User Manual

U-CONTROL UCA202

Ultra-Low Latency 2 In/2 Out USB/Audio Interface
with Digital Output

behringer

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Thank you

Thank you for choosing the new UFO202 U-PHONO interface from BEHRINGER. You will now be able to transfer all your great albums from the vinyl and tape eras into the digital realm with the help of this easy-to-use device. It features stereo RCA inputs and outputs to allow both monitoring and recording of the audio source. The USB connection will work with either PCs or Mac computers, so no drivers are needed for installation, and power is supplied through the USB cable. The separate headphones output allows you to play back your recordings at any time, even if you don't have any loudspeakers available. We've also included free software to help you transfer and edit the music in a streamlined fashion, allowing you to spend less time fidgeting with settings and more time listening to your favorite songs.

EN Important Safety Instructions

CAUTION
RISK OF ELECTRIC SHOCK!
DO NOT OPEN!
ATTENTION
RISQUE D'ÉLECTROCUTION !
NE PAS OUVRIR !

Caution
This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

Caution
This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

Caution
To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

Caution
To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Only use attachments/accessories specified by the manufacturer.

9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

10. CAUTION - These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions unless you are qualified to do so.

LEGAL DISCLAIMER

LIMITED WARRANTY

1. Introduction

Welcome to the family of U-CONTROL users and thank you for expressing your confidence in BEHRINGER products by purchasing the UCA202. With the UCA202 you have purchased a high-performance audio interface that includes a USB connector. It is thus an ideal sound card for your laptop computer or an essential recording/playback component for studio environments that involve desktop computers.

The UCA202 is PC and Mac-compatible. Therefore, no separate installation procedure is required, while the operating system drivers ensure an extremely short latency. Thanks to its robust construction and compact dimensions, the UCA202 is also ideal for traveling. The separate headphones output allows you to play back your recordings at any time, even if you don't happen to have any loudspeakers available.

2 inputs and outputs as well as the digital stereo output give you total connecting flexibility to mixing consoles, loudspeakers or headphones. Power is supplied to the unit via the USB interface. The LED gives you a quick check that the UCA202 is properly connected to the computer. The UCA202 is the ideal extra for every computer musician.

1.1 Before you started

1.1.1 Shipment

Your UCA202 was carefully packed at the assembly plant to assure secure transport. Should the condition of the cardboard box suggest that damage may have taken place, please inspect the unit immediately and look for physical indications of damage.

◊ **Damaged equipment should NEVER be sent directly to us. Please inform the dealer from whom you acquired the unit immediately as well as the transportation company from which you took delivery. Otherwise, all claims for replacement/repair may be rendered invalid.**

◊ **Please always use the original packaging to avoid damage due to storage or shipping.**

◊ **Never let unsupervised children play with the equipment or with its packaging.**

◊ **Please dispose of all packaging materials in an environmentally friendly fashion.**

1.1.2 Initial operation

Please make sure the unit is provided with sufficient ventilation, and never place the UCA202 on top of an amplifier or in the vicinity of a heater to avoid the risk of overheating.

The current supply is made via the USB connecting cable, so that there is no external power supply unit required. All required safety precautions have been adhered to.

1.1.3 Online registration

Please register your new BEHRINGER equipment right after your purchase by visiting http://behringer.com and read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, it is our intention to have it repaired as quickly as possible. To arrange for warranty service, please contact the BEHRINGER retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (http://behringer.com).

Registering your purchase and equipment with us helps us process your repair claims more quickly and efficiently.

Thank you for your cooperation!

2. System Requirements

◊ **The UCA202 is PC and Mac-compatible. Therefore, no installation procedure or drivers are required for the correct functioning of the UCA202.**

To work with the UCA202, your computer must fulfill the following minimum requirements:

PC	MAC
Intel or AMD CPU, 1 GHz or higher	G4/G5, 800 MHz or higher
minimum 512 MB RAM	minimum 512 MB RAM
USB 2.0 interface	USB 2.0 interface
Windows XP SP2	Mac OS X 10.3.9 (Panther) or higher

2.1 Hardware connection

Use the USB connecting cable supplied with the UCA202 to connect the unit to your computer. The USB connection also supplies the UCA202 with current. You can connect a variety of devices and equipment to the inputs and outputs.

