damage.

Only use stands whose maximum bearing capacity is at least as high as the weight of the device. Always ensure that the stand is stable.

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Mains connection



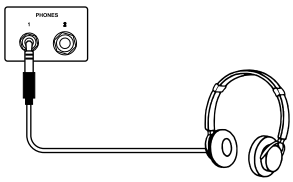
The device is operated via a 12 V plug-in power supply.

1. Before establishing or breaking the connection between the device and the supply voltage, make sure that the device is switched off.
2. Turn the volume control to “minimum”.
3. Connect the supplied plug-in power supply to the 12 V input of the device.
4. Plug the mains plug into a properly connected mains socket.
5. Turn on the device using the main switch.

When the device is not in use or when there is a risk of a thunderstorm with lightning, disconnect the device from the mains power for safety.

5 Connection options

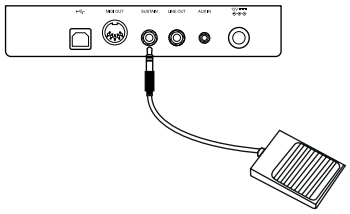
Headphones



The headphone outputs are located on the left under the keyboard.

Connecting headphones (not supplied) to the outputs mutes the speakers.

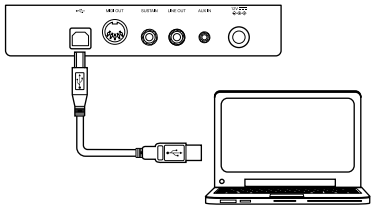
Sustain pedal



Connect the supplied sustain pedal via the *[SUSTAIN]* connection socket on the back of the device.

With the sustain pedal all played notes sound longer. This effect simulates the lifting of the dampers on an acoustic piano.

USB to host



The output is used to transmit the MIDI data generated by the device to a PC (MIDI stands for "Musical Instrument Digital Interface"; it is a global standard that enables the electronic interaction of various instruments and sound modules).

At the same time, the audio signal from the device is transmitted to a connected PC via the output and can be recorded and reproduced using appropriate software.

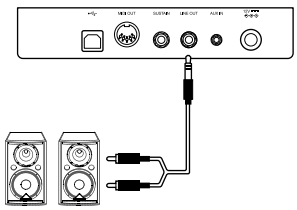
You can also connect the device to smartphones, tablets or other mobile devices and control it using a suitable app (e.g. "PianoToolBox").

Use a current operating system still supported by the provider to avoid technical difficulties.

If the computer is in standby or sleep mode, reactivate the computer before connecting the USB cable.

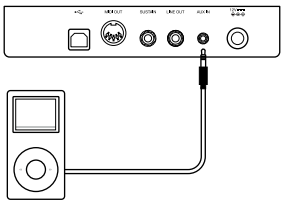
Establish the USB connection between the computer and the instrument before turning on the instrument.

External audio device line out



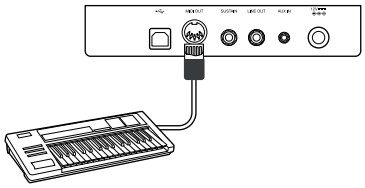
Use the *[LINE OUT]* socket to connect the device to an amplifier, stereo system, mixer or recording device. Plug one end of the audio cable into the *[LINE OUT]* socket on the back of the device and the other end into the input of the respective audio device.

External audio device aux in



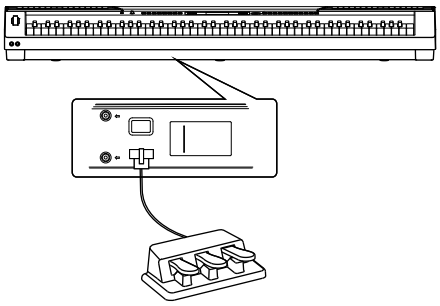
You can connect the device to a CD player or MP3 player, for example, via the *[AUX IN]* socket. This allows you to play songs through the device's internal speakers and accompany them at the same time. Plug one end of the audio cable into the *[AUX IN]* socket on the back of the device piano and the other end into the output of the respective audio device.

MIDI device MIDI out



Use the *[MIDI OUT]* MIDI interface to send MIDI data to an external MIDI device.

