CAT5/6/7 HDMI/DVI & Audio with Bi-Directional RS232 & IR Smart Baluns™

FatCAT SERIES™

KD-BBTX

HDMI/DVI Video, Analog & Digital Audio Smart Balun™
with Control over single CAT5/6/7 **TRANSMITTER**

Tx

KD-BBRX

HDMI/DVI Video, Analog & Digital Audio Smart Balun™
with Control over single CAT5/6/7 **RECEIVER**

Rx

Key Features

› Extends HDMI or DVI Video, L/R Analog, or PCM Digital Audio, IR and RS-232 over a single CAT5/6/7 cable

› Supports all SD, HD, and VESA (VGA, SVGA, XGA, WXGA, SXGA, UXGA) resolutions up to 1080p (60Hz & 50Hz)

  » SD & HD: 480i, 480p, 720p, 1080i, 1080p

  » VESA / VGA (RGBHV): From 640x480p up to 1920x1200p

› Full support for HDCP, HDMI 1.3a/b, Deep Color (12 bits/color) Video

› Supports lossless compressed digital audio (Dolby® TrueHD, Dolby® Digital Plus and DTS™-HD Master Audio)

› Bi-Directional and Simultaneous IR and RS-232

› Audio Toggle Switch for Analog / Digital Audio Selection

Key Benefits

› Transmits (KD-BBTX) and receives (KD-BBRX) HDMI Video, HDMI Audio, Digital or Analog Audio, IR and RS-232 over a single CAT5/6/7 cable

› 1080p/60 signals up to 150 feet, 1080p/24 signals up to 250 feet over a single CAT5/6/7 cable

› Compatible with KD-HDMS4X4, 4 Inputs to 4 Outputs HDMI Matrix Switcher

› Compatible with all video resolutions

› Allows extension of HDMI signals distances that standard HDMI cables cannot achieve

› Enables the use of less expensive CAT5/6/7 cabling for HDMI/DVI signal distribution

Specifications

Technical:

» **Inputs/Outputs:** 1 HDMI connector, 1 stereo analog balanced or unbalanced audio 0dBu/1kΩ, 0.5V/75Ω, on a Phoenix connector; 1 digital S/PDIF audio on RCA connector; RS-232 Tx, Rx lines and ground on Phoenix connector; wired IR bi-directional modulated or un-modulated on Phoenix connector; 1 CAT 5 IN on shielded RJ-45 connector (video/audio/data)

» **Bandwidth:** TMDS bandwidth 10.2 Gb/s

» **EQ Adjustments:** Precise Auto Adjust, Distance Measurement

» **Compliance w/ HDMI Standards:** Supports HDMI1.3+, HDMI1.2, HDMI1.1, DVI1.1 and HDCP

» **Link and Range:** Single Link Range: (1080p/60) 12 bit color depth, 1920x1200 max 150 ft; (1080i/60, 720p, 1080p/24) UTP 250 ft, STP 275 ft

» **Deep Color Support:** Supports Digital Video Formats in Deep Color Mode at up to 12 bits/color

» **Additional Non-HDMI Audio:** Left and Right Balanced or unbalanced on Phoenix connector or Coaxial Digital Audio S/PDIF on RCA connector

» **DDC Signal (Data):** Input DDC Signal: 5 Volts p-p (TTL)

» **HDMI VIDEO/AUDIO SIGNAL:** Input Video Signal: 1.2 Volts p-p

» **HDMI Connector:** Type A, 19 Pin Female

» **RJ45 Connector:** Shielded Link Connector RJ45

» **I2C Communication:** EDID and HDCP Transparency from Display to Source

» **Additional Non-HDMI Wired RS-232:** RS-232 Tx and Rx Line active and bi-directional up to 115,200 baud rate

» **Additional Non-HDMI Wired IR:** IR line modulated or not modulated, active and bi-directional 0-5V TTL or -10 – 10V

» **Power:** External UL Certified Power Supply. 5V DC / 1A, 110-240 VAC, 50-60 Hz

General

» **Regulation:** CE, RoHS, WEEE
» **Product Dimensions:** L = 2.75" W = 2.5" H = 1.5"
» **Shipping Carton Dimensions:** L = 4.75" W = 8" H = 3"
» **Accessories:** Mounting Clip, HDMI Cable Clip
» **Enclosure:** Black Metal
» **Rack Mount:** Bracket (included)
» **Product Weight:** 0.6 lb
» **Shipping Weight:** 1 lbs

System Design Example

Blu-Ray — PCM Audio / HDMI
Control System — IR / RS-232
KD-BBTX — CAT5/5e/6
Up to 300' CAT5/6/7 cable with bi-directional IR/RS-232 — CAT5/5e/6
KD-BBRX — HDMI / RS-232 — Display
Audio Rcvr. — IR / PCM Audio — Speakers

Desktop PC — Analog Audio / DVI Video*
Control System — IR / RS-232
KD-BBTX — CAT5/5e/6
Up to 300' CAT5/6/7 cable with bi-directional IR/RS-232 — CAT5/5e/6
KD-BBRX — DVI Video* / RS-232 — Display
Audio Rcvr. — IR / Analog Audio — Speakers

Legend: CAT5/6/7 | Audio | HDMI | IR | DVI | RS-232

*To connect DVI use Key Digital® HDMI to DVI adapters, part numbers KD-FMHDMI and KD-MFHDMI