

CVI, TVI, AHD.

1. Where are they coming from?

HD-CVI: in 2012, Dahua announced his own developed HD CCTV standard-----HD-CVI (High Definition Composite Video Interface), an analogue technology based on coaxial cable.

As Dahua said before, HD-CVI made breakthroughs for the limitation of traditional Analogue CCTV, get Megapixel images when the transmit distance is over 500 meters.

HD-TVI means “High Definition Transport Video Interface” it is also a HD CCTV standard based on coaxial cable.

HD-TVI was invented by Techpoint, Inc (built in Silicon Valley in 2012), whose team mostly comes from Techwell. Techwell’s chipset had a high market share in the field of analogue DVR before, so Techpoint inherited Techwell's rich experience and technology.

As the analogue 960H can’t meet the request of customers, IP CCTV also had its weakness such as network delay. A market demand for HD analogue CCTV based on coaxial cable emerged, so Techpoint, Inc invented HD-TVI, a 720P/1080P full HD video chipset.

For AHD, as the high speed development of IPc since 2013, IP got a big stir in CCTV market. but analogue video product is still hot.

On this occasion, Nextchip in Korea launched its HD analogue chipset, AHD (Analogue High Definition)

2. Common features of these 3 technologies.

- CVI, TVI, AHD are Progressive-Scan HD analogue video chipset based on coaxial cable, all the video chipset of each technology is placed in the security camera.
- Operate the same as the traditional analogue device, it can be upgraded directly from the 960H CCTV system. They follow the same wiring regulation with 960H, which means

customers can upgrade their 960H to HD CCTV easily by just replacing the Camera&DVR.

- Compared with HD-SDI, CVI, TVI, AHD has a longer transmit distance without any signal loss.
- Compared with IP CCTV, CVI, TVI, AHD doesn't have problems such as delay, signal loss.

3. Product difference of these 3 technologies.

Compared with CVI and TVI, **AHD** manufacturers said it can be compatible with 960H/D1 perfectly

But someone had a test on AHD, if customers need AHD to support 960H, they must reset the parameters in several menus and restart DVR.

In the test of 4 channel AHD DVR.

There is a strange rule: 1st channel and 2nd channel must keep the same resolution(both 720P/960H), 3rd channel and 4th channel must keep the same resolution(both 720P/960H).

It means it is impossible if customers want 1*720P+3*960H or 1*960H+3*720P, neither in 720P for 1st and 3rd channel, 960H for 2nd and 4th channel.

This rule reduced the degree of User Experience.

And for the moment, AHD only has 720P version(AHD 1.0), 1080P version(AHD 2.0) will launch in a few months.

But AHD 2.0 is not compatible with AHD 1.0, which means the current AHD is just a transitional product, the true AHD will need some days.

Some manufacturers will separate their AHD products to cover this difference, such as AHD-A series(which may use AHD 1.0), AHD-B series(which may use AHD 2.0).

Actually, for TVI, it is also easy to make it be compatible with 960H, just by adding a 960H video chipset can make it. The 960H camera is purely plug and play, no need to set parameters, restart DVR, and no strange rules.

Most of the customers think that the TVI DVR price is more and more closer to 960H, at the end of 2015, 960H will gradually exit the market. So a hybrid DVR(960H+720P/1080P) is just a transitional product.

CVI had become a standard in HD-CCTV alliance, HDCCTV 2.0 AT, but it is still not quite open.

one manufacture made the industry standard, produce and sell CVI chipset to other manufactures.

And it also produce thousands of CVI in this market. nothing difference like monopoly.

Like a game, he is a judge and also act as a player.

TVI and AHD are open chipset, any manufacture can use these chipsets, the product can be more market oriented.

4. CVI, TVI, AHD, who will be the most popular?

CVI lead by Dahua has a first mover advantage, CVI enter into the market early.

TVI lead by Hikvision is tend be accepted by more manufacture, over 100 CCTV manufactures from the world are using this technology.

For AHD, though almost no leading manufacture using AHD, but AHD has an advantage in price.

But all of these technology had a problem in marketing, customers still don't know them well.

Which one can be more popular?

It may depend on the manufacture's marketing ability, who had a better marketing muscle, whose product may be more quickly accepted by the market.