

# Owner Manual

ROTH & JUNIUS

Digital Piano

DP220

# Welcome

Thank you for purchasing a ROTH&JUNIUS Digital Piano. This piano is easy to operate, high-performance instruments. These pianos are ideal for both beginners, as well as more advanced musicians. In order to get the most from your new piano, please read this manual carefully.

## Caution:

**Warning:** do not place the piano near water or moisture.

**Warning:** electronic components are dangerous - do not expose the piano's internal mechanisms.

**Attention:** to avoid electric shock, make sure that the plug is firmly connected to a wall socket.

Only trained repair technicians should attempt to maintain or repair the piano.

## Important safety information:

1. Only use the provided 220V power supply.
2. Do not touch the power supply with wet or damp hands.
3. Avoid excessive pressure on, or bending of the power cord.
4. Unplug your instrument during lightning storms.
5. Turn the power off when not in use.
6. Avoid water or liquids being spilled into the keyboard or piano body.
7. Do not put objects containing liquids onto the piano - such as flower vases, wine glasses, etc...
8. If liquid spills into the keyboard or piano body, please turn off the power at once and contact your ROTH&JUNIUS Dealer.
9. Do not attempt to modify the piano components.
10. Avoid dust getting into the keyboard.
11. Keep the piano away from TV, radio and other objects with strong electromagnetism.
12. Keep the piano on a flat and level surface.
13. Please clean the piano with a dry and soft cloth.
14. Operate the piano according to this user manual - any non-standard operation could cause damage to your piano.
15. Your piano should be kept in an area that is well ventilated, away from any heating appliances.

