

# KDV7920/7820

## High Definition Videoconferencing Terminals



KDV7920/7820 is a series of High-Definition videoconferencing terminal with outstanding stable motion video quality, crystal clear audio effect and excellent dual stream presentation capability. With its rich interfaces for excellent coordination, characteristics and performance, the KDV7920/7820 HD videoconferencing system provides you with real natural and pleasant visual experience.

## Features

### **Extraordinary Clear and Sharp Video Quality**

Highly powerful integrated CPU image processing technology makes HD video performance faster ever with 720P/1080P\* 60fps @ 8 Mbps at an exceptional High-Definition quality.

### **Audio Effects**

Supports MPEG4-AAC, G.719, G.722.1C, MP3 and many more protocols for superior digital audio effect.

### **Rich HD Interfaces**

The integrated HD video matrix leads your competition in deployment, by taking advantage of HDMI and broadcasting level HD-SDI (High Definition Serial Digital Interface). The HD video matrix allows multiple audio and video signals synchronization which saves setup cost without compromising conference quality. The HD-SDI interface supports a simple cabling solution free of signal loss over an extra-long distance (more than 330 ft) without the use of any repeater.

These well-known industry standard interfaces allow simplicity and attainability in designing large conference rooms and choosing peripheral equipment.

### **High-Definition Dynamic Dual Streams**

These HD terminals are incorporated with the standard H.239 full dynamic dual stream and static stream functions, as well as dual-channel of up to UXGA/SXGA/720P/1080P\* High-Definition full dynamic video streams.

### **Strong Network Adaptability**

KDV7920/7820 supports both Ethernet and E1 access with reliable automatic redundancy backup between the two types of connections, which will prevent important meeting from network interruption and also flexibly provide system deployment over diversified networks. Built-in proxy for firewall/NAT traversal, intelligent lost packet recovery, dynamic rate adjustment, QoS and other network

optimization mechanism will optimize the network connectivity to improve video communication quality.

### **Security and Reliability**

The terminal is built-in with its 128-bit AES hardware encryption functions and multiple redundancy mechanisms based on the embedded system architecture, the terminal possesses and delivers the best systemic security and reliability to hold conferences with more confidence. Gatekeeper's H.235 protocol realizes the authentication and authorization for security management.

### **Complete High-Definition Solution**

With KEDACOM's fast-growing videoconferencing product family, you can build a complete High-Definition videoconferencing system using our entire solution that spans from terminal to MCU and recorder, from conference management to system maintenance tools.

## Technical Specifications

### Protocol Standards

System standard: H.323, H.320, SIP

Video standard: H.263, H.263+, H.264, MPEG-4

Audio standard: G.711, G.719, G.722, G.728, G.729, G.722.1 Annex C/Polycom® Siren14TM, MP3, MPEG4-AAC (LC/LD)

Network protocols: TCP/IP, Telnet, HTTP, FTP, SNMP, DHCP, RTP/RTCP, PPPoE, NTP

Other standards: H.221, H.225, H.231, H.235, H.239, H.241, H.242, H.243, H.245, H.281, T.120, T.140

### Conference Rate

High-Definition conference: 768Kbps~8Mbps

Standard Definition conference: 64Kbps~8Mbps

### Models

KDV7920A: 1080P@60fps

KDV7920B:

1080P@30fps Encoding, 1080P@60fps Decoding

KDV7820A:

720P@60fps Encoding, 1080P@60fps Decoding

KDV7820B: 720P@60fps

### Resolution

Resolution of video images:

1080P (1920×1080)\*

720P (1280×720)

4CIF (704×576)

CIF (352×288)

QCIF (176×144)

Resolution of PC contents:

UXGA (1600×1200)

SXGA (1280×1024)

XGA (1024×768)

SVGA (800×600)

VGA (640×480)

### Video Input / Output

HD Interface: DVI-I (HDMI, YPbPr and VGA)

HD-SDI (Optional Module)

SD Interface: Composite

\*1080p resolution available only in selected models

### Video Features

Status display

User define logo

Support PAL/NTSC

Adjustable brightness, saturation and contrast

### Dual-stream Features

Support H.239 standard dual video stream protocol

Support dual-video, dual-display

Support bandwidth adjustment

### Audio Input / Output

XLR (48V phantom power)

Digital Audio: DVI-I => HDMI, RCA,

6.35mm Stereo

### Audio Features

Audio sampling frequency: 48 KHz

AEC (Automatic Echo Cancellation)

ANS (Ambient Noise Suppression)

AGC (Automatic Gain Control)

ALS (Automatic Lip Synchronization)

Mute and Dumb control

### Control Interface

One Rs485

One RS232

Infrared remote control

### Network Interface

IP: 10/100M Ethernet interface

### Network Features

Embedded Proxy for Firewall/NAT traversal

Intelligent packet loss recovery

Automatic data line backup

Dynamic rate adjustment

QoS (DiffServ, IP Precedence)

Adjustable MTU value

Automatic repeat attempt upon disconnection

Auto-detection of IP conflict

Automatic gatekeeper discovery and registration

Automatic PPPoE dial-up

### Conference Function

Point-to-point and multi-point conferences

Conferencing request features including joining, speaker, chairing and chiming in

Support calls through E.164 number, alias name, and IP address

### Security Features

H.235-based conference encryption flow

Built-in 128-bit AES hardware encryption

Conference password protection

Local logon and authorization

Built-in firewall

H.235 gatekeeper password authentication

Management and Diagnosis Features

Support SNMP

PC Web browser access for local operations

Support online configuration and upgrade via

Telnet/FTP/Web/NMS

Support event log and management functions

Support status monitoring, and alarm display and transmission

Address book management

Electricity Characteristics

Power consumption of integrated system: ≤60W

Adapter power supply: AC (100~240V/50~60Hz)

### Environmental Requirement

Ground resistance: ≤5Ω

Operating temperature: 0°C~55°C

Operating humidity: 10%~90% (non-condensing)

Atmospheric pressure: 86~106kPa

### Physical Specifications

19-inch 1.5U standard rack

Dimensions: 66mm (H)×442mm (W)×337mm (D)

Weight: ≤5 Kg

