



Cardio Entertainment



Frequently Asked Questions



Frequently asked questions

How does Audeon work?

Audeon is a wireless audio system and uses UHF radio signals in the 863 MHz to 865 MHz ISM band. The audio signals are converted to radio waves similar to those used in FM broadcasting which are transmitted from a small aerial. The personal receiver uses the headphone lead as the aerial and reproduces the audio signals just like a portable VHF FM radio.

Do we need a licence?

Wireless audio transmissions are licence free within the 863 MHz to 865 MHz pan European ISM licence free band provided the equipment conforms to the European Council Directive 199/5/EEC which applies the standard EN 301 357. If you wish to use the system in another band (channel 69) you will need a special event licence from JFMG in the UK. Other countries have different rules and conditions for channel 69 so you will need to ask the appropriate authority.

How far will the signals go?

Up to 100 metres in line of sight depending on reflections in the venue. We do know that a range of over 400 metres has been achieved but this is exceptional.

What reception can I expect?

Up to 90% coverage in 90% of the venues. Experience has shown that most venues can expect 100% coverage.

How many receivers can we have?

Like normal radio transmissions the number is unlimited provided they are within the service area.

How good is the sound quality?

The Audeon system uses the same type of transmissions as FM radio so the quality is the same as you can expect from your radio at home.

What type of headphones do we require?

Any good quality headphones will work with the audeon system. They should have an impedance of 32 ohms or greater. Low impedance headphones are not suitable for Audeon.



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You say that the Audeon receivers are portable and can be fixed to fitness equipment, how?

The new RX7 attaches permanently to the exercise machine. The RX6 receiver is portable, but if required it can sit in a power supply and charger which is fixed to the machine. The receiver can only be removed from the machine with the special release key which is supplied to the club.

I have heard that transmitting 8 channels will cause interference. Is this so?

Some competing systems which use single channel transmitters do have problems with interference caused by intermodulation. The Audeon system transmits on all 8 channels from the same aerial so it does not have this problem.

I only have 4 input sources do I have to have an 8 channel transmitter?

You can use an 8 channel transmitter with only 4 channels fitted into the card frame with the other positions fitted with 4 blank front panels. The RX6 and RX7 receivers can be reprogrammed for 4 channel working.

I wish to have a 16 channel system can Audeon work 16 channels?

You can use two Audeon transmitters, one on channel 70 and the other on channel 69. The receivers will need to be switched to 16 channel working (see the receiver instructions for how to do this).

I have a 4 channel transmitter and I wish to add some extra TVs and radio. How do I change to 8 channels?

You will need to add 4 new input modules (RF6) to the existing card frame. The 4 channel transmitter (MCTX-4) is fitted with the required connectors for an upgrade as standard. When fitting the new input modules the small channel selector switch will require to be set for the new channels. The receivers will also require reprogramming for 8 channel working.

Will my Audeon system work with self powered exercise machines?

Audeon RX6 receivers are charged up from the dynamo in the self powered machines with the CS 3 charger & power supply. The receiver is charged up to last for twice the time that the unit is operated. If the user cycles for 10 minutes then a 20 minute charge will be put in the batteries.

How long will the Audeon RX receiver last before the batteries require recharging?

Upto 16 hours from a fully charged battery.



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How long should I charge my Audeon RX6 receiver battery for?

10 hours (usually overnight) in the Audeon docking station will fully charge the receiver. If the receiver is installed in a CS charger & power supply attached to a fitness machine then it is charged from that machine. Powered machines such as treadmills will have a CS2 fitted which trickle charges the batteries. Self powered machines will have a CS3 fast charger fitted which will charge the battery for twice the time that the machine is being used.

I have heard that rechargeable batteries deteriorate and lose their charge if they are constantly charged up and discharged.

That was a problem which applied to the old Nickel Cadmium cells which deteriorated after a number of charging cycles. Audeon receivers have the much improved Nickel Metal Hydride cells which do not deteriorate and do not have the memory effect associated with the nickel cadmium cells.

How long before I have to change the RX6 receiver battery?

The current life expectancy of the rechargeable battery is over 2 years. We have found that receivers which have been returned for service and are over 2½ years require new batteries whilst other receivers have been in use for over 4 ½ years without any battery failures. Batteries are always replaced if the receiver is over 2 years old when they are returned for service.

How long will the installation take?

One day should be OK. There are no wires to run, apart from the two coax cables between the processor and the upconverter. You will not even have to close whilst the installation is in progress.

Can we have the transmitter in one room and the receivers in another?

Yes, but when the radio signals travel through walls but they are attenuated. The distance from the transmitter to the receiver will be much reduced and this is not recommended. An example where this arrangement can be used is in an adjacent room to the main area which is near to the transmitter aerial.

My venue is split over several floors can we use more than one aerial?

The Audeon system is not designed to use more than one aerial per upconverter as this will cause loss and distortion to the radio signals. Additional up converters can be installed with care but you must ensure that the areas do not interfere or overlap.



