

APart

SUB SERIES



MANUAL



SUB2400

INFO@APART-AUDIO.COM



APART THANKS YOU

Apert thanks you for purchasing its SUB-2400
Read this manual carefully to get the best result out of your sub system.

To improve reproduction of lower frequencies, it is advisable to add subwoofers to your sound system.

To calculate the number of subwoofers needed, determine the maximum rated output of a single subwoofer.

Placing your subwoofer near one or more boundaries, increases the SPL by 3-6dB for each boundary (for certain frequencies).

Features

- Neutral black design
- Unique overload protection
- Mono 4 or 16 ohm driven
- Band pass (4th order)
- Twin coil 10" woofers (2 pieces)
- Great power handling
- Smooth punchy bass



The combination of using two bandpass chambers and the push pull principle, results in a rather small cabinet.

A 4th order bandpass system results in a lower natural cutoff frequency, a great power handling and a good transient response. The frequency graph shows a high level of efficiency and very good bandpass characteristics. The two, twin coil, 10" woofers have a lower mass to move and are therefore much quicker, punchier, than bigger woofers. We have compared the SUB2400 to a single 15" (150 litre) and a 18" (200 litre) vented subwoofer and we were surprised ourselves. The Apert SUB2400 are mussels from...

The combination of the Apert Mask, full range, speakers, the Apert Pubdrive, active three channel amplifier, and the Apert SUB2400 gives you the winning team !!!



MASK6 Series

Our mid-sized MASK is an extended-range full range loudspeaker fitted with a 6" LF driver and our smooth sounding dome tweeter on a Vari-throat horn. The sound will be projected over a wide coverage with a SPL which will surprise you.

The normal MASK6 is an 8 ohms model.

The MASK6T models include a multi-tap 100V transformer; when bypassed you have a 16 ohms loudspeaker.



MASK6BL



MASK6W

MASK8 Series

The senior MASK is a full range loudspeaker fitted with an 8" LF driver and our smooth sounding ferro-fluid cooled silk dome tweeter on a 360° Waveguide horn for high output, without getting aggressive.

The coated paper cone together with the stiff suspension results in a well controlled sound. This wooden bass reflex loaded model is only in 8Ω available.

You can use the MASK 8 anywhere you need a BIG sound from a rather small enclosure.



MASK8BL



MASK8W



Wiring

The two speakon connectors are wired in parallel. The rocker switch gives you the possibility to turn your SUB2400 into a 4 or 16 ohm version.

To get the best result in producing low frequencies, keep the total impedance of your sub system as high as possible, certainly when using cable runs of more than 10 meters. Adding more subwoofers gives more balls to your low frequencies, than the little gain you get from the extra watts you draw from your amplifier, by working on a lower impedance (2 Ω for example). By keeping the impedance higher, the loss on power (voltage) will be a lot less on longer cable runs.

A team with more players is not only more impressive, but has a lot more reserve on power!

The -1/-2 and the +1/+2 are wired in parallel, so cables of a heavier gauge can be created. This results in a better bass response.

To avoid confusion, use cables which have clear (colour) codes, so correct polarity can be maintained. Also use wires of the right gauge, certainly for longer distances.

Load	2,5mm ²	4mm ²
2 Ω	<7,5m	<12,5m
4 Ω	<15m	<25m
8 Ω	<30m	<50m
16 Ω	<60m	<100m

equity between loss and cable length

As long as you stay under these cable lengths the loss of amplifier power will remain below +/- 10%.

4 Ω

4 Ω

16 Ω

16 Ω

16 Ω

16 Ω



Total impedance : 2 Ω

1200 Watt

GOOD

Total impedance : 4 Ω

900 Watt

BETTER



Overload Protection

A thermal overload protection has been integrated to prevent you to burn your woofers. When you feed your SUB2400 with too much power, the signal will be cut. Turn down the audio level and after a few seconds your punchy subs will be heard again.

Safety information

Important Safety Instructions

Before pushing your loudspeaker volumes to the edge, take a few minutes to read these instructions carefully. This little time might avoid claims afterwards.

1. Keep this manual for future reference.
2. Clean only with dry cloth.
3. Do not operate near heaters or place it on other apparatus which produce a lot of heat.
4. Take care for the speaker leads. Never use damaged leads and install them in such a way that no one can walk on it.
5. Only use accessories specified by the manufacturer.
6. Make sure the mounting surface can easily support the speaker's weight.
7. Use only industry-accepted rigging tools and methods.
8. Choose the right speaker for the right job.
9. Use sufficient loudspeakers and avoid death spots.
10. No main power shall be connected to the loudspeakers.
11. This apparatus should only be serviced by qualified personnel. If not, the warranty might be void.
12. Removal of the grill causes risk to loudspeaker damage.
13. Use cables of the right gauge, certainly for long runs.
14. Use cables with clear colour codes and maintain polarity throughout the whole system.
15. Switch amplifiers on with the volumes turned completely down to avoid loud clicks and clacks.
16. Avoid loud feedback for this is a main speaker killer!
17. Please check the units' condition after unpacking. If the outside of the carton box has been damaged, inform your shipper immediately.

Music colours our lives but too much sound might damage yours and other's hearing permanently!

Being exposed to loud sound levels over a long time can cause severe hearing loss.

