



LILIN is a global IP video manufacturer of IP video cameras, recording devices and software, with over 35 years of experience. The company has maintained its dedication to Creativity, Progress, and Excellence, providing expertise in digital video with a strong focus on innovation.

Established in Taiwan in 1980, LILIN has quickly grown to be among the worlds' leading manufacturers in the IP video surveillance industry. LILIN is dedicated to the design, development, manufacture, and marketing of a broad range of networking surveillance solutions. LILIN is proud to have strong relationships with over 50 valued software and integration partners, and is recognized as the first camera company to become ONVIF-conformant.

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LILIN Navigator is a Fully Featured and Trusted Video **Management System**

► Centralized & Distributed Management

LILIN NAV enables users to manage and to control systems including cameras, NVRs, and servers from a single location.

► Integration & Flexibility

LILIN NAV supports ONVIF for integration with third-party cameras. Further integration is possible with access control systems, ANPR (automatic number plate recognition), POS and barcode scanners.

▶ Scalability

LILIN NAV supports small to large projects. It benefits from several advanced features such as failover, Mosaic TVWall Display, remote NAV client access, alarm management and user access management.

► Failover Backup Operational System

The failover feature of the LILIN NAV ensures that no data is lost if the primary NAV server fails. If this happens another NAV recorder can be configured to take over the recording, meaning no loss of data.

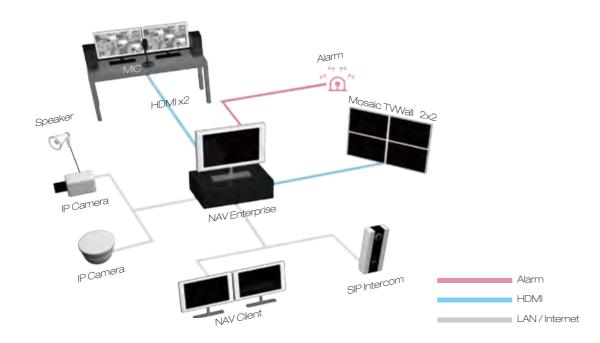
► Smart Search Engine

Smart Search Engine allows users to quickly find events. Users can locate and trace back the video clip they want with the Smart Search Dialogue Box.

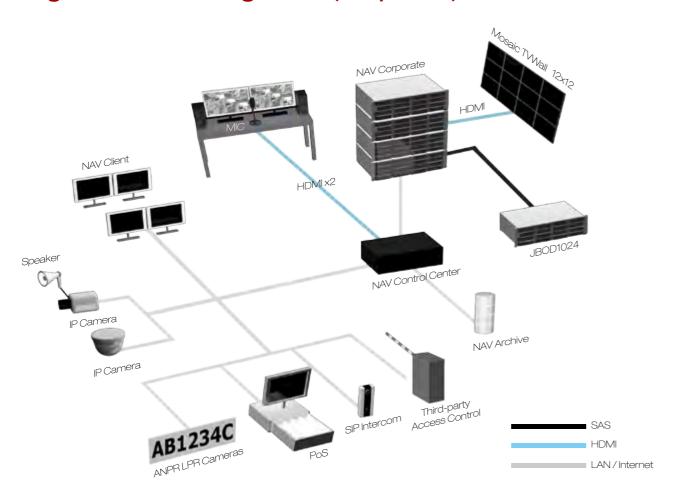
► Future Expandability & Compatibility

LILIN NAV is a compatible management system that allows easy integration. The design philosophy of NAV focuses on backward compatibility and future expansion.

