# M-AUDIO® FORTYSIXTY

**User Guide** 



(1.0) INTRODUCTION	3
(1.1) Box Contents	3
(1.2) Support	3
(2.0) SETUP	4
(2.1) Connection Diagram	4
(2.2) Precautions	5
(2.3) Configuration	5
(2.3.1) XLR Balanced Connection	5
(2.3.2) TRS Balanced/Unbalanced Connection	5
(2.3.3) Connecting to Preamp or Computer Outputs	5
(2.3.4) Using Isolation Pads	5
(2.3.5) Speaker Placement	6
(2.3.6) Speaker Height	6
(2.3.7) Speaker Orientation	6
(3.0) FEATURES	7
(3.1) Front Panel	7
(3.2) Rear Panel	8
(4.0) OPERATION	10
(4.1) Pairing a Bluetooth® Device	10
(4.2) Stereo-Link™: Connecting Two Speakers	10
(4.3) App Control	11
(5.0) TROUBLESHOOTING	12
(6.0) APPENDIX	13
(6.1) Technical Specifications	13
(6.2) Trademarks & Licenses	13

Thank you for purchasing this Forty Sixty speaker. At M-Audio, performance and reliability mean as much to us as they do to you. We design our equipment with only one thing in mind—to make your sound the best it can be.

The Forty Sixty speaker is designed to be versatile. Meeting your needs for music production, live streaming, or podcasting, it is focused on delivering precise sonic imaging. The Forty Sixty speaker is self-powered, accepting a line-level signal from a variety of sources. Also, use the M-Audio Studio Control App to create custom EQ curves to further shape the sound or adjust for the speaker position in your acoustic space.

#### (1.1) Box Contents

Forty Sixty Speaker

Isolation Pad

Power Cable

Quickstart Guide

Safety & Warranty Manual

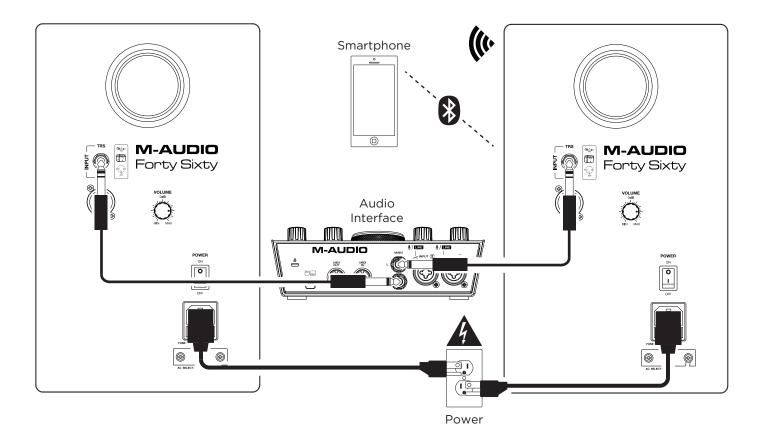
# (1.2) Support

For the latest information about this product (system requirements, compatibility information, etc.) and product registration, visit **m-audio.com**.

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

# (2.1) Connection Diagram

Items not listed under the (1.1) Box Contents are sold separately.



#### (2.2) Precautions

- Handling: Please do not touch the speaker cone. The speaker is packaged in the box tightly, so your attention is required when taking the monitor out of the box. To avoid possible damage to the speaker unit, hold both sides of the monitor in order to pull it out of the box. The speaker cone should not be touched in order to avoid damage even after it is out of the box.
- Correct Power Operation: Since the speaker 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.

**Note:** This product does not have a standby/low-power mode.

• Connections: You can connect either an XLR balanced cable or TRS balanced/unbalanced cable from the input of each speaker to your corresponding preamp, computer, mixer, 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 speaker and turn the volume of the speaker down to a minimum before making the necessary connections.

**Note:** When using an unbalanced cable there is a greater chance of experiencing noise issues. If you are using an unbalanced cable and you are experiencing noise issues, try connecting a balanced TRS cable or XLR cable.

#### (2.3) Configuration

The arrangement and placement of your Forty Sixty speaker 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 speakers.

