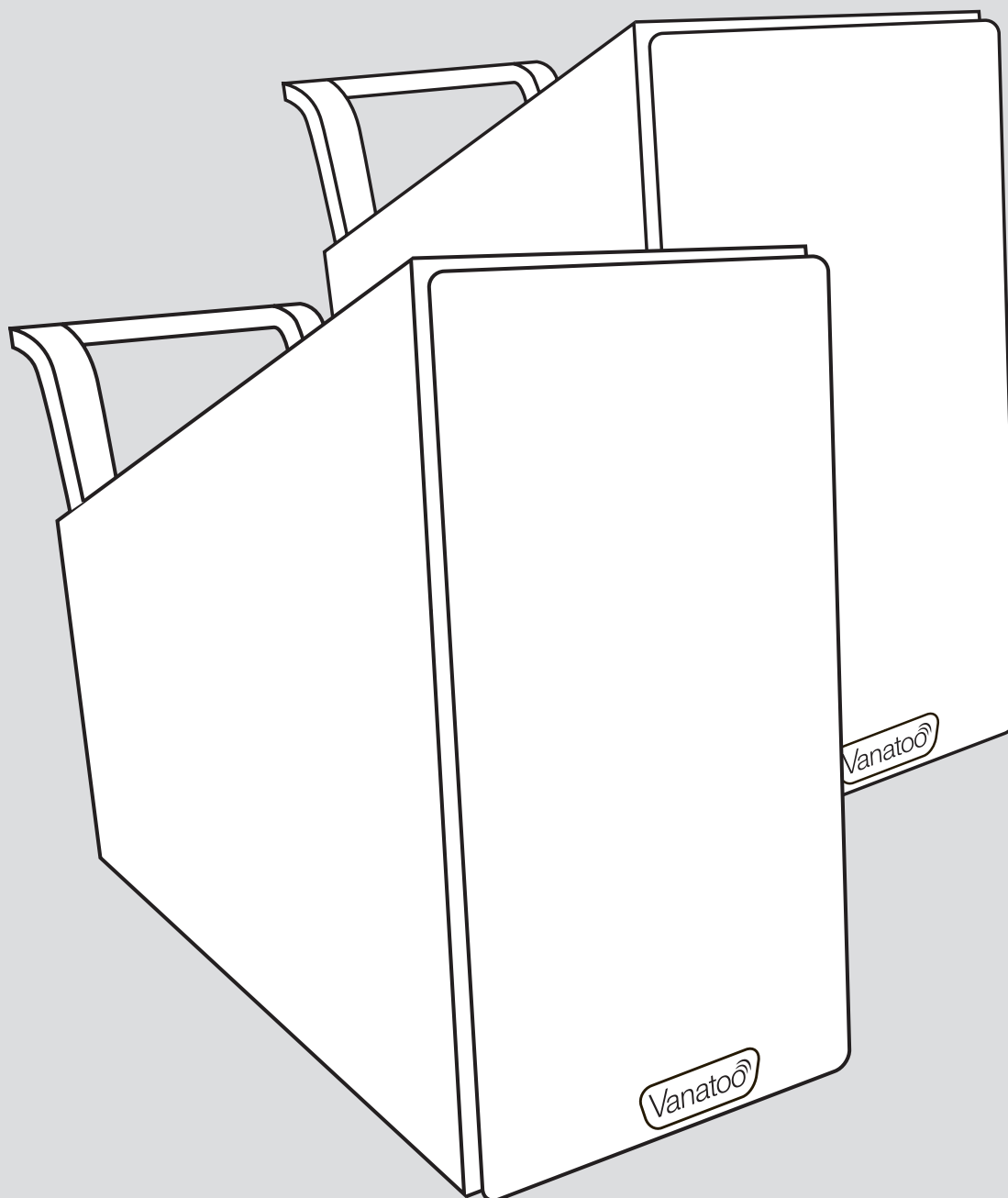


**VANATOO™ TRANSPARENT ZERO™**  
**POWERED SPEAKERS**

## Owner's Guide



**Vanatoo™**  
*Technology Serving Art*

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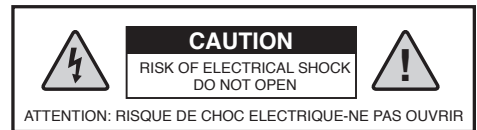
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## SAFETY PRECAUTIONS PRÉCAUTIONS DE SÉCURITÉ

1. This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
  - Warning: To reduce the risk of electric shock, do not remove cover (or back) as there are no user serviceable parts inside. Refer servicing to qualified personnel.
  - The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.
2. To prevent risk of fire or electric shock, avoid overloading the wall outlet, extension cords.
3. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
4. Read these instructions.
5. Keep these instructions.
6. Heed all warnings.
7. Follow all instructions.
8. Do not use this apparatus near water.
9. Clean only with dry cloth.
10. Do not block any ventilation openings. Install in accordance with the manufacture's instructions.
11. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
12. Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
13. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
14. Use only attachments/accessories specified by the manufacturer.

15. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
16. Unplug the apparatus during lightning storms or when unused for long periods of time.
17. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as when power supply cord or plug is damaged, when liquid has been spilled or objects have fallen into the apparatus, or when the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
18. WARNING: The main plug/appliance coupler is used as the disconnect device. The disconnect device shall remain readily operable.
19. The woofer cone and tweeter dome are fragile. Do not touch.

1. Le symbole de l'éclair à pointe de flèche inscrit dans un triangle équilatéral est destiné à informer l'utilisateur de la présence, dans le boîtier du produit, d'une "tension dangereuse" non isolée d'une importance suffisante pour constituer un risque d'électrocution.
  - Avertissement : Afin de réduire les risques d'électrocution, ne retirez pas le couvercle (ou le dos) de l'appareil, celui-ci ne contenant aucune pièce réparable par l'utilisateur. Pour toute réparation, veuillez faire appel à un personnel qualifié.
  - Le point d'exclamation inscrit dans un triangle est destiné à informer l'utilisateur de la présence, dans le manuel accompagnant l'appareil, d'importantes instructions concernant le fonctionnement et l'entretien.
2. Pour empêcher le risque d'incendie ou de décharge électrique, évitez d'excéder la capacité normale de la prise de courant, des cordons électriques.
3. AVERTISSEMENT : Pour réduire les risques d'incendie ou d'électrocution, n'exposez pas cet appareil à la pluie ou à l'humidité. L'appareil ne doit pas être exposé à des gouttes ou à des éclaboussures. Veillez à ne pas poser sur l'appareil des objets remplis de liquide tels que des vases.
4. Lisez ces instructions.
5. Conservez ces instructions.
6. Respectez tous les avertissements.



7. Suivez toutes les instructions.
8. N'utilisez pas cet appareil à proximité d'une source d'eau.
9. Nettoyez l'appareil uniquement avec un chiffon sec.
10. N'obstruez aucun orifice de ventilation. Installez l'appareil selon les instructions du fabricant.
11. N'installez pas l'appareil près d'une source de chaleur comme des radiateurs, bouches de chaleur, cuisinières ou autres appareils (y compris les amplificateurs) dégageant de la chaleur.
12. Ne modifiez pas le connecteur polarisé ou la mise à la terre. Un connecteur polarisé est doté d'une lame plus large que l'autre. Un connecteur avec mise à la terre est doté de deux broches semblables et d'une troisième différente. Cette lame large, ou troisième broche, est conçue pour assurer votre sécurité. Si le connecteur fourni ne convient pas à votre prise, consultez un électricien pour qu'il procède au remplacement de votre prise.
13. Protégez le cordon d'alimentation pour éviter de marcher dessus ou de le pincer, particulièrement aux points des fiches, des prises et de sortie de l'appareil.
14. Utilisez uniquement des accessoires ou options recommandés par le fabricant.
15. Utilisez uniquement un meuble sur roulettes, un support, un trépied, une étagère ou une table d'un type recommandé par le fabricant ou vendu(e) avec l'appareil. Si vous utilisez un meuble sur roulettes, veillez à le déplacer avec précaution afin d'éviter tout accident corporel si l'équipement se renversait.
16. Débranchez l'appareil pendant les orages ou s'il doit rester inutilisé pendant une période prolongée.
17. Pour toute réparation, faites appel à un personnel qualifié. Une réparation sera nécessaire si l'appareil a subi des dommages tels que détérioration du cordon d'alimentation ou de la fiche, liquide renversé sur l'appareil, ou encore si un objet est tombé dessus, si l'appareil a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas correctement ou s'il a fait une chute.
18. AVERTISSEMENT : La fiche du cordon d'alimentation de l'appareil fait office d'interrupteur d'alimentation. À ce titre, elle doit demeurer accessible à tout moment.
19. Le woofer à cône et le tweeter à dôme sont fragiles. Ne les touchez pas.



## WELCOME!

*Thank you for choosing Vanatoo Transparent Zero powered speakers. We hope you'll enjoy them for years to come. We've worked hard to design a desktop speaker that delivers impressive bass, amazing sound clarity, and a rich set of features for today's home audio environments. Now, all that's between you and a great listening experience is the short time it takes to set up your speakers and plug in your favorite audio source. If you have any questions, don't hesitate to contact us directly, or visit our website at [www.vanatoo.com](http://www.vanatoo.com) for additional tips and information.*

*The Vanatoo Team*

## ABOUT YOUR SPEAKERS

Your Vanatoo Transparent Zero powered speakers use high quality components and state of the art digital technology to deliver excellent sound reproduction. Its four audio source input options let you connect to a wide variety of audio devices and popular home audio networks. The T0 system consists of a passive speaker, which contains the traditional speaker components, and an active speaker, which is also home to an integrated four channel 48W per channel high efficiency digital amplifier and controls.

Primary features of Vanatoo Transparent Zero powered speakers include:

- 2 digital input options: TOSLINK® optical and audio USB
- 3.5mm analog input
- Wireless Bluetooth interface with aptX and a range of about 30 feet
- D2Audio® integrated bi-amped (four channel) 48 watts per channel Class D amplifier
- Integrated digital signal processor
- 4 inch aluminum woofer
- 1 inch soft dome tweeter
- 4 inch passive radiator
- Volume, bass and treble controls
- Automatic low power sleep mode
- A set of magnetically attached grills
- Optional subwoofer output
- Automatic subwoofer crossover implementation
- Automatic input switching with digital silence detection
- Remote control
- Isolation pads
- Customizable speaker configurations
- Solid MDF cabinet construction

*(continued next page)*

## Product Specifications

Power output	48 watts RMS per channel, bi-amped
Amplifier type	Class D
Optical input	S/PDIF; Max sample rate of 96K at 24 bits
Audio USB input	Max sample rate of 48K at 16 bits
DSP resolution	48K at 24 bits
AC Voltage in	120 VAC±10% at 60Hz or 220 VAC ±10% at 50Hz
Sleep mode power consumption	Less than 0.5 watts
Idle power (not asleep and nothing playing)	6.5 watts

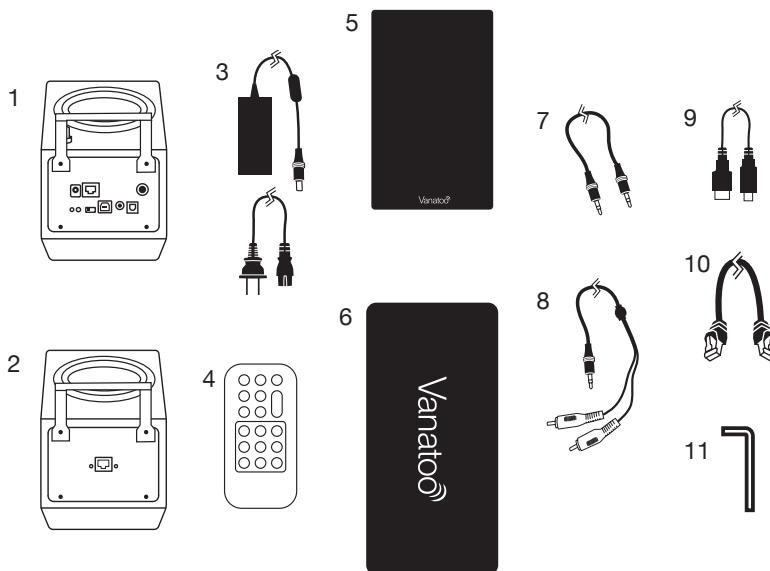
  

Protection	Thermal, short circuit, & over current output protection
Weight	Active: 4.5 lbs / Passive: 4 lbs
Dimensions—each speaker	7 1/2" H x 4 3/4" W x 7 3/4" D without support 7 1/2" H x 4 3/4" W x 9 3/4" D with support
Shipping weight	14 lbs
Shipping dimensions	7 3/4" H x 13 1/2" W x 17 3/4" D

## UNPACKING YOUR SPEAKERS

When unpacking your speakers, inspect them to make sure that there is no visible damage due to shipping. If you see damage, please contact us immediately. Please check to make sure your shipment contains one of each of the following items:

- 1) Active speaker
- 2) Passive speaker
- 3) AC power adapter
- 4) IR remote control
- 5) Pair of speaker grills
- 6) Pair of isolation pads
- 7) 3.5mm to 3.5mm cable
- 8) 3.5mm to RCA "Y" cable
- 9) USB A to USB B cable
- 10) RJ45 speaker interconnect cable
- 11) 2.5mm Allen wrench

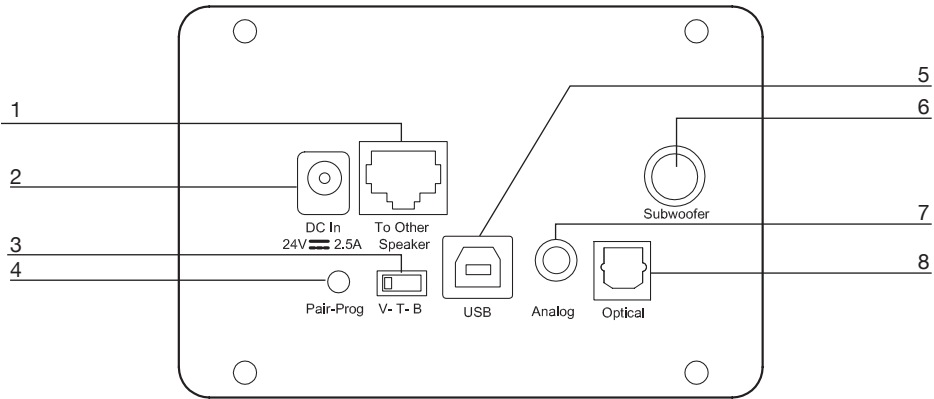


**⚠ DO NOT discard shipping materials. In the rare case that you must return the speakers, they will need to be shipped in the original packaging. The shipping box is collapsible for storage.**

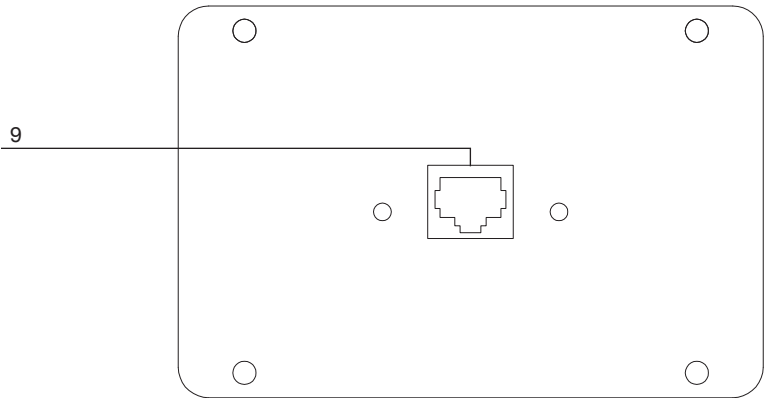
# SETTING UP YOUR SYSTEM

You may have noticed the absence of a registration card. You are not required to register your speakers. However, if you want us to send you updates or information on future products, you'll want to register as a Vanatoo customer at our website at [www.vanatoo.com](http://www.vanatoo.com).

## Active Speaker Back Plate Overview



## Passive Speaker Back Plate Overview



#	Feature	Description
1	TO OTHER SPEAKER	Amplifier OUTPUT connector to connect the active speaker's internal amplifier to the passive speaker <b>⚠ DO NOT connect this output to anything other than the passive speaker. THIS SHOULD NEVER BE CONNECTED TO ANY ETHERNET EQUIPMENT OR DAMAGE MAY RESULT.</b>
2	POWER INPUT	Power input for DC power cable from the external power supply
3	VOL/TREB/BASS SWITCH	Defines the function of the potentiometer located next to the passive radiator. Also used to select speaker setup configurations.
4	PAIR/PROG	Places the Bluetooth receiver in pair mode. Also used to program speaker setup configurations.
5	USB IN	Digital Audio USB input for a standard USB type B plug
6	SUB OUT	Line level output for an optional powered subwoofer
7	ANALOG IN	Analog input for a 3.5mm (sometimes called an 1/8 inch) stereo plug
8	OPTICAL IN	Digital S/PDIF input for a TOSLINK fiber optic plug
9	SPEAKER INPUT CONNECTOR	Passive speaker INPUT connector. Connect to the amplifier OUTPUT connector (1) on the active speakers using the speaker wire provided. <b>⚠ DO NOT connect this input to anything other than the active speaker. THIS SHOULD NEVER BE CONNECTED TO ANY ETHERNET EQUIPMENT OR DAMAGE MAY RESULT.</b>

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### Step 1: Pick your speaker locations

Speakers sound best when they point toward your ears. The T0 has been designed to make this easy, whether used on a desk or in a room.

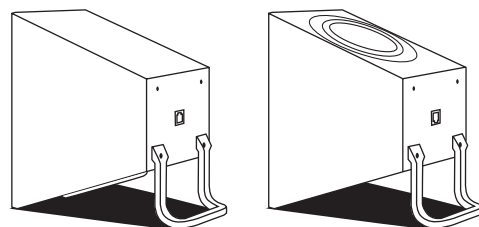
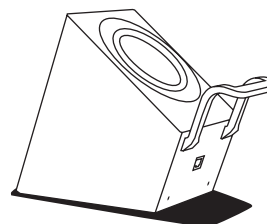
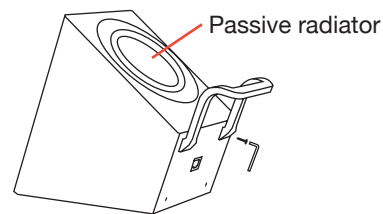
*The support is optional for desktop usage, but we recommend leaving it installed if you have space to improve portability. For space constrained applications the supplied 2.5mm Allen wrench can be used to remove the support. The support can also be moved to the other side of the cabinet, as the T0 works with the passive radiator facing either up or down. Note that when the passive radiator faces down the support must face down too; the speaker cannot be allowed to rest on the passive radiator. With or without the support, all four screws need to be securely installed during use.*

#### Desktop Usage

Place the speakers on the supplied isolated pads with the supports and passive radiators facing up. Position the active speaker with the connections on the right side of your seated position (this can be changed in software). Try to get your speakers at equal distance on each side.

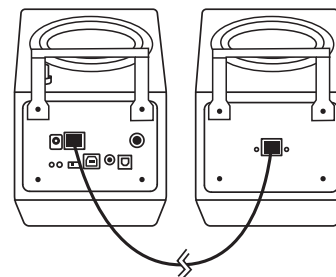
#### In-Room Usage

Place the speakers on the supplied pads with the supports and passive radiators facing down. Position the active speaker with the connections on the right side of your listening position (this can be changed in software, see speaker configuration settings). Ideally your speakers should be at equal distance from your best listening position on each side, and approximately at ear level when you are seated.



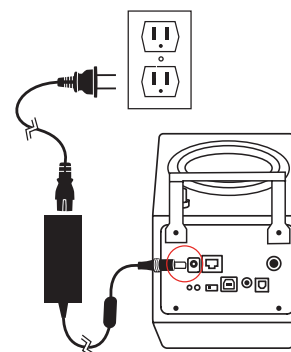
### Step 2: Connect the active speaker to the passive speaker

The included speaker interconnect cable with modular RJ50 connectors makes this a "snap"!



### Step 3: Connecting power

Plug in the AC adapter to the wall and to the active speaker.



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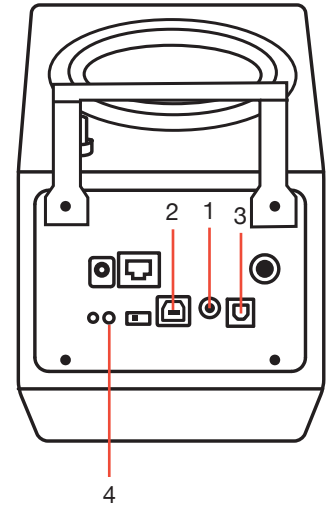
## SETTING UP YOUR SYSTEM, CONTINUED

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### Step 4: Connect the active speaker to your audio device

Your T0 speakers support analog, USB, optical, and Bluetooth wireless connections.

- 1) Analog — Connect your source using the included using 3.5mm to 3.5mm cable or 3.5mm to RCA cable as appropriate for your source component.
- 2) USB — Connect your computer to the T0 using the supplied USB A to USB B cable. Select the Vanatoo T0 in your computer's audio settings.
- 3) Optical — Connect your source component to the Vanatoo T0 using a Toslink optical cable.
- 4) Bluetooth —
  - a. Press and release the “Pair-Prog” button on the rear of the active speaker, or press “Enable” and then “BT Pair” on the remote control.
  - b. Ensure Bluetooth is turned-on on your source device and pair with the Vanatoo T0.
  - c. Ensure your source device is connected to the Vanatoo T0 over Bluetooth and play music!

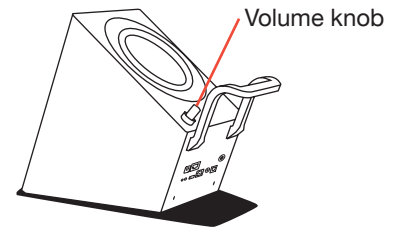


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### Step 5: Optimize for your space

Vanatoo knows each customer's environment and listening preferences are different. T0 speakers have bass, treble, and volume adjustments to allow you to tune your speakers to your listening environment.

1. Turn the audio device volume up to the  $\frac{3}{4}$  point.
2. Turn the active speaker volume knob up to the maximum volume you desire. Note that it is OK to turn the volume to 100% and leave it at that setting when the volume will be controlled by the source.
3. This should provide a good volume combination so that, in the future, you should only need to adjust the volume control on your audio device to achieve your desired listening volume. Adjust the volume combination down if your settings cause distortion. As with all speakers, prolonged distortion can cause permanent damage.
4. Adjust the treble and bass settings as desired. In most cases, the optimum setting for a flat frequency response is to set the treble and bass knobs at the mid settings. This is our default setting. To find out how to adjust the treble and bass settings in the T0 please refer to the section on this subject later in this manual.
5. Visit our website for pointers on how to optimize the settings for different room conditions. [www.vanatoo.com/audiospeak](http://www.vanatoo.com/audiospeak)



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### Step 6: Enjoy!

That's It! You are ready to enjoy your Vanatoo Transparent Zero speakers. Congratulations and happy listening.

## CUSTOMIZE CONFIGURATION SETTINGS

Seven settings can be customized on the T0.

**Sleep Mode setting**—These settings allow the T0 to be configured so that it will either go to sleep after 20 minutes of no audio inputs or to never go into the sleep mode. In the sleep mode the T0 consumes less than 0.5 watts of power. When music is sent to a sleeping T0 it takes about 3 seconds for the amplifier to transition out of sleep mode and start playing music. If the T0 is in idle mode (not in sleep but not playing music) it draws about 6.5 watts of power. When music is sent to an idle T0 the music starts playing almost immediately.

**Remote Enable Key setting**—By default the remote's "Enable" key must be pressed before any of the other keys in the rectangular box on the remote will work. This is to keep the user from accidentally bumping a button and unknowingly changing the settings. The user has 15 seconds to use the buttons in the box (BT Pair, Treble, Bass) before the "Enable" key must be used again. The optional configuration extends the "Enable" key behavior beyond the buttons in the box to include the source selection buttons. This is to protect against accidentally switching the source.

**DSP setting**—The default "Shelved" DSP setting should be used when you are placing the speakers on a desktop near a wall or corner of your room. If you connect a subwoofer to the T0 with the Shelved DSP setting selected, the crossover to the subwoofer is set at 125 Hz. A T0 set to the Shelved DSP setting with a subwoofer connected is the configuration which will result in the loudest possible music from the T0.

The optional "Flat" DSP setting should be used when you are placing the speakers on stands at least two feet away from any wall or if you are using the T0 as home mixing monitors. If you connect a subwoofer to the T0 with the Flat DSP setting selected, the crossover to the subwoofer is set at 80 Hz.

**Stereo/Mono setting**—Setting the T0 to the default Stereo mode will give you true left/right stereo output with the active speaker (the one with the volume knob) being the right channel. If you set the T0 to the optional Mono mode the input's left and right channels are summed together and the same content is output to both speakers. Use the Mono mode if you want to take just the active speaker with you to the garage to work on your car but don't want to bother taking both speakers. Just set the T0 to mono mode, plug in the active speaker into power, and push music to the speaker with your Bluetooth on your phone. If you want to include your passive speaker in the Mono mode that's OK too.

**Auto Input Switch setting**—In the default setting when the T0 goes to sleep it will automatically reset the input selection to the Auto Input Switch mode. This way if someone in your family uses the remote control to select a specific input then an hour later you walk in the room you will always know that sending music on any input will bring the unit out of sleep mode and your music will play. Most people should leave the T0 in this setting.

In the optional setting when the T0 goes to sleep it will not change the input selection. To bring the T0 out of sleep mode the user must play music on the last input selected or hit any key on the remote to bring the T0 out of sleep mode then select the desired input. This is probably a less frequently used setting but some users may find it useful in a controlled environment.

**Limiters setting**—In the default Limiter setting the T0 DSP incorporates limiters (sometime called compressors). These are commonly used in making Pop Music recordings, and have the effect of increasing the overall playback volume. They are turned-on by default in the T0 to both increase the maximum playback volume and reduce the peak power draw of the system. When the system is played at full volume with heavy bass demands and the limiter turned off, it is possible to trigger the protection circuit resulting in a temporary shutdown. This is OK, as the circuit is behaving exactly as intended, but may be annoying. The default of the limiters "Enabled" greatly reduces the chances of this happening. The limiter can however have a negative effect on the sound at high volumes, and some users may find the sound more "open" with the limiters disabled. We let you, the user, decide. Just note that the maximum volume with the limiter "Disabled" will be a little lower, and if the protection circuit trips you'll need to turn it down a little!

**Active speaker position setting**—In the default setting the active speaker is defined as the speaker on the right as you face the T0s. This can be changed using the Active speaker position setup so that the active speaker is defined as the left speaker.

**Default setting**—This setting sets each of the optional settings to their default selections as noted in the default column in the table on page 9.

*(continued next page)*



## CUSTOMIZE CONFIGURATION SETTINGS, CONTINUED

Customize your settings by using the volume knob (A), the DC power plug (B), the Pair/Prog button (C) and the volume/treble/bass switch (D) on the active speaker.

### Steps to customize settings

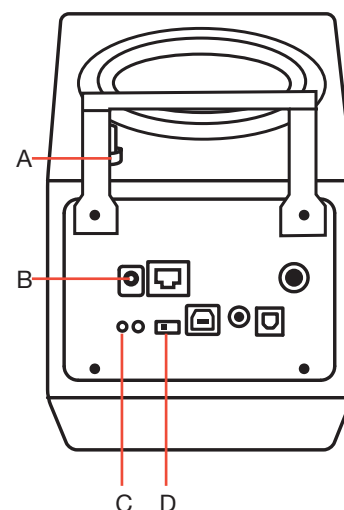
1. Power off the T0 by unplugging the DC power plug.
2. Find the setting you wish to customize in the chart below. Set the volume knob position and the volume/treble/bass switch position accordingly.
3. While holding the Pair/Prog button down, connect the DC power plug.
4. Release the Pair/Prog button. The power-on blue LED will flash several times to signal that the new configuration is set.
5. If you wish to customize another setting, repeat steps 1–4. Your customized setting(s) will remain when you power off the T0.



**TIP** You may find it easier to lay the speaker face down, with the grill on, while changing the configuration.

### Default settings

If you reset to the factory defaults, the blue and amber LEDs will flash several times. After the default reset is complete, the power-on blue LED will remain on.

**TIP** After customizing the speaker configuration settings *be sure to reset the volume* by setting the volume/treble/bass selector switch to “volume” and set the volume knob to at least the mid way position (two dots).

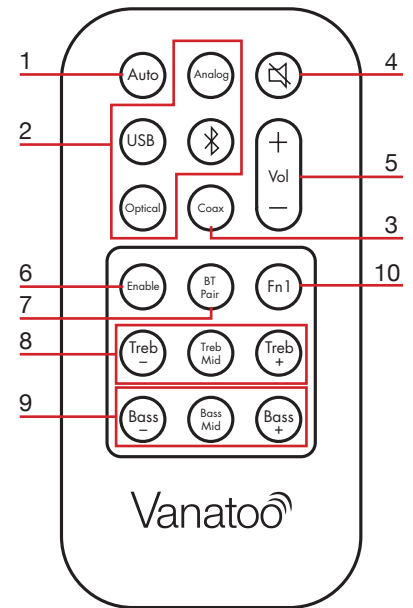


Customizable Configuration Setting	Volume Knob Position 	Volume/Treble/Base Switch Position 	Factory Default
Enables sleep mode after 20 minutes	One dot	Treble (T)	yes
Disables sleep mode — never sleeps	One dot	Bass (B)	
Remote “Enable” key must precede remote BT Pair, Treble, and Bass changes	Two dot	Volume (V)	yes
Remote “Enable” key must precede remote input selection, BT Pair, Treble and Bass changes	Two dot	Treble (T)	
Enables shelved DSP settings	Two dot	Bass (B)	yes
Enables flat DSP settings	Three dot	Volume (V)	
Stereo output	Three dot	Treble (T)	yes
Mono output	Three dot	Bass (B)	
Reset to Auto Input Switch mode in sleep	Half way between one dot and two	Volume	yes
Retain current input selection in sleep	Half way between one dot and two	Treble (T)	
Limiters enabled	Half way between one dot and two	Bass (B)	yes
Limiters disabled	Half way between two dots and three	Volume (V)	
Active speaker on the right	Half way between two dots and three	Treble (T)	yes
Active speaker on the left	Half way between two dots and three	Bass (B)	
<b>Reset settings to factory defaults</b>	One dot	Volume (V)	

## REMOTE CONTROL

The T0 comes with a remote control. You can use this remote to control various functions of the T0. In addition, some universal remotes support the Vanatoo remote control commands. Check your universal remote's device compatibility list to see if the Vanatoo products are included.