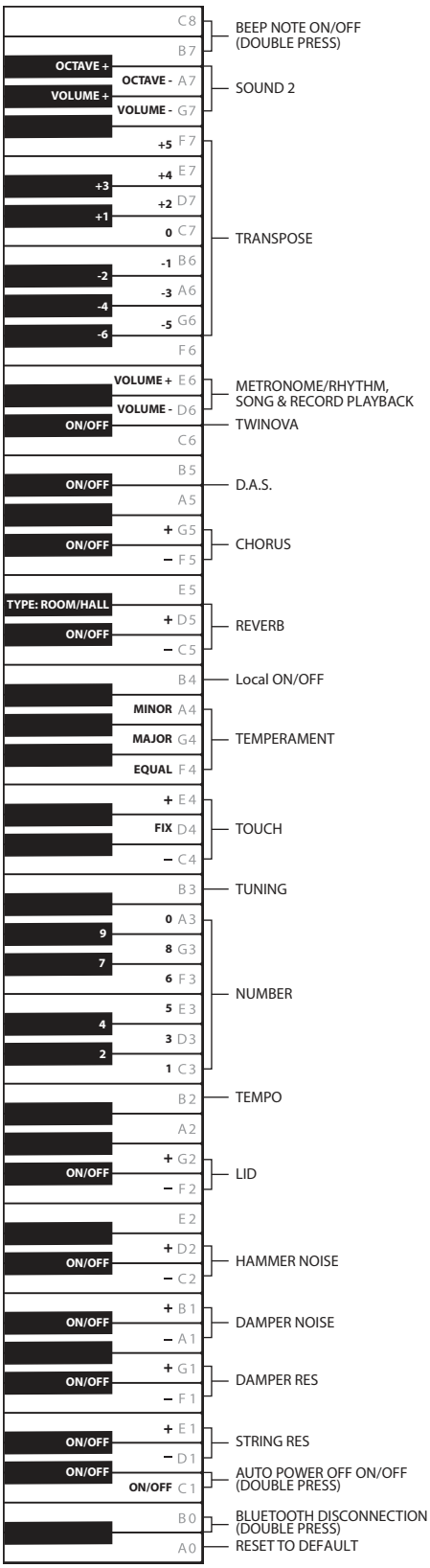
Pedal box

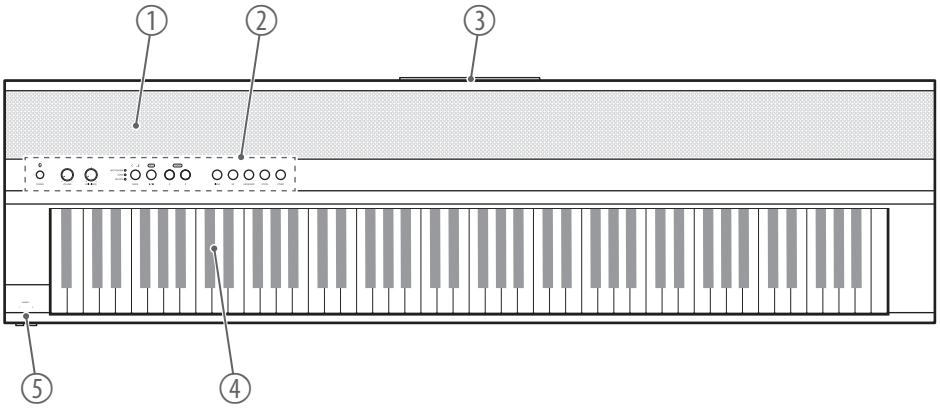


You can connect the triple pedal (Sustain, Sostenuto and Soft) from the optional Thomann original stand (item no. 352262) via the connection socket on the bottom of the device.

6 Connections and controls

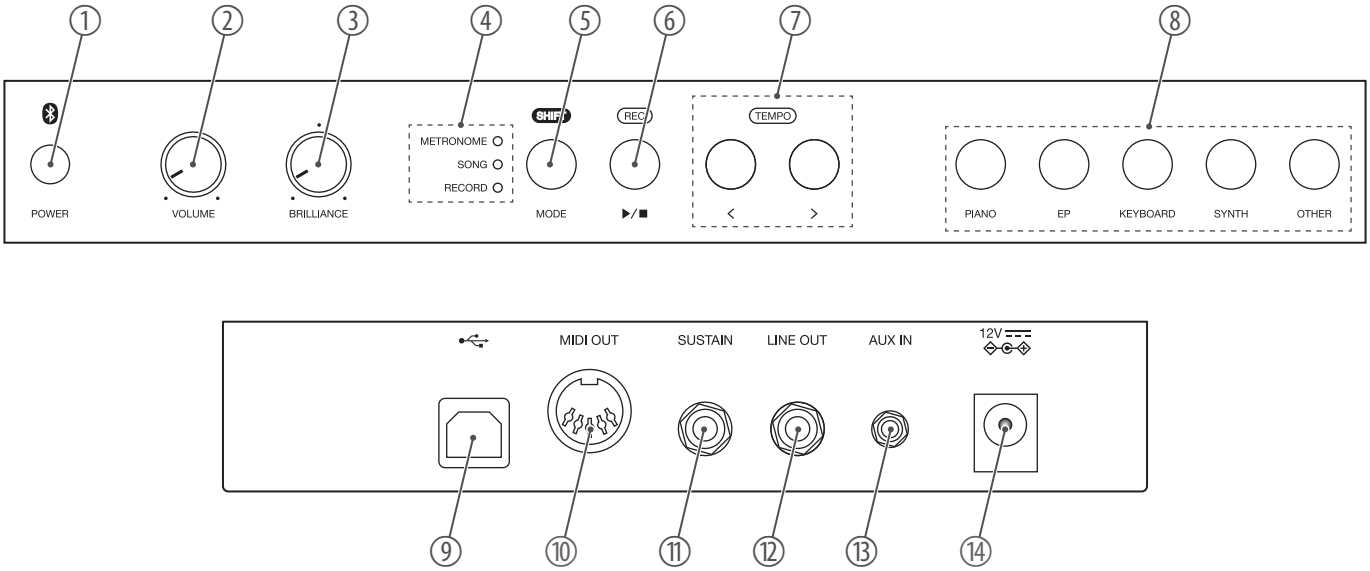
Assembly overview





1	Built-in speakers
2	Control panel
3	Connections on the back
4	Keyboard
5	Connections for headphones

Control panel and connections on the back



1	*[POWER]* | Main switch Turns the device on and off.
2	*[VOLUME]* | Rotary control for adjusting the overall volume
3	*[BRILLANCE]* | Rotary control for adjusting the tone colour
4	*[METRONOME]*/*[SONG]*/*[RECORD]* | LEDs for indicating the activated mode
5	*[MODE]* | Mode selection button (first function) *[SHIFT]* | Enables the second button function in combination with one of the buttons *[11]* and *[12]*.
6	▶/■ | Button for playing or stopping the practise and demo songs (first function) *[REC]* | Button for activating recording mode (second function)
7	*[<]*/*[>]* | Buttons for setting the parameters and selecting the functions *[TEMPO]* | Buttons for setting the tempo during playback (second function)
8	*[PIANO]*/*[EP]*/*[KEYBOARD]*/*[SYNTH]*/*[OTHER]* | Buttons for selecting a sound
9	⇢ | USB-to-host interface for connection to a computer (MIDI data)
10	*[MIDI OUT]* | MIDI out for connecting an external MIDI device
11	*[SUSTAIN]* | Connection for a sustain pedal, designed as a 6.35 mm jack socket
12	*[LINE OUT]* | Stereo output socket for connection to external audio equipment, e.g. a stereo system, designed as a 6.35 mm jack socket
13	*[AUX IN]* | Stereo input socket for connecting an external audio device, e.g. an MP3 player or CD player, designed as a 3.5 mm jack socket
14	*[12V]* | Connector for an external power supply

7 Operating

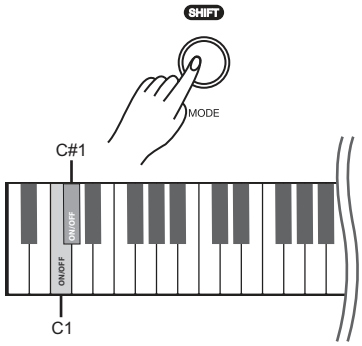
7.1 Starting the device

Press *[POWER]*.

⇨ The LEDs light up.

If you do not hear anything from the speakers, the volume may be set to "minimum".

7.2 Setting the automatic shutoff



If the device is not used for 15 minutes, the device automatically switches off. Automatic shutoff is enabled by default.

1. Hold down *[SHIFT]* and press *[C1]* and *[C#1]*.

⇨ Automatic shutoff is deactivated.

