

ATOHM®

RAFALE SERIES

VR1-X



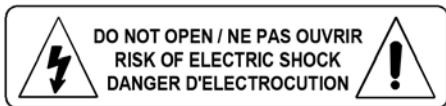
USER GUIDE



A great deal of effort has gone into designing and manufacturing this product to the highest possible standards to suit your requirements, whether it be for your stereo, multichannel, hi-fi or home theater system. Our products are renowned for their exceptional performance and unrivaled reliability. We are sure that they will provide you with entire satisfaction for many years to come.

PRECAUTIONS, WARNINGS:

Explanation of Graphical Symbols:



The lightning flash with arrowhead symbol, within the equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

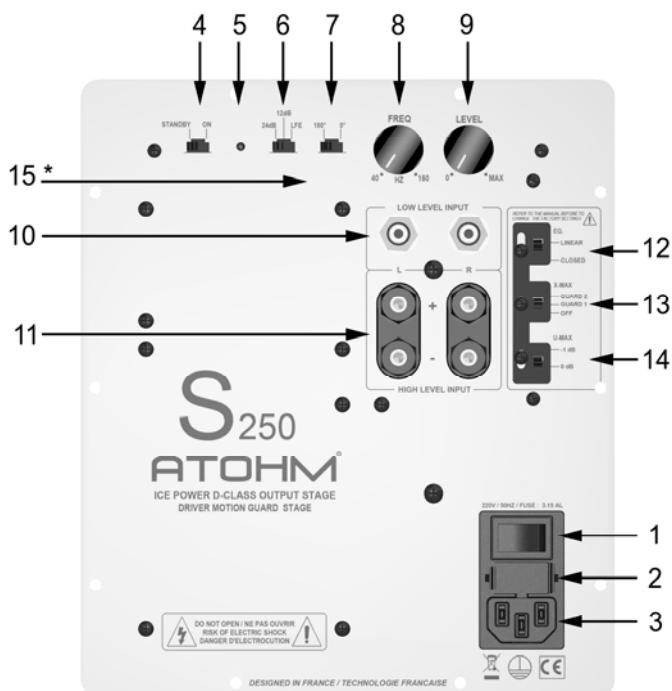
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Before installing your subwoofer, this user manual must be read thoroughly. If you have any doubts about how to connect the equipment, ask for advice from your dealer.

- Do not expose this product to rain or humidity and do not insert foreign bodies inside the device.
- Do not use the subwoofer close to a source of extreme heat (radiator, etc).
- If the power cable does not perfectly fit in your mains socket, consult an electrician and replace the socket. The power cable must never be walked or pinched. The mains socket must stay accessible at all time.
- Do not overload the mains sockets, multi-sockets or extension cables to avoid electrical shocks.
- Switch the subwoofer off when not in use (1). In case of lightning storm or long absence, disconnect from the mains (3).
- Only connect the device with the mains type indicated on the device's silkscreen or specific label. If you have any doubt, consult your electricity supplier or device dealer.
- Ventilation: Ensure that the front panel of the amplifier remains « unobstructed ». Do not cover the subwoofer or install it inside a closed cabinet.
- Never dismantle the amplifier module control panel to avoid the risk of electrocution. Your dealer and/or a qualified technician must be contacted for all servicing requirements.
- Fuse: In the event of a complete failure to function, first disconnect the power cable from the mains, and then check the mains fuse. When replacing the fuse, only use a fuse which is absolutely identical to the original one. If this does not solve the problem, contact your dealer.
- Never allow an output wire to come into contact with the earth ground (the amplifier chassis).
- Never handle the (6), (7), (12), (13), and (14) switches when the "Standby/On" switch (4) is ON. Always do it on STANDBY.
- Never change the factory settings which are locked by a screw (see control panel section).
- Cleaning and maintenance: Your subwoofer enclosure is made out of MDF (medium density fiberboard) with a natural wood finish. No special maintenance is required. For cleaning purposes always use a soft fluff-free cloth, which may be slightly moistened if necessary (we recommend the use of soft "micro-fiber" cloths). **WARNING:** Never apply solvents, detergents or any other alcohol based products.
- Do not use other accessories than the one supplied with the device or explicitly recommended by the manufacturer.
- Transport: When using a trolley, be careful moving the device to avoid injuries due to tipping.
- Keep wrappings out of reach of children. Suffocation hazard.

