TVI HD
ANALOG SOLUTION

TURBO HD 3.0

PERFECT VIEW

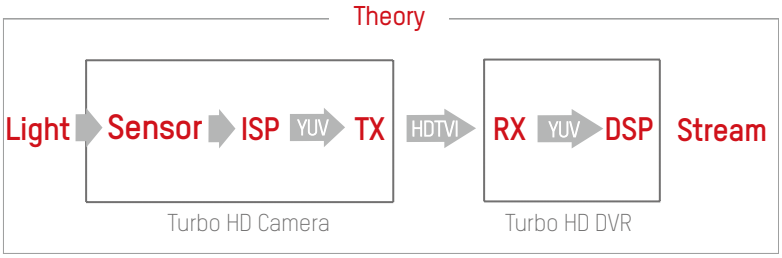
REV UP ANALOG WITH TURBO HD OVER COAX

The Trends and Market Requirements for HD Products

With the recent and rather substantial surge in the need for up-to-date surveillance systems, installers often find themselves scrambling to patch together old technology with new products. Naturally, compatibility challenges pop up everywhere. When you need to update or upgrade an existing video surveillance system, finding the right gear is one of the biggest difficulties. Not only that, but removing old components and cables to install new equipment often makes a project more complex than simply starting from scratch. You need surveillance products that are widely compatible, simple to install, and cost effective. We provide just that – in our TVI HD Analog Solution.

Specially designed for analog users who want a high-definition surveillance system, Turbo HD 3.0 Solution makes High Definition video possible without upgrading to IP cameras or even replacing existing cabling structure. Turbo HD 3.0 technology takes current equipment and powers it up to the next level.

HDTVI TECHNOLOGY

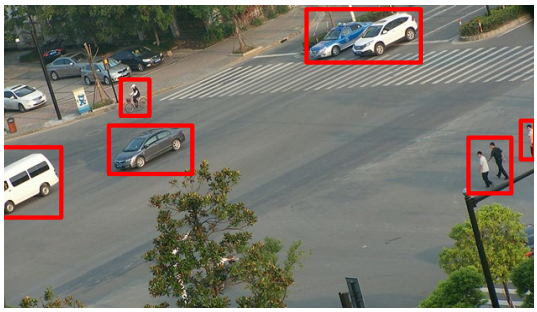


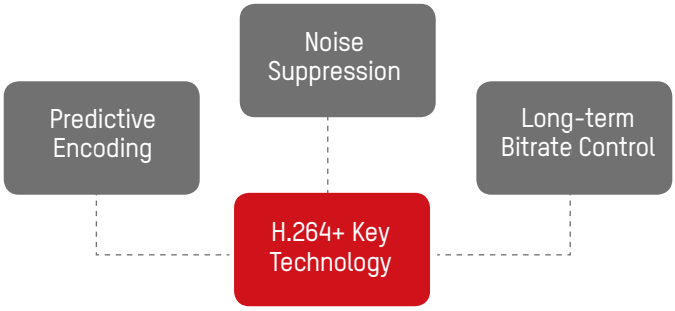
HIGHLIGHTS

- HDTVI (HD Transport Video Interface) standard
- Transmission media: SYV75-3/SYV75-5/UTP
- Farther transmission distance(1200/800m)
- Low-frequency signal, great anti-interference & image performance

H.264+: SAVE 50% Bitrate as Average

Maximizing the memory of security systems is critical. Solving that problem, with H.264+. The "+" on our "H.264+" means a step up in efficiency from the standard H.264 – bitrates are reduced by 50% on average while high transmission quality is maintained. That means more data becomes available, and it means more memory remains available in existing recording devices and computer systems.



