# Communitek Video Systems

# Minicaster

## Features

- Real-Time Compression and Streaming Appliance
- Support for H.264, Flash®
- HD/SD-SDI, HDMI, Analog Video Input Options
- Embedded and Analog Audio Inputs
- Built-in Live Stream Capture and Storage

## Applications

- Live Webcasting for Concerts, Sports, News, Conferences and many other real-time applications
- Direct, Live output to most popular Streaming Services, or Communitek.tv CDN
- HD or SD Internet Broadcasting for any Television or Radio Station
- High-Performance Video Conferencing and Archiving
- Video Stream Compression and Recording for High-Quality Video on Demand (VoD) Applications

. . . all in a compact, 2RU, half-rack chassis designed for professional broadcast users

# Product Description

The Minicaster™ is a portable, self-contained, stand-alone system for live HD and SD video webcasting. All of the necessary hardware and software resources are included for creating high quality streams from all types of professional video sources. Featuring MPEG4/H.264, and Adobe Flash® encoding, the Minicaster can produce video streams at bit rates from 100 kbps to 15 Mbps, delivering premium performance for all types of streaming applications.

Three main functions are performed by this unit: Video and Audio Switching/Capture/Compression, Stream Formatting/Output, and Archiving.

### • Video and Audio Switching/Capture/Compression

The Minicaster™ transforms a wide range of input signals into a variety of compressed signal formats that are compatible with player software commonly found on user PCs and other devices. Inputs can come from video cameras, tape decks, servers, production switchers and PCs. Supported compression formats include Adobe Flash® and international standard MPEG-4/H.264.

### • Stream Formatting/Output

wraps the compressed video and audio signals inside IP packets that can be transmitted over public and private networks. Care is taken to ensure that each stream is well behaved to avoid bit rate peaks and valleys, and to ensure compatibility with a wide selection of PC player software. Multicast output is enabled for operation on private networks. Minicaster output streams can also be configured to work with many different reflecting servers and Content Distribution Networks (CDNs) to allow live, simultaneous stream viewing by hundreds or thousands of Internet users.

### • Archiving

records a copy of the compressed video and audio signals on the Minicaster's built-in hard drives while the stream is being generated. The resulting files can be burned directly to a DVD or uploaded to a Web server for playback in Video on Demand (VoD) mode.

Communitek also provides a full suite of web hosting and development services, by means of our Tier1 hosted servers and through partners that provide CDN services around the globe.

# Specifications

## Versions

Minicaster™ configurations are available in single or multiple HD/SD SDI, HDMI, or Analog video inputs:

**Minicaster HD, HD2, and HD4 –** HD-SDI inputs that support up to eight channels of embedded audio. Available with 1, 2, or 4 HD-SDI Inputs.

**Minicaster HDMI, HDMI4 –** HDMI single or Quad Inputs with embedded audio and analog audio. Single input version, includes additional analog video input.

**Minicaster SDI –** Standard Definition Serial Digital NTSC, PAL, plus an additional analog composite or S-Video input. Support for 4 embedded digital audio channels or two channels of balanced analog audio.

**Minicaster SD, SD4 –** Standard Definition analog composite or S-Video input with 2-channel audio inputs. Also available with 4 composite video inputs.

### Technical Specifications
Video Formats: 1080i, 720p NTSC (525 line), PAL (625 line), 16x9 or 4x3 aspect ratio.
Frame Rates: 30p, 60i, 59.94i, 50i, 29.97p, 25, 24psf
Compressed Video Stream Rate: 100 kbps to 15 Mbps
Compressed Audio Stream Rate: 20 to 224 kbps
Video Compression Formats: Flash, H.264
Audio Compression Formats: MP3, AAC

### Physical/Environmental
Dimensions: 8.5" W, 14" L, 3.5" H (2RU  high by ½ rack wide)
Weight: 15 lbs.
Operating Temperature Range: 20 to 25 C
Power Consumption: 250 W
Input Power: 110/220VAC, 50/60Hz (Auto Sensing)
Optional DC Input Power (12V)

### Front Panel Connections
2 ea. Removable Hard Drives, Up to 4 TB Total Storage
Multi-function Optical Drive with DVD Burning Capability
Compact Flash Slot
IEEE 1394 Firewire I/O – Optional
2 ea. USB 2.0 Connectors
Left and Right Audio Monitor Outputs, 1/8 in. mini-jack

### Rear Panel Connections
**Mincaster HD,** Single HD-SDI/SD-SDI Input
**Minicaster-HD2,** Dual HD-SDI/SD-SDI Inputs
**Minicaster HD4,** Quad HD-SDI/SD-SDI Inputs
**Minicaster-HDMI,** Single HDMI Input plus Composite/S/Component Input
**Minicaster-HDMI4,** Quad HDMI Inputs
**Minicaster-SD**, Single Composite/S-Video Input
**Minicaster-SD4,** Quad Composite Video Inputs
**Minicaster-SDI,** Single SDI Input plus Composite/S-Video Input
All HD-SDI/SD-SDI and Analog Inputs are 75 ohm BNC
Left, Right Balanced Audio Inputs via XLR Break-Out Cable
2x USB 3.0 and 4x USB 2.0
2x RJ-45 Gigabit Ethernet Data
2x HDMI Outputs, 1x DVI Output
Stereo Audio Monitor Output, 1/8 in. mini-jack

### Included Accessories and Cables
Keyboard w/Mouse Pad (USB)
BNC-BNC Video Cable (10 ft.)
Audio Breakout Cable with 2 XLR Connectors
AC Power Cord (US)

### Included Software
Adobe FME 3.2 Live Encoder

### Optional Software
VidBlasterX™ Studio, or Broadcast Editions
vMix™ - All Versions
Telestream Wirecast™
SofTV™ Presenter w/PowerPoint

### Optional Hardware
HD or SD Video Switcher
Audio Mixer
Wireless Video/Audio Transmitters & Receivers
Rack-Mount Road Case w/wheels
Video Source Monitor
Video/Audio In/Out Connector Panel
Microphones, Cameras and Support Equipment