In the case of failure to observe the precautions for use the manufacturer's warranty will be immediately canceled.

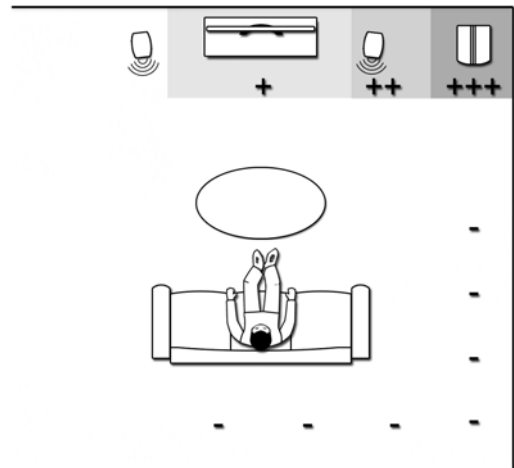
PANNEAU DE CONTRÔLE :



- 1 – Power On/Off switch
- 2 – Fuse
- 3 – Mains socket (cable supplied)
- 4 – STANDBY / ON switch
- 5 – « Standby » LED indicating mains connection, or security if blinking
- 6 – Filter slope selector: 24dB/Oct - 12 dB/Oct - LFE
- 7 – Phase switch 0-180°
- 8 – High cut-off frequency adjustment knob (40 to 150 Hz, not linear).
- 9 – Sound level adjustment knob (volume).
- 10 – Low level inputs (left and right)
- 11 – High level inputs (left and right)
- 12 – Factory setting EQ, do not modify
- 13 – Factory setting X-MAX, do not modify
- 14 – Factory setting U-MAX, do not modify
- 15 – Direct mode switch (*internal), do not modify.

SUBWOOFER PLACEMENT :

As a general rule we advise you to place your subwoofer at the front of the room, in line with the main speakers. Getting closer to a wall, and even more to a corner, will naturally amplify the sound of the subwoofer. Therefore the position labeled "3+" on the drawing will bring the highest sound level and efficiency. In doing so, you will also stimulate the natural reverberations of the room. The position labeled "2+" is a good compromise between efficiency (sound level) and homogeneity (coupling with main speakers). The position labeled "1+" favor homogeneity (coupling with main speakers, reduction of subwoofer's location) and slightly reduces room reverberations (but also sensed efficiency). According to your integration constraints, placing the subwoofer on the sides or behind your listening position (labeled "-" on the drawing) is not strictly excluded. However this type of positioning induces an inconsistency that make the subwoofer's location easier while listening (your ears detects the subwoofer's position more easily, which leads to a less consistent sound stage). If you have the possibility to experiment various positions, do so and take on the one that, in your listening conditions and due to your criteria, provides the best result while listening.

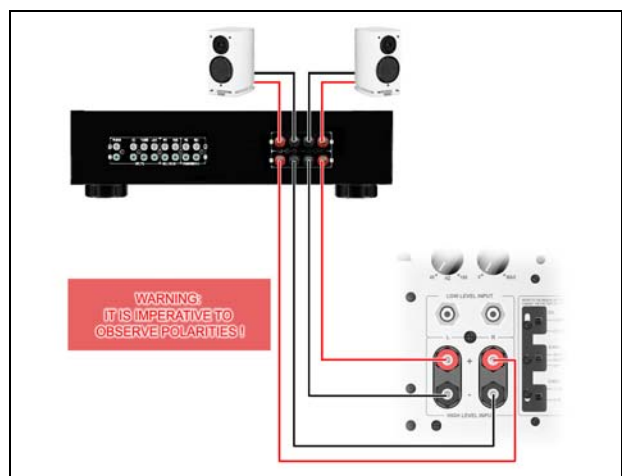
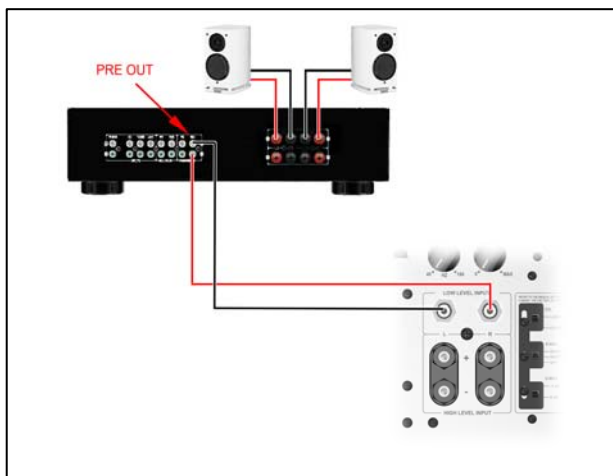


