M-AUDIO®

BX5 CARBON

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Introduction

The BX5 Carbon was designed and tested by veteran audio engineers to meet your needs in a studio monitoring environment. It is focused on the functional goal of delivering pure, original sound without any additional coloration. The BX5 Carbon monitor is self-powered, directly accepting a line-level signal from a variety of sources.

The BX5 Carbon is designed to overcome all the limitations of conventional studio reference monitors within the digital audio environment. This system delivers a wide-range frequency response by employing two extraordinary drivers and unique crossover technology licensed by M-Audio. It boasts a stable and balanced low-mid frequency response along with a defined mid and high frequency response as well. Both drivers are magnetically shielded for desktop music production.

For pro engineers at commercial studios to home studio owners, the BX5 Carbon sets a new affordable standard in studio monitoring.

Box Contents

- BX5 Carbon (1)
- Power Cable
- User Guide
- Safety & Warranty Manual

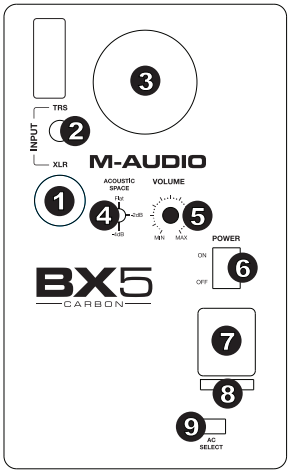
Support

For complete system requirements, compatibility information, and product registration, visit the M-Audio website: **m-audio.com/bx5carbon**.

For additional product support, visit **m-audio.com/support**.

Features

Rear Panel



1. **XLR Input:** This jack accepts XLR input connections with either balanced or unbalanced wiring. The input wiring of an XLR connector should be as follows:
   - XLR Pin 1: signal ground (shield)
   - XLR Pin 2: signal positive (+)
   - XLR Pin 3: signal negative (–)
2. **TRS Input:** This jack accepts 1/4" connections with either balanced or unbalanced wiring. For balanced wiring, a three-conductor TRS plug is necessary. The input wiring of a TRS connector should be as follows:
   - TRS Tip: signal positive (+)
   - TRS Ring: signal negative (–)
   - TRS Sleeve: signal ground (shield)

   Unbalanced 1/4" wiring can be done with either a two- or three-conductor (TS or TRS) plug. A two-conductor (TS) plug automatically grounds the signal negative input, whereas a three-conductor (TRS) plug, wired unbalanced, provides the option of leaving the negative input open or grounded. We recommend that you ground the unused negative input (this can be done by wiring the ring and sleeve of the TRS plug together). The TRS input is summed through a balanced input amplifier with the XLR input, allowing both inputs to be used simultaneously. Input specifications apply to both.

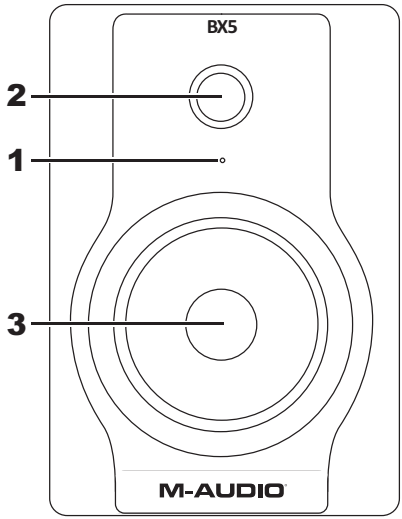
3. **Sub-Frequency Vent Port:** This port aids in reproduction of very low frequencies by discharging frequencies below 60 Hz and to act as a cooling mechanism to prevent overheating. This port should not be blocked.
4. **Acoustic Space Switch:** Your BX5 monitors should ideally be placed at least one foot away from the nearest wall, ceiling, or other large, flat surface. In the real world, this may be impractical due to space limitations within your studio. For that reason, BX5 monitors feature an acoustic space switch. This switch compensates for placement near walls.

   Tip: *Be sure to leave at least 3" of space between the rear of the speaker and a wall to allow the rear-firing port to "breathe" properly. Placing the speaker any closer than 3" may adversely affect low-frequency response.*
5. **Volume Control:** Use the volume control to set the output sound pressure from the BX5 Carbon to proper levels as required.
6. **Power Switch:** This switch turns the monitor on and off.
7. **Power Receptacle:** Accepts a detachable 3-circuit line cord in order to power the monitor.
8. **Fuse Holder:** Holds the external main fuse.
9. **Voltage-Select Switch:** Provides two selections, 115V AC and 230V AC, and should be set to match the "house supply" (receptacle) voltage of the country or location in which the speaker is used. The 115V setting is correct for the USA, while the 230V setting is correct for most of the UK and Europe.

Front Panel

The front panel houses the Power LED, which indicates whether the speakers (amplifier) power is on or off.

1. **Power LED**
2. **HF Driver** (tweeter)
3. **LF Driver** (woofer)



Installation

For optimal performance of the BX5 Carbon, please read the following thoroughly and carefully prior to installation.

Precautions

- **Handling:** Please do not touch the speaker cones. The BX5 Carbon set is packaged in the box tightly, so your attention is required when taking the monitors out of the box. To avoid possible damage to the speaker units, hold both sides of the monitor in order to pull it out of the box. The speaker cones should not be touched in order to avoid damage even after they are out of the box.
- **Correct Power Operation:** Since the BX5 Carbon contains its own amplifier, it must be connected to a power outlet using the detachable AC cable provided. Before connecting power, please make sure that the Voltage-Select Switch located on the speaker's rear panel is set to the appropriate position, as described in the rear-panel features list appearing earlier in this manual.

