100 Watt Subwoofer Amplifier #300-802



Specifications

Rated Power Output:

Signal to Noise Ratio: Input Power: Dimensions: Enclosure Cutout: Weight: 75 watts RMS into 8 ohms @ 0.1% THD 100 watts RMS into 4 ohms @ 0.2 % THD 90 dB A-weighted 120 VAC, 60 Hz, 180 watts, fuse protection 7-1/2" W x 8-11/16" H x 4-3/4" D 6-½" W x 7-¾" H 7.6 lbs.



PARTS EXPRESS 725 Pleasant Valley Dr., Springboro, OH 45066-1158 PHONE: 937-743-3000 ♦ FAX: 937-743-1677 E-MAIL: sales@partsexpress.com Thank you for purchasing the #300-802 Subwoofer Amplifier. It has been designed and built to provide years of high quality sound reproduction, and is ideal for use in both home stereo and home theatre systems. The amplifier has been engineered to include features like a choice of high or low-level audio connections, selectable crossover frequency, auto on/off circuit activated by input signal, and comprehensive internal protection against shorted speaker loads, thermal faults, and overload conditions.

Inputs and Outputs

- **High-Level Inputs:** Speaker level inputs using binding post type jacks to permit connection with banana type plugs or spade terminals. Used to connect from the speaker outputs of the full range amplifier to the input of the subwoofer amp with speaker wire. A mono signal is derived from the stereo speaker level source, which then feeds the subwoofer amplifier crossover input.
- **High-Level Outputs:** Speaker level outputs using binding post type jacks to permit connection with banana type plugs or spade terminals. Used to connect from the subwoofer amp to pass signal from the full range amp on to the main L/R speakers. Signal is only present on this output if the high level input is also used. The signal to the L/R speakers will be shaped by an internal 6 dB/octave 125 Hz high pass filter.
- Low-Level Inputs: Line level RCA inputs to connect the pre-amp or line level outputs of the full range amplifier to the inputs of the subwoofer amplifier. The inputs are internally summed to mono.
- Low-Level Outputs: Line level RCA outputs that provide a line level full range output for the connection of additional equipment. This output is only available when a signal is present at the Low Level Input.
- **Subwoofer Connection:** Wire leads that are terminated with insulated .250" female slip-on connectors. The red wire is the positive (+) connection, the black wire is the negative (-) connection.

Controls

- **Power Switch:** On, Off, and Auto mode. When the Auto on position is selected, the amp is in a standby mode until an input signal is detected. The amp will go back to standby mode some minutes after the input stops. In Auto mode, the Power LED will remain illuminated, even when the amplifier is standing by.
- **Phase Switch:** Changes relative subwoofer phase from normal (0°) to reverse (180°). Helps to blend the subwoofer with the other speakers in the system, and with the room. Adjust for the most pleasing response observed at the primary listening position.
- Gain: Adjusts the output level of the subwoofer amplifier.
- **Frequency:** Used to determine the frequency of the internal variable electronic crossover. Adjustable from 40 Hz to 180 Hz, and has a slope of 12 dB per octave.

Notes About Hum

The addition of a new component to an existing system can sometimes result in an audible hum. While it would be easy to assume that the new product is at fault or even defective, it is usually just an indicator that it is time to take a closer look at the overall grounding of the audio system. To start with, verify that all audio equipment is on the same AC power circuit. The outlets in an area may or may not all be on the same breaker, some could even be on a completely different breaker panel. Always make sure that all equipment grounds are in good condition, and NEVER remove the ground pin from a power plug. There are some cases where the actual power line has some form of interference but the most common cause of noise is a ground loop, meaning that the system's different ground points lack a common potential. The cable TV line can be the cause of hum in multi-source home audio/video systems. Just temporarily disconnect the cable line, and if the hum stops then the use of an inline isolation transformer (part #180-075) is suggested. Other situations may require the installation of an improved earth ground (connection to a metal water pipe or grounding rod) in the vicinity of the audio/ video system. The key is to proceed slowly and step by step, taking care to identify which cables or combinations of cables cause noise when connected. If the hum cannot be eliminated by any practical means, the use of the speaker level inputs is suggested.