

Digital High Definition Television Processor

DHDP Series



○ Features & Benefits

- Digital & High Definition Capable
- MICM Form Factor – Vertical & Horizontal Versions
- 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 and are available in both horizontal and vertical versions.

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).

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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 dbmV 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: 44.00 MHz IF
Output Level: +30dBmV (-20 dBmV to +25dBmV Input)
L.O. Leakage on RF Input Port: -50 dBmV
Phase Noise: @ 10 KHz Offset -85 dBc/Hz

General

Power Requirements:
+12 VDC: 120 mA
+5 VDC: 160 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 (.36 kg)
Connectors (Rear Panel):
RF Input: "F" Type, Female
IF Output : "F" Type, Female
Power: 3 Pin Polarized Receptacle
Controls (Front Panel):
Channel Selection: 2 Digit Push Button

Channel Enter: Push Button
Indicators (Front Panel):
Power ON/Status OK: 2 color LED/Green
Status (Error): 2 color LED/ Red

UPCONVERTER

RF

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: +40 dBmV (IF Input +30dBmV)
Output Level Adj. Range: 10 dB
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 -88 dBc
@ 20 KHz Offset -98 dBc
Output Impedance: 75
Output Return Loss: 12 dB

General

Power Requirements:
+12 VDC: 140 mA
+5 VDC: 300 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 (.36 kg)
Connectors (Rear Panel):
IF Input: "F" Type, Female
RF Output : "F" Type, Female
Controls (Front Panel):
Channel Selection: 2 Digit Push Button
Channel Enter: Push Button
RF Output Level: Control
Indicators (Front Panel):
Power ON/ Status OK: 2 Color LED/Green
Status/ Error: 2 Color LED/Red

○ Ordering Information

Units

| Model | Stock No. | Description |
|---------|-----------|--|
| DHDP-V | 6266 | Digital & High Definition Processor Vertical Combo 54-860 MHz 8VSB Downconverter, 54-860 MHz Upconverter |
| DHDC-UV | 6265 | Digital & High Definition Processor Upconverter 54-860 MHz CATV Output |
| DHDC-DV | 6264 | Digital & High Definition Processor Downconverter 54-860 MHz 8VSB Input |
| DHDP-H | 6263 | Digital & High Definition Processor Horizontal Combo 54-860 MHz 8VSB Downconverter, 54-860 MHz Upconverter |
| DHDC-UH | 6262 | Digital & High Definition Processor Upconverter 54-860 MHz CATV Output |
| DHDC-DH | 6261 | 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

| Model | Stock No. | Description |
|----------|-----------|--|
| MIRC-4C | 7710 | HE-4 Series Rack Chassis & Power Supply 19" Rack Mount 4 Slot Horizontal Chassis w/ Power Supply |
| 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 |