

Startone★

MK-201

User Manual

Keyboard

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Table of contents

1	General information	6
	1.1 Symbols and signal words.....	6
2	Safety instructions	7
3	Features	9
4	Assembly instructions	10
5	Connections and controls	11
6	Connection options	15
7	Operation	17
	7.1 Turning the keyboard on/off.....	17
	7.1.1 Automatic shutoff.....	17
	7.2 Adjusting the volume.....	17
	7.3 Demo songs.....	18
	7.4 Using the sustain pedal.....	18
	7.5 Sounds.....	19
	7.5.1 Layer mode.....	19
	7.5.2 Split mode.....	19
	7.5.3 Piano mode.....	20
	7.6 DSP effect.....	20
	7.7 Transposing.....	20
	7.8 Styles and auto accompaniment.....	21
	7.8.1 Starting auto accompaniment (rhythm track only).....	21
	7.8.2 Starting auto accompaniment (all tracks).....	21
	7.8.3 Style variations.....	21
	7.8.4 Chord structure.....	23
	7.8.5 Chord name.....	24
	7.8.6 Chord inversions.....	24
	7.8.7 Chord detection modes.....	24
	7.8.8 Quick Setting.....	25
	7.9 Metronome.....	26
	7.9.1 Turning the metronome on and off.....	26
	7.10 Function menu.....	26
	7.10.1 Octave shift.....	27
	7.10.2 Setting the split point.....	27
	7.10.3 Metronome time signature.....	27
	7.10.4 Volume of the auto accompaniment.....	27
	7.10.5 Touch velocity.....	28
	7.10.6 Fine tuning.....	28
	7.10.7 Reverb effect.....	28
	7.10.8 Chorus effect.....	28
	7.10.9 Automatic shutoff.....	29
	7.11 Performance memory.....	29
	7.11.1 Selecting a memory slot.....	29
	7.11.2 Calling up information.....	29
	7.11.3 Selecting a bank.....	30
	7.11.4 Restoring the performance memory to factory defaults.....	30
	7.12 Chord dictionary.....	30

7.13	Songs.....	31
7.13.1	Selecting, playing and stopping songs.....	31
7.13.2	Learning mode.....	31
7.13.3	Recording.....	33
7.14	MIDI functions.....	33
7.14.1	What is MIDI?.....	33
7.14.2	USB connection.....	34
8	MIDI implementation chart.....	35
9	Troubleshooting.....	37
10	Technical specifications.....	38
11	Plug and pin assignments.....	40
12	Protecting the environment.....	41



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). As a precaution, disconnect the power supply from the power grid when storms are approaching or if the device will not be used for a longer period.



NOTICE!

Risk of fire due to incorrect polarity!

Incorrectly inserted batteries may cause fires and destroy the device and the batteries. Observe the markings on the batteries and on the device. Ensure that proper polarity is observed when inserting batteries.



NOTICE!

Possible damage due to leaking batteries!

Batteries can leak and cause permanent damage to the device. Take the batteries out of the device if it is not going to be used for an extended period of time.

- **NOTICE!**
Possible staining due to plasticiser in rubber feet!
The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the device's rubber feet and the floor.

3 Features

The keyboard is characterized by the following features:

- 61 keys with touch velocity
- LCD display
- 64-voice polyphony
- 480 sounds
- 160 Styles
- 140 songs
- 140 demo songs
- 16 performance memory locations
- Record and playback function
- Layer and Split mode
- Piano mode
- Metronome
- Reverb and Chorus effects
- DSP effect
- Sequencer
- Transpose and octave functions
- Battery operation possible
- Speaker: 2 × 2.5 W
- Connections: USB MIDI, sustain pedal, headphones / external audio devices, Aux In, microphone
- Automatic shutoff
- Operating system: Windows® 8 and later, Mac OS X® 10.8 and later

4 Assembly instructions

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.

Set up the device in the desired location.

Power supply

The device can be powered by batteries or with the included power supply.



NOTICE!

Possible damage due to leaking batteries!

Batteries can leak and cause permanent damage to the device.

Take the batteries out of the device if it is not going to be used for an extended period of time.



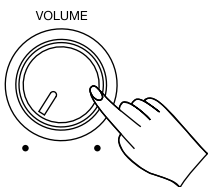
NOTICE!

Risk of fire due to incorrect polarity!

Incorrectly inserted batteries may cause fires and destroy the device and the batteries.

Observe the markings on the batteries and on the device.

Ensure that proper polarity is observed when inserting batteries.



Inserting batteries

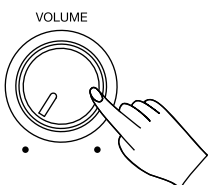
1. Turn the volume control anti-clockwise to minimum before inserting the batteries into the keyboard. This is to protect the speakers from damage.
2. Open the battery compartment cover on the underside of the device and insert six AA size batteries. Pay attention to the correct polarity.

Always use batteries of the same type and do not use new and used batteries at the same time.

3. Reattach the battery compartment cover and snap it into place.

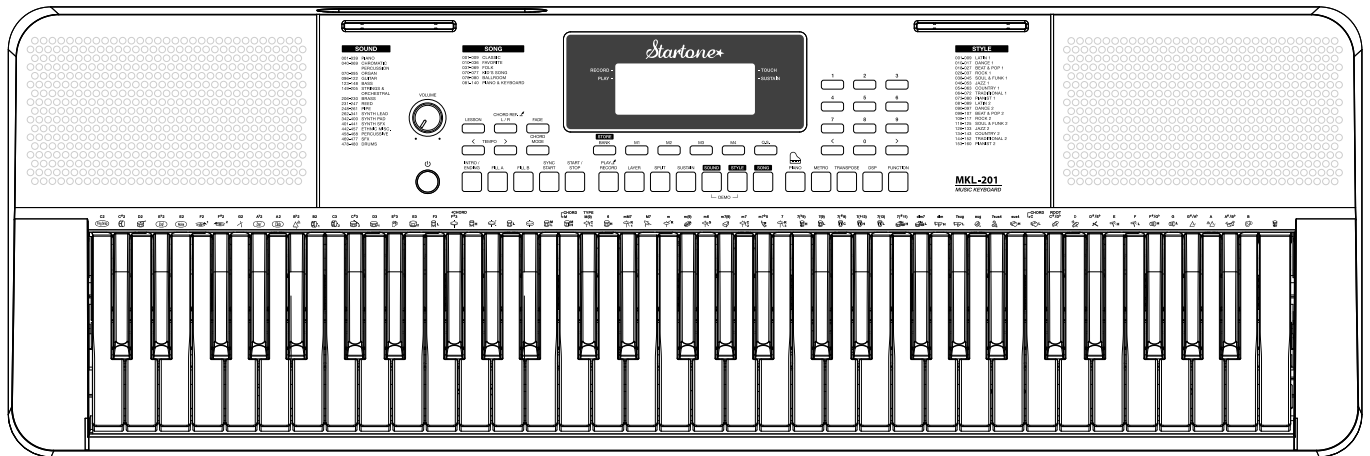
Power supply

1. Make sure that the device is turned off before you connect it to the supply voltage or disconnect it.
2. Turn the volume control anti-clockwise to minimum before connecting the keyboard to the supply voltage. This is to protect the speakers from damage.
3. Connect the cable from the power supply outlet to the [DC IN] socket on the back of the keyboard.
4. Plug the power adapter into a properly wired mains wall outlet.