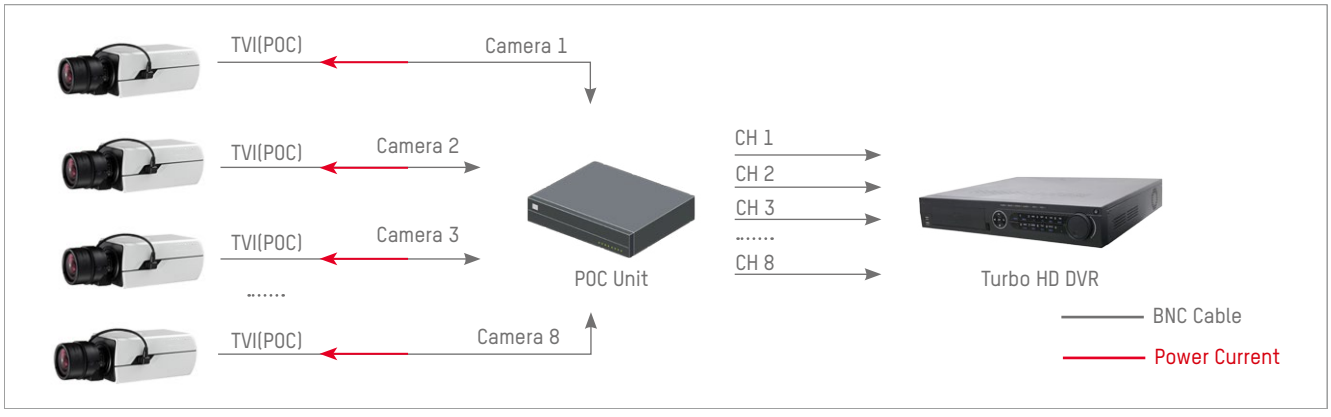


Longer Transmission Distance

As any successful business grows, so does its need for extended security. Once a complete system has been installed, it's not very long before it needs to expand. Using our technology, your customers can manage much larger projects, or extend existing ones, with high definition video while simultaneously increasing the transmission range. Users immediately find an Increase in transmission distances – even up to 2625 feet (800m) – using existing coaxial cable. The full value of the user's investment comes through in HD 1080p resolution. That means upgrades in both quality and size at the same time.

Easier Installation with POC

Once the equipment has been selected, the next hurdle is the hardware installation process. This is usually the toughest part, but now it's gotten significantly easier. You can leave that existing coax cable right where it is. Power-over-coax (POC) feature radically simplifies installation, as one coaxial cable carries both the video signal and the power supply. This translates to reduced installation time, which also translates to a reduction in both installation and material costs – which also means happy customers!



Up to 5MP

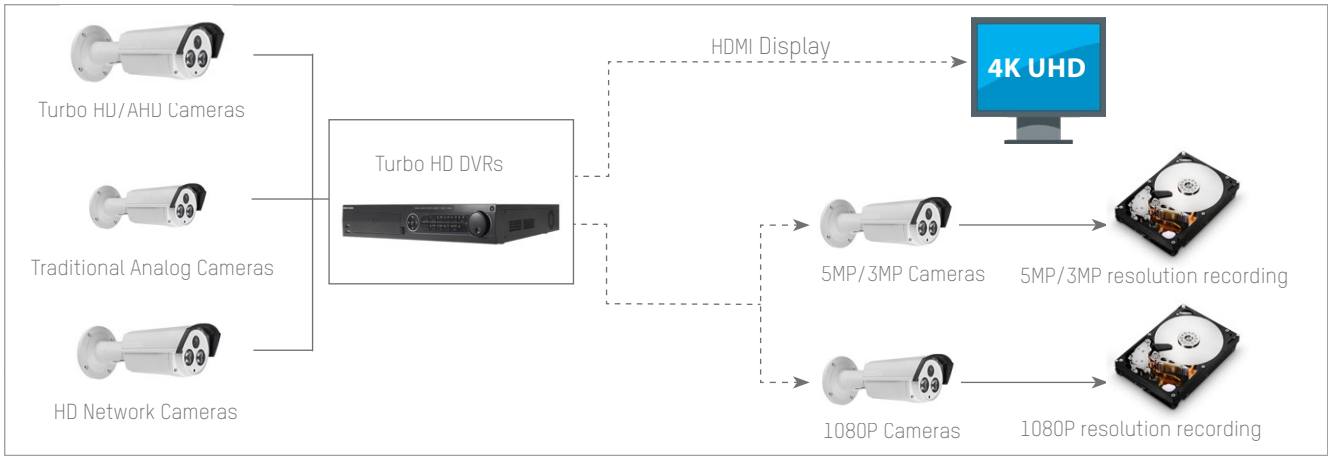
The Turbo HD Analog solution offers up to 5MP HDTVI Camera input and 4K UHD HDMI video output. The HD video output is not just based on the work of sensor, but the combination of the HD lens and image signal processing (ISP). HD lenses with low distortion and large apertures enable better low-light performance, while ISP provides videos with greater detail and vibrant color.

