



WORLDDE ORCA PAD48 MIDI Controller User's Manual

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Packing list:

WORLDE ORCA PAD 48*1

USB cable*1

USB power cord*1

MIDI to 3.5 audio cable(3.5mm TRS MIDI Out to MIDI DIN adaptor)*1

User manuals*1

Notice: To ensure your ORCA PAD 48 can be used properly, please use both the USB cable and USB power cord for power supply.

- 1)Connect your ORCA PAD 48 to your computer with both the USB cable and USB power cord if you are using it with a PC.
- 2)When using it with a mobile phone or Pad, connect your ORCA PAD 48 to your mobile phone /Pad and mobile phone charger respectively with the USB cable and the USB power cord simultaneously.

1. Introduction

Thank you for purchasing the WORLDE ORCA PAD 48 USB MIDI controller. To help you get the most out of your new instrument, please read this manual carefully.

Your ORCA PAD 48 midi controller will not make any sound unless it is connected to a computer or other external MIDI gear. This is because the ORCA PAD 48 sends MIDI data when you play it and does not produce sound on its own. Instead, it is used to control a virtual instrument on your computer or a MIDI sound module to generate sounds.

In order to use the functions of this product, you'll need to make settings in the application you're using. Make settings as described in the owner's manual for your application.

ORCA PAD 48 integrates perfectly with DAWs (such as Ableton Live, Bitwig and so on) for both production and performance.

2. Features

- 48 high quality velocity & pressure sensitive performance pads with RGB backlit, can be assigned easily as MIDI notes, MIDI CC buttons.
- 8 assignable encoders.
- 8 assignable control sliders.
- Function buttons, providing functions like, OCTAVE, AFTERTOUCHE, VELOCITY, MUTE and etc.
- USB interface, adaptable to USB 2.0(FULL SPEED). Power supplied by USB.
- MIDI IN, MIDI OUT.
- Compatible with Win11/10/8/7/XP/Vista and Mac OSX or greater.
- Drive free and hot-plug supported.
- Edited by the ORCA PAD 48 Software Editor, the picture below is the main screen. It can be downloaded from WWW.WORLDE.COM.CN for this software editor.

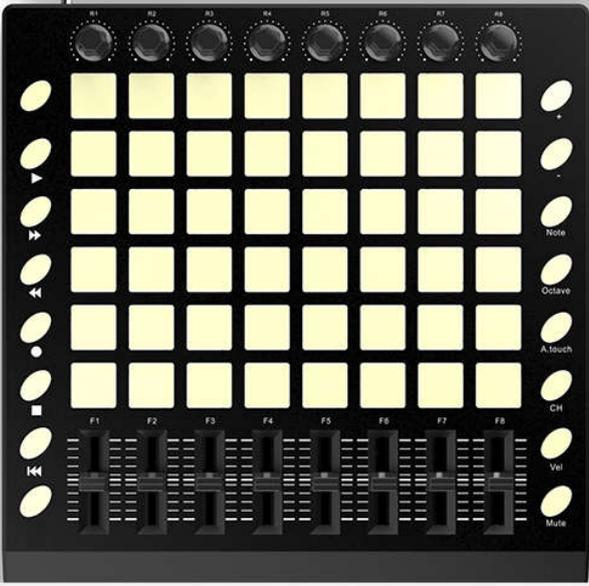
MainWindow

Global Parameters

Channel: Knob Accel: Not connected

Selected Control Parameters

Channel: CR:
CC Number: Value: CG:
Mode: Mode Option: CB:
Min / LSB: Max / MSB: Bulk change CR \ CG \ CB



Send to Keyboard
Send to Mem: workArea
Default Values
Load...
Save...
Upgrade firmware...

3. Parts and Their Functions

3.1 ORCA PAD 48 Overview

3.1.1 Top Panel Overview



3.1.2 Rear Panel Overview



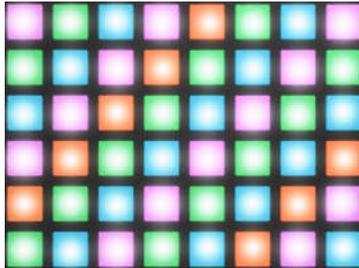
Control Definitions

1. Encoders
2. Sliders
3. Trigger pads
4. [Note] button
5. [Octave] button
6. [A.Touch] button
7. [Channel] button
8. [Velocity] button
9. [Mute] button
10. [Volume] button
11. [MMC] button
12. [Memory] button
13. [<] and [>] button
14. Full Sized USB connector
15. [MIDI OUT] Connector
16. [MIDI IN] Connector
17. DC 5V power socket
18. [OFF/ON] button