2. To activate automatic shutoff, hold down *[SHIFT]* and press *[C1]* and *[C#1]*.

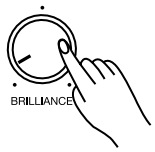
7.3 Adjusting the volume



1. To increase the volume, turn *[VOLUME]* clockwise.

2. To decrease the volume, turn *[VOLUME]* anti-clockwise.

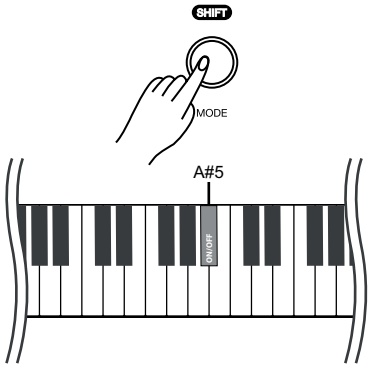
7.4 Setting the tone colour



1. Turn the *[BRILLIANCE]* rotary control clockwise to adjust the treble for the entire keyboard.

2. To adjust the bass ratio for the entire keyboard, turn the *[BRILLIANCE]* rotary control anti-clockwise.

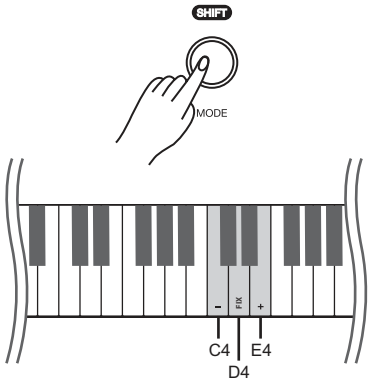
7.5 Dynamic Acoustic System (D.A.S.)



Activate the D.A.S to automatically increase the bass and treble in conjunction with the master volume even at low volume.

1. Hold down *[SHIFT]* and press *[A#5]*.
   ⇨ The D.A.S. is activated.
2. To disable the D.A.S., hold down *[SHIFT]* and press *[A#5]*.

7.6 Adjusting touch velocity



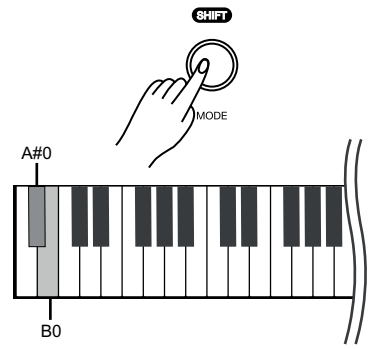
This function allows you to adjust the touch velocity of the keyboard in 6 stages.

1. Hold down *[SHIFT]* and use *[C4]* and *[E4]* to adjust the touch velocity. Each push of a key alters the parameter by 1.

Setting	Meaning
[1]	Piano
[2]	Mezzo-piano
[3]	Standard
[4]	Mezzo-forte
[5]	Forte

2. To deactivate touch velocity, hold down *[SHIFT]* and press *[D4]*.

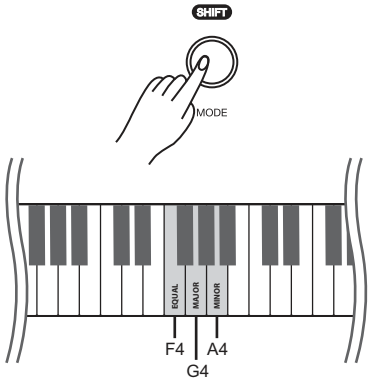
7.7 Adjusting the Bluetooth® MIDI connection



With the Bluetooth® MIDI connection, the device can be paired with smartphones, tablets or other mobile devices to enable a wireless MIDI connection.

1. Switch on the digital piano and the mobile device.
2. Activate the Bluetooth® connection on your mobile device.
3. Open the app on your mobile device and pair it with the digital piano *'Piano MIDI xxxx'*.
   ⇨ When the connection between digital piano and mobile device is established, the LED of the *[POWER]* button lights up blue.
   ⇨ You can now control the digital piano from your mobile device.
4. To disconnect the Bluetooth® connection, hold down *[SHIFT]* and press *[A#0]* and *[B0]*.

7.8 Setting the temperament

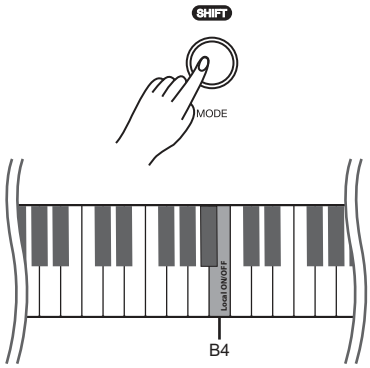


The device has a total of 3 temperaments that can be set via the keyboard.

Hold down *[SHIFT]* and press *[F4]*, *[G4]* or *[A4]*. The default temperament is *'EQUAL'*.

Setting	Meaning
[F4]	EQUAL The equal tempered tuning divides the octave into 12 equal semi-tone steps. This tuning has become standard over time because playing all keys is equally possible.
[G4]	JUST MAJOR A tuning process in which the intervals are tuned without beat. This creates chords with great sonority. For physical reasons, this only works for the major key specified here. Related chords have low beats, distant chords (such as F sharp major in a pure C tuning) usually sound very out of tune.
[A4]	JUST MINOR A tuning process in which the intervals are tuned without beat. This creates chords with great sonority. For physical reasons, this only works for the minor key specified here. Related chords have low beats, distant chords (such as F sharp minor in a pure C tuning) usually sound very out of tune.

7.9 Setting Local ON/OFF



With this function, the keyboard is disconnected from the local sound generator of the instrument, and MIDI data is transmitted to a connected device such as a PC or an external sound generator. The default setting of the instrument is *'Local ON'*.

1. Hold down *[SHIFT]* and press *[B4]*.

⇨ The instrument is in the *'Local OFF'* state.

⇨ The keyboard and local sound generator are separate.

