

- **Betacam/MII Component Video Inputs & Outputs**
- **Y/C Inputs & Outputs**
- **Digital Recursive Noise Reduction**
- **Single & Dual Channel Configurations**
- **3-Line Adaptive Comb Filter**
- **Component 4:2:2 Processing**
- **Optional RGB I/O**
- **Film Mode Strobe Effect**

The DPS-290 Component Transcoding TBC/Synchronizer is perfect for all tape formats, including U-Matic, U-Matic-SP, VHS, S-VHS, and Hi-8. Available in single and dual channel configurations, the DPS-290 provides composite (NTSC), Y/C (S-Video) and component (Betacam/MII) inputs and outputs. Because all outputs are active simultaneously, the DPS-290 also functions as a transcoder, making it particularly well suited for inter-format editing and duplication applications.

A three line adaptive comb filter decoder provides wide bandwidth composite video performance, making the DPS-290 equally useful for synchronizing camera and satellite feeds or for decoding composite video sources into component, Y/C signals or RGB signals. Designed for use in mission critical applications, a composite video bypass relay



instantly routes input and output signals together in the event of power loss or system failure.

Standard features include digital recursive chrominance/luminance noise reduction, 3-dimensional RF dropout compensation and red/blue color balance controls.

Special effects include freeze frame, freeze field, variable strobe and film mode strobe. Front panel controls and a back-lit LCD status display provide easy access to all proc amp and configuration functions including CAV output levels, vertical blanking width, Y/C horizontal delay, Y/C vertical delay and DNR modes. A 10-event scene memory permits all front panel settings to instantly be stored or recalled.

SPECIFICATIONS

Specifications and designs are subject to change without notice

Composite Video Input

(NTSC) 1 Vp-p

Y/C Input (S-Video)

Y Input 1 Vp-p
C Input 286 mVp-p burst level

Component Analog Video Inputs

Betacam CAV

Y Signal 714 mVp-p 75 Ohm
R-Y, B-Y
(Pr, Pb) Signals 700 mVp-p 75 Ohm

MII CAV

Y Signal 714 mVp-p 75 Ohm
R-Y, B-Y
(Pr, Pb) Signals 486 mVp-p 75 Ohm
Ref. Video Input 1 Vp-p (loop or 75 Ohm)
D.O.C. Input RF/TTL

Composite Video Output

(NTSC) 1 Vp-p

Y/C Output (S-Video)

Y Output 1 Vp-p
C Output 286 mVp-p burst level

Component Analog Video Outputs

Betacam CAV

Y Signal 714 mVp-p 75 Ohm
R-Y, B-Y
(Pr, Pb) Signals 700 mVp-p 75 Ohm

MII CAV

Y Signal 714 mVp-p 75 Ohm
R-Y, B-Y
(Pr, Pb) Signals 486 mVp-p 75 Ohm
Advanced Sync Output 2 Vp-p, 32 Lines Adv
GPI Freeze Trigger TTL or Contact Closure

Remote Control Port RS-232 (9,600/38,400 BPS)

Performance Specifications

Bandwidth (all modes) 0-5.5 MHz (+0.5/-3 dB)
Signal-to-Noise (component modes) 58 dB
Differential Phase < 2°
Differential Gain < 2%
K Factor (all modes) 1%
Residual Time
Base Error < 15 nS
Correction Window Infinite

Proc Amp Controls

Video Level ± 3 dB
Black Level ± 20 IRE
Chroma Level 6 dB
Hue Phase ± 45°
Horizontal Position ± 1µs

Color Balance Controls

R-Y Shift ± 20%
B-Y Shift ± 20%

Timing Controls

Genlock Coarse ± 4 µs
Genlock Fine ± 360°
Y/C Horizontal Delay -560 nS to + 490 nS
Y/C Vertical Delay ± 1/-2 Lines

Power Requirements

Input Voltage 100 - 240 VAC
Input Power (max.) 70 Watts

Physical Characteristics

Dimensions 17" x 1.75" x 20" (WHD) (43.2 cm x 4.4 cm x 50.8 cm)
Weight 13.25 lbs (6 kg)
Operating Environ. 0-40°C (32 to 104 degrees F)
Spec. Temperature 10-40 °C (50 to 104 degrees F)
Storage Temperature -40-75°C (-40 to 167 degrees F)

