User Manual

**U-CONTROL UCA222**

Ultra-Low Latency 2 In/2 Out USB Audio Interface with Digital Output
Thank you for choosing the UCA222 U-CONTROL audio interface. The UCA222 is a high-performance interface that includes a USB connector, making it an ideal sound card for your laptop computer or an essential recording/playback component for studio environments that involve desktop computers. The UCA222 is PC and Mac-compatible, therefore no separate installation procedure is required. Thanks to its robust construction and compact dimensions, the UCA222 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. Two inputs and outputs as well as the S/PDIF output give you total connecting flexibility to mixing consoles, loudspeakers or headphones. Power is supplied to the unit via the USB interface and the LED gives you a quick check that the UCA222 is properly connected. The UCA222 is the ideal extra for every computer musician.
Important Safety Instructions

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

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

LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding MUSIC Group’s Limited Warranty, please see complete details online at www.music-group.com/warranty.
1. Before You Get Started

1.1 Shipment

◊ Your UCA222 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.

1.2 Initial operation

Please make sure the unit is provided with sufficient ventilation, and never place the UCA222 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. Please adhere to all required safety precautions.

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 UCA222 is PC and Mac-compatible. Therefore, no installation procedure or drivers are required for the correct functioning of the UCA222.

To work with the UCA222, your computer must fulfill the following minimum requirements:

<table>
<thead>
<tr>
<th></th>
<th>PC</th>
<th>Mac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel or AMD CPU, 400 MHz or higher</td>
<td>G3, 300 MHz or higher</td>
<td></td>
</tr>
<tr>
<td>Minimum 128 MB RAM</td>
<td>Minimum 128 MB RAM</td>
<td></td>
</tr>
<tr>
<td>USB 1.1 interface</td>
<td>USB 1.1 interface</td>
<td></td>
</tr>
<tr>
<td>Windows XP, 2000</td>
<td>Mac OS 9.0.4 or higher, 10.X or higher</td>
<td></td>
</tr>
</tbody>
</table>

2.1 Hardware connection

Use the USB connecting cable to connect the unit to your computer. The USB connection also supplies the UCA222 with current. You can connect a variety of devices and equipment to the inputs and outputs.

3. Controls and Connectors

- **POWER LED** – Indicates the status of the USB power supply.
- **OPTICAL OUTPUT** – The Toslink jack carries an S/PDIF signal which can be connected via a fiber optic cable.
- **PHONES** – Connect a standard pair of headphones equipped with a 1/8" mini plug.
- **VOLUME** – Adjusts the volume level of the headphones output. Turn the control fully to the left before you connect the headphones to avoid hearing damage caused by high volume settings. Turn the control to the right to increase the volume.
5. **Basic Operation**

The UCA222 provides an easy interface between your computer, mixer and monitoring system. Follow these steps for basic operation:

1. Connect the UCA222 to the computer by plugging the USB cable into a free USB port. The power LED will light automatically.

2. Connect the audio source that is to be recorded, such as a mixer, preamp, etc. to the INPUT stereo RCA jacks.

3. Plug a pair of headphones into the 1/8" PHONES jack and adjust the volume with the adjacent control. You may also monitor the output by plugging a pair of powered speakers into the OUTPUT stereo RCA jacks.

4. You may also send the stereo signal in digital audio format (S/PDIF) to an external recording device via the OPTICAL OUTPUT using a Toslink fiber optic cable.

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4. **Software Installation**

- This device requires no special setup or drivers, just plug it into a free USB port on a PC or Mac.

- The UCA222 comes with a free version of Audacity editing software. This will help make the transfer process quick and simple. Simply insert the CD into your CD-ROM drive and install the software. The CD also contains VST plug-ins, ASIO drivers and various freeware.

◊ **Note** – When the UCA222 is bundled with other BEHRINGER products, the included software may vary. In the instance that the ASIO drivers are not included, you may download these from our website at behringer.com.
6. Application Diagrams

Using a mixer to record in a studio environment:

The most common application for the UCA222 is doing studio recording with a mixer. This will allow you to record several sources at once, listen to the playback, and record more tracks in sync with the original take(s).

