



Personalized 7.1 Gaming Surround Sound

Razer Surround gives gamers the best virtual 7.1 channel surround sound experience with any stereo headphones.

Current generation virtual surround technologies are often inaccurate given that every individual has a unique response to simulated sound stages – as such, virtual surround sound is often regarded as inferior to discrete surround sound set ups.

Using state-of-the-art technology, the surround sound algorithms powering Razer Surround creates an unbelievably accurate surround sound environment and allows gamers to calibrate positional sound to match their own unique preferences. This level of calibration allows Razer Surround to provide an incredible level of precision in-game, allowing gamers to have the unfair advantage.

The bullet that just whistled past you or the high-rev engine of the Formula 1 car coming up from the rear just got real with Razer Surround. Immerse yourself in the ultimate sound experience made just for you and your games.

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1. SYSTEM REQUIREMENTS

SYSTEM REQUIREMENTS

- Windows® 8 / Windows® 7
- Internet connection
- At least 200MB of free hard disk space

Disclaimer: All features listed in this Master Guide are subject to change based on the current software version.

2. INSTALLATION

INSTALLING RAZER SURROUND

Razer Surround is an audio configurator that is installed onto your PC for use with your headphones, headsets and even earphones. Razer Surround's user interface is accessed via the Razer Synapse 2.0 client.

- Step 1. Download the Razer Synapse 2.0 installer from www.razerzone.com/synapse2/.
- Step 2. Run the installer and follow the on-screen instructions.
- Step 3. Download the latest version of the Razer Surround installer from www.razerzone.com/surround.
- Step 4. Launch the downloaded installer.
- Step 5. Wait for the installation to complete.

UNINSTALLING RAZER SURROUND

If you have a previously installed version of Razer Surround or if you wish to completely uninstall the program,

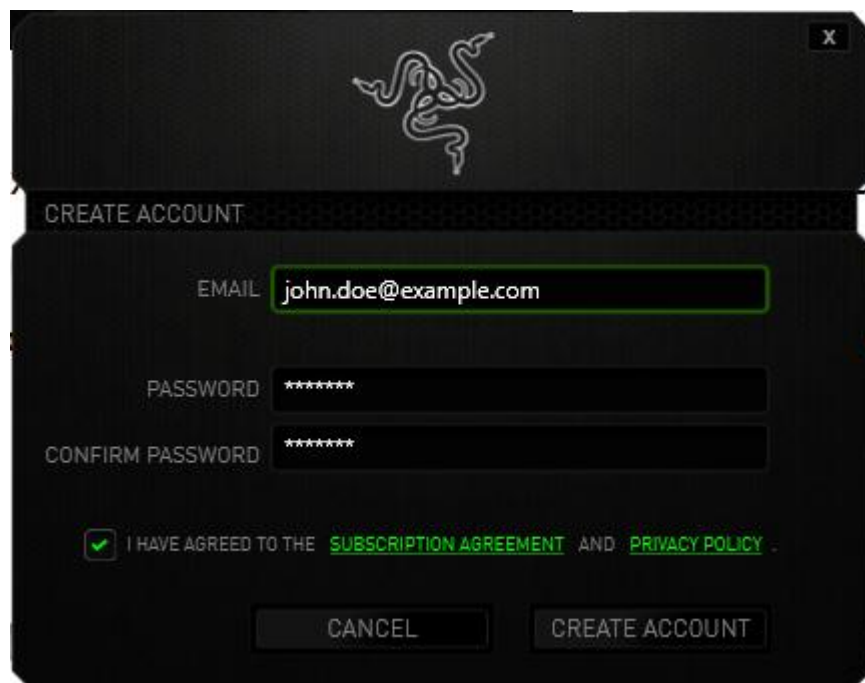
- Step 1. Navigate to your **Control Panel** and select **Programs > Uninstall a program**.
- Step 2. Right-click on the Razer Surround entry in the list and select **Uninstall**.
- Step 3. Follow the onscreen instructions to complete the uninstallation.
- Step 4. Restart your computer when prompted.

3. ACCOUNT MANAGEMENT

CREATING AN ACCOUNT

Razer Surround works on the Razer Synapse 2.0 client. Hence, please register for a Razer Synapse 2.0 account as follows:

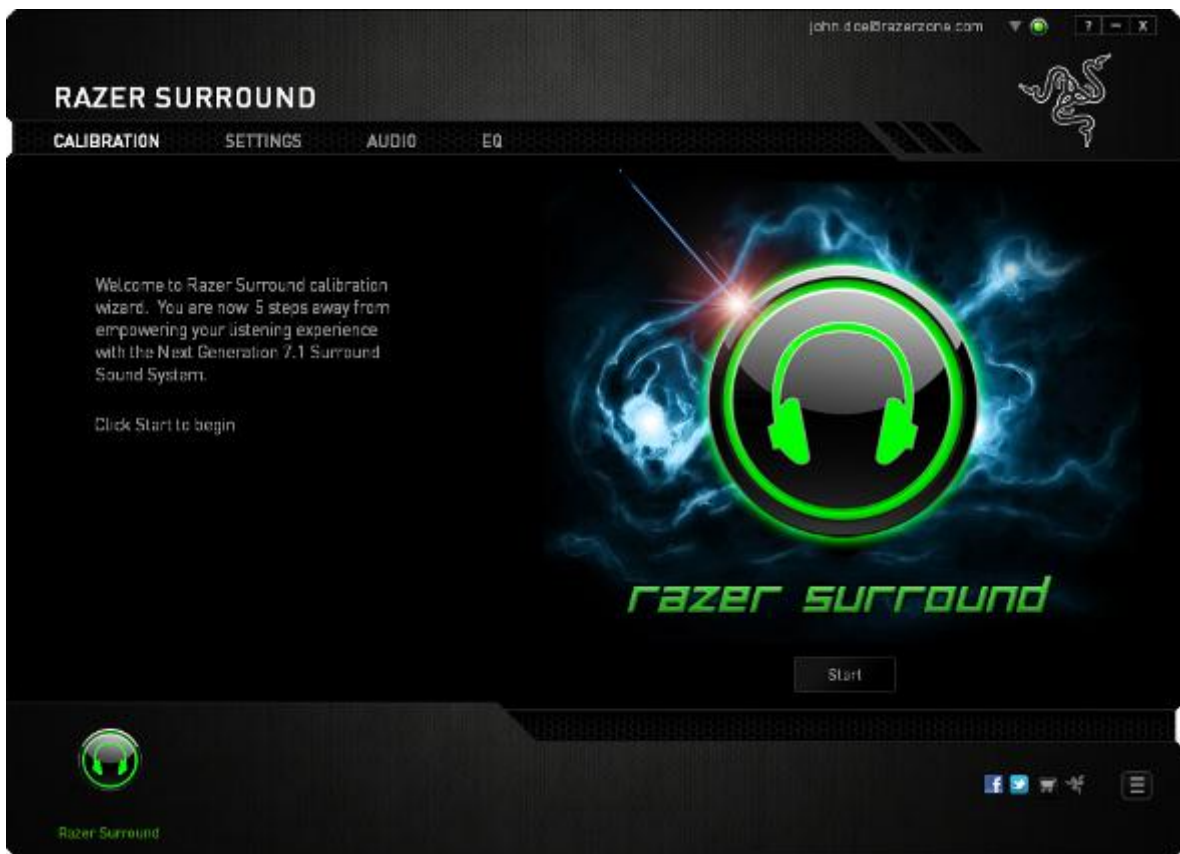
- Step 1. Launch Razer Synapse 2.0 from the Start menu.
- Step 2. Click **CREATE ACCOUNT** at the bottom of the client.
- Step 3. Enter a valid **Email** address.
- Step 4. Enter your **Password**. Re-enter the **Password** for confirmation.
- Step 5. Click the links to read the **Subscription Agreement** and **Privacy Policy**. Check the **I have agreed to the Subscription Agreement and Privacy Policy** box if you agree to be bound by the terms stated.