A wall, and therefore a corner, naturally amplifies the sound of your subwoofer, sparing work to the amplifier (compared to subwoofer in the center of the room with a fixed sound level: you gain +6dB against a wall, +12dB in a corner, knowing that doubling the amplifier's power only let you gain +3dB of sound level).

STEREO CONFIGURATION

If your integrated amplifier (or preamplifier) has a « pre-out » low level output, connect the low level inputs of the module to the outputs (Left and Right). If your amplifier does not have « pre-out » outputs, then connect the speakers outputs of the device to the « High Level » inputs of the subwoofer amplifier module (this connection is parallel to the speakers).

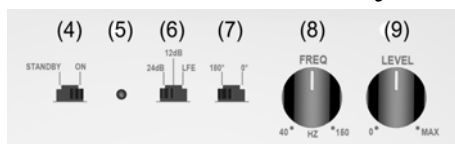
It is imperative to observe polarities (risks of destruction of both devices)!! Never connect High Level and Low Level Inputs at the same time.



Associated settings

Warning: switches (6) and (7) must only be handled when the Standby/On switch (4) is on STANDBY.

Adjust the Freq switch (8) according to your main speakers size (between 9 and 12 o'clock for columns and between 12 and 3 o'clock for bookshelves). *Please note that this setting is not linear.*



Adjust the filter's slope (6) according to your main speakers type: 12dB for closed box and 24dB for vented box.

If the EQ switch (12) is set on "linear" position, the phase switch (7) must be set on 180° for a 12dB slope, or 0° for a 24dB slope. If the EQ switch (12) is set on "closed" position, then the phase switch (7) must be set on 0° for a 12dB slope, or 180° for a 24dB slope.

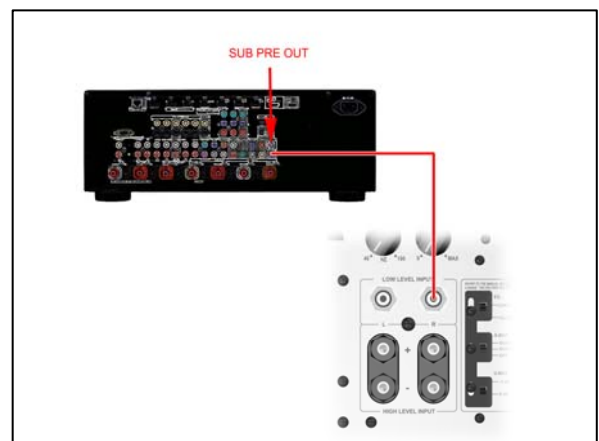
Adjust the volume (9) at your convenience.

HOME CINEMA CONFIGURATION

Connect the "SUB PRE-OUT" output of the integrated amplifier or audio-video processor preamplifier to one of the "Low Level" inputs of the subwoofer's amplifier module.

If you want to set the high cut-off frequency of the subwoofer using your audio-video processor, it should be done by setting the slope selector (6) on "LFE" position. The cut-off frequency adjustment (8) is then disabled so that it can be set by the "setup" menu of your Audio-video device.

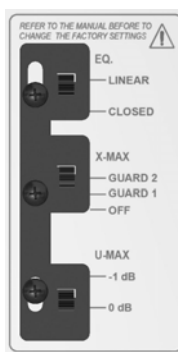
However, if you want to adjust the cut-off frequency using the subwoofer's amplifier module, you should set the cut-off frequency to its maximum value on your Audio-video device. Then follow the "associated settings" indications of the previous chapter: stereo configuration.



