



# uandsound

AWAKEN YOUR SENSES



**uandsound T series**

**Double magnification**

**Recording room monitor speakers**



**Beware:** To reduce the risk of electric shock, never remove parts of the front cover (or back cover) that require no user service. Please ask professional maintenance personnel for repairs.

**WARNING:** To reduce the risk of fire or electric shock. Do not expose the device to rain or moisture.



An arrow lightning symbol inside an equilateral triangle is used to identify the presence of uninsulated dangerous voltage in the user's product enclosure. The strength of this voltage is sufficient to cause a shock hazard to the person.

The exclamation mark in the equilateral triangle is used to enhance the user's printed materials in the product and contains important operating and maintenance (repair) instructions.



Do not place the device on an unstable cart, stand, tripod, bracket or table. The equipment may fall over and fall, causing severe physical damage to children and adults causing serious damage to the equipment. Use only carts, stands, tripods, brackets or tables specified by the manufacturer or sold with this equipment. Any assembly of the equipment on a wall or ceiling should follow the manufacturer's instructions and use the assembly accessories specified by the manufacturer.



Be careful when moving carts and equipment components. An emergency stop, excessive force, and uneven road surface may cause the cart and equipment components to tip over.

This product complies with the European Union's "Electronic and Electrical Equipment Waste" regulations. End-of-life products should not be treated as municipal waste. Please refer to local regulations for proper handling of such products.

1. Construction of state-of-the-art equipment should be connected to a power outlet with good grounding.
2. When the power plug or device connector is used as a disconnect device, keep the disconnect device (power outlet) available at all times.

1. Read these instructions.
2. Keep these instructions in a safe place.
3. Pay attention to all warning messages.
4. Follow all instructions.
5. Never use the device near water.
6. Clean only with a dry cloth.

7. Do not block any ventilation holes and follow the manufacturer's instructions for installation.
8. Do not install this equipment near any heat source such as radiators, heaters, stoves, or other equipment that generates heat, including amplifiers.
9. Do not damage polarized or grounded plugs for safety purposes. The polarized plug has two pins, one of which is wider. The grounding plug has three pins, of which the wider or third grounding pin is used to protect the user. If the supplied plug does not fit the outlet, consult an electrician to replace the original outlet.
10. Protect the power cord, especially the plugs, sockets, and equipment lead-out points from hi-hats or squeezing.
11. Use only accessories and accessories specified by the manufacturer.
12. Use only cart stands, tripods, brackets or tables specified by the manufacturer or sold with this equipment. When using the cart, care should be taken to move the cart unit components to avoid injury from tipping over.
13. Disconnect the power to the equipment during thunderstorms or when unused for long periods of time.
14. Ask a professional service person for repairs. Any form of equipment damage needs to be repaired, such as damage to the power cord or plug, liquid ingress or debris into the equipment, equipment exposed to rain or exposure to moisture, improper operation or equipment falling.

### **Caution**

POUR . VITER LES CHOC ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQUIAU FOND

### **Beware**

To avoid electric shock, fully insert the wide pin of the plug into the wide slot. If an indoor antenna (whether built-in or separately installed) is used, do not touch any part of the antenna to the metal parts of the electrical equipment such as electric lights, televisions, etc.

### **Beware**

#### **power cable**

Any outdoor antenna must be kept away from all power lines.

## **Outdoor antenna ground**

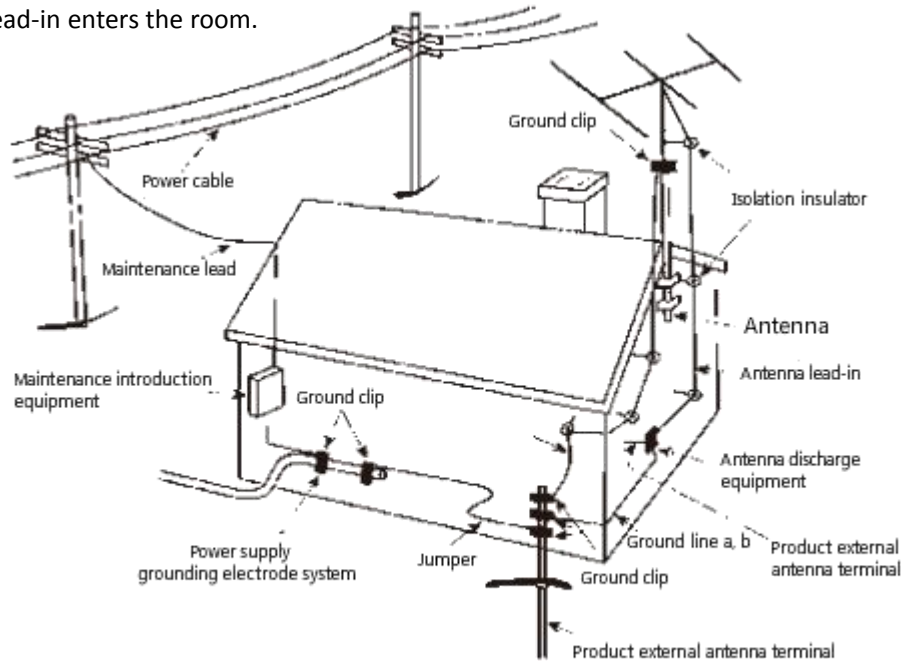
If the outdoor antenna is connected to the user's tuner or tuner preamplifier, make sure the antenna system is well grounded to provide protection against voltage surges and static charge buildup. National Electrical Code 810, ANSI/NFPA No. 70-1984, provides information on the following aspects: good grounding of the antenna and the supporting structure, grounding of the antenna lead-in connecting the antenna discharge device, size of the grounding conductor, antenna discharge The position of the device, the connection to the ground electrode and the

requirements for the ground electrode.

a. Use No. 10 AWG (5.3mm<sup>2</sup>) copper wire, No. 8 AWG (8.4mm<sup>2</sup>) aluminum wire, No. 17 AWG (1.0mm<sup>2</sup>) copper-clad steel or bronze wire, or larger diameter wire for ground wire

b. The safety antenna lead-in and the home ground wire should be kept at an insulation distance of 4-6 feet (1.22-1.83 meters).

c. The antenna discharge device should be installed as close as possible to the position where the antenna lead-in enters the room.



**Cable TV System Installation Instructions:** This instruction is used to alert the cable system installer to the National Electrical Code 820-40, which provides guidance on how to properly ground, especially when the ground wire is connected to the building grounding system. Near the wire lead-in point.

**Never attempt to repair the device yourself.**

**Please ask professional maintenance personnel for repairs.**

After any maintenance and repair work is completed, the repair shop should be required to ensure that only the parts that have the same characteristics as the original parts, that have been authorized by the manufacturer, have passed the routine safety check to ensure that the equipment is in safe operation. Replacement with unauthorized parts may result in fire, electric shock or other hazards.

## Introduction

Congratulations on purchasing uandksound's products! Welcome to join the growing uandksound owner family. uandksound's T-series studio-specific monitors are high-precision speakers that continuously improve the processing of difficult audio. This is also the meaning of these monitor speakers. They can really restore the sound in the sound material.

The key features and design elements of the T-series monitors make uandksound a "studio standard." The series uses a very strict design concept, which is very similar to uandksound's other uandksound products.

The T-Series includes new custom bass and tweeters, side-slanted side panels for improved acoustic reflection and acoustic short-circuiting, and a new cabinet design that improves structural integrity and provides an extended bottom end. The slotted sound hole can be greatly eliminated. Less voice hole. In addition, we offer valuable features and practical features, such as improved speaker protection circuitry to give users more peace of mind, using new drivers to expand the frequency response.

The result is this trusted studio-specific reference monitor that delivers clear bass, clear mid-range, and precise natural treble.

It's a subtle difference in key sound synthesis or the need to capture some special sounds, and you'll immediately see that the T-series, like yourself, knows the job.

This manual will help you familiarize yourself with the many features of the D-series monitors and how they operate. We hope that you will spend a few minutes familiar with this manual. Thank you for choosing uandksound!

Important note: The T-Series monitors were originally packaged in specially designed carton. Please keep these packaging materials in a safe place to transport or transport monitor speakers.

## **design concept**

The monitor sound system in the studio is a tool that “measures” the sound channel changes in an auditory manner. Ask an experienced sound engineer who thinks the best studio-specific monitor speakers should be, basically you will get the same answer. That is "high precision, high transparency, flat response and true restoration of sound."