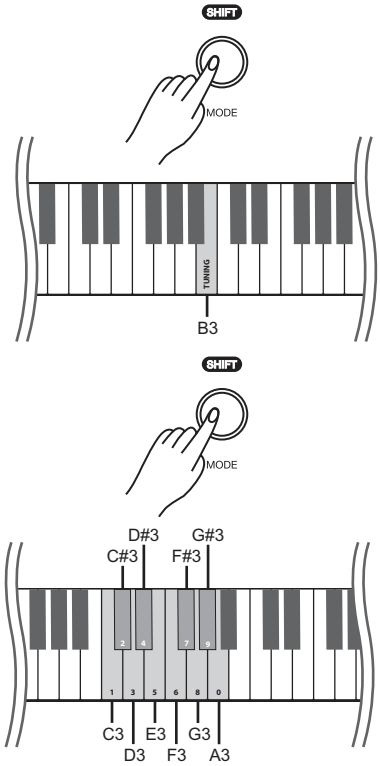
⇨ The MIDI notes of the keyboard are output via MIDI/USB.

2. To put the instrument in the *'Local ON'* state, hold down *[SHIFT]* and press *[B4]* again.

⇨ The keyboard controls the local sound generator.

⇨ The MIDI notes of the keyboard are output via MIDI/USB.

7.10 Adjusting the tuning



With this function you can fine tune the pitch of the entire keyboard. The device is tuned to 440 Hz by default. You do not need to tune the device after starting. However, if you wish you can adjust the basic tuning of the device in small increments in the range of one semitone (= 100 cents).

1. Hold down *[SHIFT]* and press *[B3]*.

   ⇨ You are in tuning mode.

2. To tune in small increments, hold down *[SHIFT]* and use the white keys *[C3]*… *[A3]* on the keyboard to enter a four-digit value.

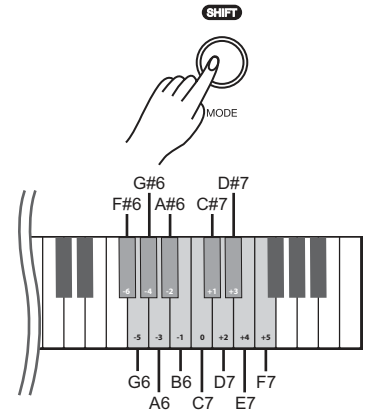
   For example, to set the frequency to *'452.3 Hz'*, hold down *[SHIFT]* and press *[D#3]*, *[E3]*, *[C#3]* and *[D3]* in succession.

3. To restore the standard pitch (440 Hz), hold down *[SHIFT]* and press *[D#3]*, *[D#3]*, *[A3]* and *[A3]* in succession.

4. Release *[SHIFT]*.

   ⇨ The setting is saved.

7.11 Transposing the pitch



You can transpose the pitch of the entire keyboard up or down in semitone intervals by up to a maximum of 12 semitones.

Hold down *[SHIFT]* and press one of the white keys *[F#6]*…*[F7]* on the keyboard.

7.12 Selecting sounds

The device has 25 sounds, see *Chapter 8 'Sound list' on page 27*.

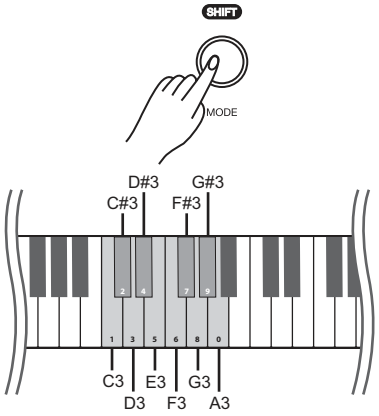
1. To select a sound group, press *[PIANO]*, *[EP]*, *[KEYBOARD]*, *[SYNTH]* or *[OTHER]*.
   ⇨ The LED of the selected button lights up.
2. To set a chosen variation sound in this key, repeatedly press the key of the selected sound group.
3. To select a different sound group, press *[PIANO]*, *[EP]*, *[KEYBOARD]*, *[SYNTH]* or *[OTHER]*.

7.13 Playing demo songs

The device has 100 integrated demo songs, see *Chapter 9 'Practise songs and demo songs' on page 28*. The demo songs incorporated in the digital piano demonstrate the sound and the pitch range of the instrument.

All pre-programmed demo songs are stored at a specific speed. You can adjust the speed, see *Chapter 7.23 'Setting the speed' on page 24*.

Selecting demo songs



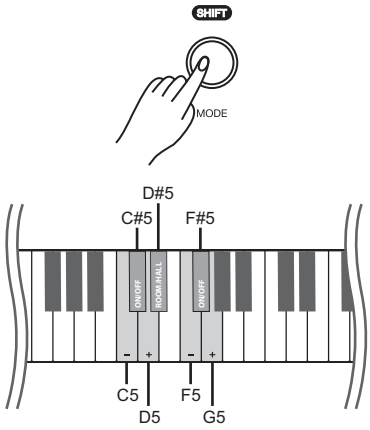
1. Press *[MODE]* until the *[SONG]* LED lights up.
2. Press ▶/■.
   ⇨ The LED in the ▶/■ button flashes.
   ⇨ Playback of the demo songs starts.
3. To select a demo song in steps of 1, press *[<]* or *[>]*.
   Hold down *[<]* or *[>]* to set the tenth next demo song.

   For example, if the current demo song is # 1, press and hold [>] to set the demo song # 11.

   To set the required demo piece directly, hold down *[SHIFT]* and use the white keys *[C3]*…*[A3]* on the keyboard to enter a three-digit value.

   To set demo song 26, for example, press [A3], [C#3] and [F3].
4. To adjust the volume, hold down *[SHIFT]* and press *[D6]* or *[E6]*.
5. To stop playback, press ▶/■.
   ⇨ The *[SONG]* LED goes out.

7.14 Adjusting the reverb effect and chorus effect



You can use the reverb and chorus functions to simulate acoustic effects in different ambient conditions.

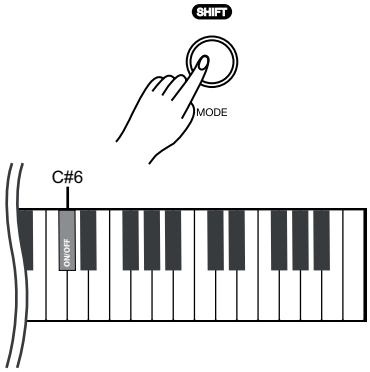
On delivery, the reverb and chorus of the respective sound are activated by default.

1. Hold down *[SHIFT]* and press *[D#5]*, to set the reverb type (Room or Hall).
2. To set the effect depth for the reverb in 10 stages each, hold down *[SHIFT]* and press *[C5]* or *[D5]*.
3. To adjust the effect depth for the chorus in 10 stages each, hold down *[SHIFT]* and press *[F5]* or *[G5]*.
4. To disable the effects, hold down *[SHIFT]* and switch off the chosen effect with *[C#5]* (reverb) or *[F#5]* (chorus).
5. To activate the effects, hold down *[SHIFT]* and switch on the desired effect with *[C#5]* (reverb) or *[F#5]* (chorus).

