

Owner's Manual

F300

eficion

The loudspeaker that sings

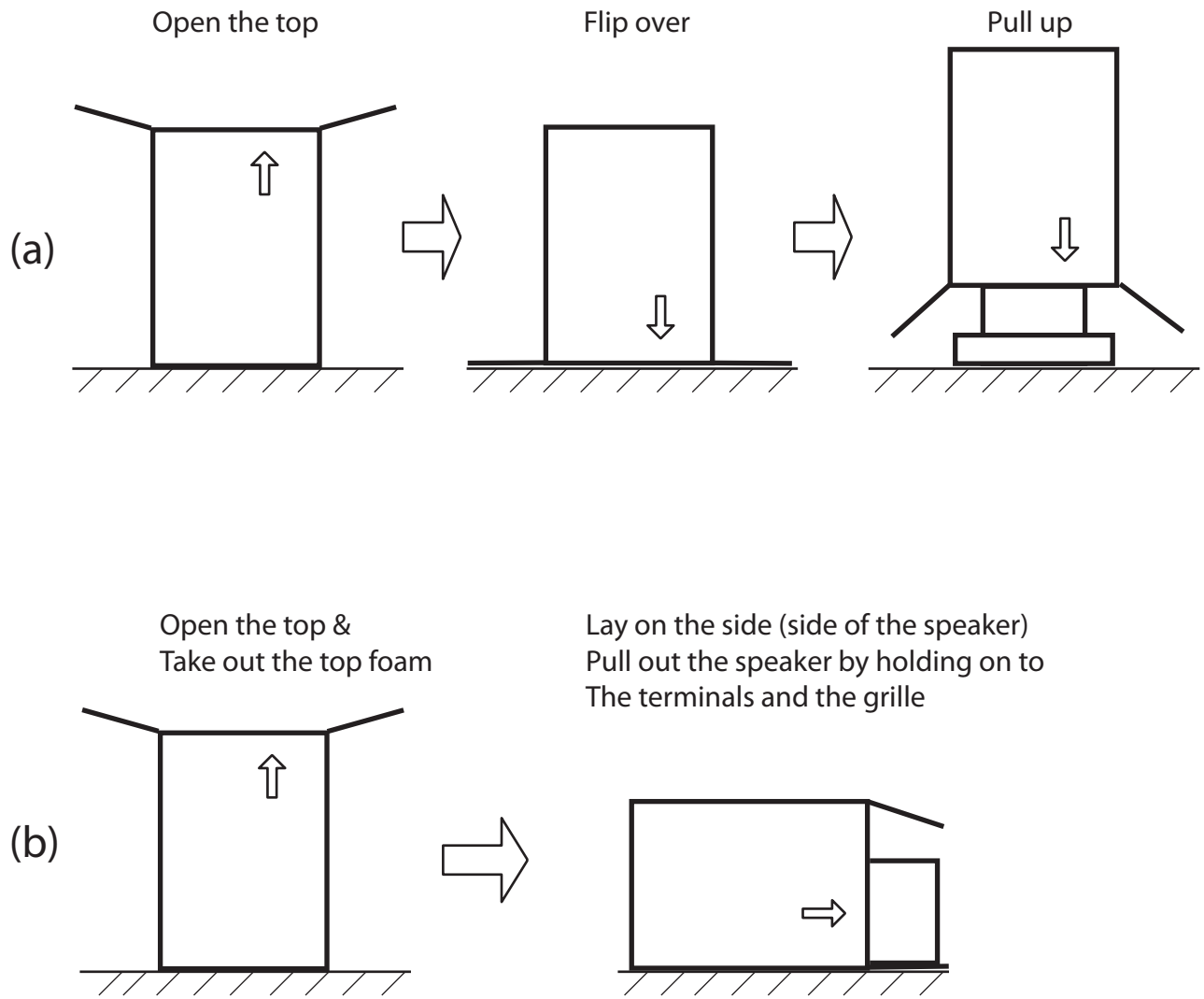
Dear Customer,

We would like to thank you for choosing a pair of our speakers and congratulate you on your choice. This manual is to provide you information for properly setting up the speakers and to optimize the performance.

