

IWA 250 – Backbox Installation

Backbox Installation: Backboxes are available for mounting the IWA 250 chassis in the wall, flush with the finished wall surface ("IWB" - In Wall Box), or for mounting on the surface of the wall, with a 4" projection ("SMB" - Surface Mount Box). The mounting location should be capable of supporting a weight of at least 75 pounds. Surface mounted units ("SMB") should be located near a dedicated AC power source, capable of providing the required power for the unit being installed. When flush mounted ("IWB"), the front surface of the backbox must be flush with the finished surface. Failure to do so may cause improper fit of the chassis (or security cover).

Either IWA Series backbox ("IWB" or "SMB") should be connected to electrical service (15 Amp max.) by a licensed electrician, to ensure compliance with local electrical code. Cables should route through appropriate conduit, raceway, or service entrance cable fitting.

Mount the backbox with the internal cable tray assembly located on the right side. The "IWB" can be mounted between standard 16" center studs, using the six mounting holes on each side of the box. The "SMB" can be mounted onto standard 16" center studs, using the four outer-most "keyhole" slots, or onto other suitable surfaces, using the six inner-most "keyhole" slots.

Wire Routing: Wiring that carries signals of dramatically different voltages must be separated by as much distance as possible. *Microphone and line level wiring should never be run with loudspeaker or power wiring. To reduce the potential of crosstalk or oscillations that could damage the amplifier, never bundle the microphone and line level cables with loudspeaker or power cables.*

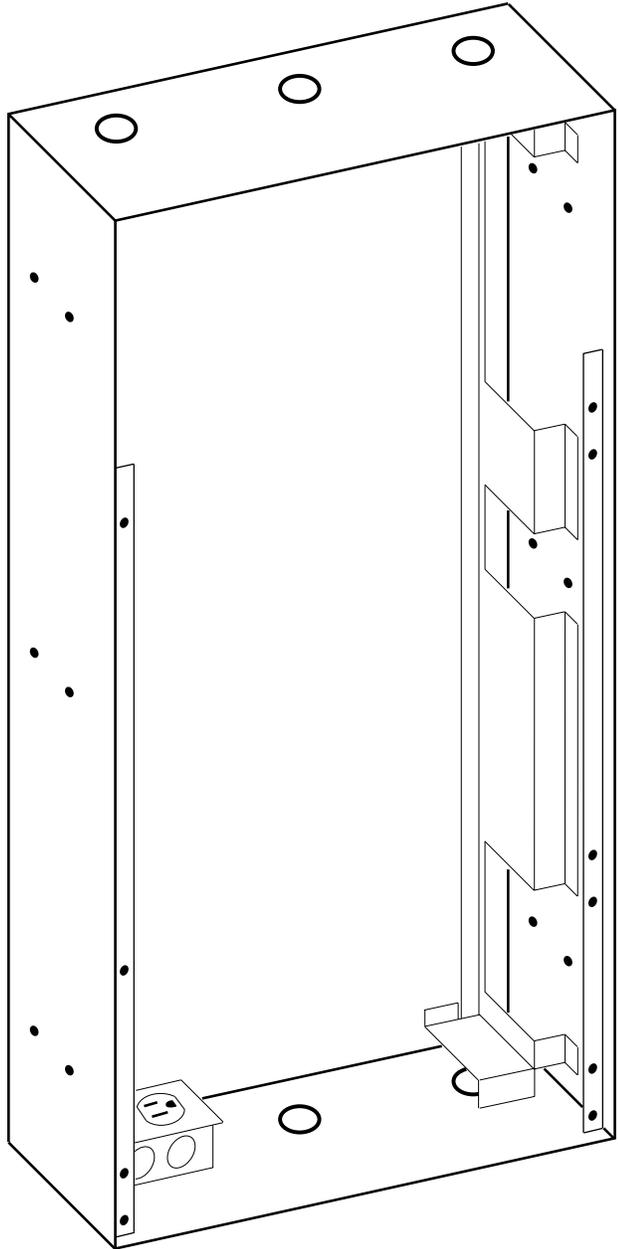
It is recommended that all loudspeaker wiring enter the backbox at the upper right "knock-out", and route through the cable tray. It is recommended that wiring for the microphone and line inputs should enter the backbox at the lower right "knock-out", and route under the bottom edge of the chassis.

NOTE: AC power should enter the backbox at the bottom left "knock-out" (a standard AC duplex outlet, with enclosure and cover, is provided). *For proper system grounding, the duplex outlet ground, enclosure, backbox, and conduit or raceway must be bonded together and connected to earth ground. For safety and conformance to codes, this bonding of all metal surfaces should be performed by a qualified electrician during installation of the backbox.*

The microphone and line level inputs require shielded wire for proper operation. Loudspeaker wiring may be unshielded. Loudspeaker wire should be of a heavy gauge, to prevent cable losses from degrading the system capabilities. Cable runs using 14 gauge wire should not exceed 90 feet (for 8 ohm operation) or 45 feet (for 4 ohm operation). Longer cable lengths require heavier gauge cable (smaller wire number). Constant voltage outputs (25, 70.7, or 100 volts) can tolerate lighter gauge cables or longer cable runs (check an appropriate line loss chart for specific application requirements).

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IWB
(In Wall Box)



SMB
(Surface Mount Box)