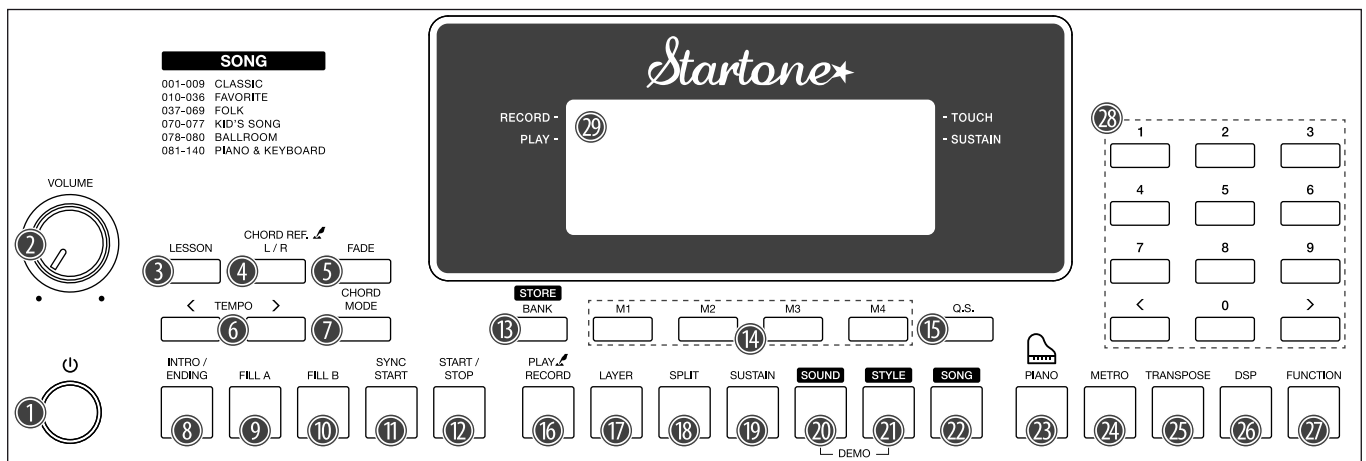


5 Connections and controls

Overview



Control panel

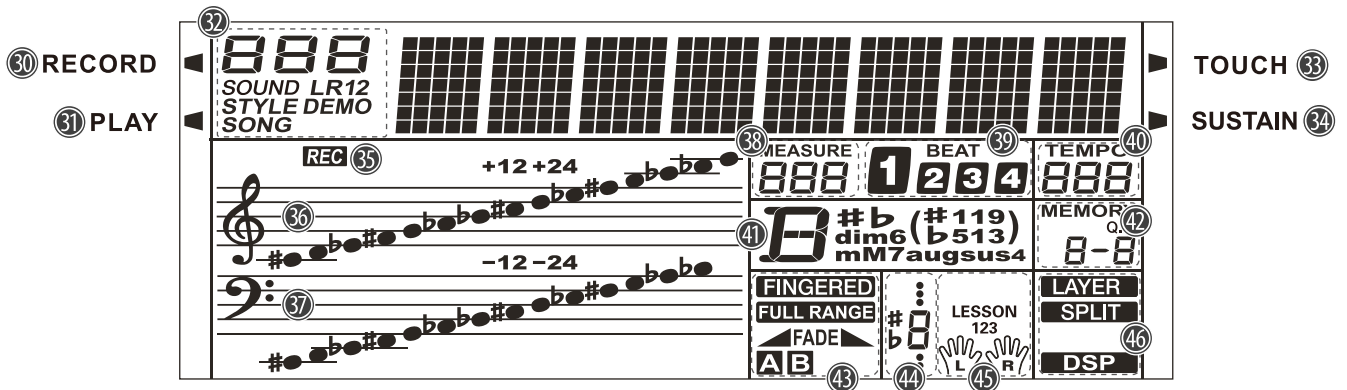


- 1 | Main switch. Turns the device on and off.
- 2 [VOLUME] | Rotary control for adjusting the overall volume
- 3 [LESSON] | Button for activating learning mode
- 4 [CHORD REF. L/R] | Press and hold the button for two seconds to open the chord directory.
Learning mode: Press the button repeatedly to choose the hand ('L', 'R' or both) you want to play with.
- 5 [FADE] | Press the button to activate/deactivate the fade in / fade out of the currently playing style.
- 6 [TEMPO] < / > | Buttons for adjusting the tempo
Press < and > simultaneously to reset the tempo to the default setting.
- 7 [CHORD MODE] | Style mode: Press the button to activate/deactivate the chord detection mode. Press the button repeatedly to choose between 'FINGERED' or 'FULL RANGE'.
Song mode: Press the button to turn the auto accompaniment on if you want to record your piece with style accompaniment.
- 8 [INTRO / ENDING] | Press the button to add an intro or ending to the currently playing style.

Connections and controls

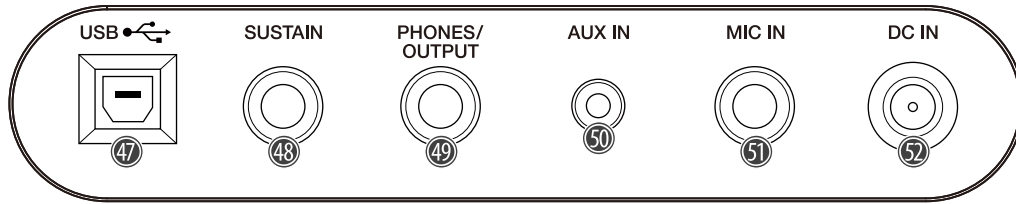
9	<i>[FILL A]</i> Press the button to play fill-in pattern 'A' (fill bars).
10	<i>[FILL B]</i> Press the button to play fill-in pattern 'B' (fill bars).
11	<i>[SYNC START]</i> Button for activating/deactivating the sync-start function
12	<i>[START/STOP]</i> Button for starting/stopping a style or song
13	<i>[STORE] / [BANK]</i> Hold down the button and press one of the <i>[M1]...[M4]</i> buttons to select the memory slot in which you want to save your settings. Press the button to call up the performance memory menu. Press the button repeatedly to switch between the banks.
14	<i>[M1]...[M4]</i> Performance memory menu: Press one of the buttons to call up the memory slot with the settings saved on it. Quick settings menu: Press one of the buttons to call up the sound setting that corresponds to the current style.
15	<i>[Q.S.]</i> Button for calling up the quick settings menu
16	<i>[PLAY] / [RECORD]</i> Button for calling up recording mode Press and hold the button for two seconds to play the recording.
17	<i>[LAYER]</i> Button for activating/deactivating layer mode
18	<i>[SPLIT]</i> Button for activating/deactivating split mode
19	<i>[SUSTAIN]</i> Button for activating/deactivating the sustain effect
20	<i>[SOUND]</i> Button for calling up sound mode Press <i>[SOUND]</i> and <i>[STYLE]</i> simultaneously to activate/deactivate demo mode.
21	<i>[STYLE]</i> Button for calling up style mode Press <i>[SOUND]</i> and <i>[STYLE]</i> simultaneously to activate/deactivate demo mode.
22	<i>[SONG]</i> Button for calling up song mode
23	<i>[PIANO]</i> Button for calling up piano mode
24	<i>[METRO]</i> Button for activating/deactivating the metronome
25	<i>[TRANSPOSE]</i> Button for calling up the transpose menu
26	<i>[DSP]</i> Button for activating/deactivating the DSP effect
27	<i>[FUNCTION]</i> Button for calling up the function menu
28	<i>[0]...[9]</i> Number buttons for selecting a value or parameter < / > Buttons for setting a value or parameter Press < and > simultaneously to reset the current parameter to the default setting.
29	Display

Display



- | | |
|----|---|
| 30 | [RECORD] LED Flashes while the user song is being recorded. |
| 31 | [PLAY] LED Flashes while the user song is being played. |
| 32 | 'SOUND / STYLE / SONG / DEMO / LR12' Displays the number of the sound, style, song, demo and the selected hand. |
| 33 | [TOUCH] LED Lights up when touch sensitivity is being adjusted. |
| 34 | [SUSTAIN] LED Lights up if a sustain pedal is connected. |
| 35 | 'REC' Recording display |
| 36 | Treble clef (right hand) |
| 37 | Bass clef (left hand) |
| 38 | 'MEASURE' Displays the time signature |
| 39 | 'BEAT' Displays the beats in the bar |
| 40 | 'TEMPO' Displays the tempo |
| 41 | Chord display |
| 42 | 'MEMORY / Q.S.' Display for memory slots 1 to 4 and quick settings |
| 43 | 'FINGERED / FULL RANGE / FADE / A/B' Display of fingering, fade and A/B |
| 44 | Note display |
| 45 | 'LESSON 123 / L/R' Learning mode display for left and right hand |
| 46 | 'LAYER / SPLIT / DSP' Display of layer mode, split mode and DSP |

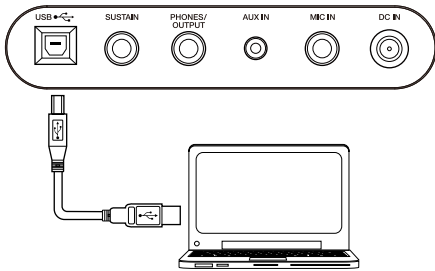
Connections on the back



47	[USB] USB interface for connecting to a computer
48	[SUSTAIN] Connection socket for the sustain pedal
49	[PHONES/OUTPUT] Output socket for headphones, an amplifier, a stereo system, a mixer or a recording device, designed as a 6.35-mm jack socket, unbalanced
50	[AUX IN] Input sockets for connecting external audio devices such as an MP3 player, designed as 3.5-mm jack sockets, unbalanced
51	[MIC IN] Input socket for a microphone, designed as 6.35-mm jack socket, unbalanced. The signal of the connected microphone is reproduced via the built-in loudspeakers of the keyboard.
52	[DC IN] Input socket for the 12-V power adapter

6 Connection options

Computer via USB-MIDI

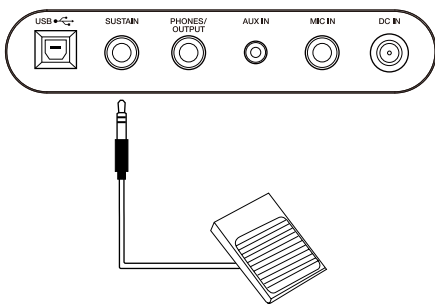


You can connect the keyboard to a PC for data exchange via the USB interface.



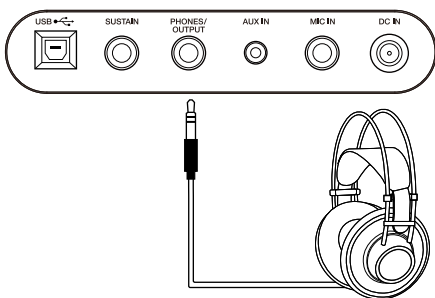
Use a current operating system still supported by the provider to avoid technical difficulties.

Sustain pedal



Use the *[SUSTAIN]* connection socket to connect a sustain pedal to the keyboard.

Headphones



Use the *[PHONES/OUTPUT]* socket to connect headphones to the keyboard.

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



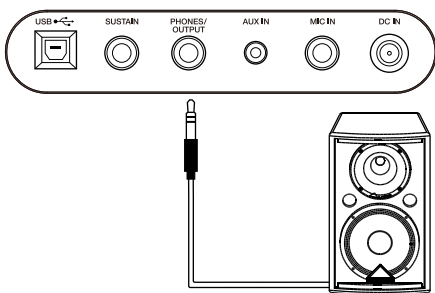
WARNING!

Possible hearing damage due to high volumes on headphones!

The use of headphones at high volumes may result in permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage.

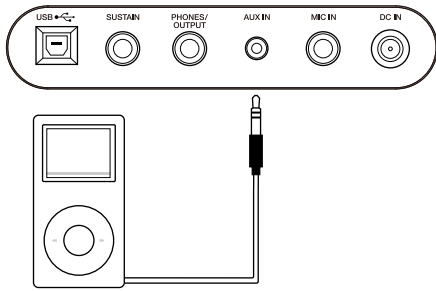
Avoid operating headphones at high volumes, in particular over an extended period of time.

External audio devices



Use the *[PHONES/OUTPUT]* socket to connect the keyboard to an amplifier, stereo device, mixing console or recording device.

CD / MP3 player



Use the *[AUX IN]* connection socket to connect a CD or MP3 player to the keyboard, for example. So you can playback music through the internal speakers of the keyboard and simultaneously play along to it. Connect the cable to the *[AUX IN]* connection socket on the back of the keyboard, and the other end of the cable to the output of the respective audio device.



NOTICE!

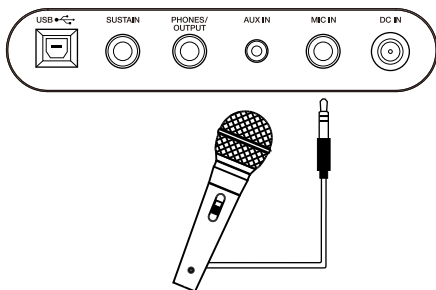
Damage to the speaker due to excessive volume!

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.

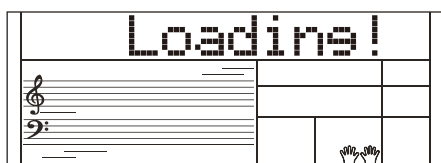
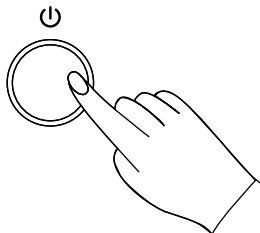
Microphone



Use the *[MIC IN]* connection socket to connect a microphone to the keyboard. Disconnect the microphone from the keyboard when it is not in use.

7 Operation

7.1 Turning the keyboard on/off



1. ➤ Press ϕ to turn the keyboard on.
⇒ The display shows 'Loading!'.
2. ➤ Press ϕ again to turn the keyboard off.



To prevent damage to the speakers, turn the volume down to "Minimum" before you switch the keyboard on.

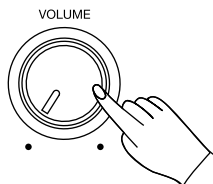
If the display remains blank when you turn on the keyboard, check the power supply.

7.1.1 Automatic shutoff

If the keyboard is not used for 30 minutes, it switches off automatically. To turn it back on, press ϕ .

You can deactivate automatic shutoff or set the desired time for the keyboard to switch off automatically (30 minutes, 60 minutes) in the function menu (see).

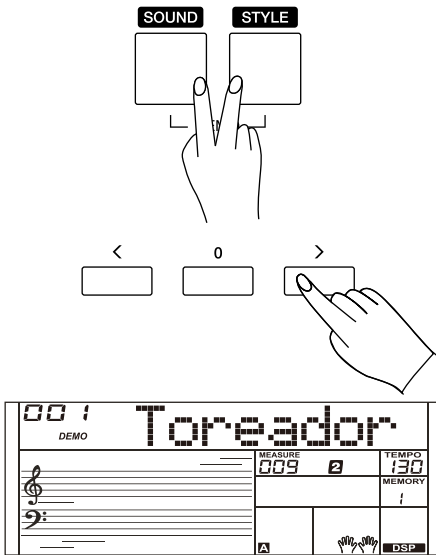
7.2 Adjusting the volume



Use the [VOLUME] rotary control to set a pleasant volume.

1. ➤ Turn the [VOLUME] rotary control clockwise to increase the volume.
2. ➤ Turn the [VOLUME] rotary control anti-clockwise to decrease the volume.

7.3 Demo songs



The keyboard offers several demo songs. The demo songs show the sound and the pitch range of the keyboard.

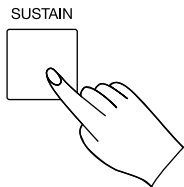
1. ➤ Press **[SOUND]** and **[STYLE]** simultaneously to activate demo mode.
 - ⇒ All demo songs are repeated continuously. The display shows the currently playing demo song.
2. ➤ Use the numeric buttons or **< / >** on the numeric keypad to select a demo track you want.

The demo list is available for download on the product page of our website www.thomann.de.
3. ➤ Press the **[SOUND]** and **[STYLE]** buttons simultaneously again or **[START/STOP]** to stop playback and exit demo mode.



*In demo mode, only the **[START / STOP]**, **[TEMPO] < / >**, **[0]...[9]** and **< / >** buttons on the numeric keypad ψ as well as the **[VOLUME]** control can be operated.*

7.4 Using the sustain pedal

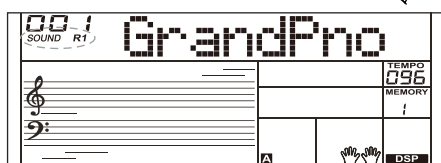
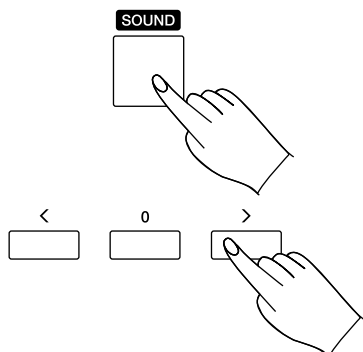


By using a sustain pedal, you can make your playing more expressive and let tones linger after you lift your fingers from the keys of the keyboard. The sustain effect is activated when you step on the pedal and deactivated when you release it.