Frequently asked questions

If my Audeon system is faulty, what after sales service do you have?

Audeon has a dedicated service telephone line ([0113 252 5582](tel:01132525582)) staffed by experienced engineers who will be able to advise you. We will arrange for any site visits and deal with all returns.

I have a faulty receiver, what should I do?

Phone the Audeon service line ([0113 252 5582](tel:01132525582)) for assistance. The Audeon staff are all experienced engineers who will diagnose the problem and advise if you should return the receiver for repair. Audeon staff will always provide you with their name and a fault reference number which you should quote in all correspondence. All calls to the service line are logged to avoid any disputes at a later date.

How long will my receiver be away for repair?

We normally return repairs which have been sent back to the factory in 4 to 5 working days. Please send units back to the factory in a padded bag with a brief description of the fault and include your name, address and telephone number. You should always use a signed for service from the Post Office or your carrier in case of loss, we are unable to accept any liability for items which are lost in carriage. Repairs which are returned through a third party may take much longer due to the extra delays in carriage time. Repaired items will be returned by post or carrier and will need to be signed for.

What sort of warranty do you provide?

On new equipment we offer a 12 months back to base limited warranty except for the headphone leads which are consumable items. The warranty does not cover consequential loss, loss of earnings, third party liability or damage. If the units have been modified or are serviced by persons other than those approved by the manufacturer then the warranty is void.

You say that the headphone leads are not covered by the warranty, why?

The headphone lead receives a great deal of wear with the connector being plugged and unplugged many times in a day. The jack socket does wear out after about 1000 connections so you must expect to replace it after about 3 months. We can supply replacement headphone leads at a competitive price.

What warranty do you offer for repaired items?

On repaired equipment we offer a 3 months back to base limited warranty except for the headphone leads which are consumable items. The warranty does not cover consequential loss, loss of earnings, third party liability or damage. If the units have been modified or are serviced by persons other than those approved by the manufacturer then the warranty is void.



Frequently asked questions

Our club has been open for 6 months. For the first 4 months all was well but now we have a problem with the crackling headphone leads and poor reception. Is the system wearing out?

No, electronic parts do not wear out like mechanical ones. Your problem is that the thin wires inside the headphone lead (which is also the aerial for the receiver) are starting to break up. This is a normal situation when the receivers have a high usage, the solution is to change the headphone lead. Plan to change them every 3 to 6 months. Spare headphone leads are available in packs of 10 from your dealer or from the factory. You can change the headphone lead without the need for a service call. For the RX5 and RX6 simply unclip the lead from the receiver and remove. Replacement is the reverse of removal. For the RX7 you will need to use a small screwdriver to release the connector (please see the instruction sheet on changing the headphone leads). Your installer will show you how to do this as part of the staff training following the installation.

Will Audeon interfere with my mobile phone?

No, they work on different frequencies. The power transmitted by the audeon transmitter is 1000 times less than the mobile phone transmits.

Will my mobile phone interfere with Audeon?

There may be a small amount of interference but only when your mobile phone is next to the audeon receiver and only when the phone is actually transmitting.

My Audeon RX6 receiver switches off after 40 minutes why?

The Audeon RX6 receiver will shut down after 40 minutes in case it has been left on with the headphones connected. This is part of the design to conserve the battery power. The RX5 and RX6 receivers will shut down 40 minutes after the last time the channel change button was pressed. The RX6 receiver can be reset by pressing the channel change button once which will active the receiver to return it to the setting before it switched off.

Some members of my club have complained that the RX5 or RX6 receiver switches off after 2 minutes use and they have to turn the receiver off and then back on. Is this a fault with the receiver?

The receivers are designed to switch off after 2 minutes if the headphone lead is removed from the headphone socket. The microcontroller inside the receiver will test the left hand headphone to see if it is connected and if it does not detect the headphone then it shuts the receiver down. A faulty set of headphones could appear to the microcontroller as if they were not connected so it turns the receiver off. Try the receiver with a known good pair of headphones.

The radio signal is not strong enough can I use a TV distribution amplifier to boost the signal?

No, this will certainly cause noise and distortion and will mean that the system will not conform to the radio standards.



Frequently asked questions

Your website shows a single channel transmitter which can be set to work on the same frequencies as the multi channel one. Can I use 8 single channel transmitters instead of 1 multi channel transmitter?

We do not recommend using multiple single channel transmitters as this will cause an interaction between them which will appear as high noise and crosstalk between the channels. The single channel transmitter is, as it says, for single channel use although by careful positioning and the choice of channels it is possible to use up to 4 single channel transmitters in one installation. Please consult our technical help line (0113 252 5582) for further advice before placing an order.

Can the electronics in the receiver be damaged by moisture or sweat?

The receiver has a sweat proof flexible membrane moulded into the display panel to prevent the ingress of moisture which provides a seal for the channel select switch and the volume control. You should make sure that users always wipe the receiver after use as part of your hygiene routine.

Audeon products are manufactured in the UK by

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