FACTORY SETTINGS:

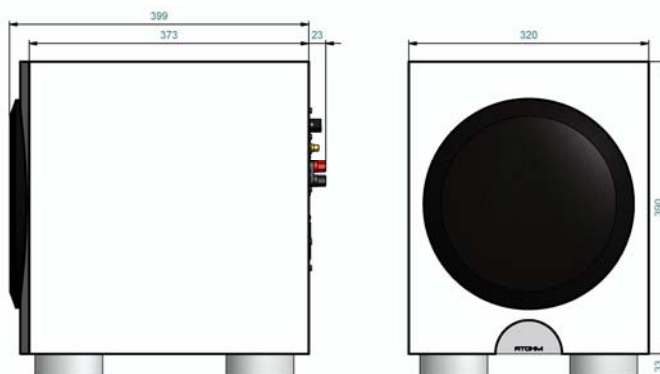
Reminder : The "factory settings" switches (12), (13), (14) have positions that are specific to each subwoofer's model and must never be modified by user (risk of damaging the loudspeaker, resulting in immediate cancellation of warranty).

- EQ (12)**
Linear Mode: Designed for vented box
- X-MAX (13)**
X-GUARD 2 Position: Maximal protection
- U-MAX (14)**
0dB Position: Nominal voltage limit



TECHNICAL SPECIFICATIONS AND DIMENSIONS (With the S250 (XG-30) amplifier module)

Active subwoofer :	Vented box
Frequency response :	33-150 Hz (-3dB)
Ported tuning frequency :	36 Hz (with port firing on ground)
Max SPL :	111dB / 40-100Hz @ 1m (Half space) Dist<3.5%
« Absolute series » woofer :	LD230CRA04
Driver unit efficiency :	90dB / 2.83V / 1m
Amplifier module :	ATOHM S250 (XG-30)
Amplifier module power :	220 Wrms
Peak power :	260W / U-guard (soft clipping)
Active excursion control :	X-guard technology (+/- 20mm max)
Low level input :	2x RCA
High level input :	2x 4mm banana plugs
Frequency response :	38 to 150Hz
Phase control :	0-180°
Filtering slope :	12dB-24dB-LFE
Supply voltage :	115V / 230V
Power consumption :	320W max
Cabinet :	MDF 18mm (36mm on front side)
Decoupling :	« high damping » EPDM foam
Finish :	Satin black / Satin white
Dimensions :	320*400*423 (mm) 12.6*15.75*16.75 (inch)
Weight :	19.5Kg



In a continuing effort to improve our products, technical characteristics are subject to change without notice. ATOHM® is a registered French trademark manufactured and distributed by Welcohm Technology (France).

This subwoofer / amplifier module is in compliance with the RoHS Directive 2002/95/CE on the restriction of use of hazardous substances in consumer electronics.



It also complies with the WEEE Directive 2002/96/CE on electrical and electronic waste disposal. Please note that this product must not be disposed of along with ordinary household garbage. When it reaches the end of its life cycle it should be returned to an appropriate recycling facility.

By conforming to the above directives you are contributing towards environmental conservation and protection of natural resources and health.



The subwoofer/amplifier module you have just acquired is covered by a 1 year warranty against defects in material and workmanship, starting from the date of purchase. However, if you return this warranty form duly filled out and accompanied by proof of purchase with your dealer's stamp, we will extend this warranty to two years.

Not included in the warranty:

- Damage due to inappropriate use (bottoming out, / tearing / warping / exposure to water, etc)
- Damage due to over powering (burnt voice coil)
- Damage due to extended output short-circuit
- Damage due to mains power supply problems (power surge,thunder etc)
- Damage due to poor installation (bad connections, faulty contacts etc)
- Damage due to a wrong packing
- Damage due to a defective auxiliary device(s)
- Any component or driver unit which has been serviced or modified in any way by a third party.
- Product on which serial number label that has been removed

Last Name:

First Name:

Postal address:

E-mail address (imperative):

Purchase Date:

Dealer's name and commercial stamp:

Product Reference:

Serial N°: