

# DDM-840

FREQUENCY AGILE

DIGITAL DEMODULATOR/ DECODER

TEST & MEASUREMENT



**HARRIS**  
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The DDM-840 is a compact, 1RU Frequency Agile Digital Demodulator with an MPEG-2 HDTV/SDTV decoder capable of demodulating 8VSB, 64 QAM and 256 QAM modulated signals and converting them to DVBSI output format. The DDM-840's MPEG-2 HDTV decoder presents the MPEG-2 program streams in either HDTV (main profile at high level) or SDTV (main profile at main level) format. While generating a multitude of signals including RGB and YPBPR analog component video, NTSC analog composite video, and serial digital for monitoring the video program selected, the DDM-840 also decodes the transport stream's audio programs to two analog stereo pairs and two digital audio outputs as Dolby® Digital (AC-3 TM) passthrough or PCM. External SMPTE-310 or DVB-ASI transport streams may be connected to the DDM-840 for decoding as well. The DDM-840 front panel interface enables quick setup through a direct entry keypad and navigation keys. Front panel indications for the current channel number, output format, received short channel name, program number and the received programs available (up to 3 programs) are included.

The demodulator front panel's 2x40 character LCD indicates the status of SNR, and Bit Error Rate (BER). External communications support configuration through an intuitive Web Browser GUI. The resident SNMP agent via the 10/100 Base-T Ethernet connection enables straightforward integration into Headend, Station, or Uplink network control and monitoring systems with real-time clock for time stamp on alarms.

The DDM-840 program information table display includes PAT, PMT, MGT, VCT, EIT, STT, and EPG. There is also a menu selection allowing the Closed Captioning to be decoded and displayed on the video output.

The DDM-840's small, 1RU foot print provides a space-efficient and economical solution for cable, satellite and broadcast facilities.

## FEATURES

- HD/SDI or SD-SDI selectable output
- Closed caption decoded and displayed on the output video
- Transport stream PSIP table display
- Signal to noise ratio and bit error rate
- Auto programming of available channels
- SMPTE 310M or DVB-ASI selectable transport stream inputs
- CAV, SDI, and NTSC outputs
- Dolby® Digital (AC-3 TM) or PCM and analog stereo audio outputs
- Standards available: ATSC

## SPECIFICATIONS

Specifications and designs are subject to change without notice.

### DEMODULATOR TUNER

Tuning Range:	Tunes terrestrial VHF/UHF and cable frequencies from 54 to 860 MHz (VHF Channel 2-13, UHF Channel 14-69, cable 2-134)
Input Range	-24 to +29 dBmV
Connector	"F", 75 ohms female

### TRANSPORT STREAM OUTPUT

	DVB-ASI
	Data Rate: 270 Mb/s
	Voltage Level: 800 mV p-p $\pm 10\%$
	D.C. Offset: $\pm 0.5$ VDC
	Rise Time: <1.2 ns (20% to 80%)
Connector	BNC, 75 ohms female

### TRANSPORT STREAM INPUT

	(SMPTE 310 M or DVB ASI selectable)
	SMPTE 310M
Data Rate	19.39 Mb/s
Voltage Level	800 mV p-p $\pm 10\%$
	D.C. Offset: $\pm 0.5$ VDC
	DVB-ASI
Data Rate	270 Mb/s
Voltage Level	800 mV p-p $\pm 10\%$
	D.C. Offset: $\pm 0.5$ VDC
Connector	BNC, 75 ohms female

### DECODER VIDEO OUTPUT

	Component as YPBPR or RGB formats
Standards	1080i, 720p, or 480i
Connectors	BNC, 75 ohms female
	YPBPR Output:
Voltage Level	700 mV typical
SYNC on Y	per SMPTE 240M
	SMPTE 274M
	SMPTE 296M
	RGB Output:
Voltage Level	700 mV typical
	Maximum Voltage Level: 1V
	NTSC Output: 1V p-p typical into 75 ohms
	Connector: BNC, 75 ohms female
	SDI Output Conforms to SMPTE 292M or 259M
Voltage Level	800 mV p-p $\pm 10\%$
D.C. Offset	0.0 V $\pm 0.5$ VDC
Connector	BNC, 75 ohms female

### AUDIO OUTPUT

	Dolby® Digital (AC-3TM) or AES output, main and SAP
Connector	BNC, 75 ohms female
	Embedded in SDI output
	Analog Stereo Output Balanced, Main and SAP
Connector	Push pin type with removable connector

### REMOTE CONTROL

Communications	Ethernet
Supported Rates	10/100 BaseT
Connector	RJ-45, female
Indicators	Network Activity, Link
Communications	RS-232/422/485 selectable
Supported Baud Rates	9600, 19200, 38400, 57600,