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PADS™ Users' Manual
Ver 1.0
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PADS™ (Pragmatic Audio Distribution System) is a proprietary and patent pending technology for audio, power and control information on a single cable. The basic concept is as shown below in Figure 1. The source signal can be sent to a distribution hub via cat5 cable (in case of Hub4 P/N PH4) or directly connected to the hub (in case of Hub16 P/N PH16) using a PADS™ transmitter PT. From the hub, the cat5 cable connects to PADS™ receiver / amplifier / speaker combinations. (i.e. PTS1 PADS™ Tube Speakers with built-in amplifier and receiver, PA15R receivers with amplifier, etc.) The distances between each of the components can be as much as 330 ft. on the cat5 cables. Certain receiving components can be extended to 500 ft to 1000 ft on the cat5 cables. Consult factory for details on these long haul products. The loop output on the hub makes the system infinitely expandable by cascading additional hubs.
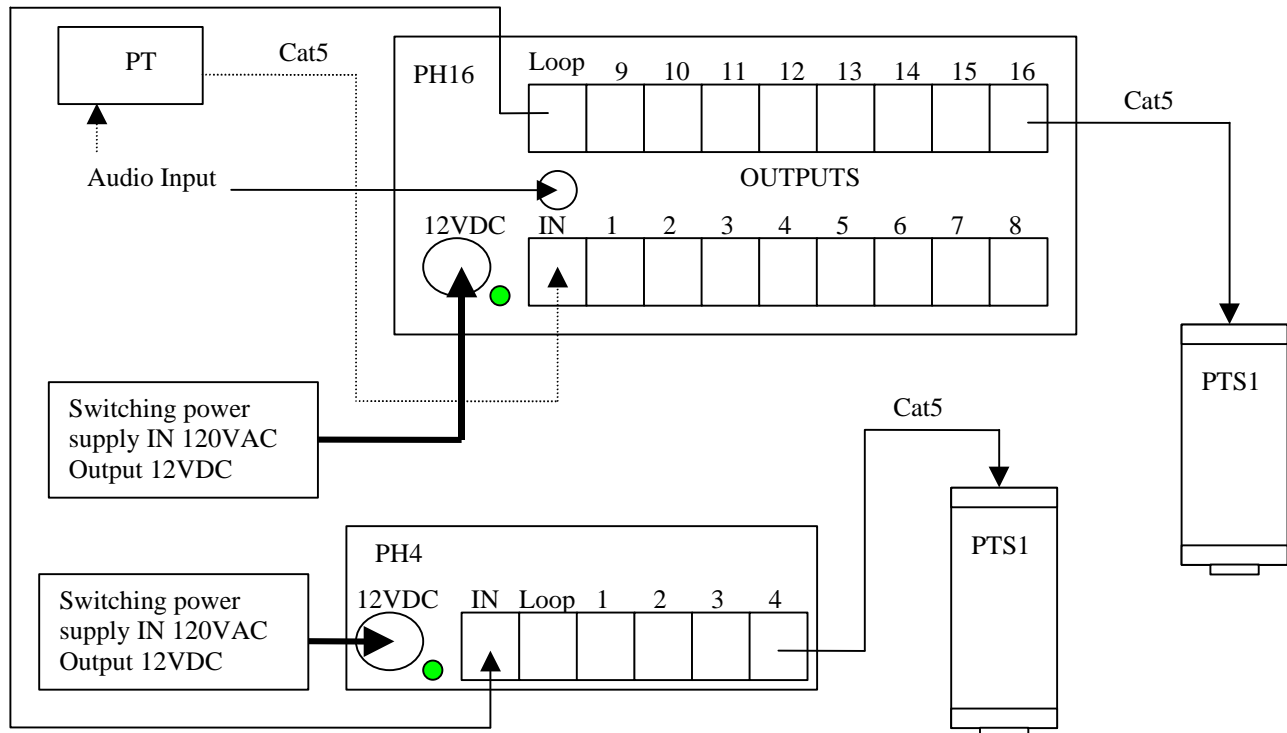

Figure 1

The cat5 color code should be consistent on both ends. Use EIA568A standards color code. Use only straight through cat5 cables. **CAUTION: DO NOT USE CROSSOVER CABLES. POSSIBLE PERMANENT DAMAGE TO THE EQUIPMENT WILL OCCUR.**

PADS™ Specifications:

PH (PADS™ Hub -4/16)

>
> Inputs: 3.5mm Stereo-jack, RJ45
> Outputs: RJ45
> Loop output: RJ45
>
> 12VDC power supply
> LED power indicator
>
> PH-4: 5.8" x 2.7" x 0.9"
> PH-16: TBD x TBD x 0.9"

PTS1 (PADS™ Tube Speaker)

>
> Input: RJ45
> 12VDC
> Frequency response: 120Hz - 20KHz (typical)
> Distortion: <0.1% (typical)
> Dynamic range: >90 dB
> Signal-to-noise ratio: >90 dB
> Power output: 81dBSpl @ 1W / 1m (typical)
> Output pattern: Omni-directional
> Size: 2" x 4.8" (typical)

Installation Instructions:

Step1: Pre-wire the job site with standard cat5 cables from the hub location to each speaker location.

Step2: Terminate the cables with standard RJ45 plug conforming to EIA568A wiring color code.

Step3: Verify that the cables are straight through, do not have any crossovers or opens / shorts using a cat5 cable tester.

Step4: Install the PTS1 by connecting the RJ45 plug on the cat5.

Step5: Secure the PTS1 to the EMT pipe using the set screw and a hex key. Caution: Do not over tighten the set screw

Step6: Connect all the RJ45 plugs into the PH-16 or PH-4 and power up the system.