1. ➤ Connect a sustain pedal to the connection socket on the back of the keyboard.
2. ➤ Alternatively, press **[SUSTAIN]** to activate the built-in sustain.
 - ⇒ The display shows 'SUSTAIN'.
3. ➤ Press **[SUSTAIN]** again to deactivate the built-in sustain.

7.5 Sounds

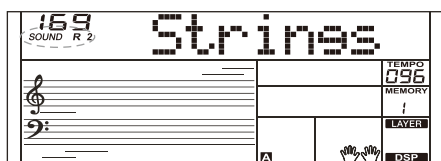
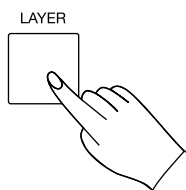
The keyboard offers 480 sounds. This allows you to play a sound with your right hand.



1. ➤ Press **[SOUND]** to activate sound mode.
 - ⇒ The display shows the 'SOUND R1' indicator and the currently selected sound.
2. ➤ Use the numeric buttons or **< / >** of the numeric keypad to select the desired sound.

The sound list is available for download on the product page of our website www.thomann.de.

7.5.1 Layer mode



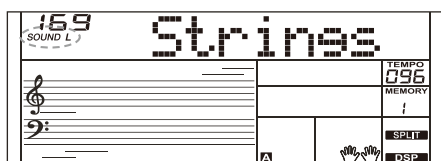
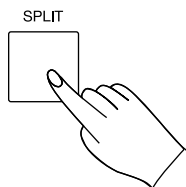
Layer mode allows you to set the "layering" of sounds.

1. ➤ Press **[LAYER]** to activate layer mode.
 - ⇒ The display shows the 'SOUND R2' indicator, 'LAYER' and the currently selected sound.
2. ➤ Use the numeric buttons or **< / >** of the numeric keypad to select the desired sound.

The sound list is available for download on the product page of our website www.thomann.de.

3. ➤ Press **[LAYER]** again to deactivate layer mode.

7.5.2 Split mode



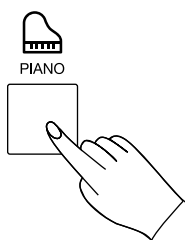
With split mode, you can assign different sounds to certain keyboard areas. The default split point is on piano key **[F#3]**. You can change the split point in the function menu (see).

1. ➤ Press **[SPLIT]** to activate split mode.
 - ⇒ The display shows the 'SOUND L1' indicator, 'SPLIT' and the currently selected sound.
2. ➤ Use the numeric buttons or **< / >** of the numeric keypad to select the desired sound.

The sound list is available for download on the product page of our website www.thomann.de.

3. ➤ Press **[SPLIT]** again to deactivate split mode.

7.5.3 Piano mode



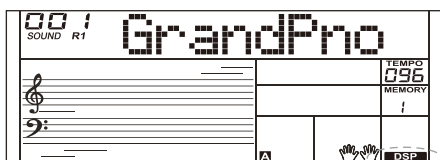
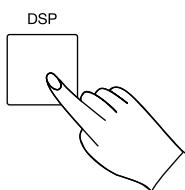
You can use piano mode to simulate playing an acoustic piano.

1. ➤ Press [PIANO] to activate piano mode.
2. ➤ Press [PIANO] again to deactivate piano mode.



- When piano mode is in use, chord mode is automatically turned off.
- Layer and split mode are not available in piano mode.

7.6 DSP effect

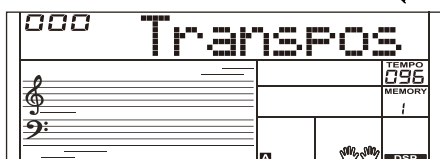
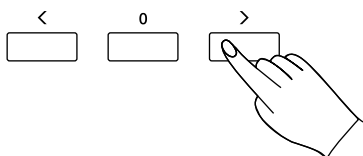
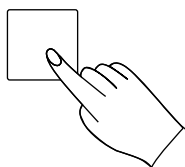


With the built-in digital effect, you can give your music more expression and depth in a variety of ways.

1. ➤ The DSP effect is activated by default. The 'DSP' indicator lights up on the display.
2. ➤ Press [DSP] to activate or deactivate the DSP effect.

7.7 Transposing

TRANSPOSE



With this function you can adjust the pitch of the keyboard up or down in 12 semitone steps.

1. ➤ Press [TRANSPOSE] to activate the transpose menu.
2. ➤ Use < / > on the numeric keypad to adjust the pitch in semitone steps.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current settings to the default setting (0).

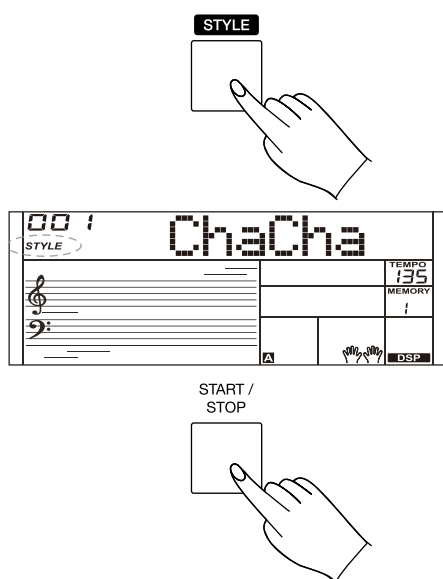
7.8 Styles and auto accompaniment

The keyboard offers a wide variety of styles (accompaniment patterns) for different styles of music.

The style list is available for download on the product page of our website www.thomann.de.

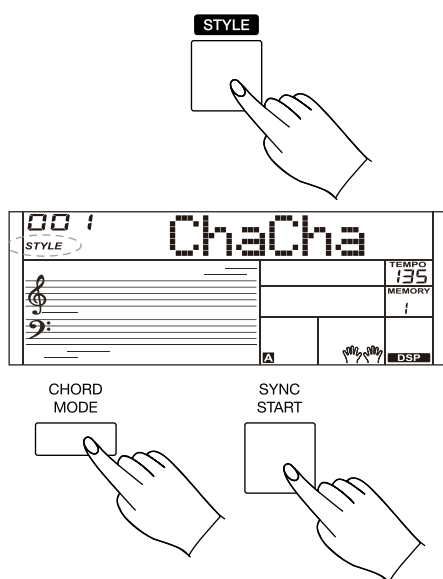
The auto accompaniment feature gives you a full backing band. To use it, you only need to play chords with your left hand while playing with your right hand.

7.8.1 Starting auto accompaniment (rhythm track only)



1. ➤ Press **[STYLE]** to activate style mode.
⇒ The display shows 'STYLE' and the currently selected style.
2. ➤ Use the numeric buttons or **< / >** of the numeric keypad to select the desired style.
3. ➤ Press **[START / STOP]** to start the auto accompaniment rhythm track.
4. ➤ Press **[START / STOP]** again to stop the auto accompaniment rhythm track.

7.8.2 Starting auto accompaniment (all tracks)



1. ➤ Press **[STYLE]** to activate style mode.
⇒ The display shows 'STYLE' and the currently selected style.
2. ➤ Use the numeric buttons or **< / >** of the numeric keypad to select the desired style.
3. ➤ Press **[CHORD MODE]** to turn the chord detection mode on. The area defined for the left hand becomes auto accompaniment area and chords played here are automatically recognized and used as the basis for auto accompaniment with the selected style.
4. ➤ Press **[SYNC START]** to start the auto accompaniment as soon as you finger a chord with your left hand.
5. ➤ Try playing other chords with your left hand.
6. ➤ Press **[SYNC START]** again to stop the auto accompaniment.

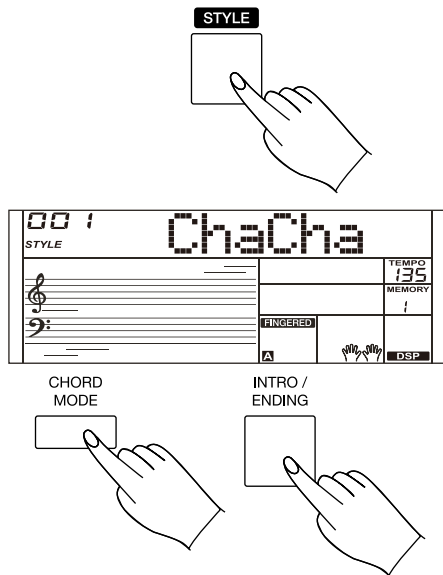
7.8.3 Style variations

You can choose from many pre-programmed variations in the accompaniment function.