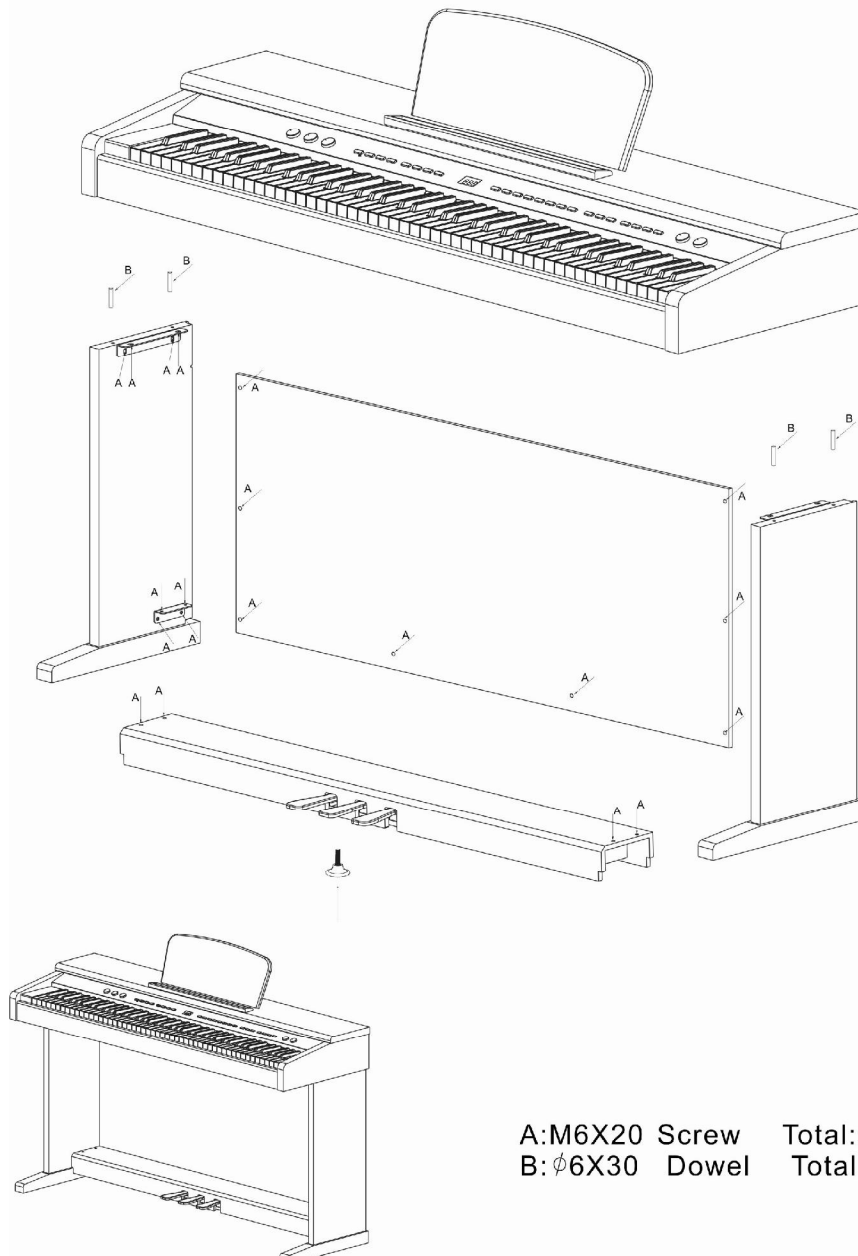
# Assembly instructions

Before you assemble this product, please check that all the below components are present.

1. Upper body
2. Keyboard
3. Music Stand
4. Side board (Right)
5. Side board (Left)
6. Pedal board
7. Leg (Left & Right)
8. Assembly screws

## DP220

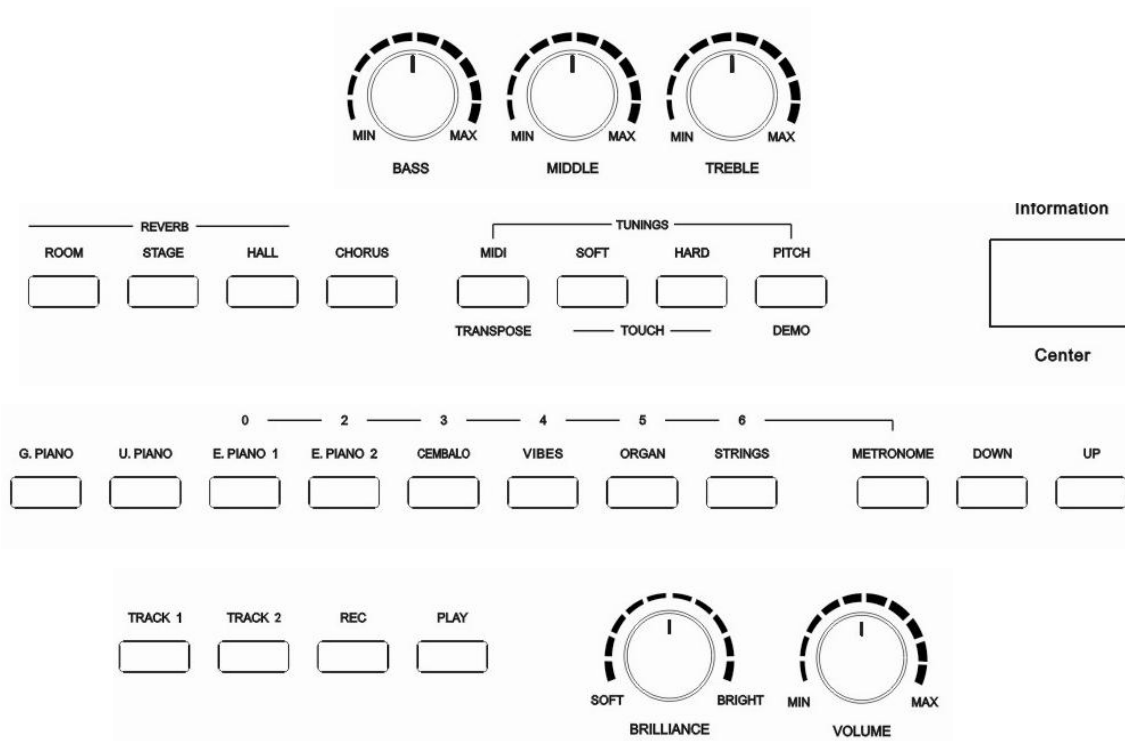
### Installation Instruction



# Main Features

- High Resolution PCM sound source
- Built-in Demos
  - 8 demonstration songs and 20 practice sounds built in
- Ability to mix sounds
  - Play 2 sounds together
- Built-in metronome
  - Assignable beat and speed settings
- Transposition and Tuning controls
  - Transpose to any key
- Play / record your compositions
  - Sound can be recorded and played-back
- Touch sensitive
  - Responds to your performance
- Reverb
- USB MIDI interface
  - Connect your piano to other MIDI devices
- Headphone connections
  - Use your headphones for private practice