A screenshot of the 'CREATE ACCOUNT' dialog box in the Razer Synapse 2.0 client. The dialog has a dark theme with the Razer logo at the top. It contains three input fields: 'EMAIL' with the text 'john.doe@example.com', 'PASSWORD' with masked characters '*****', and 'CONFIRM PASSWORD' also with masked characters '*****'. Below these fields is a checkbox that is checked, followed by the text 'I HAVE AGREED TO THE' and two links, 'SUBSCRIPTION AGREEMENT' and 'PRIVACY POLICY', separated by the word 'AND'. At the bottom are two buttons: 'CANCEL' and 'CREATE ACCOUNT'.

- Step 6. Click **CREATE ACCOUNT**.
- Step 7. Check your email inbox for an account verification email from Razer.
- Step 8. Verify your Razer Synapse 2.0 account by clicking on the link in the email.
- Step 9. Return to the Razer Synapse 2.0 client and login using your registered account.

ACCESSING RAZER SURROUND's USER INTERFACE

- Step 1. Launch Razer Synapse 2.0.
- Step 2. Enter your account's **Email** address and **Password**.
- Step 3. Check the **Stay logged in** box ONLY IF you wish to automatically login to Razer Synapse 2.0 using this account each time you launch the client.
- Step 4. Click **LOGIN**.
- Step 5. All Razer Synapse 2.0 supported devices connected to your computer will be detected and listed on the bottom left area of the client. Click the **Razer Surround** icon to access the Razer Surround user interface.



GOING OFFLINE

Internet connection is required to log into Razer Synapse 2.0. Once you are logged in, you can choose to activate **Offline Mode**. Most functionalities aside from software update of your Razer Surround software works in offline mode.

Go offline by clicking your account name on the top right corner and select “Go Offline”.

SIGNING OUT


Sign out from Razer Synapse 2.0 by clicking your account name on the top right corner and select “Change User”. To completely close Razer Synapse 2.0, right-click the Razer Synapse 2.0 icon on your system tray and select “Close Razer Synapse 2.0”.

Note: Audio adjustments made on your audio device via Razer Surround will only be active while Razer Synapse 2.0 is on.


RETRIEVING YOUR PASSWORD

If you have forgotten your account password,

- Step 1. Click **Forgot Password?** on the login interface of the client. Your web browser will launch and direct you to Razer's Password Reset Request page:

The image shows the Razer Synapse 2.0 Password Reset Request page. At the top, it says "RAZER SYNAPSE 2.0" and "YOUR SETTINGS, ANYTIME, ANYWHERE". Below this is a green cloud logo with "SYNAPSE 2.0" inside. The main form has an "EMAIL" label and a text input field. Below the email field is a CAPTCHA image showing the words "ondidg" and "soil" with a "Type the text inside." label and a text input field. To the right of the CAPTCHA is a "CAPTCHA" logo. At the bottom of the form is a green "SUBMIT" button.

- Step 2. Enter your registered account **EMAIL** and type the image verification code shown. Then click **SUBMIT**.
- Step 3. Check your email inbox for a verification email from Razer. Click the link in the email.
- Step 4. Your web browser will navigate to the password reset page as shown in the figure below. Enter your **NEW PASSWORD** and retype it to confirm. Then click **SUBMIT**.

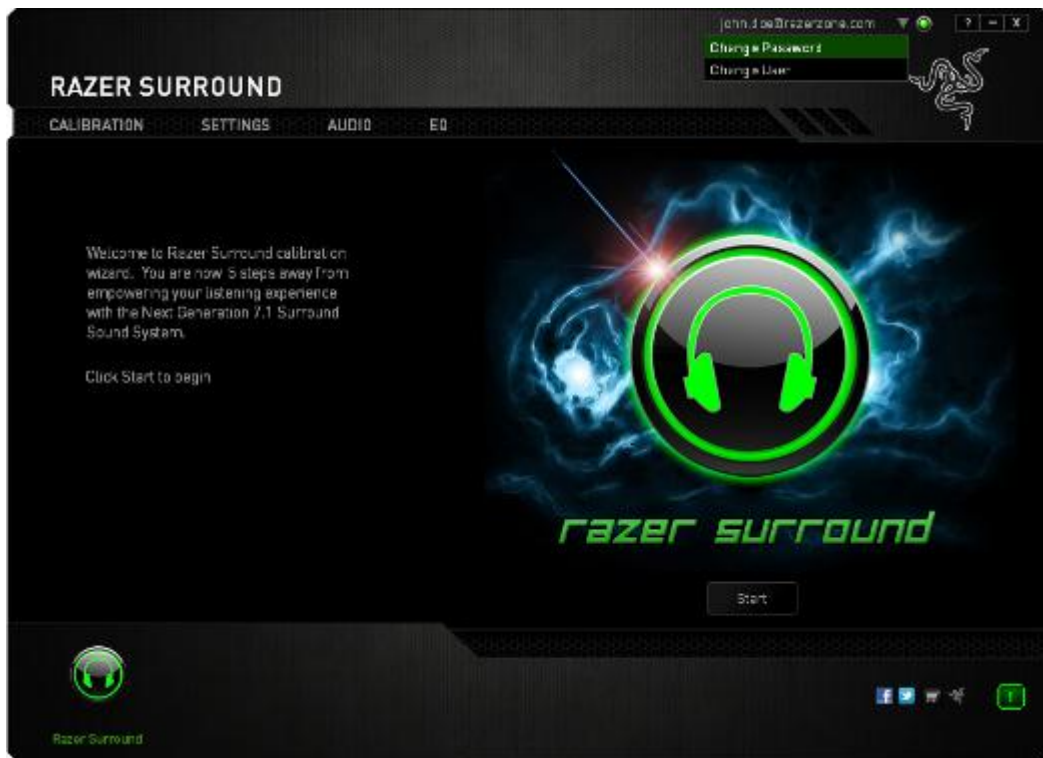
The image shows the Razer Synapse 2.0 Password Reset page. At the top, it says "RAZER SYNAPSE 2.0" and "YOUR SETTINGS, ANYTIME, ANYWHERE". Below this is a green cloud logo with "SYNAPSE 2.0" inside. The main form has a title "Razer Synapse 2.0 - PASSWORD RESET". Below the title are two text input fields: "NEW PASSWORD" and "RE-TYPE PASSWORD". At the bottom of the form is a green "SUBMIT" button.