► Navigator Video Management System (Enterprise)

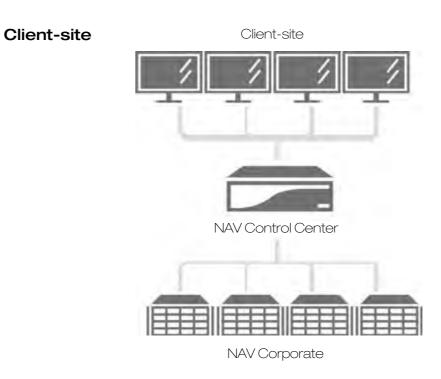


► Navigator Video Management (Corporate)



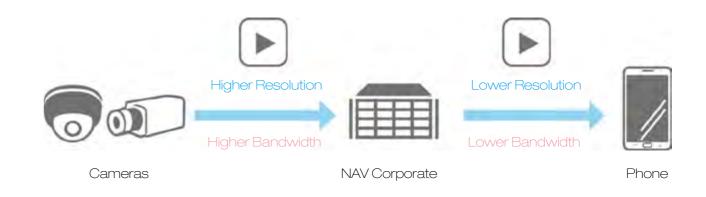
► NAV Client-site Monitoring

NAV corporate allows users to expand the monitoring system to a larger scale. Unlike conventional monitoring systems which can only be controlled from a single site, users are able to manage and control the system from various locations.



▶ Transcoding Function in a Lower Bandwidth

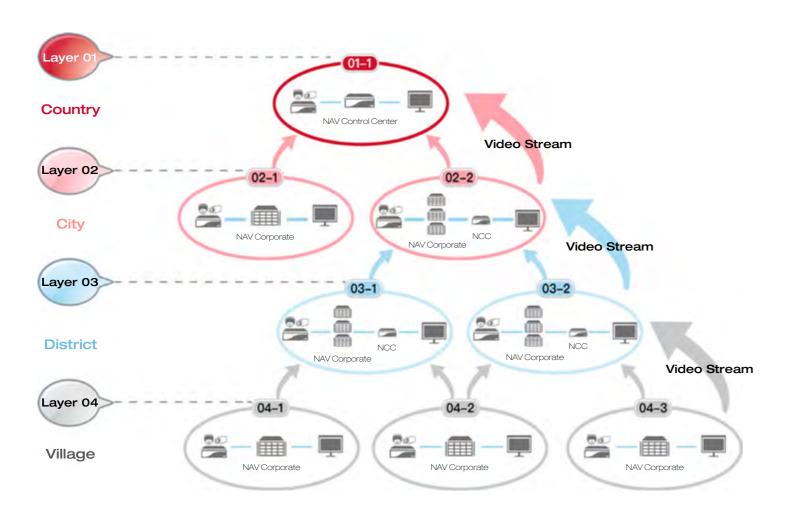
It is always difficult to play video with a high resolution and framerate on a mobile device. With transcoding functionality, the recorded video is transcoded into an image file at a lower resolution and lower bandwidth. This results in a more reliable monitoring solution for mobile devices. LILIN NAV recorders provide MJPEG transcoding for easy integration of live and recorded video.





▶ Centralization

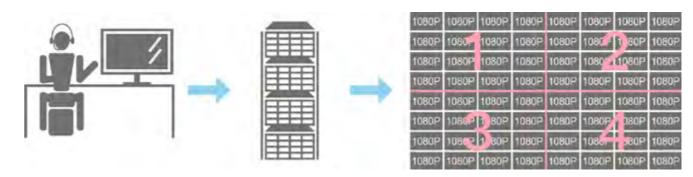
Operators could control the distributed NAV control center under the scope of centralized system. Even if the operator is on one of the distributed site, he can only control and manage the whole system under the centralized design way. In the multi-layered algorithm, user's access right is also taken into consideration. Client of the parental NAV corporate can only review the video images of the subsidiary network devices under the parental NAV corporate. The client could not access to the information of the next client in the same layer.



▶ Mosaic TV Wall Software

Mosaic TV wall is a powerful tool that allows up to 64 monitors to be used (8 monitors * 8 monitors). This tool is ideal for control centers and applications requiring live monitoring.