7.15 Setting TWINOVA

In TWINOVA mode, the keyboard is divided into 2 areas with the same sound and the same pitch to enable 4-handed playing, for example in class. The default split point is between *[E4]* and *[F4]*.

> *The layer function and split function and the playback of demo songs are not available in TWINOVA mode.*



1. Hold down *[SHIFT]* and press *[C#6]*.

   ⇨ They are in TWINOVA mode.
2. The sound selected before input is set as the standard sound for both areas. However, you can choose a different sound, see *Chapter 7.12 'Selecting sounds' on page 18*.

7.16 Setting the recording function

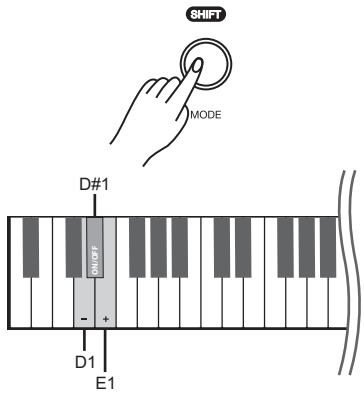
You can record a user song with the device and store the recording in the internal memory. If you record again, the saved user song will be overwritten.

1. Press *[MODE]* until the *[RECORD]* LED lights up.
   ⇨ The recording function is switched on.
2. Hold down *[SHIFT]* and press *[REC]*.
   ⇨ The device is ready for recording.
   ⇨ The *[RECORDING]* LED flashes.
3. Hit the first note.
   ⇨ Recording starts.
   ⇨ The *[REC]* LED flashes.
4. To pause or stop recording, press *[REC]*.
5. To turn on the recording function, press *[MODE]* until the *[RECORD]* LED lights up.
6. To play the recording, press ▶/■.
   ⇨ The ▶/■ LED flashes.
7. To stop playback of the recording press ▶/■.

7.17 Setting the string resonance

This function simulates the resonance effects that take place in an acoustic piano. On delivery, string resonance is activated by default.

The setting is only available for sounds 1…4.

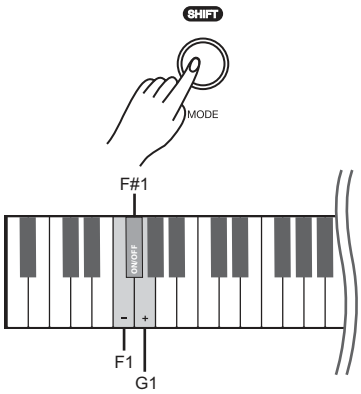


1. Hold down *[SHIFT]* and press *[D1]* or *[E1]*.
2. Hold down *[SHIFT]* and press *[D#1]*.
   ⇨ String resonance is deactivated.
3. To activate string resonance, hold down *[SHIFT]* and press *[D#1]*.

7.18 Setting the damper resonance

This function simulates the damper resonance effects with lifted dampers that take place in an acoustic piano. On delivery, the damper resonance is activated by default.

The setting is only available for sounds 1…4.

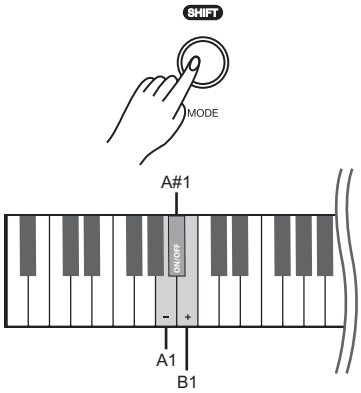


1. Hold down *[SHIFT]* and press *[F1]* or *[G1]*.
2. Hold down *[SHIFT]* and press *[F#1]*.
   ⇨ Damper resonance is deactivated.
3. To activate damper resonance, hold down *[SHIFT]* and press *[F#1]*.

7.19 Adjusting the damper noise

This function simulates the damper noise effects that take place in an acoustic piano when dampers are lifted and lowered. On delivery, the damper noise is activated by default.

The setting is only available for sounds 1…4.

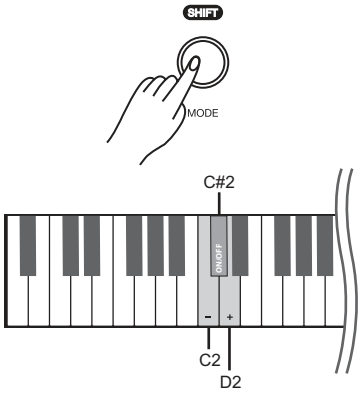


1. Hold down *[SHIFT]* and press *[A1]* or *[B1]*.
2. Hold down *[SHIFT]* and press *[A#1]*.
   ⇨ The damper noise is deactivated.
3. To activate the damper noise, hold down *[SHIFT]* and press *[A#1]*.

7.20 Setting the hammer sound

This function simulates the hammer noise effects that take place in an acoustic piano when striking the strings. On delivery, the hammer noise is activated by default.

> *The setting is only available for sounds 1…4.*

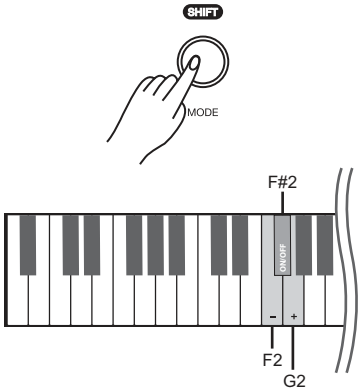


1. Hold down *[SHIFT]* and press *[C2]* or *[D2]*.
2. Hold down *[SHIFT]* and press *[C#2]*.
   ⇨ The hammer sound is deactivated.
3. To activate the hammer sound, hold down *[SHIFT]* and press *[C#2]*.

7.21 Setting the lid simulation (LID)

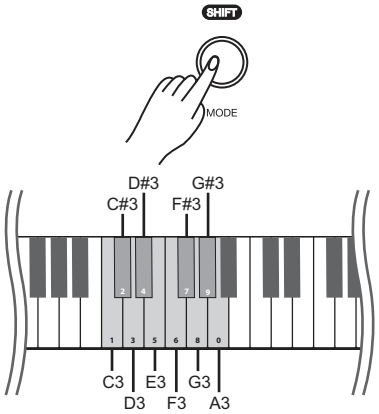
This function simulates the lid position of a piano or grand piano (open, half-open, closed).

