

MODEL  
**DHDP SERIES**  
DIGITAL HIGH DEFINITION TELEVISION  
PROCESSOR



○ **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).

# Digital High Definition Television Processor

DHDP Series

## ○ 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