- 1) **Auto Command**—When the Auto Command is sent the T0 amplifier enables the Auto Input Switching algorithm and automatically selects the input to play according to the Auto Input Switching rules.
- 2) **Analog, USB, Bluetooth, Optical Commands**—When either the Analog, USB, Bluetooth, or Optical input selection commands are sent, the T0 amplifier will disable the Auto Input Switching algorithm and switch the input to the input that was selected. This provides a means for the user to select an input regardless of the hierarchy of the Auto Input Switch algorithm. However it can result in a user selecting an input that is not receiving music which will result in the speakers being silent. If for example music is being received by the Bluetooth receiver and no music is being received by the optical input, then if the user selects “Optical” from the remote control the result will be that no music will be heard from the speakers.
- 3) **Coax Command**—When the Coax command is sent to the T0 the command will be ignored and no action will be taken as the T0 does not have a Coax input.
- 4) **Mute Command**—When the Mute command is sent to the T0 the output will be muted. If the amplifier is already muted then it will be unmuted.
- 5) **Vol+ and Vol- Commands**—When the Vol+ or Vol- commands are sent the T0 amplifier will either increase or decrease the output volume depending on which key is depressed. If one of the keys is held down the rate at which the volume is changed will accelerate the longer the key is held. If the amplifier is muted when one of the volume commands is sent the amplifier will be unmuted.
- 6) **Enable Command**—When the Enable command is sent the T0 amplifier will start an “Enable Key” 15 second countdown timer. During that 15 seconds the amplifier will respond to the BT Pair commands, Treble commands, and Bass commands. Any commands received from the BT Pair, Treble commands, or Bass commands during the 15 seconds will cause the 15 second countdown timer to be reset to 15 seconds and restart the countdown as well as executing the requested action as described below.
- 7) **BT Pair Command**—If the 15 second enable timer is greater than zero, the BT Pair command will force the Bluetooth receiver to the pairing mode. Depressing the BT Pair button on the remote also will reset the Enable countdown timer to 15 seconds and restart the countdown.
- 8) **Treb+, Treb Mid, Treb- Commands**—If the 15 second enable timer is greater than zero, the Treb+ or Treb- command will increase or decrease the treble tone control by 1dB. Holding the Treb+ or Treb- remote control key down will not continue to increase or decrease the treble setting by more than 1dB. To move the treble setting more than 1dB the remote control key must be released and depressed again. For example, if the user wants to increase the treble setting by 3dB he must press and release the Treb+ remote button 3 consecutive times. If the 15 second enable timer is greater than zero, the Treb Mid command will set the treble tone control to 0dB. Depressing any of the Treb buttons on the remote will also reset the Enable countdown timer to 15 seconds and restart the countdown.
- 9) **Bass+, Bass Mid, Bass- Commands**—If the 15 second enable timer is greater than zero, the Bass+ or Bass- command will increase or decrease the bass tone control by 1dB. Holding the Bass+ or Bass- remote control key down will not continue to increase or decrease the Bass setting by more than 1dB. To move the bass setting more than 1dB the remote control key must be released and depressed again. For example, if the user wants to increase the bass setting by 3dB he must press and release the Bass+ remote button 3 consecutive times. If the 15 second enable timer is greater than zero, the Bass Mid command will set the bass tone control to 0dB. Depressing any of the Bass buttons on the remote will also reset the Enable countdown timer to 15 seconds and restart the countdown.
- 10) **Fn1 Command**—When the Fn1 command is received by the T0 receiver the command will be ignored and no action will be taken. This command is reserved for future use.



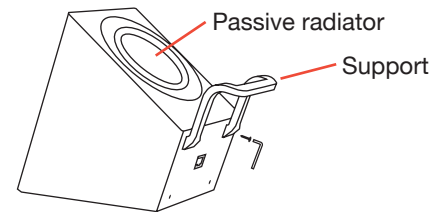
## ISOLATION PADS

The two isolation pads provided with your T0s should be used to acoustically isolate your T0s from your desktop or tabletop. These isolators can be used with the T0s in either orientation; with or without the use of the supports.

## SUPPORTS

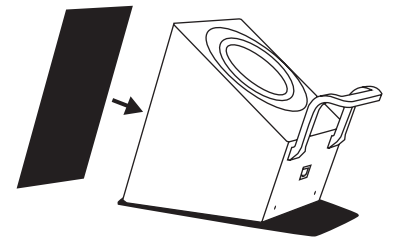
The supports can be installed to convert the orientation of the T0s from a “tilted up” orientation to a “90 degree” orientation where the front baffle is 90 degrees to the table top or speaker stand top. They can be installed so that either the passive radiator (the disk with the Vanatoo logo) is facing up or facing down when the T0s are placed on the table top or speaker stand. To install a support use the 3.5mm Allan wrench provided to remove the two screws on the back of the speaker. Install the support using the same screws. With or without the support, all four screws need to be securely installed during use.

As an added feature, the support can be used as a handle when you want to grab the speakers and take them with you on your vacation!



## GRILLS

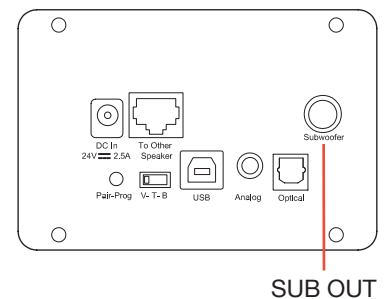
The grills that are provided with the T0 may be installed or not depending on the user's preference. They are magnetically attached to the T0's front baffles so to install them all you have to do is place the grill in the approximate location on T0's front baffle and the magnets will automatically position the grill into its proper position. The grills are also symmetrical so they can be installed on the T0 in either orientation.