A success screen will be displayed. You can now login to Razer Synapse 2.0 using this new password.

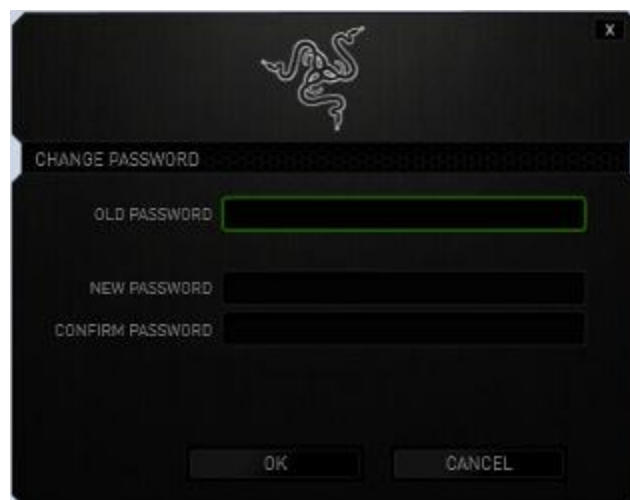
CHANGING YOUR PASSWORD

For security purposes, you are recommended to change your account password regularly. To change your account password through the Razer Synapse 2.0 client,

- Step 1. Launch the client and login to Razer Synapse 2.0.
- Step 2. From the client, click your display name to bring up a list of menu options. Select **CHANGE PASSWORD**.



- Step 3. In the next screen, enter your current **Password**, and the **New Password**. Re-enter the new password then click **OK** to confirm the change.

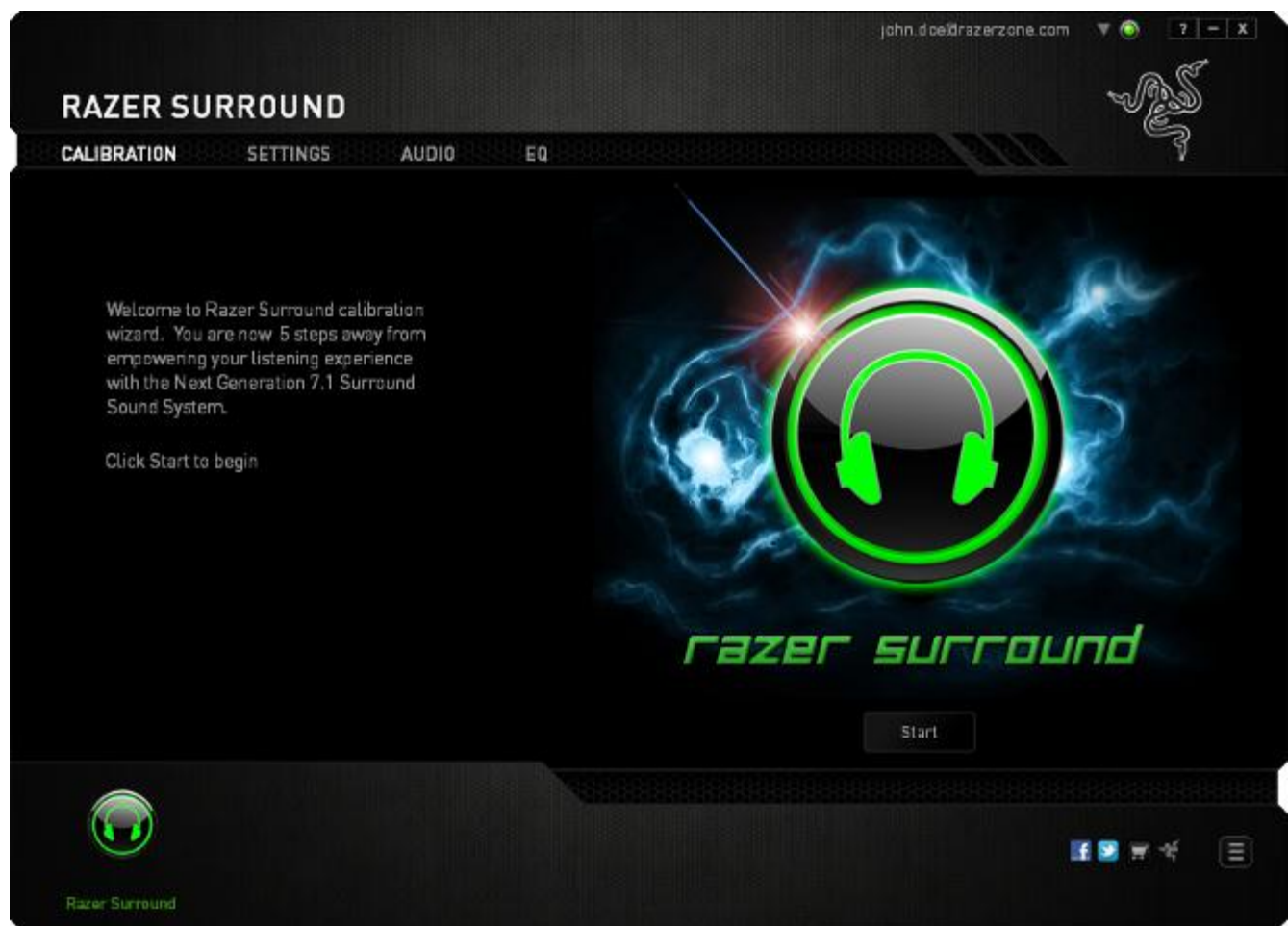


4. USING RAZER SURROUND

Note: Each audio device and headset/headphone calibrated via Razer Surround forms a unique pair of settings that will be saved in your Razer Synapse 2.0 online cloud. This setting will be retrieved each time the same pairing of devices is selected in the Razer Surround SETTINGS tab.