The TV wall can be created using the HDMI outputs from your Navigator servers. A single Control monitor can be used to create fully customized templates of up to 144 split views simultaneously. These can then be mirrored to be displayed across multiple monitors/ TV Walls.



NAV Server * n

8 * 8 Monitors / 12 * 12 Channels
Resolution Will Lose Less

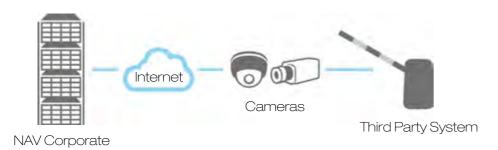


Mosaic TVWall



► Third-Party System Integration

Third-party systems such as access control or an intrusion alarm can be connected to NAV via LAN or internet. Alarm inputs and outputs are easily managed for third-party DI/DO devices.





Parking Garage Access Control System Intrusion Alarm System

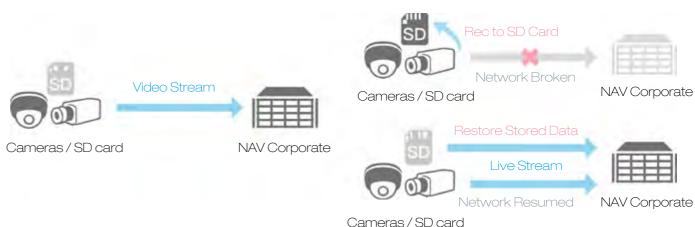
► Fully Automated Virtual Failover

When running a multi-server system, it is possible that sometimes a NAV recorder might experience a failure. The fully automated virtual failover feature allows the allocated failover servers to take over the recording task should one of the recording servers fail. The video recorded on the failover server during failover period can be retrieved to the maintained recorder simultaneously once the original server is back online.



▶ Video Sync with no Data Lost

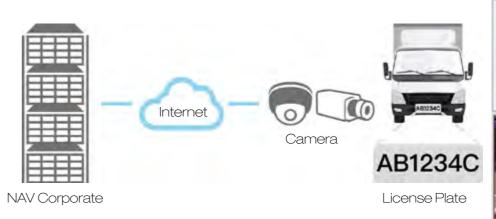
In case of network failure, images can be temporarily stored on a SD card within the camera. When the network connection is restored and returned to normal operation, the NAV recorder can retrieve and merge the video recordings. This ensures that users get the uninterrupted video recording as well as to provide safe system reliability and operation.



Cameras / SD card

► ANPR/LPR Software for Identification

LILIN ANPR/LPR software makes it possible to capture license plate numbers. These images are saved to the NAV recorder where a snapshot is taken. The software can analyze collected information and create a database system that composes of a denial list, accessible list and exclusion list. Operators can manage the traffic flow and set up a strict monitoring system by means of this database.





ANPR Setting Dialog





LILIN NAV Control Center is able to receive metadata from advanced IP network security cameras with Intelligent Video Surveillance (IVS) features. After receiving this data, LILIN NAV control center can send out an alarm signal to the connected navigator clients and notify specific incidents. The metadata such as object information and motion image can be displayed on the screen of NAV Client. Graphical analytic statistics for these IVS features are also integrated.

IVS features are available as standard on the latest generation of IP network security cameras. These IVS features are designed in LILIN's latest IP camera, including Motion Detection, Tampering Detection, Zone Entering, Zone Crossing, Direction Detection, Tripwire, Object Counting, Advanced Motion, Audio Detection, Face Detection, Tripwire and Semaphore, Missing Object and Unattended Object.



▶ Motion Detection:

Detects motion in a scene. The area can be customized and the sensitivity adjusted to suit specified requirements.



► Tampering Detection:

An alarm is triggered automatically when the camera detects someone attempting to cover, vandalize or move the lens.



▶ Zone Entering:

Capable of tracking up to 32 individual ID object boxes, analytics can count people entering and exiting a particular zone. A record of how many times this area has been crossed is then accessible from the camera's menu.