ORDERING INFORMATION

DPS-290	Single Channel Component TBC/Synchronizer
DPS-290D	Dual Channel Component TBC/Synchronizer
RGB-290	RGB I/O Option for DPS-290
RC-2000	8-Channel Desktop Remote Control Unit
RC-2001	Multi-Channel Remote Control Unit
DPS-RS-L	Rack Slide Kit
DPS-RS-EXT	Rack Slide Extensions for Racks > 25" Deep

TBC/SYNCHRONIZER

DPS-235/235D

- **Composite & S-Video Inputs & Outputs**
- **Single & Dual Channel Configurations**
- **3-Line Adaptive Comb Filter**
- **Component 4:2:2 Processing**
- **Compatible With RC-2000/RC-2001 Remotes**
- **Film Mode Strobe Effect**
- **Compatible with DPS Personal Series Control Software**
- **GPI Freeze Trigger**
- **Advanced Sync Output**



The DPS-235 TBC/Synchronizer is an ideal general purpose TBC/Synchronizer. Perfect for all tape formats, the unit is available in both single and dual channel configurations. Because the DPS-235 employs a three-line adaptive comb filter Y/C separator, the unit can also be used effectively as a video synchronizer without any loss of high frequency picture detail.

Front panel controls provide easy access to all proc amp and configuration functions including wide/narrow vertical blanking, genlock termination, Y/C vertical delay, Y/C horizontal delay and comb filter mode

selection. Red and blue color balance controls make it easy to adjust for color balance errors. A three event scene memory enables all front panel settings to be instantly stored or recalled. Special effects include freeze frame, freeze field (1-3 selectable), variable strobe and film mode strobe which provides an ersatz film look by simulating 24 FPS (3:2 pull down) video.

The DPS-235 is compatible with the DPS RC-2000 and RC-2001 multi-channel remote controls as well as with DPS Personal Series TBC control software.

SPECIFICATIONS

Specifications and designs are subject to change without notice

Video Inputs

NTSC Video Input 1Vp-p

S-Video Input

Y Input 1Vp-p
C Input 286 mV
Ref. Video Input Loop or 75 Ohm, 1Vp-p
GPI Freeze Trigger TTL or Contact Closure

Video Outputs

NTSC Video Output 1Vp-p

S-Video Output

Y Output 1Vp-p
C Output 286 mVp-p burst level
Advanced Sync O/P 2Vp-p

Bandwidth

S-Video mode 5.5 MHz
NTSC mode >5.0 MHz

Performance

Signal-to-Noise (S-Video mode) >58 dB
Differential Phase <2°
Differential Gain <2%
K Factor (All Modes) 1%
Residual TB Error <15 nS
Correction Window Infinite
Serial Data Input RS-232 Levels, 9,600/31,250 BPS

Proc Amp Controls

Video Level ± 3 dB
Black Level ± 20 IRE
Chroma Level -40 to +6 dB
Hue Phase ± 45°

Timing Controls

Genlock Coarse ± 4 μS
Genlock Fine ± 360°
Y/C Horizontal Delay -560 nS to +490 nS
Y/C Vertical Delay +1/-2 Lines
Horizontal Position ± 1 μS

Power Requirements

Input Voltage 100-240 VAC
Input Power (Max.) 40 Watts

Physical Characteristics

Dimensions 17"x 1.75" x 16" (WHD) (43.2cm x 4.4cm x 40.6 cm)
Operating Environment 0 - 40 °C (32 to 104 °F)
Spec. Temperature 10 - 40 °C (50 to 104 °F)
Storage Temp. -40 - 75 °C (-40 to 167 °F)

ORDERING INFORMATION

DPS-235	TBC/Synchronizer
DPS-235D	Dual Channel TBC/Synchronizer
VT2600WB	Second Channel Option for DPS-235
DPS-RS-S	Rack Slide Kit
DPS-RS-EXT	Rack Slide Extensions for Racks > 25" Deep