Simply put, the electrical signals that the sound engineer wants to enter the monitor can be reproduced by the mechanical action of the frequency converter, and the quality of the sound that is desired to be reproduced is not biased or degraded to any degree. Professional sound engineers rely on monitor speakers to express their sound as different audio media as accurately as possible to convey their acoustic vision. Technically, this is achieved by a monitor that meets three key important criteria. Spectrum balance, distortion management and resonance management.

### **1. Spectrum balance (sound quality)**

Studies have confirmed that the correct spectral balance is very important for studio-specific monitor speakers.

Frequency balance is defined as

Smooth on-axis response

Smooth octave response

Smooth off-axis response

After years of audition and listening to feedback from top engineers and manufacturers, uandksound engineers have mastered how to make properly tuned monitors an effective recording tool.

The T-Series is designed to be as flat as possible to ensure that the sound you hear is the true sound of the sound material without any rendering or enhancement. You can be confident that the mix will be precise and phase-consistent.

## **2. Distortion management**

Any loss or addition to the tone signal is distortion, which is present in the speaker itself. The T-Series has extremely low speaker distortion, which clearly helps to provide a more accurate sound reproduction.

Different power amplifier distortions, the most common such as intermodulation distortion, transient over intermodulation distortion and harmonic distortion have also been eliminated.

The effects of physical conditions on the waveform, such as the intimacy and diffraction of the sound holes, can also cause distortion. The design philosophy adopted by uandksound engineers is based on the complete elimination of these lossy sound conditions or the minimization of their impact.

## **3. Resonance management**

Resonance means that after removing the drive source, some objects will tend to vibrate at a particular frequency point. Resonance also has a crucial impact on the performance of the speaker. The design element of uandksound is to minimize the resonance of the small drive and the outer casing.

## **Design element**

New custom tweeters and woofer designs - uandksound has a reputation for designing high-performance studio-specific monitor speakers. T-series monitors are no exception. We have specially customized a Kevlar fiber low frequency drive for each module. Kevlar is one of the strongest, thinnest and hardest materials available for modern speaker cone structures. Kevlar's special physical properties minimize the possibility of axial and conical fractures of the cone structure. Both the tweeter and the woofer have a faster attack time. The new tweeter expands the range and improves distortion.

Anti-Resonance Low-Frequency Expansion Enclosure Design The T-Series monitor enclosures are made of MDF material, which has a stronger structural integrity than a cabinet made of standard ABS solid materials. The method makes the strength of the box large, and the MDF also has a resonance suppression characteristic, which can effectively extinguish the small box resonance.

The new cabinet design offers many benefits - the T-series monitors are manufactured in MDF, depending on the basic design of the cabinet. The cabinet has an inner and outer partition wall filled with a lightweight sound absorbing material. Advantages of MDF materials: One advantage is that the cabinet design can be made with thicker partition walls. The sound absorbing material located between the inner and outer hard shells serves as a sound insulating material to reduce the possibility of resonance dry interference. The second advantage is that there are no parallel partitions inside the cabinet. It is possible to eliminate standing waves and standing wave nodes that are unfavourable to the internal and external acoustic response of the casing. All of these features help to eliminate possible interference from the cabinet to the sound of the speaker system.

The active sub-filter-T series amplifier contains three active filters. (Subsonic, low pass and high pass). These three filters work together to achieve a seamless integration of the drive components, ensuring smooth spectral balance.

Bi-amp design - uandksound's amplifier consists of high-fidelity components and a simple and thorough audio path. The output power is balanced to match the sensitivity of the low frequency and sorghum drives as well as power management. The T-series monitors use a toroidal transformer for minimal noise.

Contoured panels - Like other uandksound speaker products, all cabinet zooms and sound holes are rigorously shaped to reduce diffraction for better detail and stereo sound. The curved panel reduces off-axis scattering and helps achieve better off-axis audio.

The slotted sound hole and the slotted sound hole reduce the intimacy and diffraction that are common in poorly designed circular sound holes.

The limit switch can be disabled. The monitor has a limit circuit that provides more powerful protection. This limit switch is off by default. The limit switch is used to reduce side effects caused by the power amplifier and or the speaker drive overload. Enabling the limit switch will greatly reduce the possibility of damage to the small drive. The limit switch can be turned off via the “Limit Limiting Limit Switch” on the rear panel. It is limited to the use of the monitor speakers within a reasonable range. The best level of no-audio distortion is determined by the help of the indicators on the front bezel.

