# **Digital High Definition Television Processor**

**DHDP** Series



### O Features & Benefits

- Digital & High Definition Processor
- MICM Form Factor
- 54-860 MHz 8VSB Input
- 54-860 MHz CATV Output
- Excellent Noise Performance 88 dBc @ 10 kHz & 98 dBc
  @ 20 kHz
- +40 dBmV Digital Output Level (+45 dBmV Analog Signals)

The DHDP Series is a two-unit system consisting of a Downconverter unit which acts as the input section and an Upconverter unit which acts as the output section. Both units are housed in a single MICM style die-cast chassis.

The Downconverter unit is designed to accept any 8VSB signal from 54-860 MHz. Channel entry is made using a 2 digit front panel accessible BCD switch. (I.E. - VHF 2-13, UHF 14-69 &

unused spectrum 806-860 MHz). The Downconverter outputs an IF signal which is fed to the Upconverter unit.

The Upconverter unit is designed to take the IF signal from the downconverter and process it to any channel from 54-860 MHz. Channel entry is made using a 2 digit front panel accessible BCD switch. (I.E. - CATV – STD, IRC & HRC as well as Broadcast VHF & UHF).



Specifications and Ordering Information are located on the following page.

## **Digital High Definition Television Processor**

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#### Specifications

#### **DOWNCONVERTER**

RF

Input Frequency Range: (8VSB) VHF 2-13: 54-216 UHF 14-69: 470-806 UHF Extended: 806-860

Operating Input Range: -10 to +20 dBmV

Input Level Range:

(AGC Controlled) -20 dBmV to +25 dBmV Adj. Ch. Rejection: (Ref. to +30 dBmV IF output) Adj. Aural and Below: >65 dB

Adj. Visual and Above: >65 dB Output Frequency: 44 MHz IF

Output Level:

+30 dBmV (-20 to +25 dBmV Input) L.O. Leakage on RF Input Port: -50 dBmV Phase Noise: @ 10 KHz Offset -85 dBc/Hz

General

Power Requirements: +12 VDC: 85 mA +5 VDC: 190 mA

Operating Temperature Range: 0 to +50 °C

Mechanical

Dimensions (W x H x D): 1.15 x 3.5 x 7.5 in., 29 x 89 x 101 mm

Weight: 0.8 lbs., 0.36 kg

**Connectors:** 

RF Input: "F" Female IF Output: "F" Female

Power: 3 Pin Polarized Receptacle

Controls:

Channel Selection: 2 Digit Push Button Channel Enter: Push Button

**Indicators:** 

Power On/Status OK: 2 color LED/Green Status (Error): 2 color LED/ Red

**UPCONVERTER** 

Output Frequency Range: 54-860 MHz Channels: CATV- STD, IRC, HRC Broadcast; VHF, UHF Output Frequency Tolerance: ±5 KHz

Output Level:

. Analog: +45 dBmV (IF Input +35 dBmV) Digital: +45 dBmV (IF Input +30 dBmV)\* Output Level Adj. Range: +35 - +45 dBmV

Channel Flatness: 1 dB

Spurious Output 50-1000 MHz: -60 dB

C/N Ratio In Channel: Digital: -60 dB (6 MHz BW +40 dBmV Output) Analog: -65 dB

(4 MHz BW +45 dBmV Output) Broadband Noise: -76 dBc

(4 MHz BW +45 dBmV Output)

Phase Noise: @ 10 KHz Offset -95 dBc Min Output Impedance: 75  $\Omega$ Output Return Loss: 12 dB

General

**Power Requirements:** +12 VDC: 310 mA +5 VDC: 320 mA Power: 3.2 W

Operating Temperature Range: 0 to +50 °C

Mechanical

Dimensions (W x H x D): 1.15 x 3.5 x 7.5 in. 29 x 89 x 101 mm Weight: 0.8 lbs., 0.36 kg

**Connectors:** 

IF Input: "F" Female RF Output: "F" Female Power: 3 Pin Polorized

Channel Selection: 2 Digit Push Button Channel Enter: Push Button RF Output Level: Control

Indicators:

Power On/Status OK: 2 color LED/Green Status (Error): 2 color LED/ Red

\* Average Measurement

Refer to product instruction manual for additional specification measurements and notes.

#### Ordering Information

Units		
Model	Stock No.	Description
DHDP-V	6266A	Digital & High Definition Processor Vertical Combo 54-860 MHz 8VSB Downconverter, 54-860 MHz Upconverter
DHDC-UV	6265A	Digital & High Definition Processor Upconverter 54-860 MHz CATV Output
DHDC-DV	6264	Digital & High Definition Processor Downconverter 54-860 MHz 8VSB Input
DHDP-50	6260	Digital & High Definition Processor 1 RU Fully Integrated Unit, +50 dBmV Output
Accessories		
MIPS-12C	7722C	HE-12 Series Power Supply 5.5 A on 5 VDC line, 4 A on 12 VDC line
MIRC-12V	7715	HE-12 Series Vented Rack Chassis 19" Rack Mountable 2 RU chassis for 12 modular units