Safety Precautions

Do not place any magnetic sensitive electronic devices, such as magnetic data storage systems and computers, within approximately two feet of the speaker.

Please refer to Figure 2A or 2B for proper speaker cable connections.



Note: accessories such as spikes are contained in the concave spaces of the bottom packaging form.

Fig. 1 Unpacking

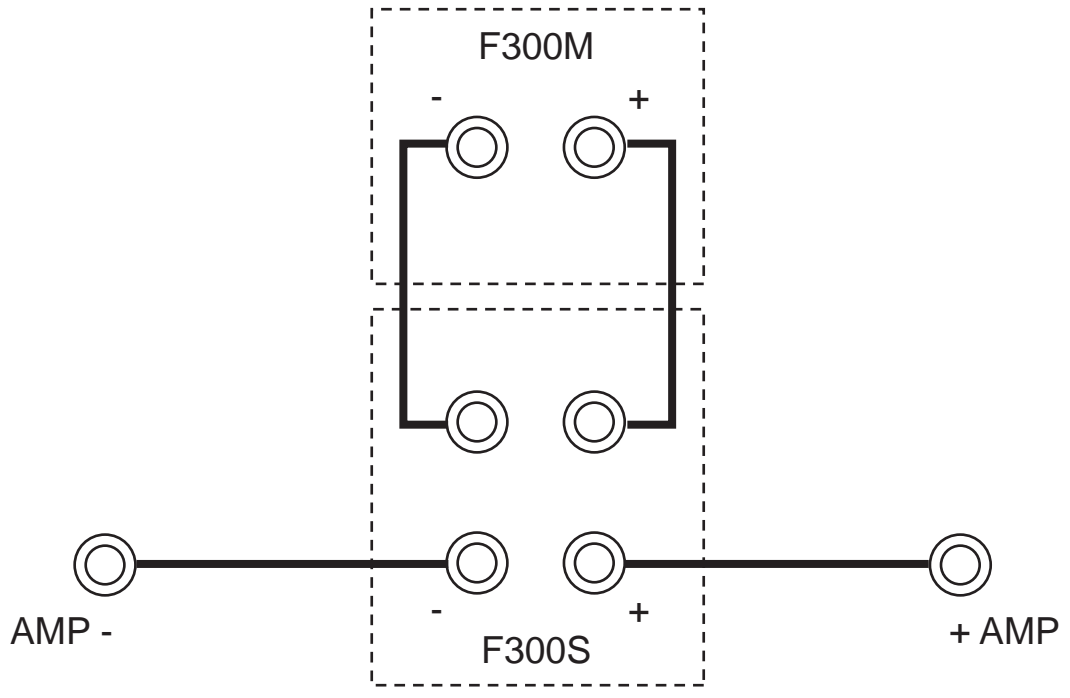
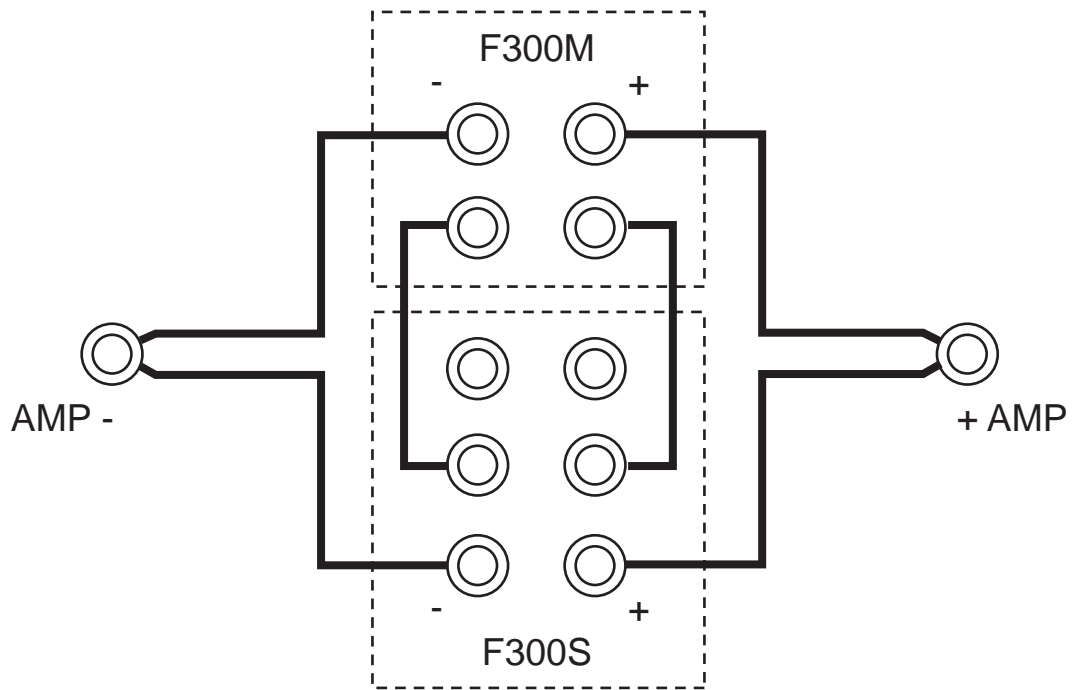