## CONNECTING TO AN OPTIONAL SUBWOOFER

Vanatoo Transparent Zero speakers are designed to provide excellent bass at louder than normal listening levels without the need for a subwoofer. However if you are playing very bass heavy music, adding a subwoofer will allow you to play even lower bass and achieve louder overall volume. When a subwoofer is connected, the active speaker automatically detects the connection and adds a digital crossover network between the T0 speakers and the subwoofer.

1. Connect to any powered subwoofer using the “SUB OUT” connector on the active speaker to the input of the subwoofer using a cable with RCA connectors.
2. Set the crossover frequency on your subwoofer to its maximum setting or disable the subwoofer crossover.
3. Set the volume control on the subwoofer to desired level.
4. The T0 system will automatically set the crossover frequency between the T0's and your subwoofer.



## CONNECTING TO A BLUETOOTH DEVICE

The Vanatoo Transparent Zero has an aptX enabled wireless Bluetooth receiver built into the active speaker. Connecting to the T0's Bluetooth receiver is very simple. Once you power up the T0 the Bluetooth receiver begins to search for devices to connect. When you see “Vanatoo T0” on your list of devices on your mobile device just select it and the connection will be completed within seconds. You can now play your music wirelessly from your Bluetooth enabled music source. Any time you want to disconnect your device from the T0 you can either do that directly on your music source (e.g. iPhone or Android phone), or you can push the “Pair/Prog” button on the back of the T0 active speaker, or you can hit “enable” followed by “BT Pair” on the remote.

**TIP** Only one device can connect to the T0 Bluetooth receiver at a time, so if you are having problems connecting make sure no other device in the area is connected. You can force all devices to be disconnected by depressing the “Pair/Prog” button on the back of the T0 active speaker, or you can hit “enable” followed by “BT Pair” on the remote.

If you happen to be using a mobile device to connect to the T0's Bluetooth interface (like an iPhone or Android Phone) and you happen to walk out of range for the Bluetooth receiver your music will stop playing and one of three things will happen when you walk back into range.

1. If you are out of range for only a few seconds the music will stop playing while you are out of range but may begin again automatically once you are back in range.

(continued next page)

2. If you are out of range for a minute or so then walk back into range the mobile device may automatically reconnect (or just stay connected) but the music may not automatically begin again. All you need to do is hit play on your mobile device's music player and the music will resume.
3. If you are out of range for more than a minute then walk back into range the mobile device will most likely be disconnected from the T0 which will require you to reconnect to the T0's Bluetooth receiver to play music again.

The exact nature of how a mobile device handles the "out of Bluetooth receiver range" issue varies from device to device and from revision to revision. However this is not a complex issue and it can always be resolved by either restarting the music or reconnecting to the T0 Bluetooth receiver once the device is back in the Bluetooth receiver's range.

## ADJUSTING TREBLE AND BASS

The treble and bass can be adjusted on the T0 using the volume knob located on the top of the T0 active speaker along with the three position V-T-B (volume/treble/bass) switch and the Pair/Prog button both located on the back of the T0 active speaker. To set the treble setting, start by playing some music. While the music is playing move the V-T-B switch to the "treble" position. Now adjust the treble setting to taste using the volume knob (which at this point in time is redefined to be a treble knob). Note that the two dots at the center of the knob's travel denotes the "flat" position. When you have the treble adjusted to taste depress and release the Pair/Prog button. This action locks in the treble setting so you can move on to the bass setting. To set the bass setting follow the same procedure except with the V-T-B switch set to "bass." When you have completed the treble and bass settings move the V-T-B switch to the volume position and the volume knob will become a volume knob again.

**TIP** If you change a bass or treble setting but forget to depress the Pair/Prog button the setting will not be saved and the previously saved setting will be used.

## ADJUSTING THE BRIGHTNESS OF THE POWER ON LED

The intensity of the blue power on LED can be adjusted to taste. In fact it can be turned off completely if you want. To adjust the intensity once the T0s are powered up and the blue LED is on and no music is playing, set the V-T-B switch to the "volume" position, hold the "Pair/Prog" button down for 5 seconds. After the 5 seconds continue to hold the button down (do not release it or you will have to start the 5 seconds over again). Then rotate the volume knob on the top of the T0 active speaker. When you have the blue LED intensity where you like it then release the Pair/Prog button. That's it. No more need of a piece of black electrical tape stuck on the power on LED to keep your bedroom dark. The blue LED will now be at this intensity until you change it (or until you power off the T0).

**TIP** When you have completed the LED intensity process by releasing the Pair/Prog button remember to readjust your volume knob to your desired listening level. If you adjust your LED intensity to a very low intensity then forget to readjust your volume knob when you are done you might wonder why you can no longer hear your music.

## AUDIO MUSIC SOURCE PRECEDENCE

If you have your T0 set to auto input switching (this is the default setting) and multiple devices are connected to your T0 speakers, the device you hear is automatically selected based on the hierarchy shown below:

1. Analog
2. Audio USB
3. Optical S/PDIF
4. Bluetooth

For example, if the T0 is connected to an MP3 player via the 3.5mm analog connection and to a networked audio device via the TOSLINK optical connection, and both are turned on, the MP3 player is the source that will be played. If however, the MP3 player is turned off and the networked audio device is left on, the networked audio device will be the source that is played.

**When switching from a higher priority input to a lower priority input, the higher priority input must be OFF (or silent) for 7 seconds before the T0 amplifier will switch to the lower priority input.** This enables the amplifier to discern between the higher input being turned off and normal inter-track silence thus avoiding switching to the lower priority input between audio tracks. This 7 second wait time is not necessary when switching from a source that is lower in priority to one that is higher. Therefore, switching from a lower priority input to a higher priority input will happen almost immediately.

## TROUBLESHOOTING

In the unlikely event that you should experience problems with your Vanatoo Transparent Zero speakers, we have listed a few suggestions that might help you. If these suggestions fail to correct your problem, check our website for additional suggestions or contact our support department.