# Functions Diagram



1. Power Switch

On/off button under the left side of the keyboard.

2. Master volume

Adjust the overall volume.

3. Brilliance

Adjust the sound from warm and soft to clear and brilliant.

4. Playback button

Playback your previously recorded music.

5. Record button

Record your playing.

6. Metronome button

Use the Metronome to help keep time during practice.

7. Reverb buttons

Choose what type of 'room' effect you would like on the sound.

8. Demo Button

Select demonstration and practice songs.

9. Transpose/MIDI/Tuning

Transpose to another key / Change MIDI options / Change into different tunings.

10. Touch Sensitivity Setting

Change the dynamic touch sensitivity of the keyboard.

11. Headphone jack

When headphones are connected, all sound is routed through the headphones and not through the loudspeakers.

**Please Note:** Loud headphone volumes for an extended period of time can damage your ears.

12. Pedal connection

13. MIDI connections

Please refer to the manual section on MIDI connectivity.

14. AUX input

Connect other instruments to your piano in order to utilise the internal speakers.

15. AUX output

Connect to an external speaker or amplifier. The Master volume will control the level being sent to the AUX output.

# Playing the Piano

## 1. Instrument selection

Pressing any one of the 8 buttons selects the corresponding instrument. A light will come on above the appropriate button to signify that this is the selected instrument.

<b>Name of instrument</b>	<b>Sound</b>
G.Piano	Concert Grand Piano
U.Piano	Upright Piano
E.Piano 1	Classic Electronic Piano
E.Piano 2	Melodic Electronic Piano
Cembalo	Baroque style instrument with strings that are plucked
Vibes	An instrument similar to a marimba – often used in jazz
Organ	Cathedral style pipe organ
String	Orchestral string ensemble

## 2. Adjust volume

Adjust the volume to a comfortable level for playback and practice.

## 3. Play

Play notes on the keyboard.

# Personal Equalizing

With the controller you can adjust the sounds to your room situation. All three knobs have a “center click”. The factory equalization is optimized for a living room of ca. 50sqm.

With the “bass” equalizing knob you for can for example elongate the internal Grand Piano sound to a longer Concert Grand Piano sound. Try to turn the knob to the right and play some notes in on the lower/left side of the keyboard and listen to the difference.

You can also reduce the size of the Concert Grand Piano to a “baby grand” piano. Turn the knob from Center to the left.

Try the same for the middle and high areas and find out your favorite personal sound.

## Brilliance

With the Brilliance knob you can adjust the Brilliance of the internal sounds.

Comparing to the Personal EQ all sound on the whole Keyboard range becomes more mellow (if you turn the knob to the left side) and more bright to if you turn the knob to the right side. Try to find out you favorite sound and start from the "center click".

## Use of Headphones

1. Connect the headphones to the headphone socket.
2. The internal speakers are disconnected and the sound comes through the headphones.

