



# Chimera-CP

## Portable MPEG Video Encoder



### CHIMERA-CP IS IDEAL FOR:

Live streaming of Community Events

Transportable Fly-Away Systems

Mobile and Airborne Encoding

Encoding Rental Packages

Supplementing Rack Mounted Encoders When Additional Temporary Paths are Required

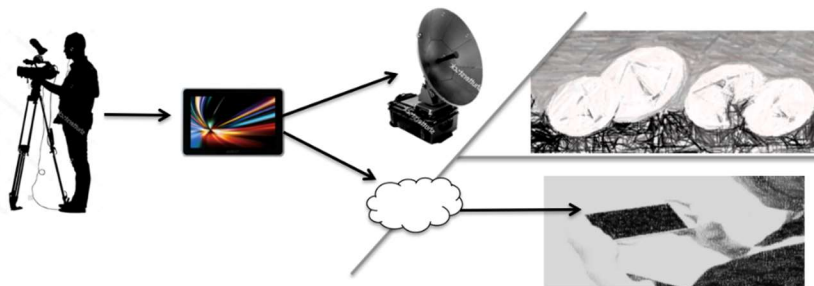
Anywhere that Space and Portability are at a Premium

More than twenty years of broadcasting experience went into the design of the **Chimera-CP** portable video encoder. **Chimera-CP** was designed to address the requirement for a highly portable and easy to use video encoder in situations where weight and size are limited, thus making a rack mount design less than ideal. The ease of portability and flexible inputs and outputs while providing outstanding video quality make **Chimera-CP** the perfect encoder for many commonly encountered situations.

Controlling **Chimera-CP** is easily accomplished using its 10.1" capacitive touch screen and intuitive menu structure. The 1280 x 800 resolution of the back lit LED screen also makes an ideal confidence monitor to confirm that **Chimera-CP** is receiving a video source. A laptop is NOT required to control **Chimera-CP**.

**Chimera-CP** is small enough to fit into a backpack, yet powerful enough to deliver outstanding video quality.

- Live Video Transmission
  - Satellite Modulator
  - TSoIP/DVB-ASI
  - RTMP/DASH/HTML5
- Multiplexing of video, audio & data
- Remote or Local Management



Made in the USA

VISION + INNOVATION



# Chimera-CP

## Portable MPEG Video Encoder

- Compact & Lightweight
- 10.1" Backlit Display
- HD-SDI & HDMI Inputs
- ASI, IP & Satellite outputs
- 12 VDC Power
- DASH (HTML 5.0) Streaming
- SMPTE-2022 FEC on TSoIP Output
- DVB-S/S2/S2X Modulator
- BISS Encryption
- ATSC & DVB Compliant

### Specifications

#### Video & Audio Encoding

- MPEG-2 & H.264/AVC
- SD & HD (525i, 625i, 720p, 1080i & 1080p30)
- 8-bit 4:2:0
- Encoded bitrate from 256 kbps to 80 Mbps
- 150 to 650 ms latency
- 8 stereo pairs of MPEG-1 Layer II Audio
- Dolby AC3 Stereo or 2 - 5.1 audio channels
- AAC-LC & HE-AAC audio encoding

#### Inputs & Outputs

- HD-SDI - 75  $\Omega$  BNC & HDMI 1.4a inputs (one active)
- Embedded audio
- MPEG-TS over ASI – BNC connectors, 75  $\Omega$
- MPEG-TS (RTP/UDP – SMPTE-2022) over IP
- RTMP or DASH (HTML5) Internet streaming
- BISS Mode 0, 1, E

#### RF Outputs

- L-Band: 950 to 2,150 MHz, 1 Hz steps  
N 50  $\Omega$  +7 dBm to -35 dBm, 0.1 dB steps
- IF-Band: 50 MHz to 180 MHz, 1 Hz steps  
BNC 75  $\Omega$  +5 dBm to -35 dBm, 0.1 steps
- SNR > 40 dB @ 0 dBm – 16 APSK – 30 Mbaud
- Shoulders rejection < -50 dB @ 0 dBm & f/fn=1.5 for roll off of 20%
- Spurious: < -65 dBc @ 0 dBm for 50 to 180 or 950 to 2,150 MHz  
-60 dBc outside the useful band
- Switchable 10 MHz insertion on L-Band RF output:
  - @1 Hz < -85 dBc/Hz
  - @10 Hz < -115 dBc/Hz
  - @100 Hz < -140 dBc/Hz
  - @1 kHz < -145 dBc/Hz
  - @10 kHz < -150 dBc/Hz
  - @1 MHz < -150 dBc/Hz

#### EAS Support

- Support both Trilithic EasyCAP and Digital Alert System's DASDEC and EAS Net

#### Clock & Synchronization

- Internal 10 MHz reference frequency
  - High Stability:  $\pm 5$  ppb over 0° to 70° C
  - Aging:  $\pm 0.05$  ppb/day,  $\pm 7.5$  ppb/year
- External 10 MHz input for RF synchronization

#### Modulation

- DVB-S / DSNG:
  - Outer/Inner FEC: Reed Solomon/Viterbi
  - QPSK: 1/2, 2/3, 3/4, 5/6, 7/8
  - 8PSK: 2/3, 5/6, 8/9
  - 16QAM: 3/4, 7/8
- DVB-S2:
  - Outer/Inner FEC: BCH/LDPC
  - QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
  - 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
  - 16APSK
  - 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10
  - PL Scrambling codes [0, 264143]
  - Supported DVB modes:
    - CCM: Constant Coding & Modulation
    - VCM: Variable Coding & Modulation
    - *SeamlessACM*: Adaptive Coding & Modulation
  - DVB-S2 Short (16 200) or Normal (64 800) frames
  - Pilots ON or OFF
  - Variable symbol from 0.05 to 72 Mbaud, 1 Baud steps
- DVB-S2x Broadcast & DSNG profiles:
  - Same specifications as defined for DVB-S2
  - New constellation for DSNG profile: 64APSK
  - All new linear MODCOD for QPSK/8PSK/16APSK/32APSK/64APSK
- DVB-CID compliance (ETSI TS 103 129)

#### Physical

- Power Supply: 12VDC – 60W Max
- Dimensions: 26.5 cm x 18.4 cm x 10 cm" (WxDxH)
- Weight 2.5 kg
- Temperature: 0° to 50° C

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