## (2.3.1) XLR Balanced Connection

Assure that the power switch of the speaker is turned off and that the volume control of the speaker is turned down to a minimum. Connect the male end of an XLR balanced cable to the balanced input of the speaker.

#### (2.3.2) TRS Balanced/Unbalanced Connection

Assure that the power switch of the speaker is turned to off and that the volume control of the speaker is turned down to a minimum. Connect the male end of a TRS balanced or TS unbalanced cable to the TRS input of the speaker.

#### (2.3.3) 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, audio interface, mixer, computer, or game console.

## (2.3.4) Using Isolation Pads

If possible, place your speakers 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, use the included foam isolation pad to isolate the speaker from the surface and the room environment to prevent vibrations. The isolation pad improves the sound quality and makes your listening experience more enjoyable. The isolation pad will also keep your setup stable, protecting the speakers from slipping or falling.

# (2.3.5) Speaker Placement

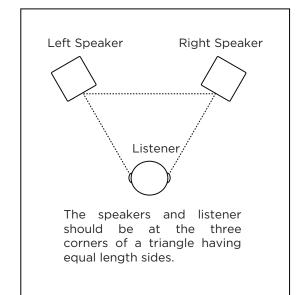
The placement of your speakers has a huge impact on how well they will perform in your studio. Although nearfield studio monitors are designed to be more forgiving when it comes to placement, you should do your best to make sure they form an equilateral triangle relative to your head. In other words, make sure that each speaker is equally distant from both your head as well as the other speaker. Once each speaker has been placed, rotate the speakers slightly so that the drivers are pointing toward the listener.

Take a look at the diagram on the right. Notice that the distance from the listener's head to each speaker is the same as the distance between the left and right speakers. Also note that the speakers are turned slightly so that the drivers are facing the listener.

This is an ideal setup but if it is not practical (or possible) to do this, try to match this setup as closely as possible.

Additionally, placing your speaker close to a wall may result in unwanted low-end reflections. Placing a speaker in a corner may increase these reflections even more. For best results, position speakers away from walls and corners, and if you are still experiencing excess low end, use the M-Audio Studio Control App to create your own custom EQ voicing to attenuate the lower frequencies. See the *App Control* section for more details.

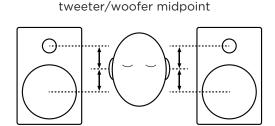
This is an ideal setup but if it is not practical (or possible) to do this, try to match this setup as closely as possible.



#### (2.3.6) Speaker Height

The ideal height for speaker is so that the speaker is parallel to the ground and that the midpoint of the woofer and tweeter is at ear height.

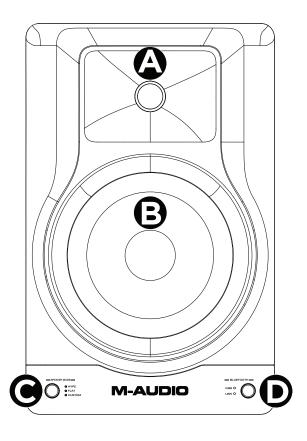
The diagram to the right demonstrates the ideal placement height of the speakers relative to the listener. Notice that the listener's ears are directly between the woofer and tweeter.



#### (2.3.7) Speaker Orientation

If possible, place the speakers in their upright position and avoid laying the speakers on their sides. The woofer and tweeter are vertically aligned and will provide the best performance when the speakers are placed upright. Placing them on their sides may create strong reflections from nearby surfaces resulting in spectrally unbalanced sound.

# (3.1) Front Panel



#### A. HF Driver

The tweeter outputs the high frequencies.

# B. LF Driver

The woofer outputs the low frequencies.

#### C. Speaker Mode

Press to toggle between different EQ voicings.

Quickly press and release the **Speaker Mode** button to cycle through different EQ voicings (see below). Use the M-Audio Studio Control App to select or create your own Custom EQ voicing.

- Flat: This gives a relatively flat frequency response for transparent mixing of audio.
- Hype: The bass response is maximized and high frequency shelving or "sizzle" is increased.
- Custom: The frequency response is "flat" by default but adjustable via the M-Audio Studio Control App.

Press and hold the **Speaker Mode** button to mute the speaker or stereo-linked pair of speakers. Press and hold again to unmute.

