

12 in 1 Modulator System White Paper

Model PDI-50121

PDI's next generation 12 in 1 modulator system provides exceptional feature and performance characteristics not commonly found in the average 12 in 1 modulator system.

EXCLUSIVE FEATURES:

1. Sealed compartmentalized power input and RF control sections for high RFI integrity. The powering section within the modulator module is isolated from the RF section to eliminate possible "cross talk" on the DC power lines.
2. PDI's unique cast aluminum alloy housing is an extra one inch in length. This provides additional finger room when working with 12 in 1 PDI pre-racked headends. The PDI-50121 modulator is 100% compatible with competitive 12 in 1 systems.
3. DC power is coupled to the RF section with soldered feed-thru capacitors.
4. A metal Meatex braid is used on the mating surface between the cover and chassis. The braid improves RFI shielding over a case to module seal, ensuring the unit exceeds FCC integrity requirements.
5. Will accept 4.5MHz audio carrier for microwave or external stereo applications.
6. Unique air flow channels are molded into the vertical sides of the housing, insuring superior cooling characteristics and longer life.
7. The modulator uses dual precision SAW filters, video & audio and audio only, providing 10 dB additional isolation. This improves the modulator's intermodulation characteristics.

ADDITIONAL FEATURES:

8. Nickel plated brass "F" connectors are standard, replacing cast "F" connectors. This provides a considerably stronger "F" connector and it insures superior RF connectivity.
9. Grounding lugs are provided to minimize ground loops.
10. Connector identification is molded into the casting.
11. The PDI-50121's advanced modulator chip offers improved stability, performance and circuit simplicity.
12. Sound THD (Third Order Distortion) is <1% maximum.
13. The PDI-50121 is BTSC Stereo compatible with a single space stereo module. Competitive units require two spaces.



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