▶ Zone Crossing:

Movement from either direction crossing up to 8 tripwire lines drawn within a camera image can trigger alarms with up to 32 individual ID object tracking boxes.



Direction Detection:

When a preconfigured line is crossed in a programmed direction at the customer site, the LILIN camera generates an event and counts the entry.



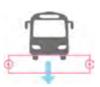
▶ Audio Detection:

An alarm is triggered when ambient sound exceeds predetermined levels. An example is a camera located in a bank and one employee is screaming.



► Tripwire:

Tripwire allows up to 8 lines or rectangles to be drawn within a camera image, movement from any direction across this line will trigger a motion detection alarm with up to 1 individual ID object tracking boxes. Line Crossing detects any object crossing a line drawn anywhere in the scene, and Zone Intrusion can be configured to monitor intrusion into any arbitrary zone.



▶ Object Counting:

Counting the number of objects entering or exiting an area over a specific duration. A virtual area can be drawn over a camera image with anything passing through the virtual area being logged and counted. A record of how many times this area has been crossed is then accessible from the camera's menu. Object Counting technology includes People Counting feature - the number of personnel entering or exiting an area over a specific duration can be counted; and Vehicle Counting feature- detects and tracks vehicle number in real-time.



▶ Advanced Motion:

The main aim of advance motion detection is to change the way motion detection is handled by the camera. With a four-pass filter for separating motion objects, this results in a more accurate motion detection algorithm, lowering false alarms and other recording triggers.



► Face Detection:

When a human face is detected, LILIN cameras can send alerts or customer notifications.



▶ Tripwire and Semaphore:

Create alarms when up to 8 tripwire lines are crossed when a specific colour is shown in your chosen area. An example of tripwires becoming active is when a traffic light turns to red.





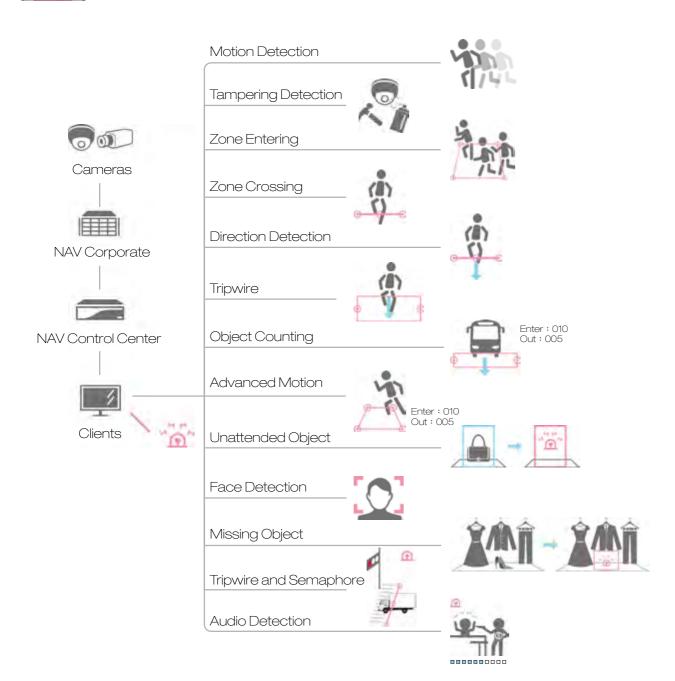
► Missing Object:

It perfectly works in situations where you might want to be notified when an object goes missing. It is suitable for a warehouse or store where there are important objects you want to keep track of.