CALIBRATING YOUR AUDIO DEVICE USING THE CALIBRATION WIZARD

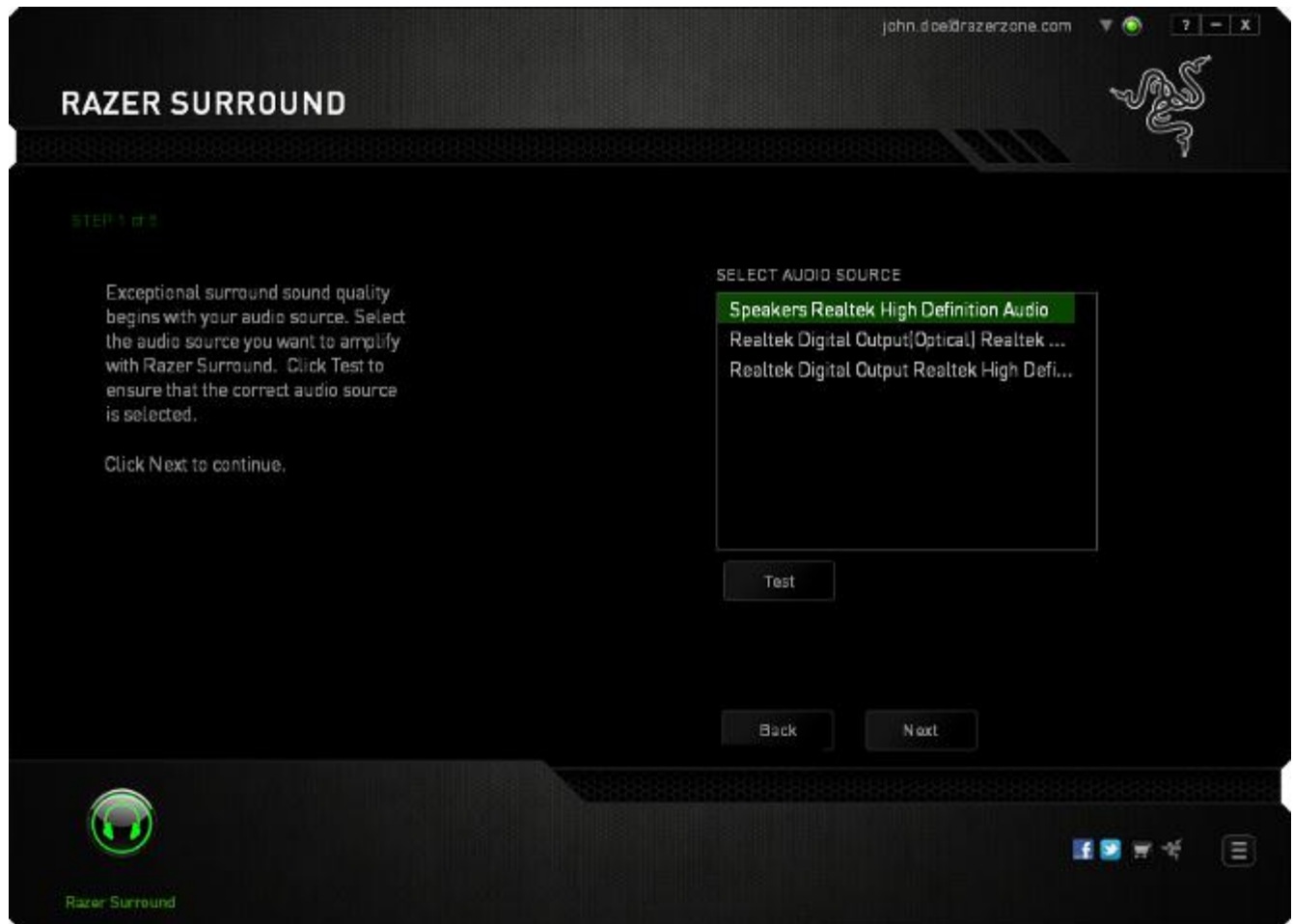
A 5 step calibration wizard helps you set up your audio device for virtual 7.1 surround sound playback. If you are setting up your audio device for the first time, we recommend using this wizard for a step by step guide on the calibration process.



Click **START** to launch the wizard.

Step 1 of 5

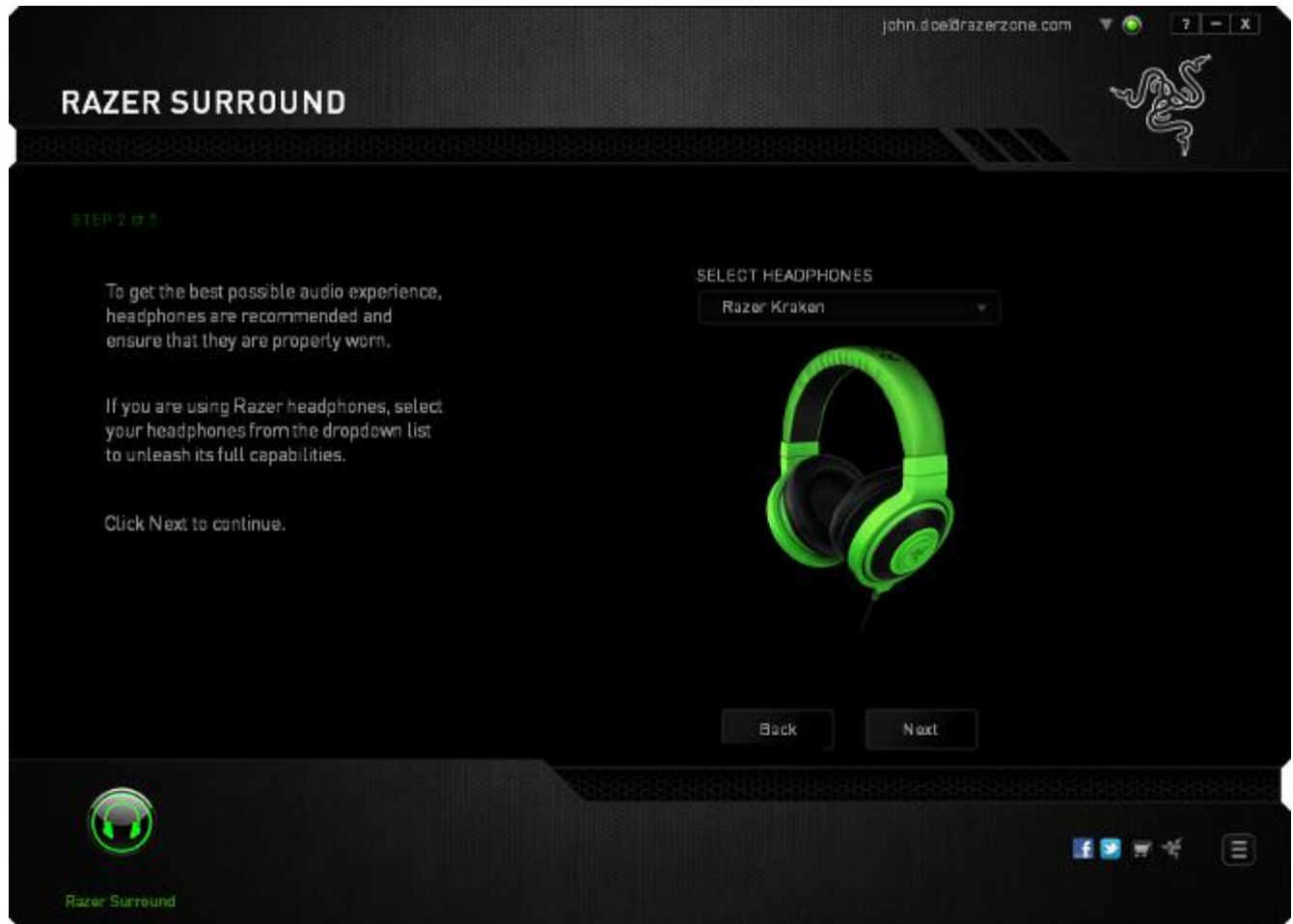
In step 1, Razer Surround detects all audio sources that are connected to and recognized by your computer and lists them in the box. Choose the audio device that you wish to configure. Click **Test** to ensure that the correct device has been selected.



Click **Next** to continue to the next step.

Step 2 of 5

If you are configuring for a Razer headphone, select your headphone model from the dropdown list.

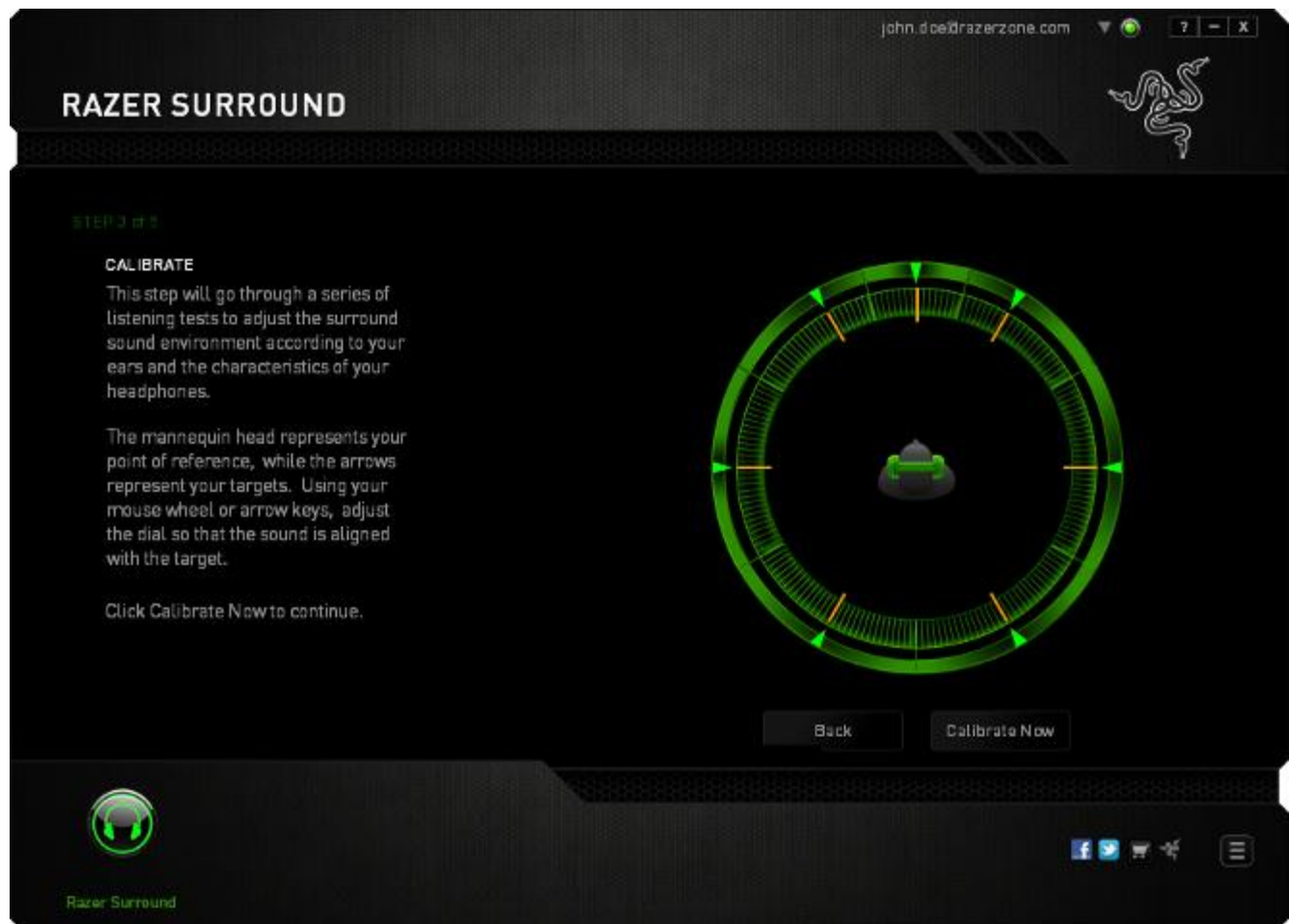


Click **Next** to continue.

Step 3 of 5

This step introduces the calibration process. Read the instructions carefully and ensure that you are in a quiet environment in order to hear the audio prompts properly.

In this figure, the mannequin represents your position. The green arrows on each segment represent the target direction of the audio playback for that particular segment. Each orange line represents the last saved calibration settings configured on Razer Surround.



Click **Calibrate Now** once you are ready to begin the calibration.

Step 4 of 5

Position yourself according to the point of reference indicated by the mannequin. The calibration process is divided into a series of segments. An audio prompt will be played for each segment.

For the first segment, the sound should be perceived as coming from the direction marked by the green target arrow, roughly North-East of your point of reference. Your aim is to move the sound you hear such that you perceive it to be coming from this target direction. To achieve this,

1. Listen carefully to the audio prompt
2. The sound you hear will change direction as you move the mouse scroll wheel or the up/down arrow keys.
3. Continue changing the direction of the sound until you perceive it to come from the North-East position or as close to the green target arrow as possible.

Note: The orange line indicates the relative change to the previously saved alignment setting. It does not affect your current calibration, as it serves merely as a change indicator.

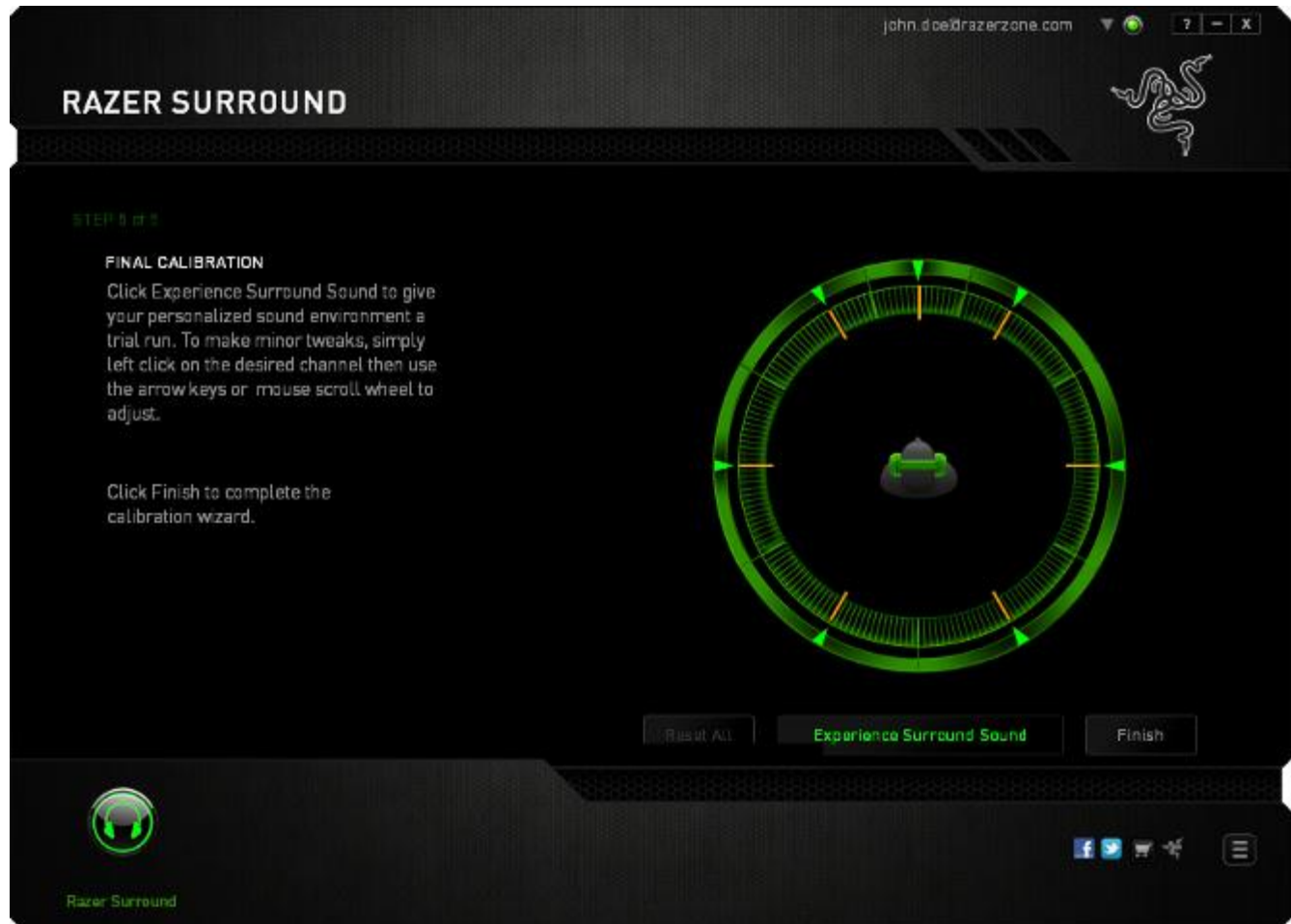
Click **Next** to continue to the next segment. Repeat the above, using the green target arrow for each segment as the target direction and continue until you complete the circle.



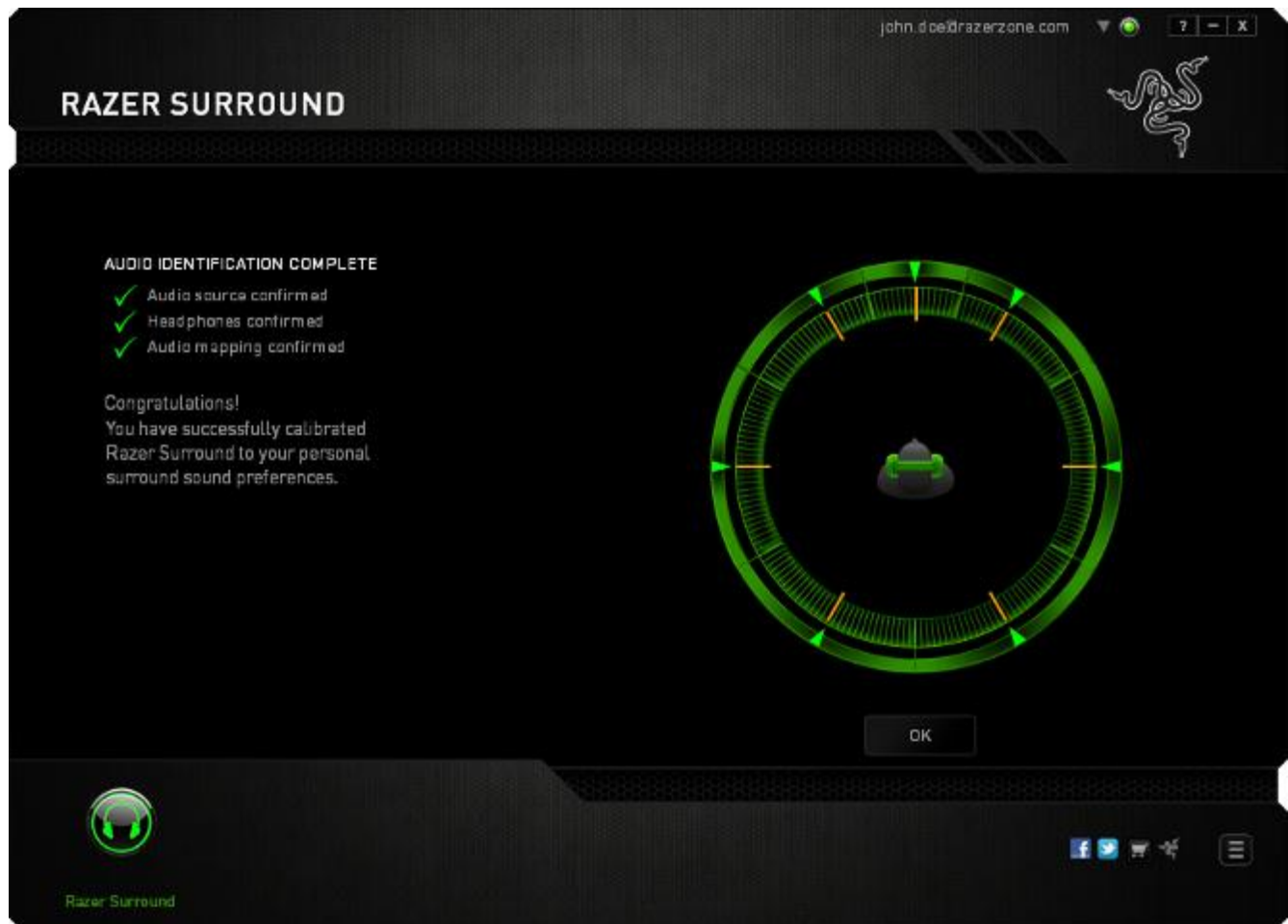
Once all segments are calibrated, click **Next** to go to the next step.