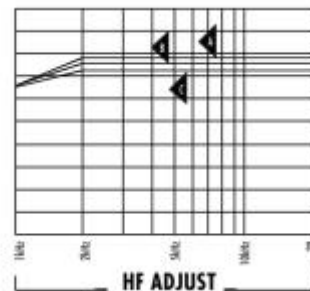


### (A) System level adjustment

The input sensitivity is adjusted by an adjustment device that is neatly attached to the rear panel (counterclockwise to reduce sensitivity). The adjustment range is from Min to Max. The preset gain is Min, which is sufficient for most situations. Adjustments are usually required only when the user is using a T-series monitor in a surround sound system and needs to balance the level, or if the monitor's source is overheated and cannot be adjusted.

### (B) High frequency adjustment (T6 only)

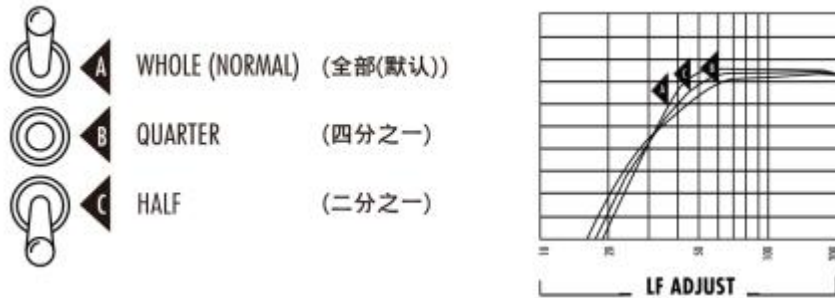
The high frequency adjustment is achieved by a 3-position toggle switch located on the rear panel. The adjustment factor is +1dB, flat, or 1dB, and the upper limit of the high frequency is 2KH. “The commercial preset is flat (the toggle switch is in the middle). The type of adjustment that should be taken is determined based on the room acoustics to ensure that the monitor has the proper frequency response.





### (B) Low frequency adjustment (T6 only)

This three-speed switch is used to adjust the low frequency response of the monitor. Poor low frequency components are produced near the wall. Adjust the low frequency adjustment switch to compensate for the over-amplified low frequency response. The type of adjustment that should be taken is determined based on room acoustics to ensure that the monitor has the proper frequency response.



When the monitor speakers are affected by indoor obstacles such as walls and corners, the low frequency response can be adjusted by the three-speed pull switch. The “all” setting means “whole space” and provides the strongest low frequency response. The "quarter" setting means a quarter of the space, providing attenuated low frequency response. The “two-for-one” setting means “half space”, and its frequency direction should be between no attenuation and one-quarter space attenuation. The monitor speakers are preset by the manufacturer as “all” space. More about this setting Please continue to read this document.

### (C) Stroke indication limit switch

The limit indicator/limit switch has three set gear positions.

1. The “ON” position indicates that the limit indicator (red) is on and the limit switch is bypassed. When the red indicator light is on, the amplifier output approaches the limiter value. The red indicator light flashes occasionally to indicate that the monitor speakers are not damaged. If the red indicator light is on for a long time, turn down the monitor input signal amplitude to avoid damage to the speaker. When tracking the over-mixed volume, you can use the appropriate setting of the limiter indicator to indicate that the monitor may be damaged due to excessive volume.
2. The “OFF” gear position indicates that the limiter indicator (red) is newly opened and the current limit switch is bypassed.
3. The "Limited" gear position indicates that the input signal will flow through the limiting circuit and the signal will be limited when the signal amplitude exceeds a preset threshold. The indicator light is illuminated when the amplifier is overloaded so that the limit switch is activated. The duration and luminous intensity of the green indicator light will increase as the limit is increased. Restriction devices are not recommended for mixing because the limitations on the audio signal change their audio characteristics. If you do need to use a limiting device when mixing, it is recommended to turn down the system input amplitude to prevent the audio signal from being overloaded.

