

User Manual



## U-CONTROL UCA202

Ultra low-latency 2 In/2 Out USB/Audio Interface  
with Digital Output

[behringer.com](http://behringer.com)



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## Thank you

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.

## EN Important Safety Instructions



Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock. Use only high-quality commercially-available speaker cables with ¼" TS plugs pre-installed. All other installation or modification should be performed only by qualified personnel.



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.



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 liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



### 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. Repairs have to be performed by qualified service personnel.

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 block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

**11.** Use only attachments/accessories specified by the manufacturer.



When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

**12.** Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a

**13.** Unplug this apparatus during lightning storms or when unused for long periods of time.

**14.** 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.

**15.** The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.

**16.** Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.



## Legal Disclaimer

Technical specifications and appearance are subject to change without notice. The information contained herein is correct at the time of printing. All trademarks are the property of their respective owners. MUSIC Group accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colors and specifications may vary slightly from product. BEHRINGER products are sold through authorized dealers only. Distributors and dealers are not agents of MUSIC Group and have absolutely no authority to bind MUSIC Group by any express or implied undertaking or representation. This manual is copyrighted. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical,

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Trident Chambers, Wickhams Cay, P.O. Box 146,  
Road Town, Tortola, British Virgin Islands

## Limited Warranty

### § 1 Warranty

**1** This limited warranty is valid only if you purchased the product from a BEHRINGER authorized dealer in the country of purchase. A list of authorized dealers can be found on BEHRINGER's website [behringer.com](http://behringer.com) under "Where to Buy", or you can contact the BEHRINGER office closest to you.

**2** MUSIC Group\* warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase (see the Limited Warranty terms in § 4 below), unless a longer minimum warranty period is mandated by applicable local laws. If the

product shows any defects within the specified warranty period and that defect is not excluded under § 4, MUSIC Group shall, at its discretion, either replace or repair the product using suitable new or reconditioned product or parts. In case MUSIC Group decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e., one (1) year (or otherwise applicable minimum warranty period) from the date of purchase of the original product.

③ Upon validation of the warranty claim, the repaired or replacement product will be returned to the user freight prepaid by MUSIC Group.

④ Warranty claims other than those indicated above are expressly excluded.

PLEASE RETAIN YOUR SALES RECEIPT. IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH PROOF OF PURCHASE.

## § 2 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase at behringer.com under “Support” and kindly read the terms and conditions of our limited warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

## § 3 Return materials authorization

① To obtain warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may contact the BEHRINGER distributor for your country listed under “Support” at behringer.com. If your country is not listed, please check if your problem can be dealt with by our “Online Support” which may also be found under “Support” at behringer.com. Alternatively, please submit an online warranty claim at behringer.com BEFORE returning the product. All inquiries must be accompanied by a description of the problem and the serial number of the product. After verifying the product’s warranty eligibility

with the original sales receipt, MUSIC Group will then issue a Return Materials Authorization (“RMA”) number.

② Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by MUSIC Group.

③ Shipments without freight prepaid will not be accepted.

## § 4 Warranty Exclusions

① This limited warranty does not cover consumable parts including, but not limited to, fuses and batteries. Where applicable, MUSIC Group warrants the valves or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase.

② This limited warranty does not cover the product if it has been electronically or mechanically modified in any way. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and

manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. This limited warranty does not cover any such modification/adaptation, regardless of whether it was carried out properly or not. Under the terms of this limited warranty, MUSIC Group shall not be held responsible for any cost resulting from such a modification/adaptation.

3 This limited warranty covers only the product hardware. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the product. Any such software is provided "AS IS" unless expressly provided for in any enclosed software limited warranty.

4 This limited warranty is invalid if the factory-applied serial number has been altered or removed from the product.

5 Free inspections and maintenance/repair work are expressly excluded from this limited warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders,

potentiometers, keys/buttons, guitar strings, illuminants and similar parts.

6 Damage/defects caused by the following conditions are not covered by this limited warranty:

- improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals;
- connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used;
- damage/defects caused by acts of God/Nature (accident, fire, flood, etc) or any other condition that is beyond the control of MUSIC Group.

7 Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the limited warranty.

8 If an inspection of the product by MUSIC Group shows that the defect in question is not covered by the limited warranty, the inspection costs are payable by the customer.

9 Products which do not meet the terms of this limited warranty will be repaired exclusively at the buyer's expense. MUSIC Group or its authorized service center will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, MUSIC Group will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

10 Authorized BEHRINGER dealers do not sell new products directly in online auctions. Purchases made through an online auction are on a "buyer beware" basis. Online auction confirmations or sales receipts are not accepted for warranty verification and MUSIC Group will not repair or replace any product purchased through an online auction.

## § 5 Warranty transferability

This limited warranty is extended exclusively to the original buyer (customer of authorized retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of MUSIC Group.

## § 6 Claim for damage

Subject only to the operation of mandatory applicable local laws, MUSIC Group shall have no liability to the buyer under this warranty for any consequential or indirect loss or damage of any kind. In no event shall the liability of MUSIC Group under this limited warranty exceed the invoiced value of the product.

## § 7 Limitation of liability

This limited warranty is the complete and exclusive warranty between you and MUSIC Group. It supersedes all other written or oral communications related to this product. MUSIC Group provides no other warranties for this product.