## Pedal Functions

1. Sustain pedal

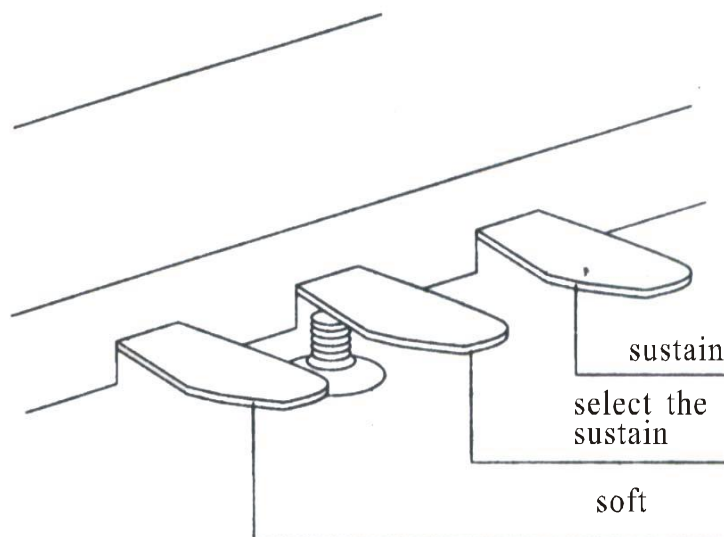
When used while playing, stepping on this pedal will make the notes "sustain" and blend with other notes.

2. Soft pedal

When used while playing, this pedal will make the notes have a smoother sound.

3. Sostenuto Pedal

When used while playing, the sostenuto pedal makes only certain notes "sustain" – while playing the notes you would like sustained, step on the pedal before you release the keys to make only those notes sustain.



## Demonstration songs

### 1. Start the demonstration songs

Press the demo button - the demonstration light comes on; all the instrument lights will flash.

### 2. Select the song

Press the instrument button you would like to select - the light will flash and the corresponding song will play.

If you don't select any songs, about 2 seconds later the song 'Piano 1' will automatically play.

### 3. To change the song

Press the instrument button you would like to select - the light will flash, and the corresponding song will play.

### 4. Stop the play of demonstration songs

Press the demo button - the light will turn off and the demonstration song will stop.

After playing the selected song, the next instrument's demo song is played automatically

The demonstration songs are used to introduce the instruments only - some songs are not played completely.

## Practice Songs

20 practice songs are stored in the piano.

No.	Name of song	No.	Name of song
1	Polonaise in Ab	12	The Moonlight
2	Nocturne # 2	13	Impromptu in Eb
3	Grande Valse Brilliant	14	Turkey march (Mozart)
4	Raindrop prelude	15	Pictures At An Exhibition
5	"Minute" waltz	16	Moonlight Sonata
6	Fantasia-Impromptu	17	Reverie
7	Chanson De L' Adieu	18	Sonata #20
8	Scherzo in Bbm	19	Traumerei
9	Military Polonaise	20	Pour Elise
10	Prelude 7 #		
11	Spring song		

**NOTE:** Some song arrangements used here are shorter than the original written versions.

### 1. Start the demo song

Press the demo button while holding the appropriate note on the keyboard (A1-F3) to start play of the selected song. The demonstration light will come on and 20 songs will be played one by



one starting at the selected song. Alternatively you can select other songs during playback.

The LED display will show the song number currently playing.

The piano will continue to play the 20 songs in a loop.

Songs can be reselected during playback.

You can change the speed of the song during playback.

You can change the rhythm of the song during playback.

You can change the timbre of the song during playback.

## 2. Playing the melody and the accompaniment separately

Press the demo button and select the song. The lights for Track 1 and Track 2 will turn on at the same time.

- A. Please listen to the song as it is playing. Track 1 is playing the accompaniment (left hand), Track 2 plays the melody (right hand).
- B. If you want to play the melody please press Track 1 and the piano will play the accompaniment. If you want to play the accompaniment please press Track 2 and the piano will play the melody.

## 3. To stop playback

Press the demo button again

# Layer Functions

The piano can combine two sounds at the same time.

## 1. Select two sounds

Press two sound buttons simultaneously. The two corresponding lights will turn on.

## 2. Adjust the volume balance of the two sounds

For example, if you are playing the Piano 1 sound and String sound together. Press the two buttons - the display should show you a balance of 5 - 5. If you want the Piano louder and the strings quieter, keep the String button held and repeatedly press the Piano 1 button. The LED Display will show you the change of the volume balance.

# Metronome

## 1. Turn on the metronome

Press the metronome button — the corresponding light will turn on.

## 2. Change the tempo

A. Press the metronome button and the corresponding sound button together.

B. Select the tempo - there are 5 kinds of tempo: 0 beat tempo, 2 beat tempo, 3 beat tempo, 4 beat tempo, 5 beat tempo and 6 beat tempo.