7.8.3.1 Intro/Ending

A piece of music usually begins with an intro. When the intro is over, the system automatically switches to the main part.

With an ending you can add an ending to a style. Inserting an ending does not end a piece being played abruptly. The length of the ending depends on the chosen style.

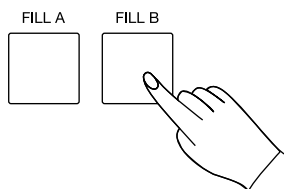


1. ➤ Press **[STYLE]** to activate style mode.
 - ⇒ The display shows 'STYLE' and the currently selected style.
2. ➤ Use the numeric buttons or **< / >** of the numeric keypad to select the desired style.
3. ➤ Press **[CHORD MODE]** to turn the chord detection mode on. The area defined for the left hand becomes auto accompaniment area and chords played here are automatically recognized and used as the basis for auto accompaniment with the selected style.
4. ➤ Press **[SYNC START]** to start the auto accompaniment as soon as you finger a chord with your left hand.
5. ➤ Press **[INTRO / ENDING]** to select the intro you want.
 - ⇒ The display shows the selected main part 'A' or 'B'. This indicates that the intro is ready to start.
6. ➤ Auto accompaniment starts as soon as you play a chord with your left hand. When the intro has ended, the auto accompaniment changes seamlessly to main part A or B.
7. ➤ Press **[INTRO / ENDING]** again to conclude the piece with an ending.
 - ⇒ The ending is played after the last bar played.



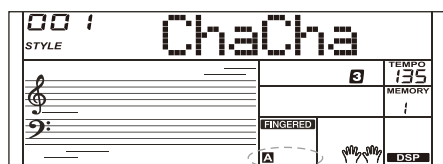
If you press **[FILL A]** or **[FILL B]** before the ending is finished, the system will play a fill-in and then switch to the appropriate main part.

7.8.3.2 Fill bars (FILL)



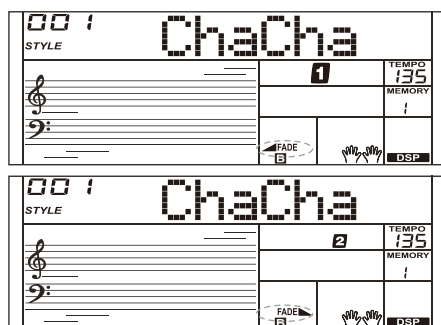
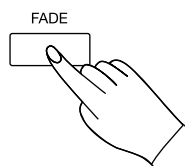
These variations can be used to automatically add a suitable fill to the style after the current bar of the style being played back.

1. ➤ Hold down **[FILL A]** or **[FILL B]** during style playback.
2. ➤ The fill-in will play repeatedly until the button is released. Playback then switches to the associated main part. When the style is finished, press **[FILL A]** or **[FILL B]** to select a main part.
 - ⇒ The display shows the selected main part 'A' or 'B'.



7.8.3.3 Fade

Fade In

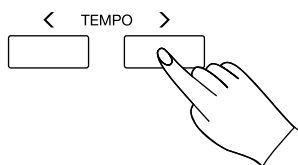


1. ➤ To start a style "softly" (Fade In), press [FADE] before you start playing.
2. ➤ Press 'START/STOP' to start style playback.
⇒ The display shows ◀ 'FADE'.
3. ➤ When the style begins to play, the style volume is increased within eight seconds from 0 to normal volume. When the fade in is complete, the function turns off.

Fade In

4. ➤ To end a style "softly" (Fade Out), press [FADE] during style playback.
⇒ The display shows ▶ 'FADE'.
5. ➤ The volume of the style decreases within eight seconds from loud to quiet until the style is completely silent. When the fade-out is complete, the style ends automatically.

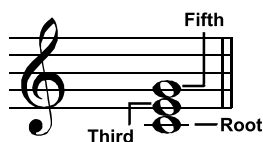
7.8.3.4 Tempo



Each style of the keyboard is programmed with a default standard tempo.

1. ➤ Press [TEMPO]< or [TEMPO]> repeatedly to change the tempo between '5' and '280'.
- ⇒ The display shows the set tempo.
2. ➤ Press [TEMPO]< and [TEMPO]> simultaneously on the numeric keypad to reset the current settings to the default setting.

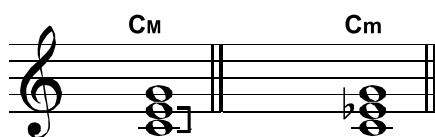
7.8.4 Chord structure



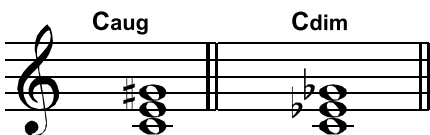
When three or more notes are played at the same time, it is called a chord. That is the basis of a harmony. Each note of a chord determines which chord it is.

In music, the basic chords are mostly triads. The chord is determined by the notes it contains. The lowest note is the root. This is followed by the third and the fifth.

The root denotes the chord (e.g. C major) and is the most important tone. The name of the chord (e.g. minor or major) depends on the interval of each note above the root.



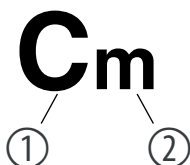
If it is a perfect fifth and the chord has a minor third, it is called a minor chord. If it is a major third, it is called a major chord.



If it is a major third and an augmented fifth, we speak of an augmented chord (often also referred to as "aug"). If it is a minor third and a minor fifth, we speak of an diminished chord (often also referred to as "dim").

Extended chords can be created through additional steps (e.g. a seventh step above the root note). This is called a seventh chord (tetrad).

7.8.5 Chord name



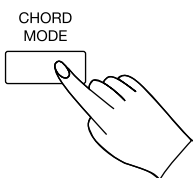
The chord name says everything about a chord: The root, gender of the chord (major or minor), is it an augmented or diminished chord, seventh chord, etc. The illustration shows that this is a C chord (1). The gender (minor) of the chord (2) is shown next to it.

7.8.6 Chord inversions

If the root of a chord is not the lowest note in the triad, it is called an inverse chord. If the root is the lowest note, it's called a root position chord. If the third and fifth are placed in the basic position, it forms an "inversion" and is therefore called an "inverse chord".

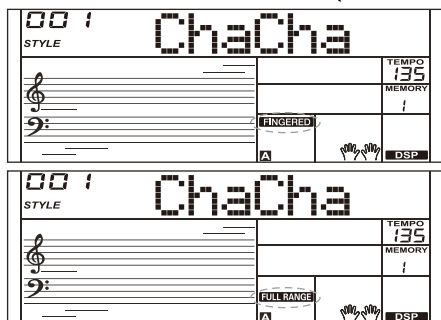
7.8.7 Chord detection modes

Chord detection modes



With a chord detection mode you can determine how the fingered chords are interpreted within the auto accompaniment. The keyboard then automatically recognizes the single or multi-finger chords played.

1. ➤ Press [CHORD MODE] to activate the chord detection mode.
 - ⇒ The display shows 'FINGERED'.
2. ➤ Press [CHORD MODE] again to change from 'FINGERED' to 'FULL RANGE'.
 - ⇒ The display shows 'FULL RANGE'.
3. ➤ Play a chord with your left hand.
 - ⇒ The display shows the chords you play.



7.8.7.1 Multi-fingered

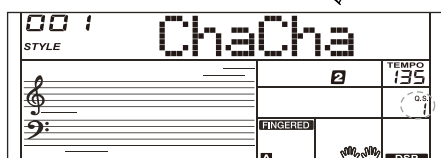
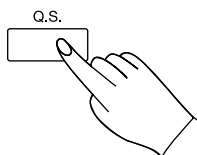
In this mode, you can play chords with normal fingering. Using the example of root C, the illustration shows which chords can be played:

0 C	1 C ₆	2 C _{M7}	3 C _{M7} (#11)	4 C _M (9)	5 C _{M7} (9)
6 C ₆ (9)	7 C _{aug}	8 C _m	9 C _{m6}	10 C _{m7}	11 C _{m7} (b5)
12 C _m (9)	13 C _{m7} (9)	14 C _{m7} (11)	15 C _{mM7}	16 C _{mM7} (9)	17 C _{dim}
18 C _{dim7}	19 C ₇	20 C _{7sus4}	21 C ₇ (b5)	22 C ₇ (9)	23 C ₇ (#11)
24 C ₇ (b13)	25 C ₇ (b9)	26 C ₇ (13)	27 C ₇ (#9)	28 C _{M7aug}	29 C _{7aug}
30 C _{sus4}	31 C ₁₊₂₊₅				



The notes in brackets are optional. These chords are recognised even if these keys on the keyboard are not pressed.