3.2 Parts and Their Functions

3.2.1 The pads/preset buttons

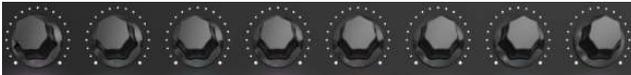
ORCA PAD 48 has 48 high quality velocity & pressure sensitive performance pads with RGB backlit which can be assigned easily as pads or MIDI CC buttons. The pads can be used to trigger drum hits to our software or hardware module. The pads are pressure and velocity sensitive, which makes them very responsive and intuitive to play. With the software editor it's possible to assign the pads and adjust the RGB color of the pads.



The pads

3.2.2 Parameter control encoders

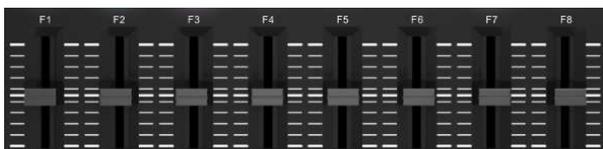
These encoders transmit control change messages. The 8 encoders can be used to control any editable parameter on the selected device. Each encoder can be used to send continuous control data to a desktop audio workstation or external MIDI device.



The Parameter control encoders

3.2.3 Parameter control sliders

The 8 sliders can be assigned to control any editable parameter on the selected device. These sliders transmit control change messages. Each slider can be used to send continuous control data to a desktop audio workstation or external MIDI device.



The Parameter control sliders

3.2.4 Note button

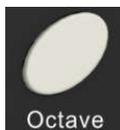
The 48 pads have dual modes: trigger pads mode and key note mode. Click the note button to start the note mode of the 48 pads, press +/- button to increase or decrease the current note by semitone.



Note button

3.2.5 Octave button

Click the Octave button to start the Octave function, use +/- button to transpose the pad notes by as much as four octaves.



Octave button

3.2.6 A. TOUCH button

Click the A.touch button to start the function of channel After touch and keyboard after touch. Channel After touch is on when the LED color is red for the A.touch button. Keyboard After touch is on when it's blue for the A.touch button. When Channel After touch is on, the system sends Channel After touch info when pressing the pads. When Keyboard After touch in on, the system sends Keyboard After touch info when pressing the pads.



After touch button

3.2.7 Channel button

Channel selection function button, selecting current MIDI channel for knobs and sliders. Click the channel button to start the channel function, use +/- button to select the channel.

The initial setting is 1, adjusting scale is 1~16.



Channel button

3.2.8 Velocity button

Every time you press a key, a MIDI note message is sent with a velocity value between 0 and the maximum; this value specifies how hard you pressed the key. Since different people have different playing styles, your ORCA PAD 48 offers a number of different velocity curves. You should experiment with the different velocity curves to find the curve that best suits your playing style.

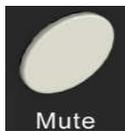
Click the velocity button to start the velocity selection function, the medium(or normal) velocity is on when the LED color of velocity button is green, heavy velocity is on when it's in red color, and blue for constant velocity.



Velocity button

3.2.9 Mute button

Mute ON/OFF button. Click mute button will start the mute function. No message will be transmitted under Mute mode.



Mute button

3.2.10 Volume button

It sends GM Master Volume message (F0 7F 7F 04 01 00 xx F7). Click the volume button, then use +/- button to adjust the volume.



Volume button

3.2.11 [MMC] button

There are 6 buttons used for MMC-[play], [>>], [<<], [O], [stop], [||<<]. It is common to set the 6 buttons as Sequencer remote control buttons, it needs to be working with sequencer software. Factory default is CC mode. In this mode, buttons will transmit control change messages. Press [||<<] and [play] button simultaneously will start the MMC mode of the buttons.



MMC button

3.2.12 Memory button

Holding the memory button and pressing one of the recalling pads to recall the parameters in Memory area.



Memory button

3.2.13 [<] and [>] button

These buttons are used for incrementing and decrementing parameter values and settings.



[<] and [>] button

3.2.14 Full Sized USB connector

Connect the ORCA PAD 48 to your computer with a USB cable via this port.