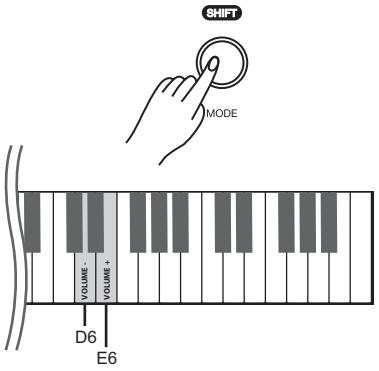
> *The setting is only available for sounds 1…4.*



1. Hold down *[SHIFT]* and press *[F2]* or *[G2]*.
2. Hold down *[SHIFT]* and press *[F#2]*.
   ⇨ The lid simulation is deactivated.
3. To activate the lid simulation, hold down *[SHIFT]* and press *[F#2]*.

7.22 Adjusting the metronome





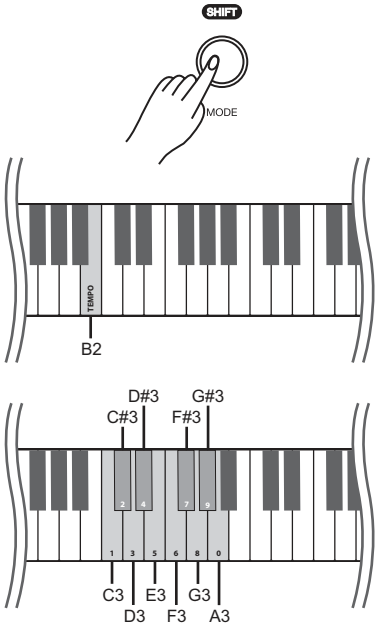
You will find the rhythm list under *Chapter 10 'Metronome rhythm list' on page 29*.

All pre-programmed time signatures are stored with a specific speed. You can adjust the speed, see *Chapter 7.23 'Setting the speed' on page 24*.

The metronome function is not available in song mode.

1. Press *[MODE]* repeatedly until the *[METRONOME]* LED lights up.
   ⇨ The metronome is switched on.
2. Press ▶/■ to start playing with the metronome.
   ⇨ The LED in the ▶/■ button flashes.
3. To set a chosen time signature, press *[<]* or *[>]*.
   Alternatively, hold down *[SHIFT]* and use the white keys *[C3]*…*[A3]* on the keyboard to enter the required time signature in two digits.
   For example, to set the *'4/4 beat'* time signature, hold down *[SHIFT]* and press *[A3]* and *[C#3]*.
4. To adjust the volume, hold down *[SHIFT]* and press *[D6]* or *[E6]*.
5. Press ▶/■.
   ⇨ The metronome is off.
   ⇨ The *[METRONOME]* LED goes out.

7.23 Setting the speed



All pre-programmed songs and the metronome function are stored with a specific speed. You can set the speed in the range from *'5'* … *'320'*. These presets can be adjusted at any time in various ways.

1. Hold down *[SHIFT]* and quickly press *[<]* or *[>]* to adjust the speed in increments of 1.

2. To set the speed to the next decimal place, hold down *[SHIFT]* and press *[<]* or *[>]* until the LED in the *[<]* or *[>]* button lights up.

> *If the current speed is 126 bpm, hold down [SHIFT] and press and hold [>]. The speed jumps to 130 bpm.*

3. Hold down *[SHIFT]* and press *[B2]*.

To set the speed directly, keep pressing *[SHIFT]* and use the white keys *[C3]*… *[A3]* on the keyboard to enter a three-digit value.

For example, to set a speed of 214, hold down *[SHIFT]* and press *[B2]*, *[C#3]*, *[C3]* and *[D#3]*.

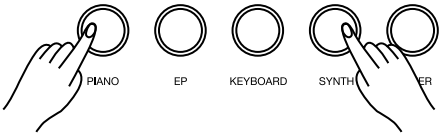
> *When playback ends in metronome mode, the speed is reset by changing the time signature of the metronome.*

4. To reset the speed to the default value, hold down *[SHIFT]* and press and *[<]* and *[>]* at the same time.

7.24 Setting the layer mode

Layer mode allows you to set the "layering" of sounds.

Setting the layer effect

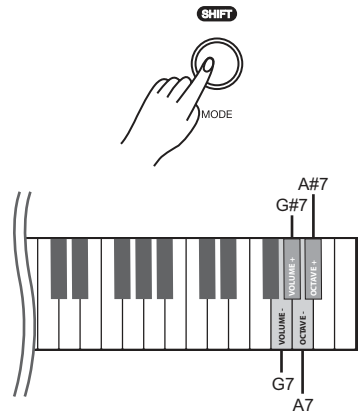


1. Press and hold one of the buttons *[PIANO]*, *[EP]*, *[KEYBOARD]*, *[SYNTH]* or *[OTHER]* and press another for the layer (e.g. *[PIANO]* and *[SYNTH]*).

⇨ You are in layer mode.

⇨ The LEDs of the selected buttons light up.

2. To set a variation sound for the selected sound groups, repeatedly press the selected buttons (e.g. *[PIANO]* and *[SYNTH]*).



3. To set the octave shift for the layer sound (SOUND R2), hold down *[SHIFT]* and press *[A7]* or *[A#7]*.

4. To adjust the volume for the layer sound (SOUND R2), hold down *[SHIFT]* and press *[G7]* or *[G#7]*.

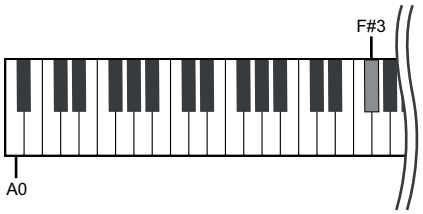
5. To disable layer mode, press and hold the button whose sound you want to turn off (e.g. *[SYNTH]*) until the LED goes out.

⇨ Layer mode is deactivated.

6. To activate layer mode, proceed as described in step 1.

Setting the split point

This function allows you to select a point that splits the entire keyboard into two sections and to assign different voices to those sections.



1. Press and hold 2 of the buttons *[PIANO]*, *[EP]*, *[KEYBOARD]*, *[SYNTH]* or *[OTHER]* and press the key which you want to use as the split point.

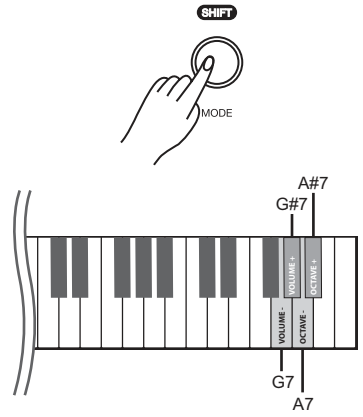
If you press multiple keys when assigning the split point, the last key pressed is set as the split point.

2. Release both buttons.

⇨ The LEDs of the selected buttons light up.

⇨ The setting is saved.

3. To set a variation sound for the selected sound groups, press the selected buttons (e.g. *[PIANO]* and *[SYNTH]*).



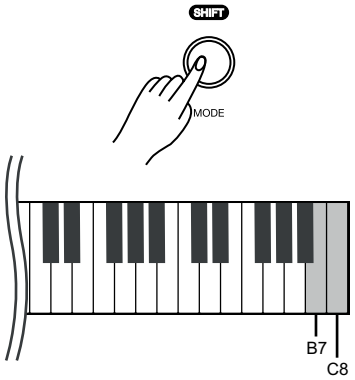
4. To set the octave shift for the second voice (SOUND L), hold down *[SHIFT]* and press *[A7]* or *[A#7]*.

5. To adjust the volume for the second voice (SOUND L), hold down *[SHIFT]* and press *[G7]* or *[G#7]*.

6. To deactivate split mode, press and hold the buttons you selected in step 1.

⇨ The LEDs of the selected buttons go out.

7.25 Setting the operating tone



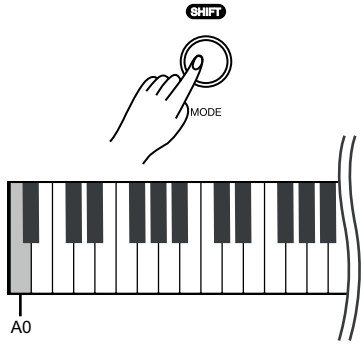
If a setting is made using key combinations, an operating tone sounds which can be switched on or off as required. The operating tone is activated by default.

1. Hold down *[SHIFT]* and press *[B7]* and *[C8]*.

⇨ The operating tone is deactivated.

2. To activate playback of the operating sound, hold down *[SHIFT]* and press *[B7]* and *[C8]*.

7.26 Resetting to factory defaults



Resetting to factory defaults clears the battery-powered memory and resets all functions to the factory defaults that applied on delivery.

Hold down *[SHIFT]* and press *[A0]*.

8 Sound list

No.	Name	No.	Name	No.	Name
PIANO		009	Dark EP	017	Strings
001	German Grand	010	FM EP	018	Choir
002	Japanese Grand	**KEYBOARD**		019	Square Lead
003	Bright German Grand	011	Clavinet	020	Saw Lead
004	Warm Grand	012	Harpsichord	**OTHER**	
005	Electric Grand	013	Tonewheel Organ	021	Bell
EP		014	Classic Organ	022	Celesta
006	Vintage EP	015	Church Organ	023	Nylon Guitar
007	Warm EP	**SYNTH**		024	Electric Bass
008	Reed EP	016	Synth Pad	025	Acoustic Bass

9 Practise songs and demo songs

No.	Name		No.	Name		No.	Name
001	Sonata No.17		035	Etude E Major		069	Reverie
002	Sonata No.14		036	Black Key		070	Cakewalk
003	Sonata No.8		037	Revolutionary		071	Arietta
004	Sonata No.25		038	Etude A-Flat		072	Butterfly
005	Sonata No.20		039	Etude F Minor		073	Neapolitan Song
006	Fur Elise		040	Nocturne B-Flat		074	Arabesques No.2
007	Menuett G-Dur 4		041	Nocturne E-Flat		075	Etudes G Minor
008	Prelude C Major		042	Nocturne F Minor		076	Gymnopedies
009	Prelude No.2		043	Impromptu A Flat		077	Je Te Veux
010	Gavotte No.5		044	Fantaisie-Improm		078	Fast Dance
011	Minuet G Major		045	Raindrop		079	Gypsy Rondo
012	Prelude C-Sharp		046	Preludes C Minor		080	Liebestraum
013	Prelude E Major		047	Waltz E-Flat		081	The Sapin
014	Prelude C Minor		048	Waltz C-Sharp		082	Lyric Rondo
015	Invention No.13		049	Minute Waltz		083	Humoresque
016	Invention No.1		050	Mazurkas F Major		084	La Priere
017	Sonata K.545 1st		051	Sweet Remember		085	To A Wild Rose
018	Sonata K.333 1st		052	May Breezes		086	Fontaine, La
019	Sonata K.333 3rd		053	Spring Song		087	Blumenlied
020	Rondo alla Turca		054	Venetianisches		088	Le Coucou
021	Ah, Vous Dirai-je		055	Lost Illusions		089	Minuet
022	Perpetuum Mobile		056	Barcarolle		090	Warblings
023	Impromptu		057	Christmas		091	Gavotte
024	Moments Musicaux		058	Autumn Song		092	Dance Steps
025	Serenade		059	Traumerei		093	Salut D'Amour
026	Arabesque		060	The Happy Farmer		094	Le Cygne
027	La Chevaleresque		061	May, Sweet May		095	Paloma, La
028	Tarentelle		062	Winter Time I		096	Rialto Ripples
029	La Gracieuse		063	Intermezzo		097	Le courant limpide
030	Sonatina Op.36-1		064	Brahms Waltz		098	Maple Leaf Rag
031	Sonatina Op.36-2		065	Arabesques No.1		099	Entertainer
032	Sonatina Op.36-3		066	Clair De Lune		100	Peacherine
033	Sonatina Op.36-4		067	Perludes No.8			
034	Etude C Major		068	Doctor			

10 Metronome rhythm list

No.	Name	No.	Name	No.	Name
01	Simple Count	18	70's Rock	35	Funk 2
02	4/4 Beat	19	Texas Rock	36	Swing 1
03	2/4 Beat	20	Sweet Ballad	37	Swing 2
04	3/4 Beat	21	6/8 Soul	38	Funky Jazz
05	3/8 Beat	22	Fusion Shuffle	39	Bernard Shuffle
06	6/8 Beat	23	Adult Ballad	40	Bluegrass
07	5/4 Beat	24	Organic Ballad	41	Country Step
08	5/8 Beat	25	Tango	42	Country Folk
09	7/8 Beat	26	Slow Waltz	43	Bossa Nova
10	10/8 Beat	27	Cha Cha	44	Latin
11	8Beat 1	28	Rumba	45	Mambo
12	8Beat 2	29	Samba	46	Waltz
13	16Beat 1	30	Techno 1	47	Vienna Waltz
14	16Beat 2	31	Hip Hop	48	Polka
15	Rock	32	Techno 2	49	March
16	Ska	33	Classic Disco	50	6/8 March
17	Slow Rock	34	Funk 1		

11 MIDI implementation

Function		Sent	Received	Notes
Basic Channel	Default	1	1-16	
	Changed	1-16	1-16	
Mode	Default	No	Mode 3	
	Messages	No	Mode 3	
	Altered	********	No	
Note Number	Note	0 – 127	0 – 127	
	True voice	********	0 – 127	
Velocity Note	Note ON	Yes, 9nH, v = 1 – 127	Yes, 9nH, v = 1 – 127	
	Note OFF	No, 9nH, v = 0 or 8nH, v = 0 – 127	Yes, 9nH, v = 0 or 8nH, v = 0 – 127	
After Touch	Keys	No	No	
	Channels	No	No	
Pitch Bend		No	Yes	
Control Change	0	Yes	Yes	Bank Select
	1	No	Yes	Modulation
	5	No	Yes	Portamento Time
	6	No	Yes	Data Entry
	7	Yes	Yes	Volume
	10	No	Yes	Pan
	11	No	Yes	Expression
	64	Yes	Yes	Sustain Pedal
	65	No	Yes	Portamento ON/OFF
	66	No	Yes	Sostenuto Pedal
	67	No	Yes	Soft Pedal
	80	Yes	Yes	Reverb Program
	81	Yes	Yes	Chorus Program
	91	Yes	Yes	Reverb Level
	93	Yes	Yes	Chorus Level
	120	No	Yes	All Sound Off
	121	No	No	Reset All Controllers
	123	No	Yes	All Notes Off
Program Change	True #	Yes	Yes	Bank MSB, Bank LSB, Programm
System Exclusive		No	Yes	
System Common	Song Position	No	No	

Function		Sent	Received	Notes
	Song Select	No	No	
	Tune Request	No	No	
System Real Time	Clock	Yes	No	
	Commands	No	No	
Aux Messages	Local ON/OFF	Yes	Yes	
	Active Sensing	Yes	No	
	System Reset	No	Yes	

MIDI channel modes

	POLY	MONO
OMNI ON	Mode 1	Mode 2
OMNI OFF	Mode 3	Mode 4

12 Technical specifications

Input connections	Power supply	1 × socket for an external power adapter
	USB port	1 × USB to host
	Sustain pedal	1 × 6.35 mm jack socket (mono, unbalanced)
	AUX In	1 × 3.5 mm jack socket (stereo, unbalanced)
Output connections	Headphones	1 × 6.35 mm jack socket (stereo, unbalanced)
		1 × 3.5 mm jack socket (stereo, unbalanced)
	Line Out	1 × 6.35 mm jack socket (stereo, unbalanced)
	MIDI Out	1 × DIN socket, 5-pin
Keyboard	88 weighted keys with hammer action	
Polyphony	192-voice	
Sounds	25	
Styles	50	
Effects	Reverb, Chorus	
Pedals	Sustain	
Pitch adjustment	Transposing	–12…+12
	Fine tuning	–6…+5
Functions	Pedal support	Sustain
	Metronome	0…6
	Speed	5…320
	Reverb	1…10
	Chorus	1…10
Demo and practise songs	100	
Bluetooth®	Frequency range	2,379 MHz … 2,496 MHz
	Max. transmission power	10 dBm
	Standard	Version 4.0
	Bluetooth® name	Piano MIDI xxxx
Speakers	2 × 20 W	
Volume	+89 dB max.	
Power supply	External power adapter, 100 - 240 V ~ 50/60 Hz	
Operating voltage/current	12 V ⎓ / min. 2,000 mA , polarity: Centre positive	
Operating system	Windows® 8 and later, Mac OS X® 10.8 and later	
Dimensions (W × H × D)	1,365 mm × 134 mm × 366 mm	
Weight	12.5 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

Further information

Colour	Black (item no. 493572), white (item no. 520276)
Surface	Matt
Hammer mechanism	Yes
Wooden keyboard	No
Ivory-feel keyboard	No
Auto accompaniment	No
Number of rhythms	50
Sequencer	Yes
Master keyboard functions	No
Pitch bend	No
Modulation wheel	No
Number of split zones	2
Layer function	Yes
Matching bag	Optional (item no. 146377)
Matching stand	Optional (item no. 352262)

13 Plug and connection assignment

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

1/4" TS phone plug (mono, unbalanced)



1	Signal
2	Ground, shielding

1/4" TRS phone plug (stereo, unbalanced)



1	Signal (left)
2	Signal (right)
3	Ground

Three-pole 1/8" mini phone jack (stereo, unbalanced)



1	Signal (left)
2	Signal (right)
3	Ground, shielding

14 Troubleshooting

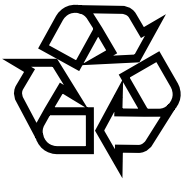
In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
When the digital piano is turned on and off, a "pop" sound emerges from the speakers.	This is normal. No need to worry.
No sound can be heard when the piano is played.	1. Make sure that the volume control is set to the appropriate level.
	2. Check if headphones are plugged into headphone output 1 or 2. When headphones are connected, the speakers of the digital piano are muted.
Interference occurs when a mobile phone is used.	Using a mobile phone near the digital piano can cause interference. To prevent this, turn off the mobile phone or use it only at a safe distance.
Some notes on the keyboard sound wrong.	1. Reset the tuning to the default setting.
	2. Restart the device.
The digital piano is not detected when it is connected to a computer.	1. Check the USB cable for correct connection.
	2. Connect the USB cable to another USB port on the computer.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at *www.thomann.de*.

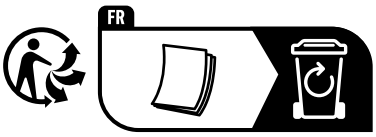
15 Protecting the environment

Disposal of the packing material



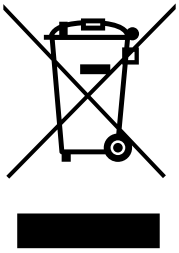
Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.



Observe the disposal note regarding documentation in France.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on *www.thomann.de*.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal. For example, use the classified ads of Thomann GmbH.

If your old device contains personal data, delete those data before disposing of it.