Don't forget to consult the local

law directions regarding producing sound in public places. In some countries ear protection is obliged when the continuous sound level over 8 hours time is 80dB (A). Each halving of time allows an increase of 3dB.

Too weak amplifiers can burn your speakers

By pushing your amplifier or its inputs too much, your amp can produce more power than the power published in his manual.

This power is not always clean and can be very distorted. When such signal is fed into your loudspeakers for a longer period, damage can be the result. Don't cut in the budget of your amplifier. A loudspeaker can demand to ten times the average power to reproduce those smashing sonic bursts you are kicking on. If your amplifier has enough reserve power, your sound will remain clear. When you squeeze your amp's throat, he'll be pushed to produce sounds which will kill your tweeters first.

Protection systems are not built to be activated all the time, they are there to warn you and to give you a safe margin!



Pubdrive 2000



The PUBDRIVE-2000 is a 3 channel amplifier, created to drive left and right top cabinets and a subwoofer unit. The amplifier is designed for professional use. Its sturdy metal housing can easily be mounted in a 19" rack or be used as a table top amplifier. The sober front panel is crystal clear and easy-to-operate.

All installers features are available at the back of the amplifier. Each input has a parallel output available to link the signal to other amplifiers or processors. The selectable X-over point for the left and right channel allow the system designer to create the perfect sound synergy, no matter what location you are using the PUBDRIVE-2000 in.

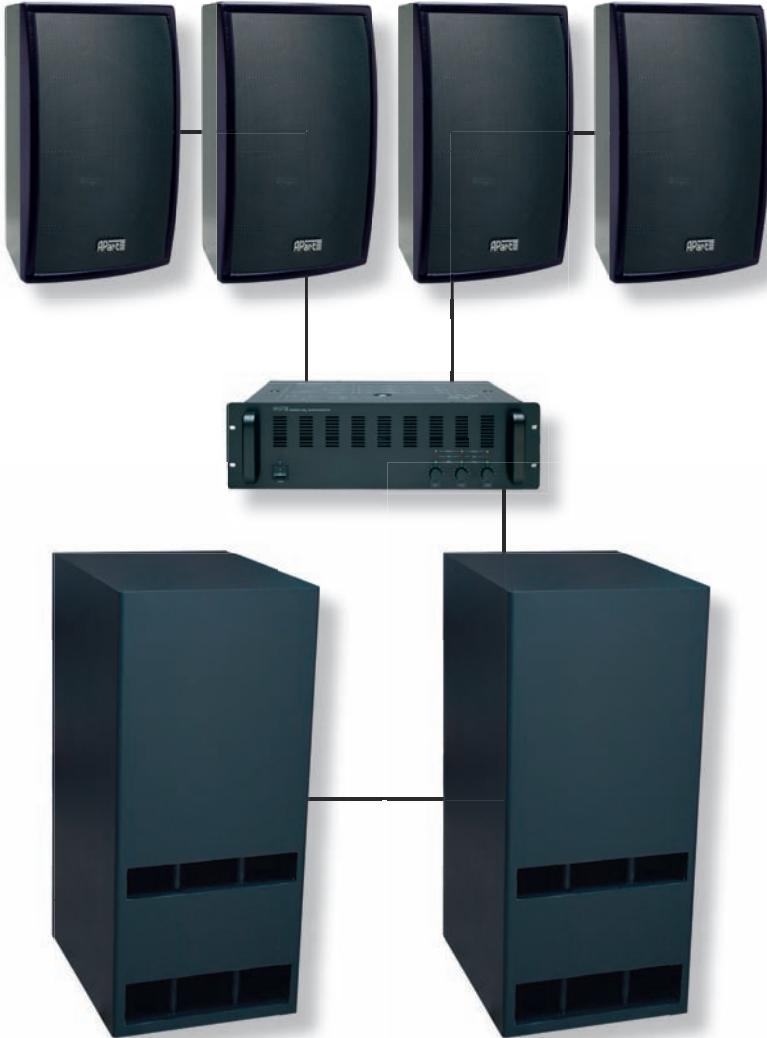
The pre-amp out and amp-in make it possible to link the processed signal to additional power amplifiers, insert extra sound processors or just use the PUBDRIVE-2000 as a power amplifier (the X-over section is by-passed, but the volume controls and limiters are still after the AMP-IN input).

The design is based on the best components without any compromise. Huge power is always available, no matter what speakers you are driving. The left and right channel can be charged with 2.7 Ohm loads while the SUB channel accepts 2 ohm loads.

The PUBDRIVE-2000 is equipped with 2 very silent variable speed fans (Left + right channel and SUB channel). The fans will turn at 50% as soon as a temperature of 50° C has been reached. When the temperature exceeds 70° C, fans will turn at full speed. The oversized power supply with thermal protection circuit and soft start, together with the integrated AP-limiter® make the PUBDRIVE-2000 a fail-proof amplifier, 24 hours a day, 7 days a week!



Pubset 2000



The PUBDRIVE-2000 is also at the heart of the new APart PUBSETS. Completed with the APart passive subwoofers and MASK cabinet loudspeakers, these PUBSETS will offer you a fail-safe, coherent and powerful audio system for pubs, restaurants, fashion shops and others.

PUBSET-2000: 4 x MASK8 + 2 x SUB2400 + PUBDRIVE-2000

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