Fig. 2A single-wire model connections

(a) Bi-wire connections



(b) Single-wire connections

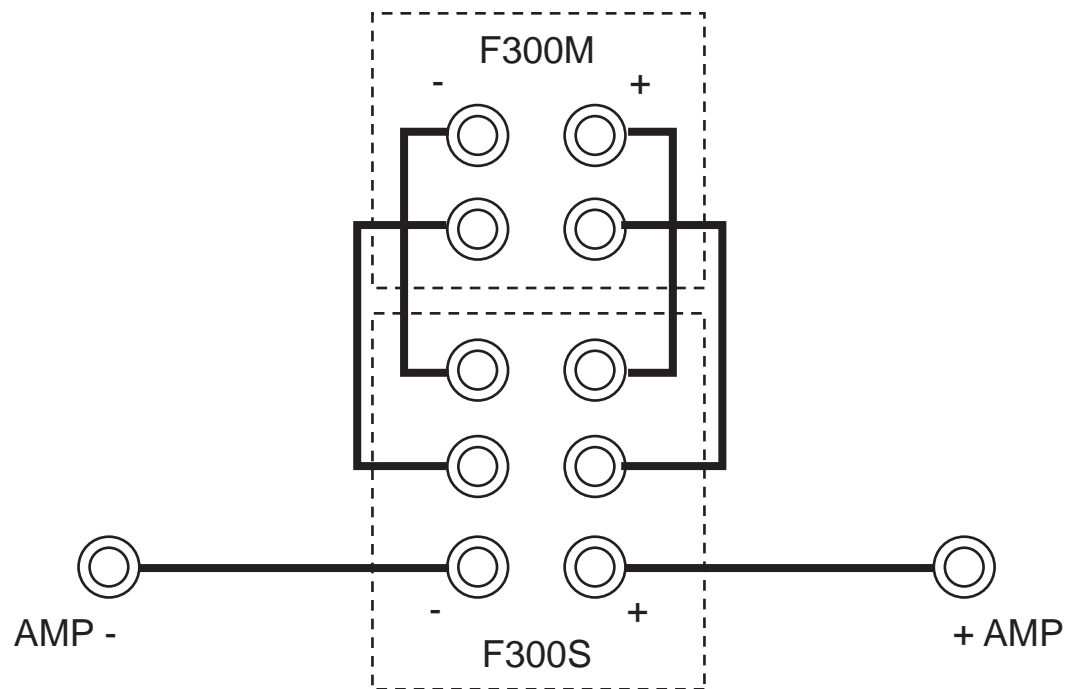


Fig. 2B bi-wire model connections

Unpacking and Handling

The F300, especially the bass unit (F300S), is both heavy and relatively delicate and must be handled carefully. When moving the speaker still in the cardboard box, gentle rolling is generally allowed. But dropping from at height should be absolutely avoided. It is preferable to unpack the speakers close to the position at which they are to be used.