7.8.8 Quick Setting



If this function is activated, suitable right-hand sounds or effects are automatically added to the selected styles.

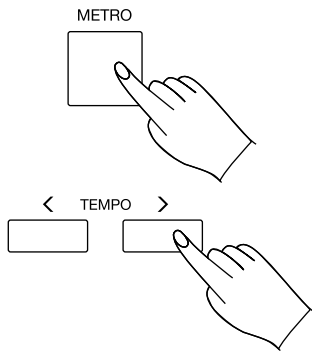
1. ➤ Press [Q.S.] to activate the quick setting function.
⇒ The display shows 'Q.S.'. Chord detection mode is activated.
2. ➤ Press one of the [M1] ... [M4] buttons to call up the panel settings (including sound and effects) that correspond to the current style.
3. ➤ Press [Q.S.] again to deactivate the quick setting function.



The memory function is not available when the quick setting function is in use.

7.9 Metronome

7.9.1 Turning the metronome on and off



1. Switching on the metronome

Press [METRO] to turn the metronome on and off.

⇒ The metronome beat can be heard.

2. Setting the tempo

Set the desired tempo while the metronome runs.

3. Press [TEMPO]> to increase the tempo.

4. Press [TEMPO]< to decrease the tempo.

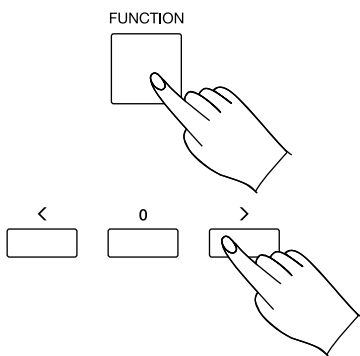
5. Setting the time signature

The default time signature is '4'. You can adjust the time signature in the function menu (see).



- If you turn the metronome on during style playback, the metronome will start on the next bar. Time signature and tempo adapt to the current style or song. When the style has ended, you can change the beat of the metronome as desired.
- The metronome is not available in song mode.

7.10 Function menu



This menu is used to set the various parameters offered by the keyboard.

1. Press [FUNCTION] to call up the function menu.

⇒ The display shows the current parameter.

2. Press [FUNCTION] repeatedly to select the desired parameter.

3. Use < / > on the numeric keypad to adjust the selected parameter as desired.

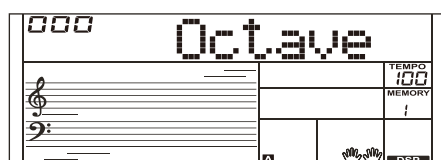


If you do not press a key within three seconds of entering the function menu, the menu is closed automatically.

The following table shows the adjustable options and parameters:

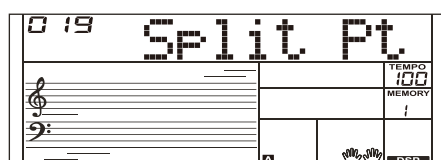
Option	LC display	Control range	Default value
Octave shift	'XXX Octave'	-2 to +2	000
Split point	'XXX Split Pt'	1 to 61	19 (F#3)
Metronome time signature	'XXX Beat'	0, 2 to 9	004
Auto accompaniment volume	'XXX Accomp'	0 to 32	000
Touch velocity	'XXX Touch'	OFF, 0 to 3	002
Fine tuning	'XXX Tune'	-50 to +50	000
Reverb effect depth	'XXX Rev Lev'	0 to 127	000
Chorus effect depth	'XXX Chr Lev'	0 to 127	000
Automatic shutoff	'XXX PowerOff'	OFF, 030, 060	030

7.10.1 Octave shift



1. ➤ Press [FUNCTION] repeatedly and select the 'Oktave' menu.
2. ➤ Use < / > on the numeric keypad to move the octave up or down.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting (000).

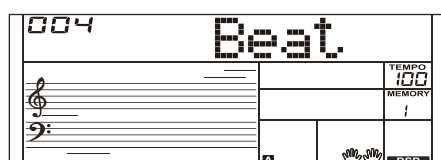
7.10.2 Setting the split point



Using this function you can select a point to split the whole keyboard into two areas. The default split point is on piano key [F#3].

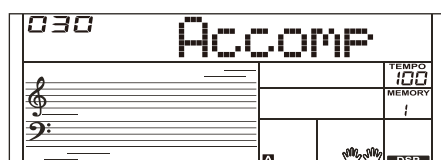
1. ➤ Press [FUNCTION] repeatedly and select the 'Split Pt' menu.
2. ➤ Use < / > on the numeric keypad to set the split point.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting ([F#3]).

7.10.3 Metronome time signature



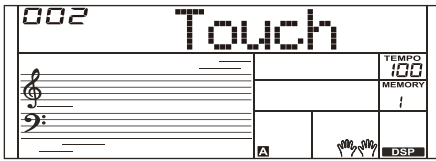
1. ➤ Press [FUNCTION] repeatedly and select the 'Beat' menu.
2. ➤ Use < / > on the numeric keypad to set the desired time signature.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting (004).

7.10.4 Volume of the auto accompaniment



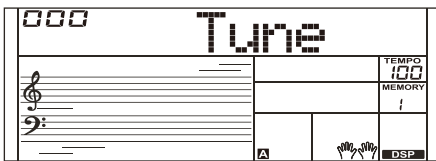
1. ➤ Press [FUNCTION] repeatedly and select the 'Accomp' menu.
2. ➤ Use < / > on the numeric keypad to set the desired volume.
3. ➤ Press < and > simultaneously on the numeric keypad to mute the auto accompaniment.
4. ➤ Press < and > on the numeric keypad again simultaneously to unmute.

7.10.5 Touch velocity



1. ➤ Press *[FUNCTION]* repeatedly and select the 'Touch' menu.
⇒ The 'TOUCH' indicator on the display lights up.
2. ➤ Use < / > on the numeric keypad to set one of five levels.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting (002).

7.10.6 Fine tuning



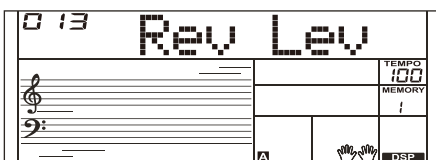
With this function you can fine tune the entire keyboard in cent steps.

1. ➤ Press *[FUNCTION]* repeatedly and select the 'Tune' menu.
2. ➤ Use < / > on the numeric keypad to change the tuning in the range of -50 to +50 cents. Each time a key is pressed, the value changes by 1 cent.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting (000).



The fine tuning affects the entire keyboard and the styles.

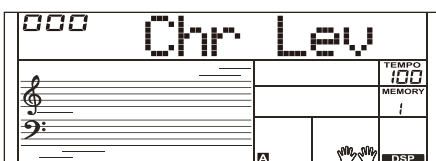
7.10.7 Reverb effect



The reverb effect lets you simulate the acoustic effects of different ambient conditions.

1. ➤ Press *[FUNCTION]* repeatedly and select the 'Rev Lev' menu.
2. ➤ Use < / > on the numeric keypad to set the desired reverb effect depth between '0' and '127'.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting (000).

7.10.8 Chorus effect



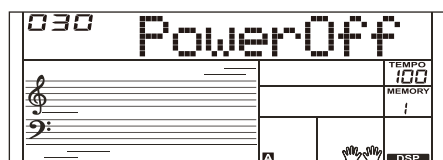
The chorus effect lets you simulate the acoustic effects of different ambient conditions.

1. ➤ Press *[FUNCTION]* repeatedly and select the 'Chr Lev' menu.
2. ➤ Use < / > on the numeric keypad to set the desired chorus effect depth between '0' and '127'.
3. ➤ Press < and > simultaneously on the numeric keypad to reset the current setting to the default setting (000).