C. The default tempo setting is 4 beat.

## 3. Change the speed

The speed slows down when you press the down button and speeds up when you press the up button. The LED Display shows you the speed. If you press the Up and Down Button together, the Metronome moves to a speed of 120.

## 4. Stop the metronome function

Press the metronome button again and the corresponding light will turn off.

# Touch Sensitivity

There are 7 different touch sensitivity settings, within the following categories:

**Standard:** Normally weighted key action.

**Light:** Lighter touch – less effort to produce louder sounds.

**Heavy:** Heavier touch – more effort to produce louder sounds. Useful for practicing and developing finger strength and agility.

## Changing the touch sensitivity

A. Light Touch: Press the Light key - the display will show you "2". With the Up and Down buttons you can change the dynamic of the light touch. If the LED shows you "3" the touch dynamic is off. This can be a very useful touch setting for the Organ sound.

B. Heavy Touch: Press the Heavy key - the Display shows you "2". With the Up and Down buttons you can adjust the dynamics of the Heavy touch.

C. Standard Touch: If a light is on, pressing this button will return the piano back to standard touch.

The relation between light and heavy touch sensitivity:

Status	Weight	
	Light	Heavy
Standard	Off	Off
Light	On	Off
Heavy	Off	On

Touch sensitivity adjusts the response of the key action. The mechanics of the keyboard are not changed.

## Recording

### 1. Record

- A. Get ready to record. Press the record button and the light flashes. Choose Track 1 or Track 2.
- B. Begin to play – this will be recorded.

Available recording options are:

#### A. Start the recording (no time recording)

The recording starts when you begin to play (press the keyboard, step on the pedal, etc...).

#### B. Start the recording (with time recording)

Press the metronome button - the recording should start after the selected time.

#### C. Stop the recording

Press the record button again. The record light turns off.

### Memory capacity

5000 events

Content of recording includes pedal operation, change of timbre and pauses, etc...

### Memory warning

The record light starts to flash when the memory becomes full.

The record light is turned off and recording stops when the recorded amount exceeds 5000 events.

### Stop the recording

Press the record button again and the light will turn off

Use the metronome

Before the recording, turn on the metronome. This will be recorded

Change the Measure

The measure cannot be changed during the recording

Change the Speed

The speed cannot be changed during the recording

2. Playback

A. Start the playback

Press the play button and your recorded song begins to play

B. Stop the playback

After the song is finished, playback stops

C. Stop the playback in the middle of a song

Press the play button again.

## Transposition

1. Transpose

Press the Transpose button.

To change to another key press the Up or Down button. The key will change by  $\frac{1}{2}$  a tone higher (Up) or lower (Down).

2. Returning back to "C" or standard key

Press both buttons together (Up/Down) and scroll back step by step.

## Setting the Tuning Curve

With electronic pianos and synthesizers, you can modify the master tuning curve.

1. Setting the tuning to 12 average tune

Hold down the transpose button and press the organ button.

## 2. Returning to the standard tuning of piano

Hold down the transpose button and press the organ button.

While you press the button, the organ light indicates the content set.

The relation between lights and tuning

Light (on)	Tuning of piano
Light (off)	12 average tuning

## Adjusting the Master Tuning

### 1. Change the sound while playing

#### A. Getting ready to adjust tuning

Hold down the transpose button, then press the demo button - the transpose and demo lights will flash. The heavy touch button and the light touch button will turn on.

#### B. Modify the tuning

Pressing the Up button increases the semitones.

Pressing the Down button decreases the semitones.

The LED display will show you the tuning status.

#### C. Returning to default setting

Press the Down and Up buttons at the same time and the piano turns back into 440hz.

#### D. Exit from adjusting the master tuning

Press the transpose button.

The input number should be 427—453, other numbers are invalid.

The frequency of A3 is 440HZ when the power is on

## Classic Tunings

Press the Transpose and Demo Button. Both lights will flash. Press Piano 1 (the light will turn on) and the tuning will change to the Pythagoras temperament. To reset the tuning, press Piano 1 - the light will turn off.