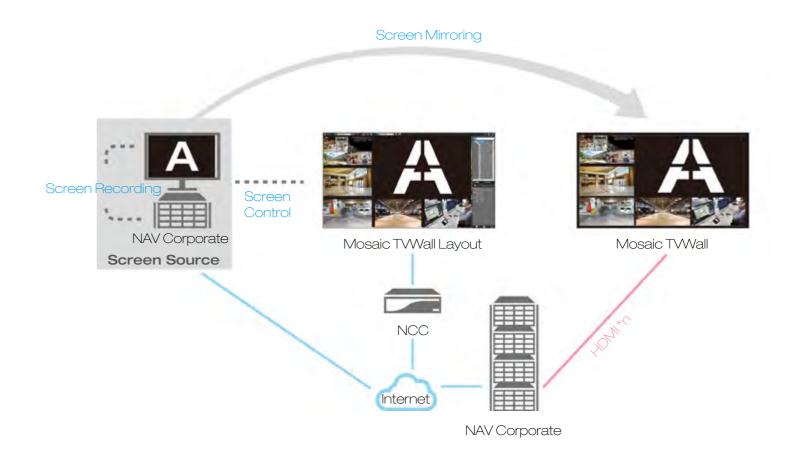
► Unattended Object:

It is perfect for places such as an airport, train station or bus station where suspicious bags or packages left are an issue. You can draw an area where you would need to monitor for these "drop offs" and be able to receive an alert when a package is left unattended for even a short period of time. The security team would be notified of this potential threat.



▶ ScreenMirroring & ScreenRecording

Screen Mirroring feature allows the screens of the operator directly mirrored on the clients' Mosaic TVWall, such as E-map, video and audio playback, and motion image of the clients can be mirrored on Mosaic TVWall. Furthermore, those metadata of the NAV Clients can be recorded on and retrieved from the NAV Corporate servers.





► P2P Connection Supported Makes Remote Control of Your NVR Easier

LILIN NAV Solution supports P2P technology and can be connected to our cloud server to make control of your remote NVR easier than ever.

Our cloud server, LILIN Cloud, is available on the web. No more complicated set up steps for static IP addresses, no more router configuration and no more DDNS service required. By simply scanning a QR code from your mobile device, you can connect to the NVR easier. You will be redirected to your cameras in just a few seconds. You can enjoy accessing to live videos at any time anywhere.





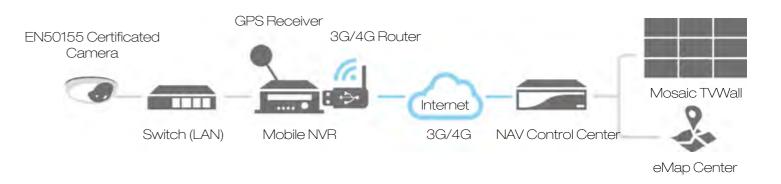


▶ Traffic Management Application

For the corporate system, operators can manage a larger project such as transportation and traffic monitoring. LILIN NAV control center is connected to a Mosaic TVWall. Through fiber networks, LILIN NAV control center can also be connected to NAV client. Instant images from the highway and intersection can be easily and clearly viewed in both central control room and the client side.

Key Points

- [√] Mosaic TVWall Solution in traffic control room
- [v] Centralized video management. Live video will be sent over to the control center and then to the control center. Each branch office will be able to review the live video from control center.
- $[\sqrt{\ }]$ Operators will be able to remotely monitor the live video recorded from each branch office.





▶ Mobile Solution

LILIN NAV is also a suitable system for mobile solution. LILIN mobile NVR can be connected to cameras via a switch and send back live video images to NAV control center under the 3G/4G network environment.

- LILIN NAV can be connected to Mosaic TVWall via HDMls. The Mosaic TVwall provides high-resolution images, ensuring much more detailed and clearer images.
- P2P networking helps solve the connection problem under the circumstances with no fixed IP addresses. Mobile NVRs can be automatically connected to the screen via 3G/4G network.
- LILIN NAV also supports GPS tracking on Google map, displaying the exact locations and corresponding images on the map. Operators could easily manage the traffic with the E-mapping function.