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3. Operating Elements and Connections
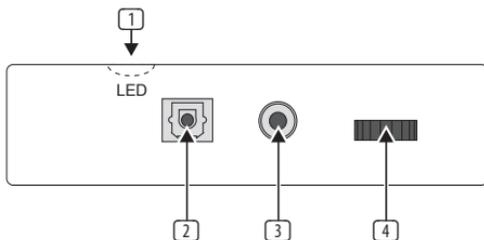
3.1 Front panel

Fig. 3.1: Front panel UCA202

(1) The **LED** indicates the status of the USB power supply.

(2) **DIGITAL OUTPUT**: The Toslink jack carries an S/PDIF signal which can be connected via a fiber optic cable, for example, to the digital input of an effects device.

(3) Use the ⌾ jack to connect a standard pair of headphones equipped with a ⅛" TRS connector.

(4) The **VOLUME** control adjusts the volume level of the headphones output. Turn the control fully to the left before you connect the headphones. This helps you avoid the damage that is caused by high volume settings.
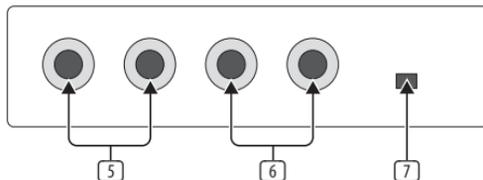
3.2 Rear panel

Fig. 3.2: Back of the UCA202

(5) Use the **LINE-OUT** jacks for audio cables with RCA connectors.

(6) Use the **LINE-IN** jacks for audio cables with RCA connectors.

(7) The **OFF/ON-MONITOR** switch activates the monitor function. In this case the input signal is routed directly to the headphones output.

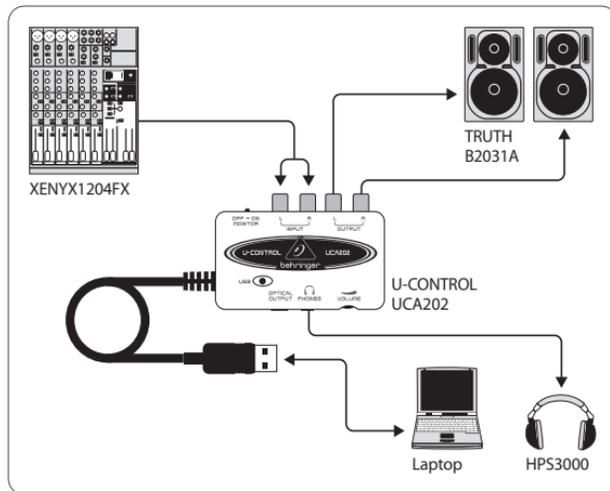## 4. Working with the UCA202

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4.1 Application example

Fig. 4.1: Common version with the UCA202

To provide a professional recording interface between mixing console and computer, you can use the UCA202 in combination with a suitable mixing console that includes subgroup outputs. This type of setup allows you to record several signals in the computer at the same time, to simultaneously play back several takes or playbacks which have been recorded, and to listen to the whole recording via loudspeakers (or headphones). Figure 4.1 shows a possible setup with one UCA202.

Connect the outputs of the subgroup (in this case ALT 3-4 OUT) with the inputs of the UCA202 ⑥. You can choose to connect the outputs ⑤ of the interface either to the TAPE INPUT sockets or to your monitor speakers. You can connect control headphones to the ⌂ socket ③ of the UCA202 or to the headphones output of your mixing console. Use the USB cable supplied with the unit to connect your PC or MAC via the USB interface.