## Connection system

### Turn on the power

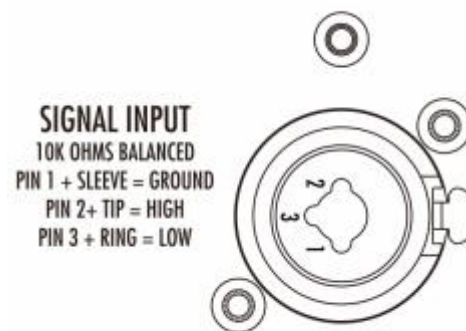
All connections are completed, all controllers and adjustments should be set to a minimum, and all other equipment should be powered up before the T6 monitor is energized. The power on/off switch is located on the rear panel.

### Audio mute switch

When the switch is placed in the "on" position, the timing circuit will be activated. If the system does not detect the audio signal, the high voltage power supply will be turned off after about 20 minutes. The low voltage power supply still supplies current. The monitor speakers will unmute when the signal is detected. If the level of the audio material used is low or the sound is intermittent, such as game music or surround mix, it is recommended to turn off the auto mute switch.

### Connector

The Neutrik® Combo connector plugs into the XLR, 1/4" TRS and 1/4" earphone plugs. Please note that the 2-pin input forward signal must be connected to the sleeve at the signal source if an unbalanced connection is used. This can be done with a suitable wire or adapter.



### Install monitor speakers

By definition, near-field reference monitor speakers reduce indoor reverberation. This contrasts with conventional stereo configurations or large-scale speaker arrays during the recording period. In the latter two environments, the sound from the speakers passes through the ceiling, walls and floors, greatly enhancing the sound. Near-field monitors provide great flexibility due to the reduced sound-to-ear path, making the sound less susceptible to different room environments. Equally important is the ability to adjust high frequency and low frequency characteristics. It compensates for the effects of indoor irregular environments and achieves high precision sound. See the High Frequency Adjustment and Low Frequency Adjustment section of this manual. Note that these adjustments are only available for T6.

A depressing indoor environment usually requires an increase in high response. Similarly, lowering the high frequency direction can change the indoor reverberation. The first reflection of the woofer can be compensated by adjusting the low frequency, whether it is a reflection from the floor in a common stereo setting or a reflection from a mixing console (when the monitor is placed on the tuning table bridge).

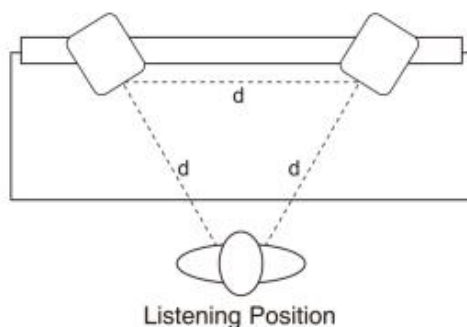
Placing the monitor near the back wall, side wall or corner enhances the low frequency effect. In general, if you move the monitor to two or three feet from the wall or corner, the low frequency

reverb will be worse (excluding the mixer's reverb). However, when the speaker can not be placed in the best position, the use of low adjustment is a solution. We assume that there are now two different studios, one in the room, the monitor speakers are close to the wall, and in the other room, they are far from the wall. The same sound effects can be achieved in both rooms by simply adjusting the low frequency response of each monitor. This method is very useful for synthesizing in room B based on the sound of the A room.

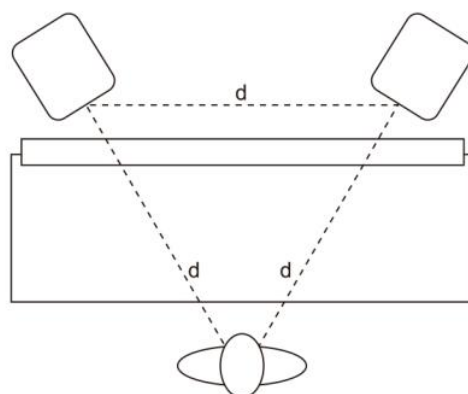
Placing the monitor in the correct position in the studio is critical to its performance. Primarily, they are placed in such a position that all of the speakers that are listening to the same level are completely covered. An effective way to test the audio and video effects of a monitor is to play a very familiar CD record by listening to the sudden and weak position of the dead angle, adjusting the angle of each speaker.