3.2.15 [MIDI OUT] Connector

Use a five-pin MIDI cable to connect the MIDI OUT of the ORCA PAD 48 to the MIDI IN of an external device. Make sure to connect the 3.5mm TRS MIDI Out to MIDI DIN adaptor to MIDI Out connector first and then plug the five-pin MIDI cable to the adaptor.

3.2.16 [MIDI IN] Connector

Use a five-pin MIDI cable to connect the MIDI OUT of an external MIDI device to the MIDI IN of the ORCA PAD 48. Make sure to connect the 3.5mm TRS MIDI Out to MIDI DIN adaptor to MIDI In connector first and then plug the five-pin MIDI cable to the adaptor.

3.2.17 DC 5V

5V power input interface.

3.2.18 [OFF/ON] button

Power Off/On button.

4. Setup

4.1 Minimum System Requirements

Windows	Mac OS
i3 1.2GHz or higher (CPU requirement may be higher for laptops)	Macintosh i3*1.2GHz/P4*1.2GHz or higher (CPU requirement may be higher for laptops)
1G RAM	OS X 10.3.9 with 1G RAM,
Direct X 9.0b or higher	OS X 10.4.2 or greater with 1G RAM
Windows XP (SP2) or higher (Windows 98, Me, NT or 2000 not supported)	*G3/G4 accelerator cards are not supported.

4.2 To download the software editor of Orca pad48

The following settings cannot be edited on the WORLDE ORCA PAD48 instrument, so you need to use the WORLDE ORCA PAD48 software Editor. You can download the WORLDE ORCA PAD48 software Editor from WORLDE website www.worldde.com.cn.

4.3 Creating MIDI Presets with the Orca PAD48 Software Editor

4.3.1 Overview: What is a ORCA PAD 48 Preset?

Thanks to the ORCA PAD 48 Software Editor it's possible to configure the ORCA PAD 48 to work with practically any device or software capable of responding to MIDI information. To summarize, here are some examples of what you can do with a ORCA PAD 48 preset:

- Use the pads to transmit MIDI notes.
- Switch between two values of any MIDI CC# by playing a pad.
- Assign an encoder to control any MIDI CC# and define its operational range.
- Assign a slider to control any MIDI CC# and define its operational range.
- Save the entire set of altered controls to one of ORCA PAD 48's four preset locations.
- Recall any of the four personalized presets easily and immediately.

4.3.2 Assign a couple of Pads to MIDI notes

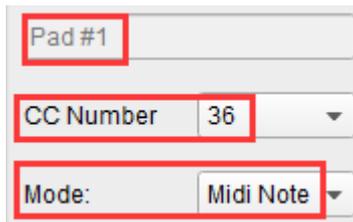
The natural thing to do when you're starting a song is to lay down the kick and snare tracks. The ORCA PAD 48 pads can be assigned to any MIDI note number that you like, so for this example we'll set Pads 1 and 2 to trigger the General MIDI note numbers for the Bass drum and Snare drum (MIDI note numbers 36 and 38, respectively).

By default the pads have their Mode set to MIDI note, so when you select each Pad we'll get right down to selecting the MIDI note number and velocity values. Let's leave the other setting to "Gate" so the notes shut off when you lift the pad; you can try the "Toggle" value later if you'd like the MIDI note to stay "On" until you hit the pad a second time.

4.3.2.1 Select the MIDI note number: Kick

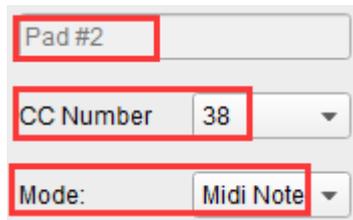
The CC number field is used to set the MIDI note number, which makes sense: there are 128 MIDI Controller numbers and 128 MIDI Note numbers. So click the pull-down menu and set this value to 36 to select the General MIDI Kick drum note number:

We'll show you how to set Pad 2 to the Snare drum note number in section 4.2.3.2.



4.3.2.2 Select the MIDI note number: Snare

Setting Pad 2 to trigger the snare is done the same way, only by choosing a different MIDI note number (38 in this case):



So now you're ready to lay down the groove for your song: You have Pads 1 and 2 set to play the Kick and Snare.

4.3.3 Assign a Pad to toggle a MIDI CC # between two values

One popular musical effect these days is to take an audio loop, filter it heavily for certain sections of a song, and switch it back to the full-open sound later in the song. You can pre-configure one of the ORCA PAD 48 pads to send those commands to a filter plug-in

that should be readily available in your DAW software.