- Connect the mixer’s TAPE OUT to the INPUT RCA jacks on the UCA222. This will allow you to capture the overall mix.
- Plug the USB cable into a free USB port on your computer. The POWER LED will light up.
- Connect a pair of powered monitor speakers to the UCA222 OUTPUT RCA jacks. Depending on what type of inputs your speakers accept, you may need an adapter.
- You may also monitor the input signal with a pair of headphones instead of or in addition to the monitor speakers. Turn the OFF/ON MONITOR switch to the ‘ON’ position. Plug a pair of headphones into the PHONES jack and adjust the volume with the adjacent control. This will be preferable if the mixer and computer are in the same room as the instruments being recorded.
- Take some time to adjust each channel level and EQ to ensure a good balance between the instruments/sources. Once the mix has been recorded you will be unable to make adjustments to just one channel.
- Set the recording program to record input from the UCA222.
- Press record and let the music rip!
Recording with a preamp such as the V-AMP 3:

Preamps such as the V-AMP 3 provide a great way to record a wide selection of high-quality guitar sounds without the hassle of placing a mic in front of a conventional amp. They also allow you to record late at night without tempting your roommates or neighbors to strangle you with your own guitar cable.

- Plug a guitar into the instrument input of the V-AMP 3 using a standard ¼" instrument cable.
- Connect the stereo ¼" outputs on the V-AMP 3 to the stereo RCA inputs on the UCA222. This will likely require adaptors. You may also use the stereo RCA to ¼" TRS cable that is included in the V-AMP 3/UCA222 package bundle to connect from the V-AMP 3 headphone output to the UCA222 RCA inputs.
- Plug the USB cable into a free USB port on your computer. The POWER LED will light up.
- Adjust the output signal level on the V-AMP 3.
- Set the recording program to record input from the UCA222.
- Press record and wail!
7. Audio Connections

Although there are various ways to integrate the UCA222 into your studio or live set-up, the audio connections to be made will basically be the same in all cases:

7.1 Wiring

Please use standard RCA cables to connect the UCA222 to other equipment:

You can also use a ¼” adapter cable:

8. Specifications

<table>
<thead>
<tr>
<th>Line In</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>RCA, unbalanced</td>
</tr>
<tr>
<td>Input impedance</td>
<td>approx. 27 kΩ</td>
</tr>
<tr>
<td>Max. input level</td>
<td>2 dBV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Line Out</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>RCA, unbalanced</td>
</tr>
<tr>
<td>Output impedance</td>
<td>approx. 400 Ω</td>
</tr>
<tr>
<td>Max. output level</td>
<td>2 dBV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Digital Output</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Socket</td>
<td>Toslink, optical cable</td>
</tr>
<tr>
<td>Output format</td>
<td>S/PDIF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phones Out</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Socket</td>
<td>¼” TRS stereo jack</td>
</tr>
<tr>
<td>Output impedance</td>
<td>approx. 50 Ω</td>
</tr>
<tr>
<td>Max. output pegel</td>
<td>-2 dBu, 2 x 3.7 mW @ 100 Ω</td>
</tr>
<tr>
<td><strong>USB 1.1</strong></td>
<td><strong>Power Supply</strong></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Connectors</strong></td>
<td><strong>USB connection</strong></td>
</tr>
<tr>
<td>type A</td>
<td>5 V, 100 mA max.</td>
</tr>
<tr>
<td><strong>Digital Processing</strong></td>
<td><strong>Dimensions/Weight</strong></td>
</tr>
<tr>
<td>Converter</td>
<td>Dimensions (H x W x D) approx. 0.87 x 2.36 x 3.46&quot;</td>
</tr>
<tr>
<td>16-bit converter</td>
<td>approx. 22 x 60 x 88 mm</td>
</tr>
<tr>
<td>Sample rate</td>
<td>Weight approx. 0.10 kg</td>
</tr>
<tr>
<td>32.0 kHz, 44.1 kHz, 48.0 kHz</td>
<td></td>
</tr>
<tr>
<td><strong>System Data</strong></td>
<td></td>
</tr>
<tr>
<td>Frequency response</td>
<td></td>
</tr>
<tr>
<td>10 Hz to 20 kHz, ±1 dB @ 44.1 kHz sample rate</td>
<td></td>
</tr>
<tr>
<td>10 Hz to 22 kHz, ±1 dB @ 48.0 kHz sample rate</td>
<td></td>
</tr>
<tr>
<td>THD</td>
<td>0.05% typ. @ -10 dBV, 1kHz</td>
</tr>
<tr>
<td>Crosstalk</td>
<td>-77 dB @ 0 dBV, 1 kHz</td>
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<tr>
<td>Signal-to-noise ratio</td>
<td>A/D 89 dB typ. @ 1 kHz, A-weighted</td>
</tr>
<tr>
<td></td>
<td>D/A 96 dB typ. @ 1 kHz, A-weighted</td>
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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. Technical data 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 US 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 UCA222

U-CONTROL UCA222 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