Figure 1 illustrates two alternative ways to take the speaker out of the box. **After taking out the speaker, please also take out the foam at the bottom as accessories are placed in the concave spaces of the foam.**

Speaker Placement

The speakers should be placed 7 to 9 feet apart (measured between nearest sides) for a natural sound stage. Too far apart, while focus still maintains, the sound stage may become artificially wide. An ideal listener to speaker distance should be that the two speakers and the listener are at three corners of an equilateral triangle. Ideally, the speakers should be at least 2 feet away from the back and side walls. Moving the speakers further from the walls will generally reduce the volume of bass. Space behind the speakers will also help to extend depth of the sound stage. Because of the uniform sound dispersion, distance to the side wall is not as critical as that of dome tweeter speakers. Also because of the wide and uniform horizontal dispersion, toe-in (speakers pointing at the listener) is generally not needed, in fact, not preferred as less toe-in may fill the room better.

Most room treatment experiences are developed based on the widely used dome tweeter which beams sound and tends to have problems with rooms. The F300 employs an air motion tweeter, which has a wide and uniform horizontal dispersion pattern and is a dramatic departure from the dome tweeter, the F300 is less affected by the room, and placement is relatively more forgiving. However, since the F300 produces substantial amount of bass, bass traps, especially at the corners, can often make quite a difference. Hanging heavy fabrics at the corners can be a

simple yet elegant solution.

Bulky objects, such as a tall equipment rack or a rear-projection TV set, placed directly between two speakers have negative effect on the sound stage. They should either be moved as far back as possible or be covered with a sound absorbing material, such as a heavy curtain.

Speaker Installation

It is important to ensure that the speakers stand firmly on the floor using the height adjustable spike feet supplied whenever possible. The spike feet are designed to press the carpet to the floor surface. For hard surface floor, place a puck supplied underneath each spike foot.

Place four isolation pucks on top of each bottom unit (F300S), and then rest the top unit (F300M) on the isolation pucks.

Tapes covering the tweeters (front and back) need to be removed before powering up the speakers. First you need to gently pull off the grille.

Figures 2A and 2B illustrate cable connections to the speakers. In the single-wire model shown in Fig. 2A, the crossover circuit is in the bass unit (F300S). Amplifier is connected to the "IN" terminals of the bass unit. Using the provided cables to connect the bass unit's "OUT" to the top unit's "IN". In the bi-wire model shown in Fig. 2B, both the top unit (F300M) and the bass unit (F300S) have crossover circuit. The speaker can either be connected as bi-wired or single-wired. Please follow the Fig. 2B for appropriate connections. For bi-wire model, using bi-wire is always recommended. Bi-wiring may provide more improvement than a pair of expensive single-wire cables. Keep cable as short as possible may be more beneficial than an expensive but long cable, as inductance, which affects high frequency response, is proportional to the cable length. See inductance formula in straight wire conductor:

$$L = 5.08 \cdot l \cdot \left(\ln \frac{4l}{d} - 1 \right)$$

, where L = inductance (nH), l = length of conductor (in), and d = diameter of conductor (in).

Apparently increasing diameter is far less effective in reducing the inductance than reducing length of the wire.

Break-in Period

The performance of the speaker will change subtly during the initial listening, as the suspension materials of the drivers need time to loosen up. Generally 8 hours of break-in will get you most of the performance. However, as many as 80 hours may be needed to fully break in the woofer.

To some people, the break-in process is also a psychological one, as our brain needs to re-tune to a new kind of sound. Fully appreciating the F300 may happen only after a week of listening to it.

Aftercare

The cabinet surfaces usually only require dusting. Soft cloth dampened with warm water may be enough to remove grease. If you wish to use chemical agents, choose with caution and always test first on a small area on the back of the speaker. Avoid products that are abrasive, or contain acid, alkali or anti-bacterial agents. Do not use cleaning agents on diaphragms of the drivers. Do not cause strong air flow to or from the tweeter diaphragms.