### Two-channel setting

**Near Field Configuration** - In the control room, the monitor speakers are often placed on the tuning bridge or in the near field listening position. The initial position is determined by measuring a simple equilateral triangle (equal length of the three sides) with its apex at the center of the listening position (as shown in Figure 1) as a "coverage" for stereo installation. In this configuration, each of the left and right monitor speakers is placed at an angle of 60 degrees to the listening position and at the same distance.

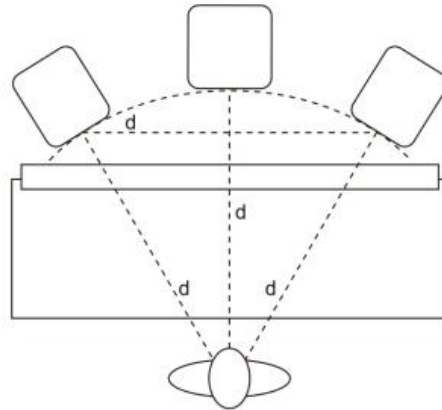


**Midfield configuration** - This configuration method is basically the same as the near field configuration. (See Figure 2.) The midfield configuration is usually used when the monitor speakers are large or when the monitor speakers are too large to fit on the mixer's bridge. This setting gives you a better overall position and better spatial audio and video effects. Make sure that the height of the woofer is higher than the height of the mixer's instrument bridge.



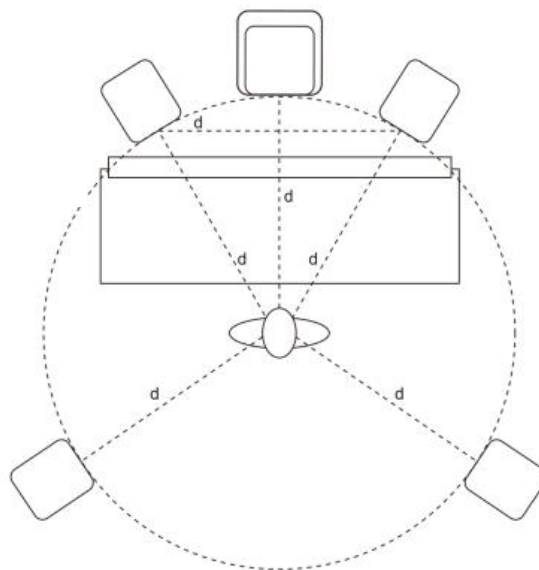
### Bass speaker settings

First determine the best position for the woofer. If possible, the settings shown in Figure 3 work best, however, this setting may not be feasible for your room. After the monitor speakers are installed, listen to some audio and video materials that contain low frequency information. If the subwoofer has a phase switch, adjust it to the highest frequency. Move the switch back and forth to find the best setting position. Then adjust the low-pass filter of the speaker to work with the high-frequency of the auxiliary device, and then re-adjust the level of the speaker.



### 5.1 channel surround sound settings

First place the left front and right front channels at the same distance from the listening position and at a 30 degree angle to the center channel. The left surround channel (rear) and right surround channel (rear) should be placed at a 110 degree angle to the center channel. They should also be equally spaced from the listening position. The subwoofer (providing low-effect) channels are best placed directly below the center channel as shown in Figure 4. If this is not possible, place the subwoofer on the left or right side below the center channel. Make sure the woofer is above the console.



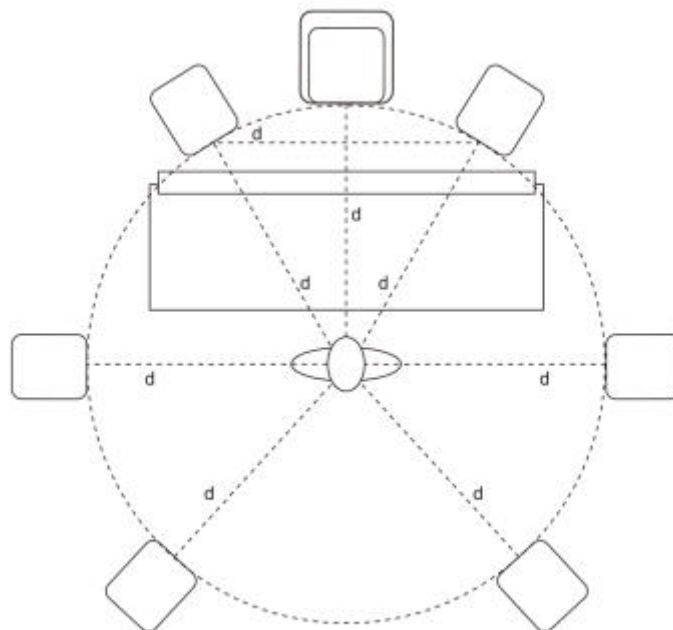
## 7.1 channel surround sound settings

The 7.1-channel surround sound unit adds two speakers to the sides of the mixing position, which is very similar to the real surround sound configuration of a movie theater - the difference is that the cinema usually adds extra side surround sound to compensate for the space length of the theater.