# MIDI

MIDI (Musical Instrument Digital Interface) is an international standard that allows different musical products to communicate with one another. An instrument transmits and receives data via a MIDI cable. Any electronic instrument with MIDI can exchange data.

**Table of MIDI Implementation**

Function	Send signal	Receive signal	Remark
Basic	1	1-16	
Track set channel	1-16	1-16	
Model power is on	3	1	
Signal	×	OMNI ON/OFF.POLY	
Replace	*****	*****	
Note	1 15-113	0-27	
No. range	*****	15-113	
Speed note ON	O9n H v=1-27	O 9n H v=1-27	
Note OFF	×9n H 8n H v=0	×	
After outer key	×	×	
touching outer track	×	×	
Move tone	×	×	
Control 07(07H)	×	O	Volume
11(0BH)	×	O	Show
Change			
64(40H)	O	O	Sostenuto pedal
66(42H)	O	O	Soft pedal
67(43H)	O	O	
			Reposition auto
121(97H)	×	O	
Program	O 0-127	O	
Transfer: set scope	*****	0,1,4,5,6,11,19,48	
OR circuit	×	×	
Song and string	×	×	
Rhythm select song	×	×	
Tune	×	×	
Real time signal	×	×	
Synchronization signal	×	×	
Other piano ON/OFF	×	O	
All notes ON/OFF	×	O: 123-127	
Sensor	O	O	
Reposition	×	×	
For reference	1 change scope by switch		