Conventional analog camera

Hikvision Turbo HD analog camera

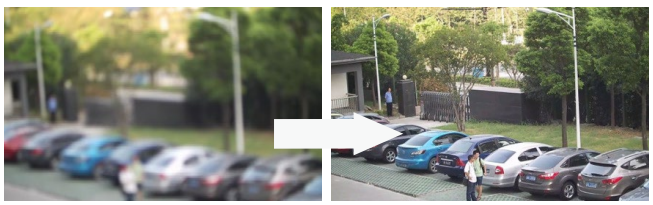
Tribrid System

The Turbo HD DVR offers simultaneous connections to IP, analog, Turbo HD and third-party AHD cameras. Existing systems can be upgraded by simply replacing the current group of cameras and DVRs, and also by adding IP network cameras to cover new areas. Alternatively, users can keep existing SD cameras and only upgrade the necessary surveillance points to HD. The Turbo HD solution offers seamless compatibility with various third-party HDTVI compliant cameras and DVRs for superior flexibility.



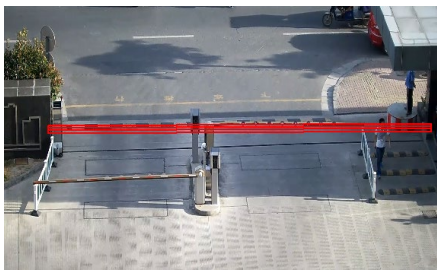
Smart Detection

The Turbo HD DVR is equipped with smart features such as face detection, defocus detection, and video analytics including traversing virtual plane, intrusion detection, and scene change detection.



Defocus detection

Scene change detection



Traversing virtual plane

Intrusion detection

Face detection

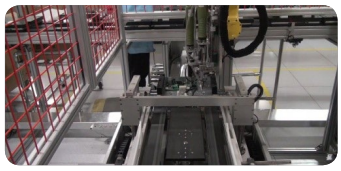
Advanced Manufacturing Level

As a manufacturer, we seek the highest level of control over product quality, and the manufacturing process greatly contributes to performance of the Turbo HD series. The products are processed in a cleanroom for precise component assembly of camera lenses. In addition, we use automation software and rigorous testing to improve production efficiency and ensure consistency. As a result, we integrated lens and other product offerings feature high stability and reliability.

The products also undergo environment, aging, and EMC testing — which means that Turbo HD products can thrive in extreme temperatures or very specialized environmens.

What is Real HD

Because of our advanced, industry-leading manufacturing technologies, the flexible Turbo HD 3.0 Solution offers seamless compatibility with various third-party HDTVI-compliant cameras and DVRs. Your customers don't have to replace each and every component in their setup. With everything you need from cameras to recording devices and more – and extensive compatibility with devices from other manufacturers, too – this easy and affordable solution will upgrade an existing analog CCTV system to high definition. We helps you solve surveillance installation and extension problems in any situation you encounter.



Auto Assembly

Guarantee of High Quality

Auto Testing

Auto Packaging

HD Lens

HD Lens

Conventional lens　　Hikvision lens

Has professional lens division in R&D department—from design to deployment.

Big Aperture

Conventional lens　　Hikvision lens

With big aperture, Turbo HD cameras have better low light performance at night.

Low Distortion

Conventional lens

Low distortion

Turbo HD cameras use HD lens with low distortion.

HD ISP

Clear

Color

Comfort

Clear　Color　Comfort

ISP provides videos with more details and real color.