The left front and right front speakers usually form a wider triangle (related to the mix position) than the 5.1-channel setting to more accurately replicate the actual effect of the cinema. The front speakers are not for the central position but from the exterior is directly facing the theater. This is also the case where the movie sound is mixed. As with the 5.1 surround settings, the center channel speaker is placed directly in the center position. Similarly, when the subwoofer is placed directly below the center channel, it works best. If this is not possible, place the subwoofer on the left or right side below the center channel.

Like the three front speakers, the left and right surround speakers are placed on either side of the same distance from the mix position. Finally, the left and right rear surround speakers are placed at the same distance after the mix position. The 7.1-channel surround sound environment is a completely immersive environment and the best choice for mixing environments, because in a mixing environment, sound can be felt from front to back from left to right.

After the monitor speakers are placed, you need to adjust the system benefit adjuster for each speaker to ensure that all channels have the same sound pressure level output at the listening position. Although this can be done simply by listening to one channel at a time and adjusting the correlation level, we recommend using a sound pressure level meter and filtering noise (Pink noise) to detect each channel separately. Simply read the sound pressure readings for each monitor and then adjust all monitors to match the lowest sound pressure level reading. The system level of multi-channel surround sound should now be in balance.



## Troubleshooting

### **Question: If there is no power supply, please check if it is.**

- The power plug is properly inserted into the IEC socket and AC power outlet on the back panel of the unit.

The AC mains voltage matches the system operating voltage requirements (see section on connecting the system for changing voltages on page 3). If the AC mains voltage is higher than the voltage selected by the monitor, the fuse may need to be replaced. (See the section on connecting the system on page 3 for replacing the fuse).

- After the monitor speakers are powered up, the uandksound company logo on the front panel will be illuminated. If not, turn off the power switch and check the AC power fuse. Never use an fuse that is larger than the specified amperage. Turn the power switch back on and the power indicator should be lit.
- If the fuse is replaced due to need, and the fuse is blown again when the monitor is re-energized, the speaker needs to be returned to the merchant or uandksound for repair.

### **Question: If you can't hear anything**

- Repeat the steps in the troubleshooting section described previously before proceeding.
- Check that all other audio equipment that uses the same AC outlet is still working.
- confirm:
  - The audio source cable is connected to the audio output terminal and the monitor speaker.
  - System gain adjuster clockwise to maximum (+6dB).
  - Signal sources (such as mixing consoles, workstations, CD players, etc.) can be output to the monitor speakers.
- If one of the monitor speakers is working properly. Replace the audio cable of the normal working device with the audio input cable that does not work on the monitor. This can be determined whether it is due to the monitor itself, the faulty cable, or other faults in the audio system.
- If the monitor is still not working properly, it should be sent back to the purchaser or Uandksound for repair.

### **Question: If the monitor speakers suddenly stop working.**

- Turn down the monitor speaker volume or turn it off.
- Repeat the steps in the troubleshooting section above before proceeding.
- Carefully check that the rear panel of the amplifier is hot. If the monitor is operating for a long time with maximum power output, it may cause the device to overheat and the protection circuit unit will immediately shut down the system. uandksound monitors provide maximum circuit protection for AC power surges, amplifier overloads, and overheating of the amplifier. Turn off the monitor and wait for 30 minutes for the back panel to cool sufficiently. Turn the power switch back on
- Increase the volume and check if the system is working properly.
- If the monitor is still not working properly, it should be sent back to the merchant or uandksound for repair.

**Question: Sound quality is not new**

- Repeat the steps in the troubleshooting section described previously before proceeding.
- Disconnect the signal cable from the monitor input. Turn on the power and bring your ear close to each drive (tweeter and woofer)

Listen for noise (such as a slight snoring or snoring). If there is no sound at all, it is possible that one or more of the drives (tweeter, woofer or both) have failed. Problems may also exist in other locations of the electronic device.

