

DAP Series

Digital to Analog Processor

The Digital to Analog Processor (DAP) is a complete single channel solution for delivering digital television programming over existing analog networks. The DAP is a perfect transition unit for existing analog processors to ensure uninterrupted delivery of off-air signals from new digital broadcast sources. The DAP permits operators the ability to embrace the approaching FCC mandated February 17, 2009 digital transition deadline and ensure uninterrupted delivery of off-air programming to subscribers. By deploying the DAP now an operator can immediately take advantage of the superior quality digital off-air broadcast transmissions that are currently available. The unit supports the decoding of all 18 ATSC (Advanced Television Systems Committee) standard formats including 8VSB as well as Annex B QAM 64 & QAM 256 signals.

The DAP is housed in a one rack high unit and features a backlit 2 x 16 character LCD screen and push button navigation switches to allow interaction with the simple to follow user menu functions for programming. Input and output tuning is easily accomplished with either the front panel menu interface or via the optional Remote Network Card; only one per headend is needed for complete configuration and control. The DAP supports standard EIA CATV, IRC, HRC and Broadcast channel plans in the 54—864 frequency range. All channel frequency information, with appropriate FCC offsets, is pre-programmed and tuned electronically via microprocessor. The unit is also equipped with the Emergency Alert System (EAS) feature which can also be used as an alternate IF input.

- Accepts All ATSC Digital Input Standards, 8VSB, 64 QAM, 256 QAM
- Outputs All Broadcast and CATV Channel Assignments in the 54-864 MHz Range
- Remotely Configure All DAPs in a Headend with Optional Remote Network Card in one DAP unit.
- Perfect Digital Transition Solution to Offer Analog Versions from Digital Sources



**BLONDER
TONGUE**
LABORATORIES, INC.

DAP Series

Digital to Analog Processor



○ Features & Benefits

- Accepts All ATSC Digital Input Standards, 8VSB, 64 QAM, 256 QAM
- Outputs All Broadcast and CATV Channel Assignments in the 54-864 MHz Range
- Remotely Configure All DAPs in a Headend with Optional Remote Network Card in one DAP unit
- Perfect Digital Transition Solution to Offer Analog Versions from Digital Sources

○ Specifications

Input — 8VSB Mode

Tuning Range:
UHF 14-69, VHF 2-13 or CATV 2-135
Data Rate: 19.392 Mbps
Input Level: -20 to +20 dBmV
Modulation Type: 8VSB ATSC Compliant
Input Connector: "F" Female

Input — QAM Mode

Tuning Range: CATV 2-135
Data Rate:
QAM 64 Annex B: 26.9 Mbps,
Auto Detection
QAM 256 Annex B: 38.8 Mbps,
Auto Detection
Input Level: -20 to +20 dBmV
Input Connector: "F" Female

Output — RF

Frequency Range: 54-864 MHz
Channels: CATV, VHF, UHF (STD, HRC, IRC)
FCC Offset (pre-programmed):
0, +12.5, or 25 kHz
Output Level: +60 dBmV
Output Level Adjust: 10 dB
Aural/Visual Carrier Ratio: -15 ±5 dB
Visual Carrier Frequency Tolerance
Standard Channels: ±10 kHz
FCC Aeronautical Channels: ±5 max kHz
4.5 MHz Aural Inter Carrier Frequency: ±150Hz
Channel Selectivity:
Adjacent Aural and Below: -40 dB
Adjacent Picture and Above: -50 dB

Spurious Outputs: -60 dBc
C/N Ratio In Channel: 67 dB
Broadband Noise: -80 dBc
Output Impedance: 75 Ω
Output Return Loss: 14 dB

Output — IF

Aural Frequency Standard: 41.25 MHz
Visual Frequency Standard: 45.75 MHz
Composite IF Loop Output
Aural Carrier Level: +20 dBmV
Visual Carrier Level: +35 dBmV
Output/Input Impedance: 75 Ω
Output Return Loss: 16 dB
Input Return Loss: 20 dB
EAS/ALT IF Input Level: 36 dBmV @
45.75 MHz
EAS/ALT IF Switch Isolation: >60 dB

General

Power Requirements
Voltage: 117, ±10% VAC
Frequency: 60 Hz
Power: 25 W
Fuse: 0.40 A
Temperature Range: 0 to +50 °C

Mechanical

Dimensions (W x H x D):
19.0 x 1.75 x 14.5 in.
483 x 44 x 368 mm
Weight: 7 lbs., 3.18 kg

Connectors

ATSC/QAM: "F" Female
IF Output: "F" Female
IF Input: "F" Female
RF Output: "F" Female
EAS/ALT IF: "F" Female

Controls

Video Level: Control
Aural Carrier Level: Control
Audio Level: Control
LCD: 2 Line x 16 Character Display
Switches: 5 Push Button Navigation
Switches

Indicators

Video Over Modulation: LED, Red
Audio Over Modulation: LED, Red
EAS/ALT IF: LED, Green
Stereo: LED, Green
Ethernet Option:
Link: LED, Green
RX: LED, Green
TX: LED, Green

○ Ordering Information

Stock No.	Model	Description
6290	DAP	Digital to Analog Processor
6290-RNC	DAP RNC	DAP Equipped with Remote Network Card (Only One Required per Headend)

Accessories

2738	DAP-RNC-FIK	DAP-RNC-Field Insall Kit
------	-------------	--------------------------



**BLONDER
TONGUE**
LABORATORIES, INC.

Blonder Tongue Laboratories, Inc. • One Jake Brown Road, Old Bridge, NJ 08857
©2008 Blonder Tongue Laboratories, Inc. All Rights Reserved. Specifications subject to change without notice.
All trademarks are property of their respective owners.
800-523-6049 or 732-679-4000 • www.blondertongue.com