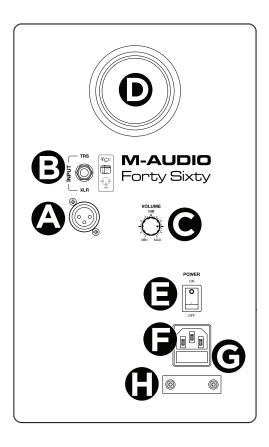
To turn off front panel LEDs, press and hold the **Speaker Mode** button and **Bluetooth** button. Press and hold these buttons again to turn on the front panel LEDs.

**Note:** If your speakers are Stereo-Linked<sup>™</sup>, muting and turning off the front panel LEDs will affect both speakers. You only need to perform the function on one of the speakers for it to affect both.

#### D. Bluetooth

Use this button to pair your Bluetooth device or stereo-link™ two speakers together.

# (3.2) Rear Panel



#### A. 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 (-)

#### B. TRS Input

This jack accepts 1/4" (6.35 mm) 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:

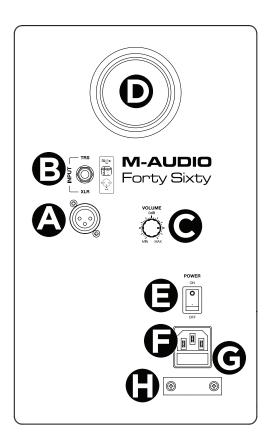
- TRS Tip: signal positive (+)
- TRS Ring: signal negative (-)
- TRS Sleeve: signal ground (shield)

#### C. Volume

Use the volume control to set the speaker output level as needed.

#### D. Bass Port

This port aids in reproduction of very low frequencies by discharging frequencies below 60 Hz and acts as a cooling mechanism to prevent overheating. This port should not be blocked, and should be at least 2" away from the nearest wall.



# E. Power Switch

Press to turn the speaker on or off.

**Note:** This product does not have a standby/low-power mode.

# F. Power Input

Connect the included power cable here.

# G. Fuse

Holds the external main fuse.

# H. Voltage-Select Switch

This switch provides two selections to match the "house supply" mains voltage of the country or location in which the speaker is used. The 120V setting is correct for the USA, while the 240V setting is correct for most of the UK and Europe.

# (4.1) Pairing a Bluetooth® Device

- 1. Turn on your Bluetooth device.
- 2. Turn on the speaker using the power switch.
- 3. Press and release the **Bluetooth button**. The LED will blink white when pairing with no device connected.
- 4. Navigate to your Bluetooth device's setup screen, find the **Forty Sixty speaker**, and connect. Once a device has successfully connected, the LED will remain lit white to indicate that a device is paired.
- 5. Start playback from your Bluetooth device.
- 6. Make sure your Bluetooth device's volume is turned up.

**Note:** Bluetooth and Analog input sources will both be heard through the speakers simultaneously.

The speakers will automatically reconnect with previously paired devices when they are within range.

To disconnect, press and hold the **Bluetooth button** on the speaker or turn off Bluetooth in your device's Bluetooth settings.



Press



Press and release





# (4.2) Stereo-Link™: Connecting Two Speakers

- 1. Power on both speakers by using their **power switches**.
- 2. (Optional) Connect a Bluetooth device by following the steps in section (4.1) Operation > Pairing a Bluetooth® Device to ensure proper stereo placement.
- 3. Double press the **Bluetooth button** on both speakers. The LEDs will blink white while establishing the link. When the two speakers have successfully linked, the LEDs on both speakers will be lit solid white to indicate they are paired.

#### Notes:

Bluetooth and Analog input sources will both be heard through the speakers simultaneously.

When Stereo-Linked<sup>™</sup>, if a speaker is connected to a Bluetooth device, this will become the "Stereo Left" speaker when playing stereo-mixed tracks via Bluetooth. To swap stereo-left and right positions without moving the physical speakers, press and release the **Bluetooth button** on a speaker.

4. When linked, press a **Speaker Mode button** to toggle between Flat, Hype, and Custom EQ voicings.

The speakers will automatically relink to the last linked pair when powered on

To disconnect, press and hold the **Bluetooth button** on one of the two speakers.