Step 5 of 5

Click **Experience Surround Sound** to test your personalized sound environment. To tweak a particular section, simply click it to play its audio prompt and adjust the settings as desired. To reset the entire configuration, click **Reset All**. Otherwise, click **Finish** to confirm the settings.

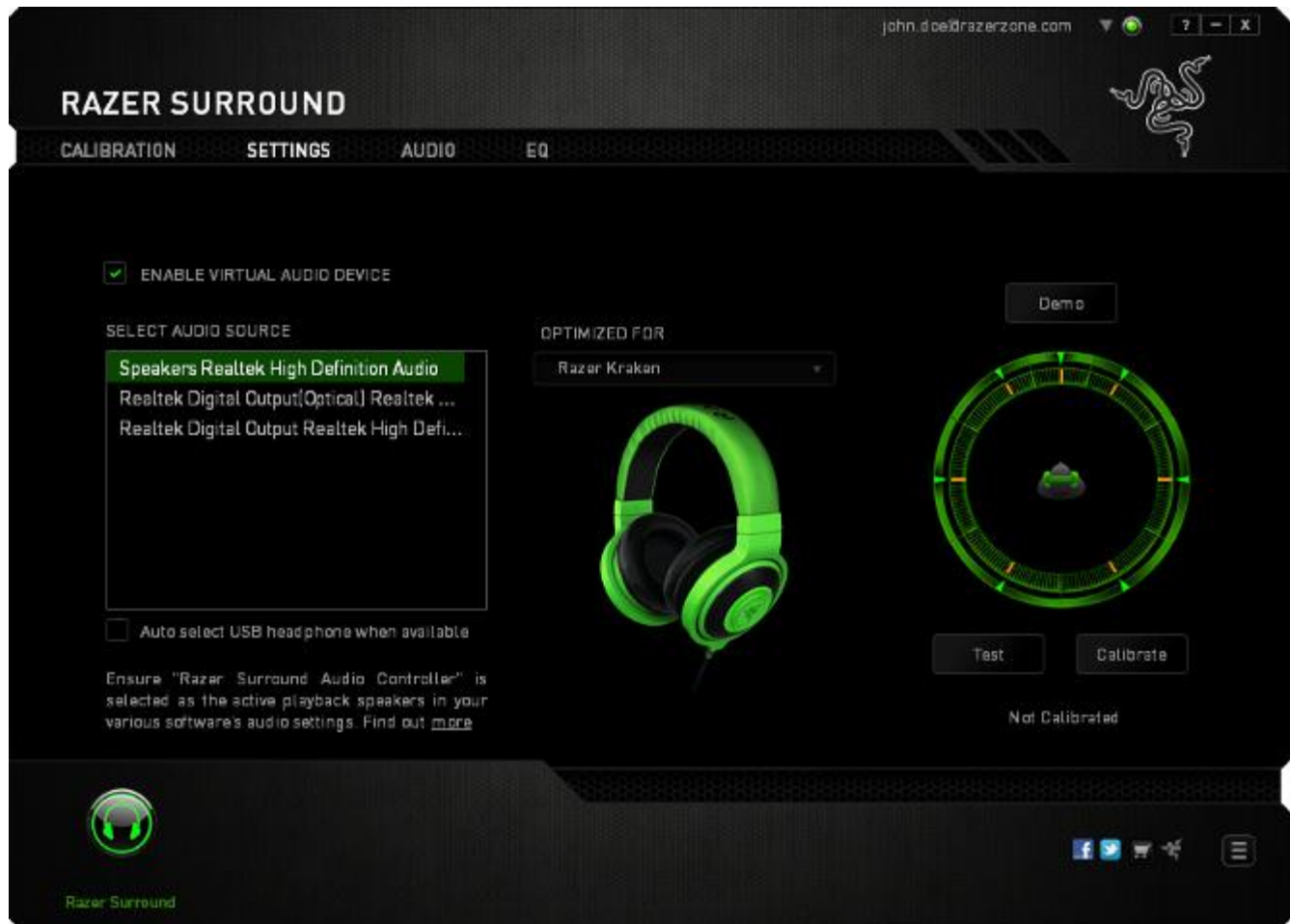


A confirmation screen will be displayed. Click **OK** to save and exit the wizard.



CALIBRATING YOUR AUDIO DEVICE USING MANUAL SETTINGS

If your audio device has already been set up previously for virtual 7.1 surround sound playback but you wish to tweak a few settings, you can choose to use the **SETTINGS** tab instead.



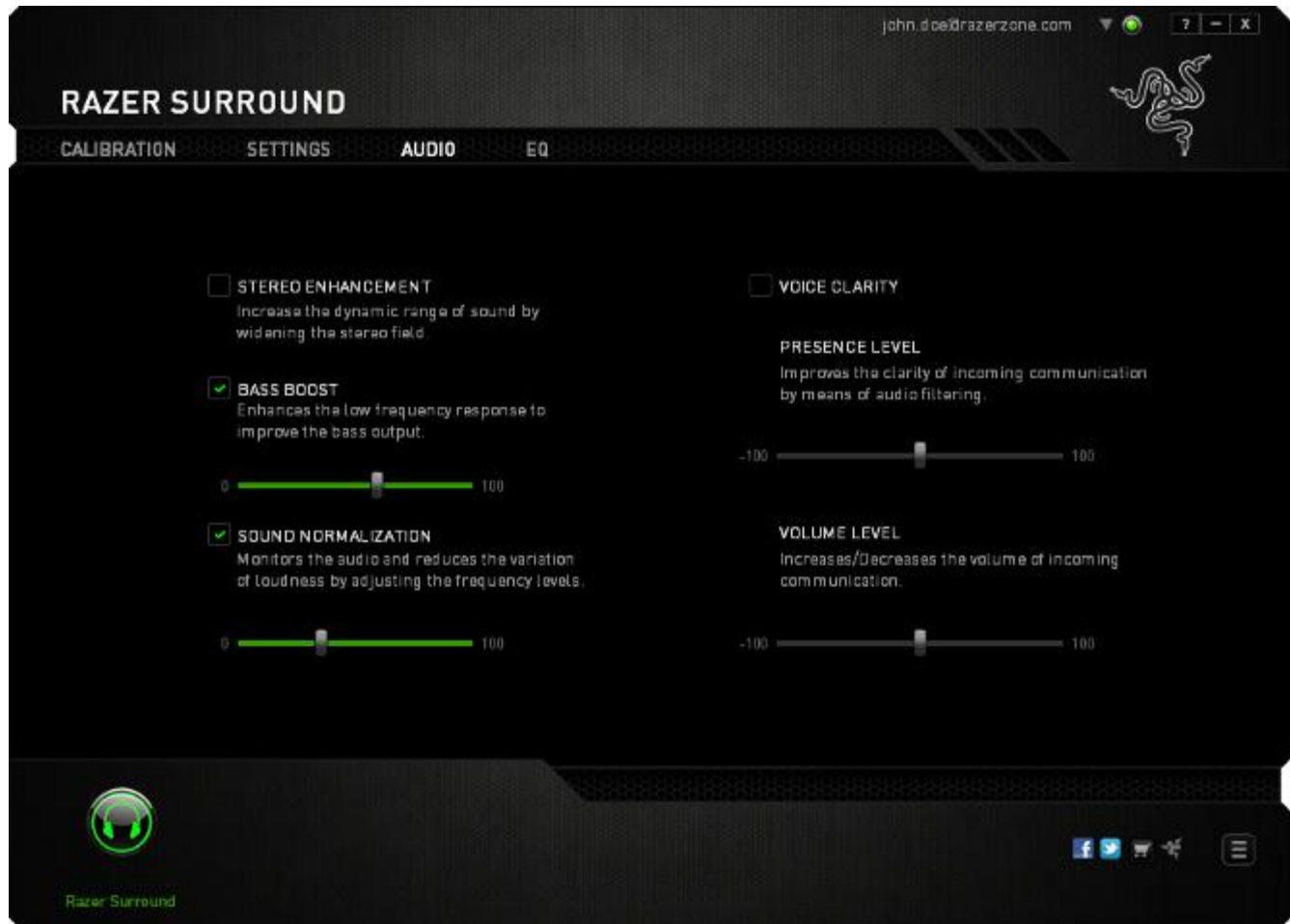
Ensure that the **Enable Virtual Audio Device** checkbox is selected. You can then edit the settings including :