7.10.9 Automatic shutoff

When the digital piano is not in use, it shuts off automatically after 30 minutes. To turn it back on, press ϕ .

You can deactivate automatic shutoff or set the desired time for the digital piano to switch off automatically (30 minutes, 60 minutes).

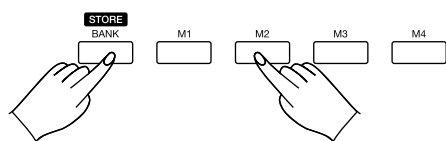


1. ➤ Press *[FUNCTION]* repeatedly and select the 'PowerOff' menu.
2. ➤ Use \langle / \rangle on the numeric keypad to set the desired time when the keyboard switches off or deactivate automatic shutoff.
3. ➤ Press \langle and \rangle simultaneously on the numeric keypad to reset the current setting to the default setting (030).

7.11 Performance memory

With this function you can save all the settings you have made and call them up again at the push of a button.

7.11.1 Selecting a memory slot

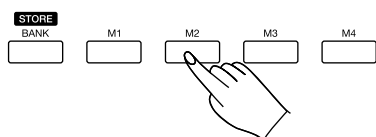


- ➔ Hold down *[STORE]* and press one of the *[M1]...[M4]* buttons to save the current settings you have made on the keyboard to the selected memory slot.



This process overwrites all previous settings saved in the selected memory slot.

7.11.2 Calling up information

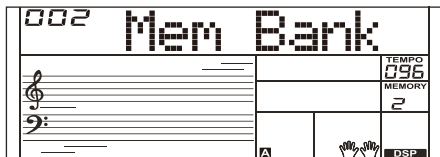


- ➔ Press one of the *[M1]...[M4]* buttons to apply the current settings saved in the selected memory slot.



- *This process will reset all previous settings.*
- *The performance memory function cannot be called up when the quick setting function is activated.*

7.11.3 Selecting a bank



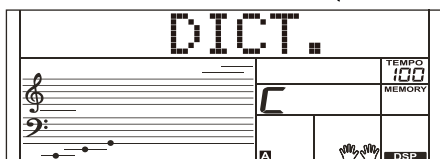
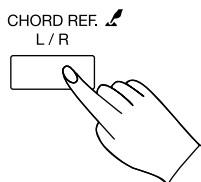
All of the settings you have made can be saved to a bank in the performance memory menu.

1. ➤ Press **[BANK]** to call up the performance memory menu.
⇒ The display shows the current bank number.
2. ➤ Press **[BANK]** repeatedly to select a desired bank number.

7.11.4 Restoring the performance memory to factory defaults

- Press **⏻** to turn the keyboard off.
⇒ All settings in the performance memory menu are reset to the factory settings.

7.12 Chord dictionary



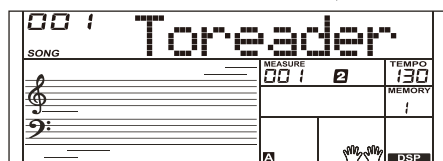
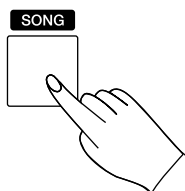
The chord dictionary is essentially an integrated “chord book” that helps you find the right notes of a chord, for example if you know the chord name, but not how to play it.

1. ➤ Chord learn mode
Hold down **[CHORD REF.]** for two seconds to open the chord directory and enter the ‘*DICT.*’ mode.
In this mode, the keys from C4 on are used to assign the chord type, and the keys from C6 to assign the root note. If you have pressed the keys for chord type and root note, the display shows the chord name and the individual notes in the notation system.
2. ➤ When you play the correct chord in the chord area of the keyboard, you'll hear applause.

Hold down **[CHORD REF.]** again for two seconds to exit the chord directory.

7.13 Songs

7.13.1 Selecting, playing and stopping songs



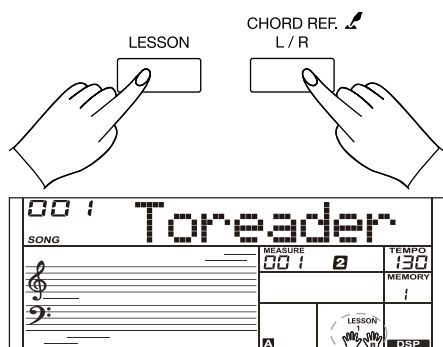
The keyboard offers 140 songs. Each song can be practised in learning mode.

1. ➤ Press **[SONG]** to activate song mode.
 - ⇒ All songs are played in an endless loop. The display shows the current song.
2. ➤ Use **< / >** on the numeric keypad to select the desired song.
 - The sound list is available for download on the product page of our website www.thomann.de.
3. ➤ Press **[START / STOP]** during playback to end the song. Press **[START / STOP]** again to play the songs in an endless loop.
4. ➤ Press **[TEMPO] >** to increase the tempo of the selected song.
5. ➤ Press **[TEMPO] <** to decrease the tempo of the selected song.
6. ➤ Press **[STYLE]**, **[SOUND]**, **[LAYER]** and one of the **[M1]...[M4]** buttons to exit song mode.

7.13.2 Learning mode

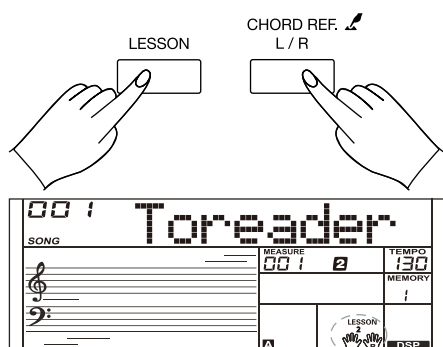
When practising, it is mainly important to play the right **notes** at the right **time**. In this mode you can check your progress. There are three training stages.

Lesson 1 - playing in time



1. ➤ Press **[SONG]**. Stop the starting playback with **[START / STOP]**. Press **[LESSON]** to enter learning mode.
 - ⇒ The display shows 'LESSON 1'. This mode only assesses whether you play the notes at the right time, but not whether you hit the right notes.
2. ➤ Press **[L/R]** repeatedly to choose the hand ('L', 'R' or both) you want to play with.
3. ➤ Press **[START / STOP]** to start practising.
4. ➤ If you selected 'R', the right hand voice is muted and you have to play the right hand yourself. As long as you are in time, you will hear the right hand voice. If you selected 'L', the left hand voice is muted and you have to play the left hand yourself. As long as you are in time, you will hear the left hand voice. If both 'L' and 'R' are selected, the voices for both hands are muted. You then have to play in time with both hands.
5. ➤ You find out the result after completing the exercise.

Lesson 2 - hitting the right notes

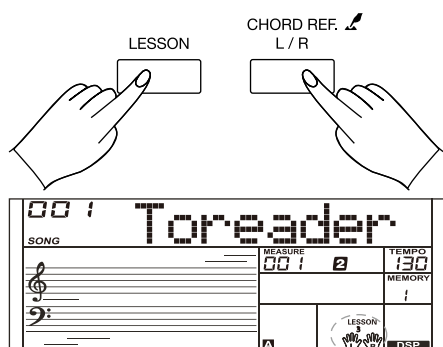


1. ➤ Press [LESSON] again to enter learning mode 2.
⇒ The display shows 'LESSON 2'. This mode only assesses whether you hit the right notes, but not whether you play them at the right time. The practise song continues only when you play the right note.
2. ➤ Press [L/R] repeatedly to choose the hand ('L', 'R' or both) you want to play with.
3. ➤ Press [START/STOP] to start practising.
4. ➤ You find out the result after completing the exercise.



In lesson 2, the notes only sound when you play them correctly on the keyboard.

Lesson 3 - hitting the right notes at the right time



1. ➤ Press [LESSON] again to enter learning mode 3.
⇒ The display shows 'LESSON 3'. This mode assesses whether you play the right notes at the right time. The practise song continues only when both are correct.
2. ➤ Press [L/R] repeatedly to choose the hand ('L', 'R' or both) you want to play with.
3. ➤ Press [START/STOP] to start practising.
4. ➤ You find out the result after completing the exercise.



In lesson 3, all notes you play will sound. However, if you do not press any keys on the keyboard, only the accompaniment will play.

