

Video Door Phone

Talk to the person at door without letting him in



Video Door Phone

VDP is a real-time system comprised of two components – Monitor and Camera. Camera contains a Lens, Microphone and Speaker subsystems and the Monitor consists of LCD based Display, Microphone and Speaker device.

AV data is captured using Camera lens and microphone is encoded as MPEG-2 Video and MPEG-2 Audio. These two encoded streams are multiplexed using MPEG2-TS for streaming or MPEG2-PS for storing as audio-video clips. For streaming the AV data to monitor we use RTSP/RTP protocol.

The monitor device de-multiplexes, decodes and displays the video data on the LCD display and plays audio data on speaker device respectively.

VDP device specifications

- Camera: (Camera Lens + microphone + speaker)
 - uCLinux
 - MPEG hardware encoder (video only)
- Monitor: (Display + microphone + speaker)
 - Win CE
 - Video rendering using Hardware DMA buffers

Situation

Digihome Solution's (<http://www.digihome.co.in>) home automation system allows the users to control their home appliances and other features through various interfaces like Web, SMS, phone call or a UI console.

Digihome also offers Video Door Phone system which enables viewing and communicating with the visitor through a UI console deployed inside.

Expected Feature Set

- Video Door phone system providing 2 way communication – one way video, 2 way audio
- A solution to record audio-video clips
- Video Door phone solution which could direct the calls on the mobile when the person is not at home.

Solution

The video door phone solution designed and developed by Aftek provides high quality audio video communication.

The solution can re-direct the call to your mobile phone in case you are not at home.

Solution offers simultaneous viewing of multiple cameras from the console.

Aftek's value-add

- ① Highly optimized state of art video codec to have superior video quality.
- ② Acoustic Echo Cancellation and noise removal for audio clarity
- ③ Efficient AGC algorithms for automatically controlling audio volumes at both ends.
- ④ Noise suppression algorithms for high quality audio.
- ⑤ 3GPP clip trans-coding for sending audio-video clips to Mobile devices.