We'll use Pad 6 for this example. Select it and then use the pull-down Mode menus to select "Switched" and "Toggle":

Selected Control Parameters

Pad #6 Channel: Global

CC Number 1 Value 0

Mode: Switched Mode Option: toggle

These settings will allow you to send two different values of a particular MIDI CC number each time you press the pad.

There are a couple of MIDI CC numbers that have been assigned the task of controlling filter brightness (CC# 74) or harmonic content (CC# 71). We'll use CC# 74 for this example.

Click on the CC number field and select the Brightness controller number 74 as shown:

Selected Control Parameters

Pad #6

CC Number 74

Next we'll set some minimum and maximum values that might work (adjust them to suit the audio source):

Selected Control Parameters

Pad #6 Channel: Global

CC Number 74 Value 0

Mode: Switched Mode Option: toggle

Min / LSB: 78 Max / MSB: 127

The first press of Pad 6 will send a CC# 74 command with a value of 78, which will close the filter down part way but still let a lot of the audio pass through. The second press of Pad 6 will send a value of 127, opening the filter completely.

Note: Be sure to check the MIDI Channel assignment to make sure it matches that of the

receiving device.

4.3.4 Assign an Encoder to control a MIDI CC # between two values

The encoders are assignable using the same techniques described for the pads. Let's give a quick example of an interesting use: setting the rate of an LFO so it operates only within a certain range.



Looking at the picture above we see familiar information: Encoder 5 has been selected. It is assigned to the Global MIDI channel; you can specify any MIDI channel from 1-16 or leave it on the Global channel.

Its Mode is set to Continuous, which means it will transmit a MIDI Continuous Controller number when it is turned.

The second Mode field is set to Absolute, which means it will transmit in a linear fashion from fully counter-clockwise to fully clockwise.

The CC number field shows CC# 76, the MIDI CC # that has been assigned to control Vibrato Rate.

The Min / LSB and Max / MSB fields are set in such a way as to limit Encoder 5 to operation only within a certain range.

To summarize, the settings seen above mean that Encoder 5 will control the Vibrato Rate of the target device, sweeping it between the values of 10 and 32 only. The vibrato will not become too fast, nor will it become too slow.

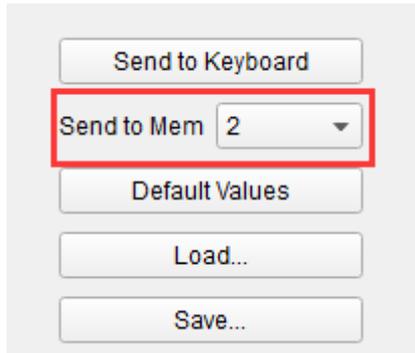
Naturally you can choose settings that are appropriate for the MIDI device you are using.

Note: Some devices may not use standard MIDI controller assignments. Refer to the documentation for your device to determine what settings to use for each purpose.

4.3.5 Save the changes to a Preset

So let's review what we've done in section 4.3.2 to 4.3.4 so far: The pads have been set up to play kick and snare, toggle the filter settings; one of the encoders is controlling the vibrato rate. Not bad! There's a lot more ORCA PAD 48 can do, but that's a good start. So the next thing to do is make sure this configuration is available when you want it. To do that, you need to save these settings as a group into one of the eight memory locations in the ORCA PAD 48.

The upper right-hand section of the software editor has a button called "Send to Keyboard". Right below that is a pull-down menu that allows you to specify which of the ORCA PAD 48's eight memory locations will be the repository for the Preset you've created. Before clicking the top button, select a location you know is available. We'll use memory location #2 for this example:



Select #2 in the drop-down list as pictured above.

Once you're sure where the preset will be stored, click the "Send to Keyboard" button:



4.3.6 Recalling a Preset / Switching between Presets

Once you've created a couple of presets you can switch between your personalized configurations very quickly. This is as simple as it can be: simply hold the Memory button and press one of the 4 pads as shown in picture below.



In the picture above the combination of the Memory button and Pad 2 will select Preset #2 from the ORCA PAD 48 preset memory locations.

To switch from Preset #2 to Preset #1, hold Memory again and press Pad 1 instead.

4.4 Select the Backlit RGB Color of 48 Pads

Use the ORCA PAD 48 Software Editor to select the backlit RGB color of 48 pads. You can download the ORCA PAD 48 Software Editor from WORLDE website www.worlde.com.cn.

