ZvBox® 150
HD Video Distribution Made Easy

FEATURES

Share HD sources using existing COAX

A/V INPUTS

- Separate VGA and component video inputs

- Accepts 720 and 480 on component input

- Up to 1680x1050 on VGA

- Coax and optical digital audio connectors

HD MPEG2 ENCODING

- 720p encoding

- Encoding of PCM inputs, pass-through of encoded audio input

- Digital and visual water-marking for content theft prevention

- Extremely low-latency encoding for interactive applications

RF MODULATION / CHANNEL UPCONVERSION

- Digital cable (QAM) channel inserted onto any empty channel

- Built-in spectrum analyzer scans cable to find empty channels

- User-selectable broadcast channel from 2-141
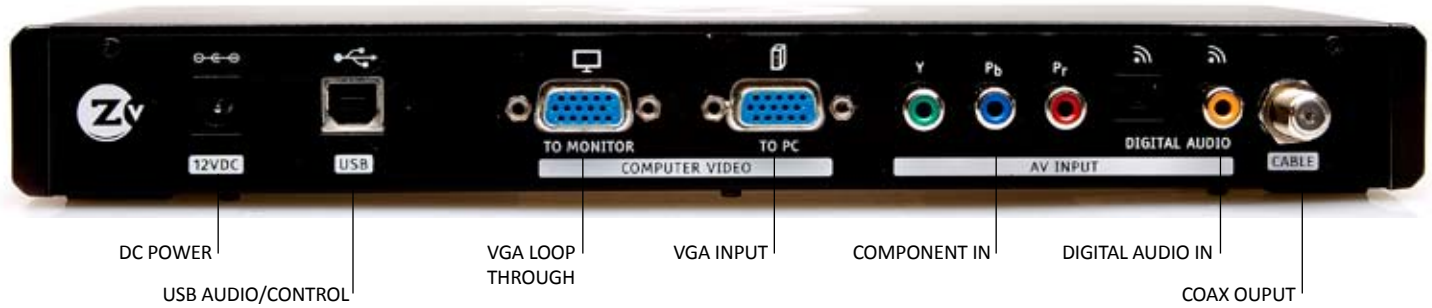
- Supports STD, HRC, or IRC cable standards

Create a private HDTV cable channel and share a cable box, DVR, DVD player, computer, or any other VGA or HD source among multiple HDTVs.

ZvBox® 150 front and rear view.

Based on the same encoding and modulation technology used by TV stations and cable companies, **ZvBox® 150** turns the output of any VGA or HD source into an HDTV cable channel and broadcasts it over coax cabling to all connected HDTVs. To view the HD source, simply tune in your new Zv channel at any of the HDTVs. Compatibility with existing coax cabling means ZvBox® 150 is ideal for retrofit applications.

- **Many Applications -** Use ZvBox® 150 to:
    - Create a whole-house HD video distribution system
    - Deliver digital signage or share HD video to multiple displays in light commercial environments

- **Multiple Channels -** Multiple ZvBox® 150s can be combined to distribute many HD channels on-premise, on the same simple to deploy coax cabling.

- **Simple Installation -** Easily connects to new or existing coax distribution systems. Fast to configure using simple ZvCLI commands.

- **Stand-alone Operation -** Once configured, no computer or Internet connection required.

- **Works with Any VGA or HD Video Source -** Connect any computer, DVD player, DVR, or any other device with an HD video output to ZvBox® 150 and your new HDTV channel pours out onto the coax wiring.

DC POWER
USB AUDIO/CONTROL
VGA LOOP THROUGH
VGA INPUT
COMPONENT IN
DIGITAL AUDIO IN
COAX OUPUT

ZvBox® 150 Specifications

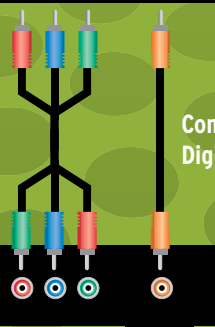### Video Input

Computer VGA (Analog)
  HD-15 connector, buffered and looped
  Resolutions Supported:
    640x480, 720x480, 800x600,
    1024x768, 1152x864, 1176x664,
    1280x720, 1280x768, 1280x800,
    1280x960, 1280x1024, 1360x768,
    1440x900 at 60,70,72,75, 85 Hz
    1680x1050 at 60 Hz
Component Video (Y, Pr, Pb)
  RCA connectors
  Resolutions Supported:
    480, 720
    59.94 frames / fields per second

Audio Input

SPDIF Digital Audio
  Physical Connections
    TOSLINK optical, RCA
  Formats
    48K bit PCM
    AC-3 Pass-through

Video Encoder

Encoder Video Profile
  MPEG2 HD Profile 2: ISO13818-2
  MP@HL (1280x720)
Video Transport Bit Rate 38.78 Mbps
Average Encoding Data Rate 20 Mbps
Program Information – Programmable
Content Watermarking – Digital and Visual

Audio Encoder

Encoder Audio Profile
AC-3
ATSC A/52

Built-in RF Spectrum Analysis

Able to scan all 135 coax cable channels and report the usage of each
  Analog / Digital or Empty channel
  STD / HRC / IRC detection

Modulator / Upconverter

Modulation Types
  QAM 256 (ITU-T J83 Annex B)
Cable Standard
  HRC, IRC or STD
Frequency Range
  50 – 900 MHz (channels 2-141)
Output Power
  +25 dBmV typical
Output Level Adjust
  0 – 20 dB of attenuation in 5dB steps

Control / Setup

Powerful command line interface - USB
Input Switching - IR or USB
Firmware Update - USB

General

Power – 100VAC to 240VAC, 50/60 Hz, <20watts
  External Power Supply
Cooling – Convective. Cannot be stacked or put above other hot components.
Mounting – Counter or shelf
Enclosure type – Metal
Enclosure dimensions
  1.38" H x 11.42" W x 4.02" D
  35mm H x 290mm W x 102mm D
Weight
  1.21 lbs (550 grams)
Temperature/Humidity
  Operating +32° to +104°F (0° to +40°C) /
  20% to 80%, non-condensing
MTBF – 30,000 hours
Compliance
  Safety UL60065
  FCC Class B
Part number – ZV150-NA
Model name – ZvBox 150
Warranty – 1 year

Typical Application

COAX Output

ZvBox 150

HD Component

Component Video and Digital Audio Input*

* Additional VGA video and USB audio inputs included for optinal computer use