- Play some undistorted sound material with low volume. Carefully cover the tweeter (blocking sound) without touching the diaphragm. Does the woofer emit a clear sound? If there is no clear tone quality or no sound at all, the woofer will most likely need to be replaced.

• Covering the woofer can mainly listen to the treble of the tweeter. Does the tweeter sound clear? If there is no clear tone quality or no sound at all, the tweeter may need to be replaced. If you have a better idea about the cause of the malfunction, please call and tell our maintenance staff. They will help you determine the best solution for solving the monitor problem. Please call the maintenance department.

**Question: The monitor speakers beep, hum or other high-pitched noise**

- These suggestions can help you eliminate the uncomfortable noise emitted by the system.
- Make sure the power cord is tightly connected to the IEC socket on the back of the monitor. Check that the signal source is connected to the monitor speaker and that the connector is a fully balanced system. If you connect the unbalanced output to the monitor, make sure the signal uses pin 2 and pins 1 and 3 are connected to the signal ground. This can be achieved by suitable wires or fittings.
- All audio equipment should use the same grounding point. Check all other equipment in the building that use the same AC output.

Such as dimmers, neon lights, TV screens, and computer monitors. These devices should not use the same circuit.

For the most up-to-date troubleshooting information, please visit our website at [www.Uandsound.com](http://www.Uandsound.com)

Please take care of and carefully read the warranty card in the monitor's shipping carton. You must obtain a “RMA” from uandsound before shipping the equipment back to uandsound: If there is no such important serial number, the equipment will not be accepted by the company and will not be repaired.

**Shipping instructions**

- To be shipped back to uandsound as safely as possible, please use the shipping carton and initial packaging when purchasing uandsound monitor speakers.
- Uandsound is not responsible for equipment damage caused by packaging negligence during shipment. Please Purchase insurance for shipment.
- If the monitor speaker has exceeded the warranty period and you wish to obtain a price list

before repairing the product, please call our company. Take the "RMA" serial number. We will not perform any repairs on the equipment without this serial number.

- Replacement cartons and packaging materials can be used at uandksound Systems, LLC. \$26.50 each.
- If you need to replace the parts quotation, please contact your local dealer.

## Specifications

Model	T4	T6
<b>Treble unit</b>	1" wire mesh dome NEO	1" wire mesh dome ferrite
<b>Woof unit</b>	4" Kevlar fiber	6" Kevlar fiber
<b>Input type</b>	XLR-1/4" TRS Combo 10k ohm balanced Pin 1+ bushing = ground Pin 2+ ferrule = (+) high level Pin 3+ collar = (-) low level	XLR-1/4" TRS Combo 10k ohm balanced Pin 1+ bushing = ground Pin 2+ ferrule = (+) high level Pin 3+ collar = (-) low level
<b>Adjustment device</b>	System level adjustment +6dB to -30dB variable Ground separation Disengage (open) or ground (close) Limiter indicator Open, close or limit Automatic mute Turn it on or off High frequency adjustment - invalid / effective Low frequency adjustment - invalid / effective	System level adjustment +6dB to -30dB variable Ground separation Disengage (open) or ground (off) Limiter indicator Open, close or limit Automatic mute Turn it on or off High frequency adjustment +1dB, flat, -1dB Low frequency adjustment All space (3dB52Hz) One-half space (-3dB60Hz) Quarter space (3dB75Hz)
<b>Zoom &amp; Insurance Fuse</b>	High frequency: 5 Watts Low frequency: 30Watt5 2.0A 100VAC 50HZ 2.0A110-120VAC50/60Hz 1.0A220-240VAC50/60Hz	High frequency:30Watts Low frequency: 60Watt5 3.15A 100VAC 50HZ 3.15A110-120VAC50/60Hz 1.6A220-240VAC50/60Hz
<b>Frequency response</b>	56Hz-22KHz +/- 2dB	49Hz-22KHz +/- 1.5dB
<b>Maximum voltage level</b>	Music: 104dB Maximum: 107dB	Music: 108dB Maximum: 111dB
<b>Size</b>	24.5cm H x 15.1cm W x 17.6cm D	34.6cm H x 22.05 cm W x 24.8cm D