By routing each channel that you want to record through the ALT3-4 subgroup, you can now use the input channels of the mixing console to record different signals (e.g. microphone, guitar, sound module, etc.) in the computer. If you connect the OUT jacks of the UCA202 to channel inputs 7/8 (not via TAPE INPUT), make sure that the signal is not switched to the subgroup but instead to the main output of your mixer (MUTE key on the UB1204FX-PRO in channel 7/8 not pressed). Otherwise feedback can occur. Make sure that you use the SOURCE section on the mixing console to select the correct monitoring paths (ALT 3-4 and MAIN MIX or ALT 3-4 and TAPE).

If you lead the UCA202 back via a channel input (not TAPE INPUT),

you can also use the aux path in the channel to set up a monitor mix for live musicians. To do this, use the Aux Send (e.g. Aux 1) in this channel input. If the musicians want to hear themselves as well as the playback or previous recording takes, use the Aux Sends in the recording channels to mix in the recording signals with the monitor mix.

5. Audio Connections

Although there are various ways to integrate the UCA202 into your studio or live set-up, the audio connections to be made will basically be the same in all cases:

5.1 Wiring

Please use standard RCA cables to connect the UCA202 to other audio equipment. You can also use an adapter cable.
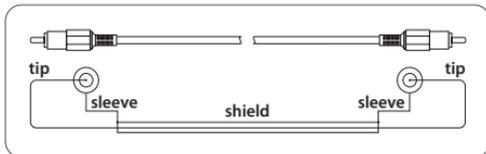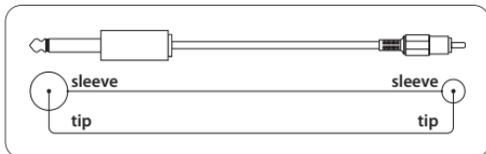
Fig. 5.1: RCA cable

Fig. 5.2: Adapter cable with ¼" jack

5.2 Headphones connection

The UCA202 is provided with a headphones jack. Here, you can connect any standard pair of stereo headphones with a ⅛" TRS connector.

6. Specifications

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Line In

Connectors	RCA, unbalanced
Input impedance	approx. 27 kΩ
Max. input level	2 dBV

Line Out

Connectors	RCA, unbalanced
Output impedance	approx. 400 Ω
Max. output level	2 dBV

Digital Output

Socket	Toslink, optical cable
Output format	S/PDIF

Phones Out

Socket	⅛" TRS stereo jack
Output impedance	approx. 50 Ω
Max. output pegel	-2 dBu, 2 x 3,7 mW @ 100 Ω

USB 1.1

Connectors	type A

Digital Processing

Converter	16-bit converter
Sample rate	32.0 kHz, 44.1 kHz, 48.0 kHz

System Data

Frequency response	10 Hz to 20 kHz, ±1 dB @ 44.1 kHz sample rate 10 Hz to 22 kHz, ±1 dB @ 48.0 kHz sample rate
THD	0.05% typ. @ -10 dBV, 1 kHz
Crosstalk	-77 dB @ 0 dBV, 1 kHz
Signal-to-noise ratio	A/D 89 dB typ. @ 1 kHz, A-weighted D/A 96 dB typ. @ 1 kHz, A-weighted

Power Supply

USB connection	5 V ⎓, 100 mA max.

Dimensions / Weight

Dimensions (H x W x D)	approx. 22 x 60 x 88 mm (0.9 x 2.4 x 3.5")
Weight	approx. 0.10 kg (0.2 lbs)

BEHRINGER always takes great care to ensure the highest standard of quality. Any modifications which may be necessary will be made without prior notification. Specifications and appearance of the equipment can therefore differ from the details or illustrations shown.

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FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

FC **BEHRINGER**
U-CONTROL UCA202

Responsible Party Name:	**MUSIC Group Services NV Inc.**
Address:	**5270 Procyon Street Las Vegas, NV 89118 USA**
Phone Number:	**+1 702 800 8290**

U-CONTROL UCA202

complies with the FCC rules as mentioned in the following paragraph:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:

Changes or modifications to the equipment not expressly approved by MUSIC Group can void the user's authority to use the equipment.

We Hear You

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