

# 1 Getting Started



If you want to download product documents, please find your desired version in [Change History](#) and click the download link on the page.

## Cloud Platform Introduction

With the development of smart cities and commercial display, there are more and more LED display applications and large-scale cluster deployment, boosting the number of LED displays. As a result, users have increased demands for remote centralized management for a large number of LED displays located in different places.

To meet users' needs, NovaStar has launched VNNOX, a secure one-stop cloud platform, which combines cloud publishing and monitoring and allows for one-stop remote content publishing and device management.

VNNOX can be used for any display devices and application scenarios. As long as the Internet is available, users can access VNNOX anytime, anywhere. Besides, VNNOX strictly controls the permissions of each user to operate the system and access resources via user, role and workgroup management.

VNNOX allows for system customization. Users can customize VNNOX to their own brands by setting the system name, logo, access address and copyright information.



## Service Introduction

## VNNOX Standard

Universal content publishing and terminal management, complete functionality and ease of use

Update player status, authorize and upgrade players, etc.

Players include synchronous players and asynchronous players. After a player is bound to a terminal player, remote publishing and control are supported.

Players can be transferred to VNNOX AD by authorization.

Create solutions. Multiple types of media can be added to a solution, including image, video, Office document, text, digital clock, weather and RSS.

Manage media library. After being added to the library, media can be used when users create solutions.

Remotely control screen brightness, volume, video source, screen status, power supply and synchronous playback in real time, and restart and monitor terminal players. In addition, users can also configure the time synchronization rules of terminal players, including manual time synchronization, NTP time synchronization and RF time synchronization.

Check remote control logs and play logs which are the logs of executing remote control commands and the logs of playing solutions by terminal players, respectively.

## VNNOX AD

Friendly design for ad users' habits, flexible role and permission management

Provides system security settings, including media approval, player authentication and system timeout settings.

Provides an advanced visualized platform allowing for complex solution creating and playback requirements. Users can add media to a playlist and schedule the playlist to create a solution.

- Adding Media

Images, videos, Office documents, webpages, RSS, pages and streaming media can be added. Complex media can be created on page media.

- Creating Playlists

Media and sub-playlists can be added. Media items can be sorted by adding time or using non-adjacent sort.

- Scheduling

Users can make playback plans by day, week and month and solution insertion can be flexible.

Configure frame templates and page templates.

A frame is used to divide a screen into different areas and each area plays solutions independently.

A page template is the template of page media. Other types of media can be added to meet complex playback requirements.

Configure players, remote control plans and time synchronization rules, and check play logs.

Players include synchronous players and asynchronous players. After a player is bound to a terminal player, remote publishing and control are supported.

NTP time synchronization and RF time synchronization are available.

Check licenses and order history, buy licenses and renew licenses.

Licenses are the permissions to use players. Licenses can be used normally after bound to players.

## iCare

All-round screen status monitoring and timely email notifications, remote real-time checking, and flexible role and permission management

Configure the email server used by the system.

Check the basic information, monitoring picture, fault and alarm details, brightness information, real-time status, individual LED detection information and workgroups of a screen, and complete relevant configurations.

Set basic information of periodic inspection reports and associate screens requiring monitoring.

Add some custom tags for screens to intuitively indicate features of the screens and set alarm threshold templates, brightness templates and individual LED detection templates.

## Terminal Players

Terminal players download solutions and receive control commands from VNNOX, and play solutions and control terminals based on users' settings.

## Taurus

The Taurus series multimedia players are hardware products based on Android and can be used as terminal players of the asynchronous system.

On public networks, The Taurus can work with the cloud publishing system of VNNOX. After binding Taurus and the asynchronous players in the cloud publishing system with ViPlex Express (Windows) or ViPlex Handy (Android and iOS), users can remotely manage content and control terminals via the Taurus.

## VPlayer

VPlayer is an application and works as a terminal player used for devices installed with Windows or Linux.

On public networks, VPlayer can work with the cloud publishing system of VNNOX. After binding VPlayer and a synchronous player in the cloud publishing system, users can remotely manage content and control terminals via VPlayer.



### High Security

✚ **Input checking:** Check the security and validity of the data input from the Web client.

✚ **Client authentication:** Use OAuth2.0 for the authentication of accessed clients.

✚ **Security report:** Record the visits that trigger the security mechanism in the security report, then analyze the security report and give warnings about security issues so as to avoid attacks in advance.

✚ **Download authentication:** Use a virtualized cluster cloud storage solution to make sure media storing and downloading services are highly available and guarantee the security of media downloading via authentication mechanism.

✚ **Authorized access:** Terminals access the system via organization isolation and user name and password authorization.

✚ **Transmission encryption:** Use HTTPS protocol to keep the data encrypted during network transmission and avoid packet capture and data tampering.



### Reliable Services

VNNOX ensures the service stability via disaster recovery mechanism for the server and prevents data loss via data backup mechanism to provide highly reliable services for users.

In addition, our technical support engineers are always ready for 24/7 maintenance services.

✚ **Mobile Phone:** +86 138 9182 7082

✚ **WeChat:** Novastar-support

✚ **QQ:** 3204869507

✚ **Customer Service Email:** support@novastar.tech