Key Points

- $\lceil \sqrt{\rceil}$ Fast deployable 3G/4G video management solution
- $\lceil \sqrt{\rceil}$ Unmanned 3G/4G wildfire and flooding video system
- $\lceil \sqrt{\rceil}$ Traffic management with no local network but covered by 3G/4G network
- $\left[\sqrt{}\right]$ Live video and audio supported via 3G/4G network
- [√] Fleet management via 3G/4G network
- $[\sqrt{\ }]$ Google map on Mosaic TVWall
- $\left[\sqrt{}\right]$ EN50155 certified NVR and camera available

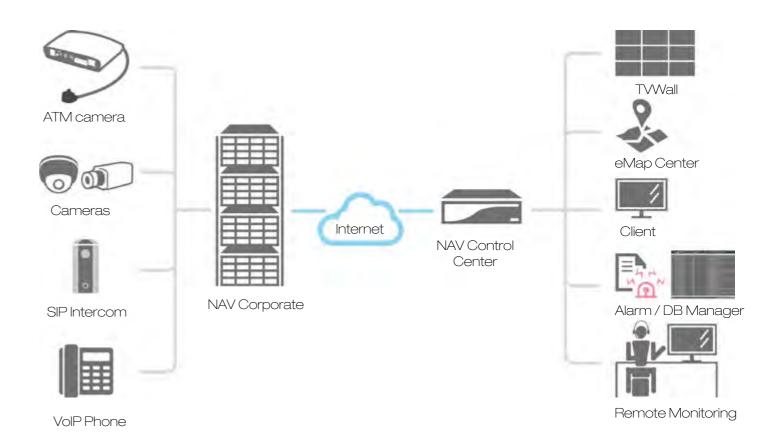


▶ ATM Solution

LILIN NAV enables to manage ATM solution much easier. Through Internet, NAV can be connected with several ATM cameras via low bandwidth mode. With Google map site management, operators are able to track and monitor a specific ATM's location. DB Manager helps operators to check the condition of the camera.

Key Points

- $\lceil \sqrt{\rceil}$ Centralized user management with access right administration
- $\lceil \sqrt{\rceil}$ Low bandwidth video in between VMS and each ATM
- $[\sqrt{}]$ Site managing on the Google map for ATM
- [√] DB Manager for ATM NVR HDD SMART (Self-Monitoring, Analysis, and Reporting Technology) and health check on the camera
- $\lceil \sqrt{\rceil}$ Video management on each branch of the bank
- $\lceil \sqrt{\rceil}$ Full range of in-door & outdoor vandal proof auto focus camera
- $\lceil \sqrt{\rceil}$ Cameras of the bank and door station all support SIP-enabled intercom



GLILIN

MERIT LILIN ENT. CO., LTD.

No. 20, Wugong 6Th Road, Wugu District,

New Taipei City, Taiwan, 248

Tel: +886 2 2298 8988, 6625 7699 Fax: +886 2 2298 9077, 6625 9866

E-mail: sales@meritlilin.com

www.meritlilin.com

LILIN Branch Offices:

Australia ------

TEL: +61 2 9646 4878 (NSW)

+61 3 9645 6129 (VIC)

E-mail: sales@lilin.com.au

China -----

TEL: +86 20 8226 5182

E-mail: gzlilin@meritlilin.com.cn

Hong Kong ------

TEL: +852 2889 2862

E-mail: roger@meritlilinhk.com

TEL:+91 11 4168 1688

E-mail: pema@meritlilin.com.tw

TEL:+39 0542 781594

E-mail: info@meritlilin.it

♦ Malaysia ------

TEL: +60 3 6274 5066

E-mail: sales@lilin.com.my

Spain -----

TEL: +34 90 210 85 33

E-mail: info@meritlilinspain.com

9 UK -----

TEL: +44 870 120 5550

E-mail: uk@meritlilin.com

∮ USA -----

TEL:+1 626 930 1000

E-mail: info@meritlilin.us





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