Cameras

Cameras from other brands

Manufacturing

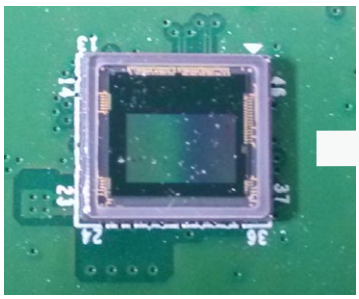
Clean Room

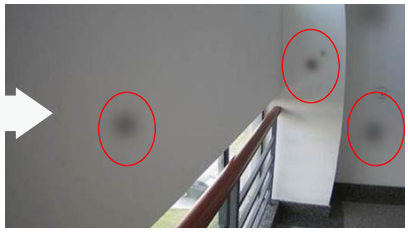
Clean assembly

Automatic Assembly

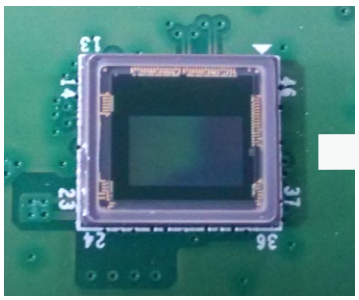
Automatic assembly ensures high efficiency and avoids problems such as defocus.

Comparison



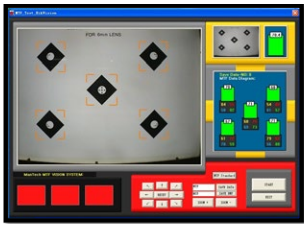


Dust on sensor



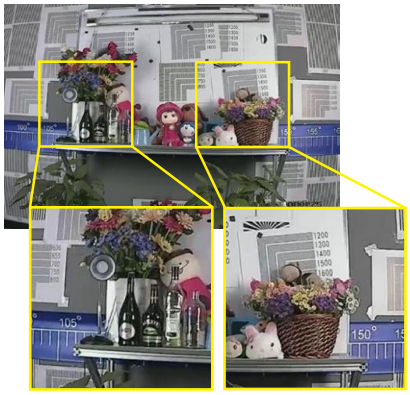
Clean sensor

Automation Software



- Uses automation software and tests machines to improve production efficiency and ensure focus consistency.
- Five blocks must all turn green in the focus station.

Clear & Defocus



Clear

Defocus

Seamless Lens

Seamless design with an integrated lens

Other brands' design with a separated lens

Reliability

Components

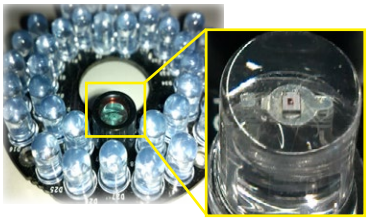
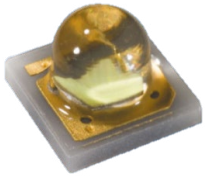
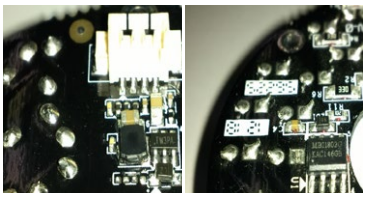


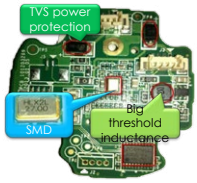
Photo Transistor
Photo transistor is environmentally friendly and meets RoHS standards.



Infrared (IR) LED
IR LED has high reliability and a long lifetime (more than 100,000 hours).`



Constant-Current Circuit
A constant-current circuit chip helps to maintain the IR LED's stability and operational life.



Components
SMD technology, high reliability.`

Environmental Testing

Extreme-temperature test cabinet

Aging room

Temperature
In an extreme-temperature simulation environment, test the devices' working conditions and determine whether there is any change.

Mechanical Environment
Test the devices' performance under vibration, shock, or dropping that may occur during transportation and daily use. Determine whether the IR-cut filter switch functions normally and whether defocus occurs.

Special Environment
Test the protection level of devices' enclosure and accessories under salt mist, water, violence, etc.

EMC Test Item—Surge

Surge test device

Test device for electrostatic discharge anti-interference

Electrostatic discharge anti-interference
- Test a single device's or a system's electrostatic discharge anti-interference ability.
- Simulate the electric discharge of operators or objects to the device when in contact or close by.