Model 1: ON, complex tone

Model 2: ON, single O: Yes

Model 3: OFF, complex tone

Model 4: OFF, single ×: No

## Practice and Demonstration Songs

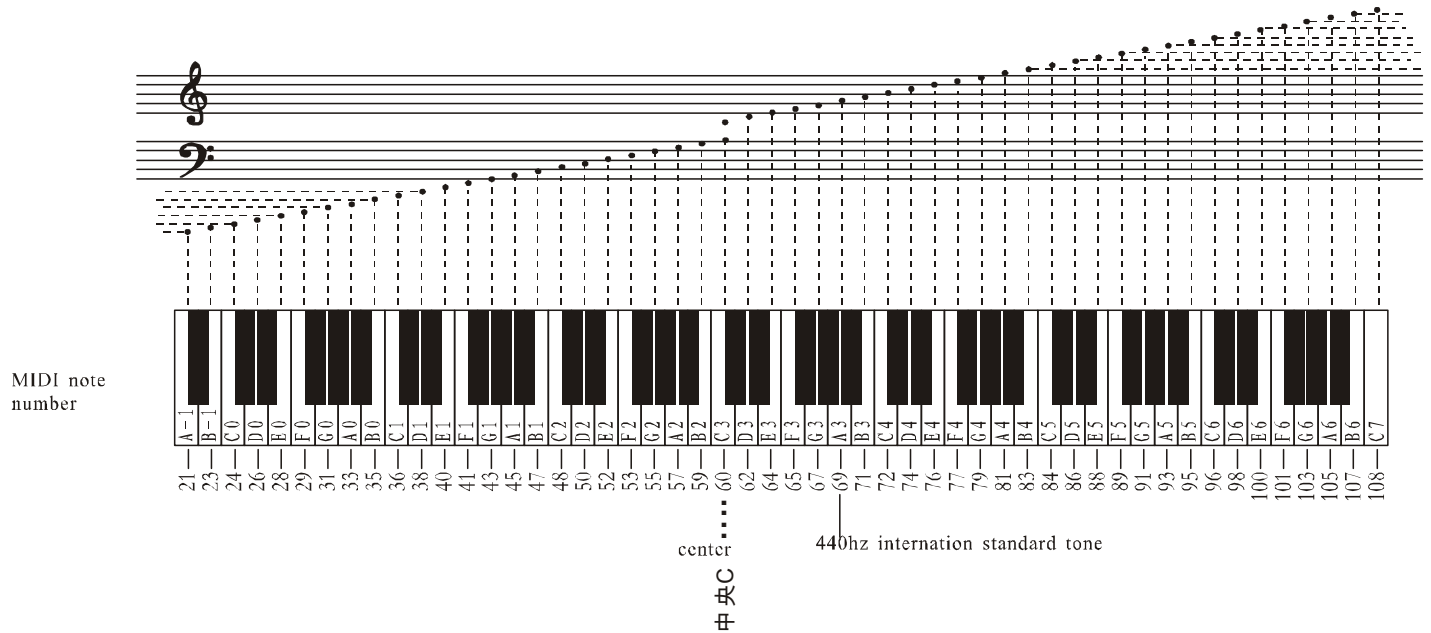
NO.	KEY	NAME	COMPOSER	SOUND	TIME
1	A0	Polonaise in Ab Major, op. 53	Chopin	Piano 1	3:40
2	B0	Nocturne op. 9, no. 2	Chopin	Piano 1	4:40
3	C1	Grande Valse Brilliant op. 18, no. 2	Chopin	Piano 1	3:10
4	D1	Raindrop-Prelude op.28, no. 15	Chopin	Piano 1	4:37
5	E1	Valse op. 4, no. 1 "Petit Chien" ("Minute Waltz")	Chopin	Piano 1	1:44
6	F1	Fantasie-Impromptu in C#m, Op 66	Chopin	Piano 1	3:45
7	G1	Etude op. 10, no 3 "Chanson De L'Adieu"	Chopin	Piano 1	4:14
8	A1	Scherzo in Bbm , op. 31, no. 2	Chopin	Piano 1	5:15
9	B1	Military Polonaise op. 40, no. 1	Chopin	Piano 1	5:16
10	C2	Prelude op.28, no. 7	Chopin	Piano 1	0:05
11	D2	Frühlingslied (Spring song) Op.62 #6	Mendelssohn	Piano 1	3:14
12	E2	Clair De Lune	Debussy	Piano 1	4:11
13	F2	Impromptu E-flat Major, Op. 90, no.2, D. 899	Schubert	Piano 1	4:18
14	G2	Sonata K.331, 3rd Mvmt. (Turkish Rondo)	Mozart	Piano 1	3:32
15	A2	Pictures at an Exhibition – Promenade	Mussorgsky	Piano 1	5:20
16	B2	Sonata op. 27, no. 2 "Moonlight", 1 <sup>st</sup> mvmt.	Beethoven	Piano 1	6:10
17	C3	Reverie	Debussy	Piano 1	1:32
18	D3	Piano Sonata No. 20 in G major, Opus 49 no 2	Beethoven	Piano 1	4:37
19	E3	Traumerei	Schumann	Piano 1	2:35
20	F3	Fur Elise	Beethoven	Piano 1	2:55
<b>SOUND DEMO SONGS</b>					
1		Grande Valse Brilliant op. 18, no. 1	Chopin	Piano 1	1:30
2		Arabesque No. 1	Debussy	Piano 1	1:20
3		Missing Forever		Piano 1	1:05
4		Humoresque	Dvorak	Piano 2	1:20
5		Sinfonia No. 3	Bach	Harpsichord	0:50
6		Jazz Tune		Vibraphone	0:50
7		Prelude in D minor, BWV 539	Bach	Organ	1:20
8		Brilliance of Grassland		String	0:55

# Modulator

## MIDI

note number

440hz internation standard tone



## Technical Specifications

<b>Keys</b>	88 Hammer Action Keys
<b>Instruments</b>	Piano 1, Piano 2, E-piano 1, E-piano 2, Cembalo, Vibes, Organ, String
<b>Functions</b>	Dual sound (layer), Touch sensitivity (7 types), Transpose, 9 reverbs, Record, Track 1 / Track 2, Demo songs, Metronome, Tuning curves, MIDI
<b>Controls</b>	Power switch, Volume control, Speed balance
<b>Pedals</b>	Soft (middle), Sostenuto (left), Sustain (right)
<b>Connections</b>	Headphone × 2, AUX IN, AUX OUT, USB MIDI Interface
<b>Loudspeaker</b>	2
<b>Speaker Power</b>	2x15 Watt
<b>Power supply</b>	AC 220V / 110V