  WARNING! *Use of improper Voltage-Select Switch combinations may result in hazardous conditions and/or damage to speaker components not covered by speaker warranty.*
- **Connections:** You can connect either an XLR balanced cable or TRS balanced/unbalanced cable from the input of each BX5 Carbon to your corresponding preamp, computer or game console outputs. We recommend that you use high-quality balanced or unbalanced cables for input connections. Also, ALWAYS turn off the power of the BX5 Carbon and turn the volume of the BX5 Carbon down to a minimum before making the necessary connections.

Setup

The configuration and placement of your BX5 Carbon monitors on speaker stands or your desktop workstation may affect the performance of the speakers. Use the following tips to achieve the best performance out of your BX5 Carbon monitors.

Tip: *If possible, place your BX5 Carbon monitors on speaker stands instead of your desktop. Desks tend to resonate sympathetically at low frequencies and may adversely affect the bass response of your monitors. If speaker stands are not possible due to space restrictions and you notice a buildup in bass, try placing the monitors on isolation pads to acoustically de-couple the monitors from the desk.*

XLR Balanced Connection

Assure that the power switch of the BX5 Carbon is turned off and that the volume control of the BX5 Carbon is turned down to a minimum. Connect the male end of an XLR balanced cable to the balanced input of the BX5 Carbon (refer to the following diagram for balanced connection).

TRS Balanced/Unbalanced Connection

Assure that the power switch of the BX5 Carbon is turned to off and that the volume control of the BX5 Carbon is turned down to a minimum. Connect the male end of a TRS balanced or TS unbalanced cable to the TRS input of the BX5 Carbon (refer to the following diagram for TRS connection).

Connecting to Preamp or Computer Outputs

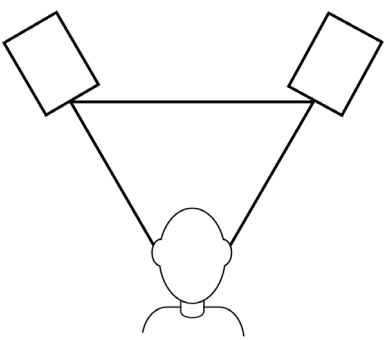
Before connecting, make sure the output device's power has been turned off. Plug the XLR balanced, TRS balanced or TS unbalanced cable to the corresponding output connectors of a pre-amplifier, computer or game console.

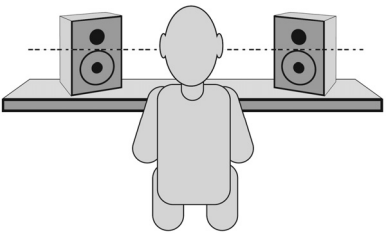
Speaker Placement

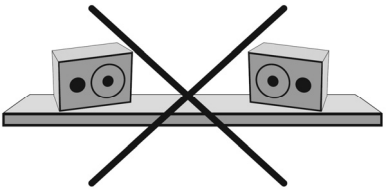
Placing speakers is one of the most important procedures in order to monitor sound accurately. To monitor with the BX5 Carbons performing to their maximum capability, an appropriate listening environment and correct placement are required. Please refer to the following for correct BX5 Carbon placement.

1. The monitors and the listener should basically align to form a regular triangle. Refer to the following diagram.
2. Position the monitors so that the top of the woofers are level with your ears in a normal listening environment. Refer to the following diagram.
3. Place the monitors vertically with the woofer on the bottom. Placing the BX5 Carbon horizontally is not recommended.

Remarks: DO NOT place any obstacles that may block the flow of air in front or between the monitors. Also remove reflective materials such as glass, mirrors or metal from the monitoring environment. PLACE THOSE MATERIALS AWAY FROM THE PATH OF THE SOUND FROM THE BX5 Carbons.







Appendix (English)

Technical Specifications

Type	2-way near-field studio reference monitors
LF Driver	5-inch (127 mm) Kevlar curved cone with high temperature voice coil and damped rubber surround. Magnetically shielded
HF Driver	1-inch (25 mm) magnetically shielded natural silk dome
Frequency Response	56 Hz – 22 kHz
Crossover Frequency	3 kHz
LF Amplifier Power	40 W
HF Amplifier Power	30 W
Signal-to-Noise Ratio	100 dB typical A-weighted
Input Connectors	1 x XLR balanced input connector 1 x TRS balanced/unbalanced input connector
Polarity	Positive signal at + input produce outward LF cone displacement
Input Impedance	20 KΩ balanced, 10 KΩ unbalanced
Input Sensitivity	85 mV pink noise input produces 90 dBA output SPL at 1 meter with volume control at maximum
Protection	RF interference, output current limiting, over temperature, turn-on/off transient, subsonic filter, external mains fuse.
Indicator	Power on/off indicator on rear panel
Power Requirements	Factory-programmed for 115 V ~50/60 Hz, 230 V ~50/60 Hz, or 100 V ~50/60 Hz
Cabinet	Vinyl-laminated high-acoustic-efficiency MDF
Dimension (height x width x depth)	9.8" x 6.9" x 7.9" 250 mm x 176 mm x 200 mm
Weight (without packing)	11 lbs. 5.0 kg

** Specifications are subject to change without notice.*

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