Problem	Troubleshooting Steps
Power LED is not illuminated	<ul style="list-style-type: none"> <li>• Make sure the AC power cord is properly connected to both the power supply and to your household wall outlet.</li> <li>• Make sure the wall outlet the power cord is plugged into is a “live” outlet.</li> <li>• Make sure the DC power cord from the power supply is connected to the DC Power In connector on the active speaker.</li> <li>• Make sure the blue LED has not been dimmed to the point that it never lights.</li> </ul>
No sound from either speaker	<ul style="list-style-type: none"> <li>• Make sure the power LED is illuminated. If not, see the steps for “Power LED is not illuminated”.</li> <li>• Make sure the active speaker volume knob is turned up.</li> <li>• Make sure your audio source volume is turned up.</li> <li>• Make sure your audio source is playing audio.</li> <li>• Disconnect all but one audio source input on the active speaker.</li> <li>• Unplug power from the active speaker then plug it back in to reset the inputs to auto switching mode.</li> <li>• If the speaker was previously working properly but stopped suddenly, this may be the result of the output drivers experiencing thermal shutdown. This is a normal protection feature and does not indicate a malfunction. Turn the power off on the active speaker, wait 5 minutes, turn down the volume of the audio source, then turn the speaker system back on.</li> <li>• If possible, try different inputs on the active speaker to see if one works where another may not.</li> </ul>
Sound from active speaker but not from passive speaker	<ul style="list-style-type: none"> <li>• Make sure the cable which connects the active speaker to the passive speaker is properly seated at the active speaker as well as at the passive speaker.</li> <li>• If you are using the analog input, make sure the 3.5mm connector is firmly seated into the connector input on the active speaker and the audio source.</li> <li>• If you are using the 3.5mm to RCA “Y” cable, make sure both of the RCA connectors are properly seated.</li> </ul>
Sound from passive speaker but not from active speaker	<ul style="list-style-type: none"> <li>• If you are using the analog input, make sure the 3.5mm connector is firmly seated into the connector input on the active speaker and the audio source.</li> <li>• If you are using the 3.5mm to RCA “Y” cable, make sure both of the RCA connectors are properly seated.</li> </ul>
Bluetooth device won't pair with the T0	<ul style="list-style-type: none"> <li>• Make sure your Bluetooth device is in range (to be sure, place your BT device within 5 feet of the T0)</li> <li>• Make sure another Bluetooth device does not already have connection with the T0. To make sure all BT connections are disconnected hit the “Pair-Prog” button on the back of the active speaker or hit enable followed by the Bluetooth button on the remote, then try to pair your device again.</li> </ul>
Audio is distorted	<ul style="list-style-type: none"> <li>• If you are using the analog input (3.5mm connector) make sure you are not overdriving the audio input. Turn down the volume on your audio source device and, if necessary, turn up the volume on the active speaker.</li> <li>• Make sure you are not overdriving the speaker drivers. Turn down your audio source device. You may want to turn down the volume knob on the active speaker also.</li> <li>• Make sure the audio source signal is providing a clean signal.</li> <li>• Make sure the cable between the audio source and the active speaker is properly seated.</li> </ul>
No audio from the optional subwoofer	<ul style="list-style-type: none"> <li>• Make sure the RCA cable between the active speaker subwoofer output and the subwoofer's input are properly seated.</li> <li>• Make sure the subwoofer is plugged in and switched on.</li> <li>• Make sure the subwoofer volume is turned up.</li> </ul>
Sound drops out momentarily	<ul style="list-style-type: none"> <li>• This could be an indication that one of the many automatic protection circuits is engaging to protect the speakers from permanent damage as a result of playing the speakers louder than they can safely play. Turn either the active speaker volume or the audio source volume down slightly until this stops. If you need to play louder than the T0 speakers allow, you should consider adding a subwoofer to your system.</li> <li>• If you are using one of the digital inputs this could also be an indication that your digital signal is being interrupted. You may consider changing the digital cable.</li> <li>• If you are using the Bluetooth input this could be an indication that your Bluetooth sending device is on the edge of being out of range.</li> </ul>



## WARRANTY

All speakers built by Vanatoo carry a 3-year limited non-transferrable warranty beginning from the date of purchase. There is no requirement for you to register your product.

The warranty covers all defects in material and workmanship with the following exceptions:

- Damage caused by improper installation or adjustment
- Damage caused by lightning or power surges
- Damage caused by accident, unreasonable use, or neglect
- Damage caused by an act of God
- Damage caused by excessive moisture
- Damage from failure to follow instructions contained in the Owner's Manual
- Damage from repairs performed by someone not authorized by Vanatoo
- Any unit on which the serial number has been effaced, modified, or removed
- Damage occurring during shipment, other than that arranged by Vanatoo
- Units which have been altered or modified in design, appearance or construction

This warranty covers only the actual defects within the product. It does not cover costs of installation, removal or setup of the product at the customer's site.

During the warranty period, Vanatoo will, at its option and within a reasonable amount of time, either repair any defective parts or replace the defective product at no cost to the customer using new parts or parts equivalent to new in performance and reliability. The customer will be responsible for shipping or transportation charges to return the defective product to Vanatoo. It is recommended that the customer retain all the original shipping materials to assure safe transport of the product should it need to be sent back. It is recommended that the customer insures the shipment in case the carrier damages the product in shipment. Vanatoo cannot be responsible for any shipping damage due to improper packing of return products. Vanatoo will be responsible for all shipping charges associated with shipping the product back to the customer once the defect has been corrected.

If repairs are necessary which are not covered by this warranty, or if a unit is examined and is found to not be in need of repairs, the customer will be charged for the repairs and/or the examination. If non-warranted repairs are needed, Vanatoo will notify the customer of the estimated cost and ask for authorization to perform said repairs. In the case that the product repair is not under warranty, the customer will be charged for any shipping charges associated with shipping the product back to the customer.

If you have any questions about your warranty coverage or you think you may need service, email the Vanatoo Authorized Service Center at: support@vanatoo.com or visit our website at www.vanatoo.com for additional contact information. We will do everything we can to answer your questions and resolve any issues as quickly as possible.

This Limited Warranty is not transferrable. THE MAXIMUM LIABILITY OF VANATOO SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID BY THE CUSTOMER FOR THE PRODUCT. IN NO EVENT SHALL VANATOO BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES.

## FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subjected 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. This equipment has been tested and found to comply with 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 residential installations. 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 interference to radio or television equipment 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.
- Move the equipment away from the receiver.
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for additional suggestions.

**⚠ WARNING:** FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

**This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.**

## Acknowledgements

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