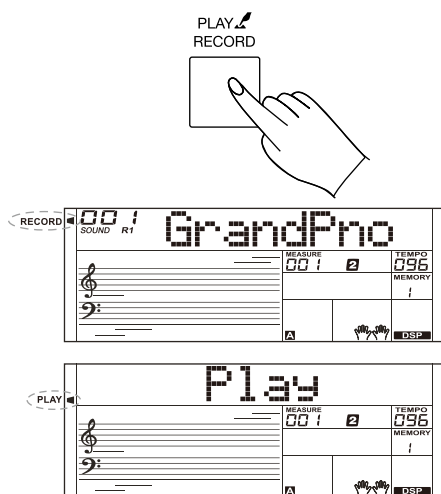
Rating

The rating is based on the level you have achieved during practise:

- Level 1: Try again.
- Level 2: OK.
- Level 3: Well done.
- Level 4: Outstanding.

After the rating, the practise song is played again and you can go on practising.

7.13.3 Recording



The keyboard lets you record your playing together with the accompaniment.

1. ➤ Press **[RECORD]** to activate recording mode.
 - ⇒ The 'RECORD' indicator on the display flashes.
2. ➤ Press **[START / STOP]** or play the keyboard.
 - If you want to record your playing with style accompaniment, press **[CHORD MODE]** to turn on the auto accompaniment and play the chords with your left hand on the keyboard.
3. ➤ Press **[RECORD]** again to stop recording.
 - ⇒ The 'RECORD' indicator on the display goes out.
4. ➤ Hold down **[PLAY]** for two seconds to play the recording.
 - ⇒ The 'PLAY' indicator on the display lights up.
5. ➤ Hold down **[PLAY]** again for two seconds to stop playback.
 - ⇒ The 'PLAY' indicator on the display goes out.



The recording is deleted as soon as the keyboard is switched off.

7.14 MIDI functions

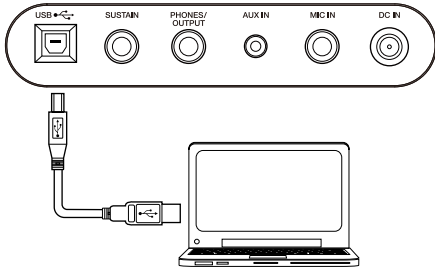
7.14.1 What is MIDI?

With MIDI connections, the device that controls other devices is called the "master". A device that is controlled via MIDI is called "slave". The MIDI output of the master is connected to the MIDI input of the slave. You cannot connect the MIDI output of a device to the MIDI input of the same device.

MIDI stands for Musical Instrument Digital Interface and represents the standard interface between a computer and electronic instruments.

You can use the USB connection to exchange MIDI data with computers or other USB devices that support USB audio via USB cable. MIDI data from computers or other USB devices can be played back by the sound module of the keyboard.

7.14.2 USB connection



1. System requirements

- CPU: 300 MHz, Pentium 2 or higher
- RAM: 64 MB or more
- 2 MB free hard disc space
- Operating system: Windows® 8 and later, Mac OS X® 10.8 and later



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

2. Connecting

Connect the USB port on the back of the keyboard to the USB port on your computer using a standard USB cable (not included).

3. USB precautions

Heed the following guidelines when connecting a keyboard to a computer via USB. Otherwise, the keyboard or the computer may crash, which can result in data loss. If a crash should occur, turn off computer and keyboard and restart both after a few seconds.



- *If the computer is in standby or hibernation, wake the computer before connecting the USB cable.*
- *Establish the USB connection between computer and instrument before turning on the instrument.*

8 MIDI implementation chart

Function		Sent	Received	Notes
Basic Channel	Default	1	ALL	
	Changed	No	No	
Mode	Default	No	Mode 1	
	Messages	No	No	
	Altered	*****	No	
Note Number		12 - 114	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	Yes, 9nH, V = 0 or 8nH, V = 0 - 127	
After Touch	Keys	No	No	
	Channels	No	No	
Pitch Bend		Yes	Yes	
Control Change	0	Yes	Yes	Bank Select
	5	No	No	Portamento Time
	6	No	Yes	Data Entry
	7	No	Yes	Volume
	10	No	Yes	Pan
	11	No	Yes	Expression
	64	Yes	Yes	Sustain Pedal
	65	No	No	Portamento ON/OFF
	66	No	Yes	Sostenuto Pedal
	67	No	Yes	Soft Pedal
	91	No	Yes	Reverb Level
	93	No	Yes	Chorus Level
	120	No	Yes	All Sound Off
	121	No	Yes	Reset All Controllers
123	Yes	Yes	All Notes Off	
Program Change	True Number	Yes *****	Yes 0 - 127	
System Exclusive		No	Yes	
System Common	Song Position	No	No	
	Song Select	No	No	
	Tune Request	No	No	

MIDI implementation chart

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

MIDI channel modes

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

9 Troubleshooting

Problem	Possible causes and solutions
You hear a 'pop' sound from the speakers when switching the keyboard on and off.	This is normal. No reason for concern.
No sound can be heard when playing the piano.	Make sure that the volume control is set appropriately.
Interference occurs when using a cell phone.	Using a mobile phone near the keyboard may cause interference. To prevent this, turn off the mobile phone or use it only at a safe distance.
The auto accompaniment does not start although the Sync Start function is enabled and a key is pressed.	Maybe you try to start the Auto Accompaniment by pressing a button in the right hand area. Auto Accompaniment with Sync Start function can only be started by pressing a key in the left hand chord area.
Some notes on the keyboard sound wrong.	Reset the tuning to the default setting and restart the keyboard.
The keyboard is not detected when connected to a computer.	Check the USB cable for correct connection. Connect the USB cable to another USB port on the computer.
The pedal does not work.	Check if the pedal cable is connected properly.
The keyboard switches itself off after a certain amount of time.	The auto shut-off switches the device off after a preset amount of time if it is not used. Set the auto shut-off in the function menu.

10 Technical specifications

Input connections	Microphone	1 × 6.35-mm jack socket
	Sustain pedal	1 × 6.35-mm jack socket
	AUX IN	1 × 3.5-mm jack socket
	Power supply	1 × input socket for the 12-V power adapter
Output connections	Headphones	1 × 6.35-mm jack socket
	USB-MIDI	1 × USB type B
Keyboard	61 touch-sensitive keys	
Polyphony	64-voice polyphonic	
Sounds	480 sounds	
Styles	160 styles	
Demo and practise songs	140 demo songs, 140 songs, 1 user song	
Effects	DSP effects, reverb, chorus	
Controller	Sustain pedal	
Pitch adjustment	Transposing	-12...+12
	Octaving	-2...+2
	Tuning	-50...+50
Functions	Pedal support	Sustain
	Metronome	0, 2...9
	Tempo	5...280
	Auto accompaniment	0...32
	Piano mode	
	Chord dictionary	
Speaker power	2 × 2.5 W	
Speakers	2 × 12 cm	
Volume	+80 dB max.	
Power supply	External power adapter, 100 - 240 V ~ 50/60 Hz	
Operating voltage	12 V $\overline{\text{---}}$ /1 A, centre positive	
Battery	Battery type	6 × AA
Operating system	Windows® 8 and later, Mac OS X® 10.8 and later	
Dimensions (W × H × D)	946 mm × 101 mm × 316 mm	
Weight	4 kg	
Colour	black	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20%...80% (non-condensing)

Further information

Aftertouch	No
Storage medium	None
Lyrics function	No
Score function	No
Vocal harmony	No
USB audio receiver	No

11 Plug and pin assignments

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!

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.

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

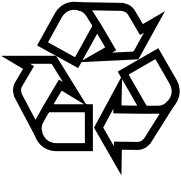
Three-pole 1/8" mini phone jack (stereo, unbalanced)



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

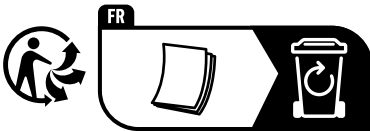
12 Protecting the environment

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 batteries

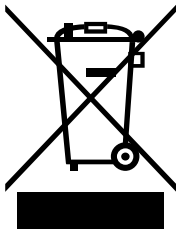


Batteries must not be thrown away or burnt, but must instead be disposed of in line with the local regulations on the disposal of hazardous waste. Use the available collection sites.

Before disposing of your old device, remove the batteries if this is possible without destroying it.

Dispose of the batteries or rechargeable batteries at suitable collection points or through your local waste facility.

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.

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