## § 8 Other warranty rights and national law

1 This limited warranty does not exclude or limit the buyer's statutory rights as a consumer in any way.

2 The limited warranty regulations mentioned herein are applicable unless they constitute an infringement of applicable mandatory local laws.

3 This warranty does not detract from the seller's obligations in regard to any lack of conformity of the product and any hidden defect.

## § 9 Amendment

Warranty service conditions are subject to change without notice. For the latest warranty terms and conditions and additional information regarding MUSIC Group's limited warranty, please see complete details online at [behringer.com](http://behringer.com).

\* MUSIC Group Macao Commercial Offshore Limited of Rue de Pequim No. 202-A, Macau Finance Centre 9/J, Macau, including all MUSIC Group companies

## 1. Introduction

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 do remember to register your new BEHRINGER equipment right after your purchase by visiting [behringer.com](http://behringer.com) (alternatively [behringer.de](http://behringer.de)) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the 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 ([behringer.com/support](http://behringer.com/support)).

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

## 3. Operating Elements and Connections

### 3.1 Front panel

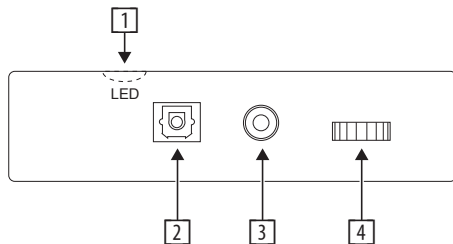



Fig. 3.1: Front panel UCA202

- 1 The LED indicates the status of the USB power supply.  
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.

Use the  jack to connect a standard pair of headphones equipped with a 1/8" TRS connector.

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.

Use the LINE-OUT jacks for audio cables with RCA connectors.

Use the LINE-IN jacks for audio cables with RCA connectors.

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

### 3.2 Rear panel

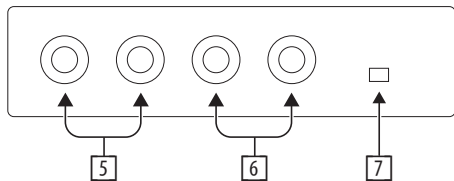


Fig. 3.2: back of the UCA202

# EN 4. Working with the UCA202

## 4.1 Application example

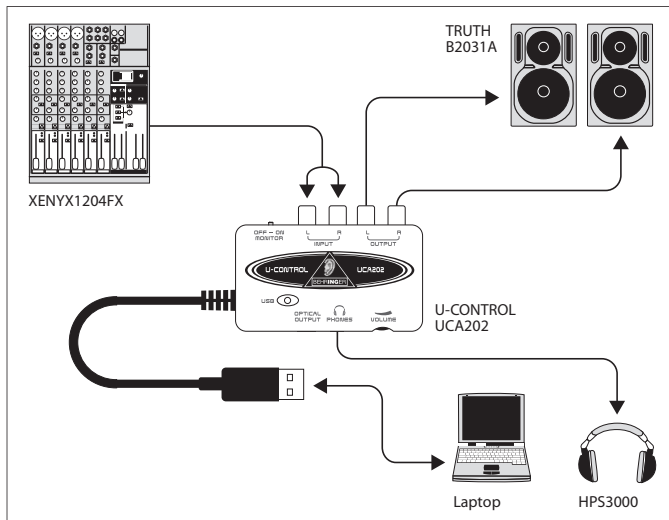



Fig. 4.1: Common version with the UCA202

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.

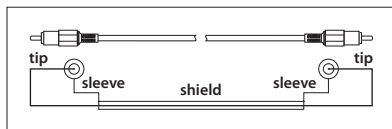


Fig. 5.1: RCA cable

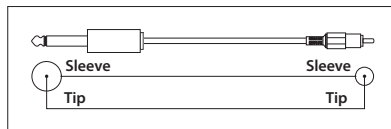


Fig. 5.2: Adapter cable with 1/4" jack

### 5.2 Headphones connection

The UCA202 is provided with a headphones jack. Here, you can connect any standard pair of stereo headphones with a 1/8" TRS connector.

## 6. Specifications

### LINE IN

Connectors	RCA, unbalanced
Input impedance	approx. 27 k $\Omega$
Max. input level	2 dBV

### LINE OUT

Connectors	RCA, unbalanced
Output impedance	approx. 400 $\Omega$
Max. output level	2 dBV

### DIGITAL OUTPUT

Socket	Toslink, optical cable
Output format	S/PDIF

### PHONES OUT

Socket	1/8" TRS stereo jack
Output impedance	approx. 50 $\Omega$
Max. output pegel	-2 dBu, 2 x 3,7 mW @ 100 $\Omega$

### USB 1.1

Connectors	type A
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### 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, $\pm 1$ dB @ 44.1 kHz sample rate 10 Hz to 22 kHz, $\pm 1$ dB @ 48.0 kHz sample rate
THD	0.05 % typ. @ -10 dBV, 1kHz
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 $\overline{---}$ , 100 mA max.
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**Dimensions/Weight**

Dimensions (H x W x D)	approx. 0.87 x 3.46 x 2.36" approx. 22 x 88 x 60 mm
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Weight	approx. 0.12 kg
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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.



## FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Responsible party name: **MUSIC Group Services USA, Inc.**

Address: **18912 North Creek Parkway,  
Suite 200 Bothell, WA 98011,  
USA**

Phone/Fax No.: **Phone: +1 425 672 0816  
Fax: +1 425 673 7647**

### 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.



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