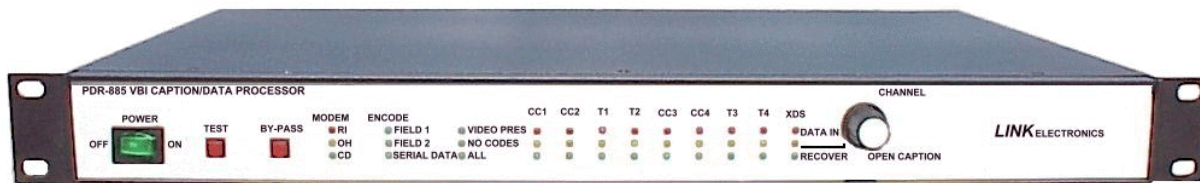




LINK ELECTRONICS, INC.

VBI CAPTION/DATA PROCESSOR ENCODER/DECODER Model PDR-885



FEATURES

- ◆ Encode, Data Recovery
- ◆ Field 1 or Field 2
- ◆ Caption & Text
- ◆ Decoder Output
- ◆ Optional Modem

- ◆ Y,R-Y,B-Y Input & Output
- ◆ Two Composite Outputs
- ◆ S/VHS Input & Output
- ◆ RS-232C Controlled, RS-422 Option
- ◆ V-Chip Compatible

The PDR-885 is a Closed Caption Encoder with an integral Decoder for inserting caption and text data on Line 21 of the NTSC signal. However, this important function is only the beginning of the PDR-885 capabilities.

Caption and Text data may be inserted in either field of the Vertical Blanking Interval. In addition, data on the incoming video signal may be recovered from either field of the VBI. This incoming data may be displayed as Open Captions, using the built-in Closed Caption Decoder, and captured by a computer utilizing the PDR-885's serial data port. Each of these important functions, Encoding, Decoding, and Data Recovery may be done simultaneously.

The Closed Caption Decoder's functions may be controlled from the front panel while the Encoder and Data Recovery functions are controlled via the serial data port. The video data path approaches perfection, with differential phase and gain errors less than 0.1° and 0.1% respectively. Video bandwidth is >26MHz while Signal to Noise exceeds 60dB. Inputs and outputs are provided for composite NTSC video as well as Component (R-Y/B-Y/Y) and S-Video.

If composite video is used, a high performance relay provides power-off by-pass of the program video. For remote captioning applications, a second serial port is available as a modem input. Both serial ports may be configured for RS-232 or RS-422 I/O, with optional plug-in PCB. An internal jumper allows baud rate selections of 1200 to 9600 bps. A modem and computer may be connected simultaneously to process local and remote caption data, only one active at a time.

Front panel LED's show the unit status and the presence of data on the incoming video. A pair of front panel push-buttons allow the user to run an encoded test message or to place the unit in by-pass mode.

The PDR-885 is ready for V-Chip technology. This technology will allow parents to block violent or otherwise offensive television programming from their TV sets. LINK Electronics is incorporating this technology in the firmware of the PDR-885. The PDR-885 handles the automatic repetition of the "V-Chip" data and can interleave it with existing Line 21 Closed Caption data. An optional plug-in modem is available that operates at 1200 or 2400 baud.

**MODEL PDR-885
VBI CAPTION DATA PROCESSOR
SPECIFICATIONS**

INPUT:

Composite Video:

Level: 1.0Vpp ±6dB
Impedance: 75Ω, Terminated
Connectors: BNC
Return Loss: 40dB
Maximum DC on Input: 4VDC
Common Mode Range: 8Vpp

S/VHS:

Level: Y Channel: 1.0 Vpp ±6dB
Level: C Channel: 0.6Vpp, Nominal
Connector: 4 Pin Mini-DIN
Impedance: 75Ω Terminated

Y, R-Y, B-Y:

Level: Y Channel 1.0 Vpp ± 6dB
Level: R-Y Channel BETA or MII
Level: B-Y Channel BETA or MII
Connectors: BNC
Impedance 75Ω, Terminated

OUTPUTS:

NTSC Video:

Level: 1Vpp ± 6dB
Insertion Gain: Unity
Impedance: 75Ω
Number of Outputs: Two
Connectors: BNC
Bandwidth: 26MHz
Tilt: <1% ref. 30Hz square wave
Hum: >70dB, 1.0Vpp
Overshoot & Ringing: <1%
Propagation Delay: 30nS ±5%
Timing: <5nS
S/N Ratio: >60dB
Differential Gain: <0.1%
Differential Phase: <0.1°
DC Offset: <0.2VDC

Y,R-Y, B-Y:

Y Channel: 1.0 Vpp ±6dB
R-Y Channel: BETA or MII
B-Y Channel: BETA or MII
Bandwidth: 26MHz
Connectors: BNC

S-VHS Video:

Level:

Y: 1Vpp ±6dB
C: 0.6Vpp Nominal
Impedance: 75Ω
Bandwidth: 26MHz
Connectors: 4 Pin Mini DIN

DECODER:

Output: Two
Level: Unity Gain ±6dB
Character Video: 90 IRE
Character Background: 10 IRE
Frequency Response: -3dB to 26MHz
Differential Gain <0.1%
Differential Phase <0.1°
DC Offset <0.2Vdc
Line Rate Tilt: <0.1%
Field Rate Tilt: <0.1%

FRONT PANEL CONTROLS:

AC Power: On/Off
By-Pass Push/Push, Maintained
Test: Push/Push, Momentary
LED's, 36 total: Video Presence
..... RS-232 Data In
..... Field 1 & Field 2

REAR PANEL:

Modem Connection: .. 9 Pin D wired as DTE
Computer Connection: 9 Pin D wired as DCE
Baud Rate: Standard 1200, 8,N,1

ENVIRONMENTAL:

Temperature: 0° to 50° C (ambient)
Humidity: 10% to 90% non-condensing
Power: 8VAR
AC Input: 120/240VAC (±10%) 50/60Hz

MECHANICAL:

Height: 1.75 inches
Width: 19 inches
Depth: 8 inches
Weight: 4.75 Lbs.



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