Press



Speaker 1 Press 2x



Speaker 2 Press 2x









# (4.3) App Control

**IMPORTANT:** To ensure the best possible experience with the app, use the most current Android OS or iOS on your device.

#### Follow these steps to download the free app on your device:

- 1. Open the Apple App Store or Google Play on your device. Then, search for the **M-Audio Studio Control** App.
- 2. Follow the on-screen instructions to download and install the app. Once downloaded, the **M-Audio Studio Control** App will appear on your device's home screen.
- 3. Connect your device to speaker via Bluetooth. See the (4.1) Pairing a Bluetooth® Device to learn how to do this.
- 4. Open the **M-Audio Studio Control** App. If prompted, allow the app to access your device's Bluetooth and Location Services.
- 5. Follow directions in the app to connect the speaker.
- 6. Use the app to control various functions of the speaker such as:
  - Select EQ presets
  - · Create a custom EQ setting
  - Compensate for the position of the speakers in your acoustic space



If the sound is distorted: Try lowering the volume control of your sound source.

#### I hear a hum when cables are connected:

- Disconnect cables from the input jacks to see if it's a faulty cable.
- · Use balanced cabling connections whenever possible.
- Make sure the signal cables are not placed near power cables.
- Connect all audio equipment power cables to outlets which share a common ground.

# I hear a buzz from the speakers when my phone is near them:

• Move the phone away from the speakers to reduce interference.

If there is too much bass: Try adjusting the EQ control in the M-Audio Studio Control App to lower the bass level. This will allow you to play the music louder before clipping (distortion) occurs.

#### If you cannot connect your audio device to your speaker via Bluetooth:

- Have your audio device (e.g., smartphone or tablet) and the speaker as close together as possible while
  trying to connect. Make sure both the audio device and the speaker are unobstructed by walls, furniture,
  etc
- Reset the Bluetooth connection on the speaker to disconnect the speaker from any other audio device
  and restart the search process. If this does not work right away, power off the speaker and then power
  it back on.
- Reset the Bluetooth connection on your audio device by turning Bluetooth off and back on. You can find this under the Bluetooth menu in the Settings for your phone or other audio device.

If this does not work, and you have connected to the speaker before, find the speaker in the list of available or previously connected devices in your audio device's Bluetooth menu, tap the "gear" or "i" icon located next to it and then select **Unpair** or **Forget**. Turn the speaker off and back on and try pairing again once it reappears in your available devices list.

**Note:** If the speaker has been paired to another audio device recently that is still within range, you may need to repeat this process with that audio device to fully disconnect.



# (6.1) Technical Specifications

Tweeter	1.0" / 25.4 mm
Woofer	6.5" / 165.1 mm
Frequency Response	39 Hz - 22 kHz (-10dB)
Max SPL	113 dB
Coverage Pattern	120° x 90°
Enclosure	Ported Vinyl Wrapped MDF
Power Configuration	Bi-Amplified Class AB
Power Amplification	100W total (60W LF / 40W HF)
Line Inputs	Connectors: (1) XLR, (1) 1/4" TRS
	Maximum Input Level: +18 dBu
	Input Impedance: 20 kΩ / 10K
Converter SNR	>120 dB
Bluetooth Specifications	Profile: A2DP
	Version: 5.3
	Frequency Bands: 2400 - 2483.5 MHz
	Maximum Radio-Frequency Power: ≤20 dBm (EIRP)
	Range: Up to 100 feet / 30.5 meters*
Power	Connection: IEC
	<b>Voltage</b> : 100-240 VAC, 50/60 Hz, 100 W
<b>Dimensions</b> (height x width x depth)	13.2" x 8.5" x 8.6" / 335 x 216 x 218 mm
Weight	15.8 lbs. / 7.2 kg

Specifications are subject to change without notice.

# (6.2) Trademarks & Licenses

M-Audio is a trademark of inMusic Brands, Inc., registered in the U.S. and other countries.

The *Bluetooth* word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by M-Audio is under license. All other product names, company names, trademarks, or trade names are those of their respective owners.

<sup>\*</sup> Bluetooth and wireless reception and range are affected by walls, obstructions, and movement. For optimal performance, place the product in the center of the room so it is unobstructed by walls, furniture, etc. Battery life may vary based on temperature, age, and volume usage of product.