Press the pad and the red circle button  will appear on that, then select the color range No. for CR,CG and CB. Press the “Send to Keyboard” to send the parameters to the ORCA PAD 48 and then press the OK button to confirm. The color range is from 0 to 127 for each one. Use the “Bulk change CR/CG/CB” button to edit the RGB color for pads group. Press the “Bulk change CR/CG/CB” button and then select the pads that to set the RGB color for, then select the color range No. for CR,CG and CB for that, press the button of Bulk change CR/CG/CB to quit the bulk change mode once it’s completed for the pad group RGB setting.

Reference RGB No. for some colors:

COLOR	R.	G.	B.
WHITE	127	127	127
BLACK	0	0	0
RED	127	0	0
GREEN	0	127	0
BLUE	0	0	127
CYAN	0	127	127
MAGENTA	127	0	127
YELLOW	127	127	0
ORANGE	127	82	0

5.Appendix

Appendix A- Toxic or Hazardous Substances and Elements

Part Number, Name and Description	Toxic or Hazardous Substances and Elements					
	Pb	Hg	Cd	Cr(VI)	PBB)	PBDE)
PCB	○	○	○	○	○	○
PCBA Welding Spot	○	○	○	○	○	○
Components	○	○	○	○	○	○
Metal Parts	○	○	○	○	○	○
Plastic and Polymeric parts	○	○	○	○	○	○
Paper Accessory	○	○	○	○	○	○
Power Cord	○	○	○	○	○	○
<p>○: Indicates that this toxic or hazardous substance contained in all the homogeneous materials for this part, according to EIP-A, EIP-B, EIP-C is below the limit requirement in SJ/T 11364.</p> <p>×: Indicates that this toxic or hazardous substance contained in all the homogeneous materials for this part, according to EIP-A, EIP-B, EIP-C is above the limit requirement in SJ/T 11364.</p> <p>(Enterprises may further provide in this box technical explanation for marking "X" based on their actual conditions.)</p>						

Appendix B- Note Value and The Corresponding Numerical Number

Note	NO.														
C-1	0	F0	17	Bb 1	34	Eb 3	51	G#4	68	C#6	85	F#7	102	B8	119
C#-1	1	F#0	18	B1	35	E3	52	A4	69	D6	86	G7	103	C9	120
D-1	2	G0	19	C2	36	F3	53	Bb 4	70	Eb 6	87	G#7	104	C#9	121
Eb-1	3	G#0	20	C#2	37	F#3	54	B4	71	E 6	88	A7	105	D9	122
E-1	4	A0	21	D2	38	G3	55	C5	72	F6	89	Bb 7	106	Eb 9	123
F-1	5	Bb 0	22	Eb 2	39	G#3	56	C#5	73	F#6	90	B7	107	E9	124
F#-1	6	B0	23	E2	40	A3	57	D5	74	G6	91	C8	108	F9	125
G-1	7	C1	24	F2	41	Bb 3	58	Eb 5	75	G#6	92	C#8	109	F#9	126
G#-1	8	C#1	25	F#2	42	B3	59	E5	76	A6	93	D8	110	G9	127
A-1	9	D1	26	G2	43	C4	60	F5	77	Bb 6	94	Eb 8	111		
Bb-1	10	Eb 1	27	G#2	44	C#4	61	F#5	78	B6	95	E8	112		
B-1	11	E1	28	A2	45	D4	62	G5	79	C7	96	F8	113		
C0	12	F1	29	Bb 2	46	Eb 4	63	G#5	80	C#7	97	F#8	114		
C#0	13	F#1	30	B2	47	E4	64	A5	81	D7	98	G8	115		
D0	14	G1	31	C3	48	F4	65	Bb 5	82	Eb 7	99	G#8	116		
Eb 0	15	G#1	32	C#3	49	F#4	66	B5	83	E7	100	A8	117		
E0	16	A1	33	D3	50	G4	67	C6	84	F7	101	Bb 8	118		

Specifications

Connectors: USB(Type B) connector/MIDI OUT connector/MIDI IN connector/ DC 5V jack

Power supply: USB bus power mode/5V DC mode

Current consumption: 100 mA or less

Dimensions (W x D x H):256x256x36mm

Weight : 890g

Included items: USB cable, USB power cord, MIDI to 3.5 audio cable, Owner's manual

***Specifications and appearance are subject to change without notice.**