EH244 Encoder Host

Applications
- Cable Networks
- Hospitality
- Health Care
- Commercial
- Government/Military
- Digital Signage

The R.L. Drake model EH244 encoder host is a platform for supporting modular MPEG2 and MPEG4 H.264 video encoders, including the SDE24, HDE24, and SDI24. The encoder host multiplexes the encoder outputs into up to 4 QAM output channels, configurable via a front panel interface or Ethernet web server. The EH244 includes provisions for emergency alert services, using either video replacement or SCTE18 control messages and is fully compatible with Drake's "Bandwidth Recovery Solution".

The EH244 accepts up to 6 encoder modules, and allows each encoder's output program(s) to be assigned to any or all 4 output program streams. The EH244 can output on up to 4 frequency-adjacent QAM channels between 54 MHz and 1002 MHz using an internal QAM modulator, and supports optional factory installed ASI outputs that mirror the QAM program streams.

Benefits
- **Quad QAM Modulation**
  The Drake Digital™ EH244 Encoder Host can multiplex the encoded video streams and output them on any one of the 4 QAM outputs allowing for optimization of both bit rate and bandwidth.
- **Scalable System**
  Any combination of Drake SDE24, HDE24 or SDI24 SD and HD encoder modules can be housed in the EH244 providing maximum flexibility. SD modules may be replaced by HD modules making future HD upgrades affordable.
- **Remote Management**
  An Ethernet port provides local or remote access to all settings and can be used to monitor basic system function.

Input Modules for Use with EH244

Digital Encoder Modules

SDE24	HDE24	SDI24
Dual Standard Definition MPEG Encoder	High Definition MPEG Encoder	High Definition MPEG Encoder
	Coming Soon: USB Video File Play Capability	

EAS Solution Modules

DTD1000	SDE24EAS	ASII
SCTE 18 Extraction from Active QAM	Emergency Alert System Encoder	Emergency Alert System Data Distribution
Works only with MEQ1000		

Specifications

Multiplexer Specifications	
Program Filtering and Grooming:	Each encoder output can be disabled or output to any or all output channels
Multiplexer:	All programs directed to each output are multiplexed into a correct multi-program transport stream
ASI Outputs:	An optional ASI output board may be ordered that mirrors the 4 QAM channel output transport streams

PSIP Table Handling	
PSIP Table Rewriting:	Supported
MGT/VCT Table Generation:	Supported
SCTE18 EAS Generation:	Supported

Modulator Specifications	
Modulation Modes:	64, 256QAM ITU j.83 Annex A
	16, 32, 64, 128, 256 QAM ITU j.83 Annex A
Symbol Rates:	1-7 Msps variable, with presets for Annex B
Frequency Coverage:	54-1002 MHz, up to 4 frequency-adjacent channels
Channel Plans:	Standard CATV, HRC, IRC, Broadcast
Max Output Power:	+54 dBmV
Min Output Power:	+42 dBmV
Output Level Accuracy:	±2 dB
Phase Noise:	<-108 dBc/Hz @ 10 kHz offset
Broadband Noise:	<-75 dBc @ 12 MHz offset in a 6 MHz bandwidth
MER:	>44 dB equalized
Channel Frequency Response:	<1 dB
Carrier Suppression:	>80 dB
I/Q Imbalance:	<1 degree
Spurious Emissions:	<-60 dBc

Temperature Rating	0-50°C ambient
Form Factor	2RU 19" rack enclosure
Dimensions	14.25"D x 3.5"H x 19"W
Weight	9.5 lbs
Power Requirements	90-260 VAC 65W maximum