- Selecting an audio source
- Selecting a Razer headphone (if you are using one)
- Enabling the **Auto select USB headphone when available** option. This allows Razer Surround to automatically use the USB driver for your headphone if available.
- Aligning the sound direction to the target direction for each audio segment.

Click **Test** to test your new configuration or click **Demo** to view a demonstration on how audio calibration can be performed.

CONFIGURING AUDIO ENHANCEMENTS

The Audio Tab lets you control various options related to the audio you hear from your headphones.

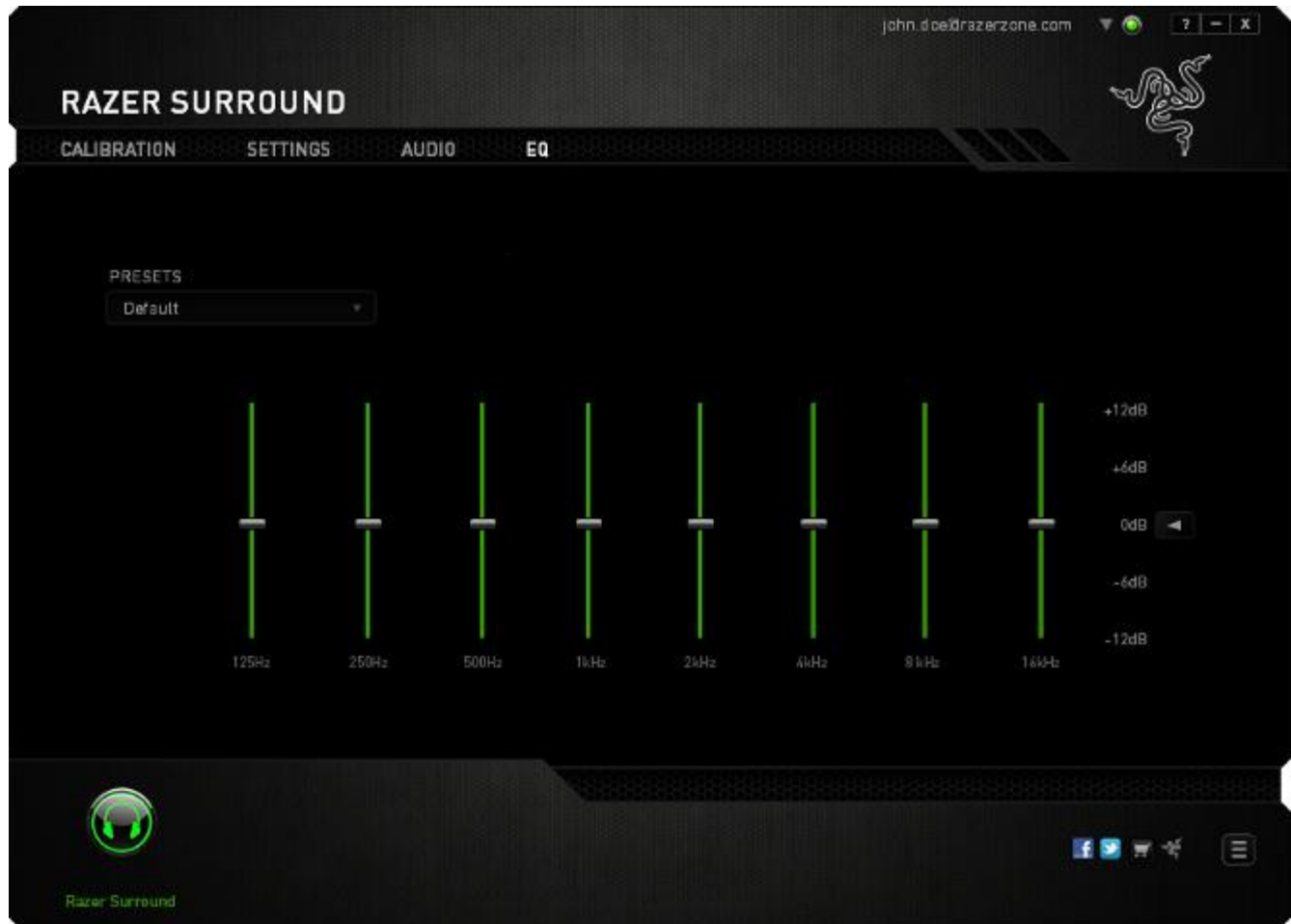


Using the various sliders, you can:

- Enable stereo enhancement for audio playback
- Adjust the overall volume of your headset
- Improve the bass output of your headset
- Normalize the loudness of audio played to avoid sudden and unpleasant increase in volume from effects such as explosions
- Enable voice clarity adjustments to improve the quality of incoming voice conversations. **Voice Clarity** adjustments includes both clarity (**Presence Level**) and volume (**Volume Level**) of incoming voice conversations

CUSTOMIZING EQUALIZER SETTINGS

The EQ Tab lets you filter various audio frequencies, controlling the overall tone of your audio output.



A list of preset equalizer settings can be selected from the drop down menu, giving you easy access to various commonly used audio tones. You can also manually adjust each audio frequency using the sliders.

5. LEGALESE

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