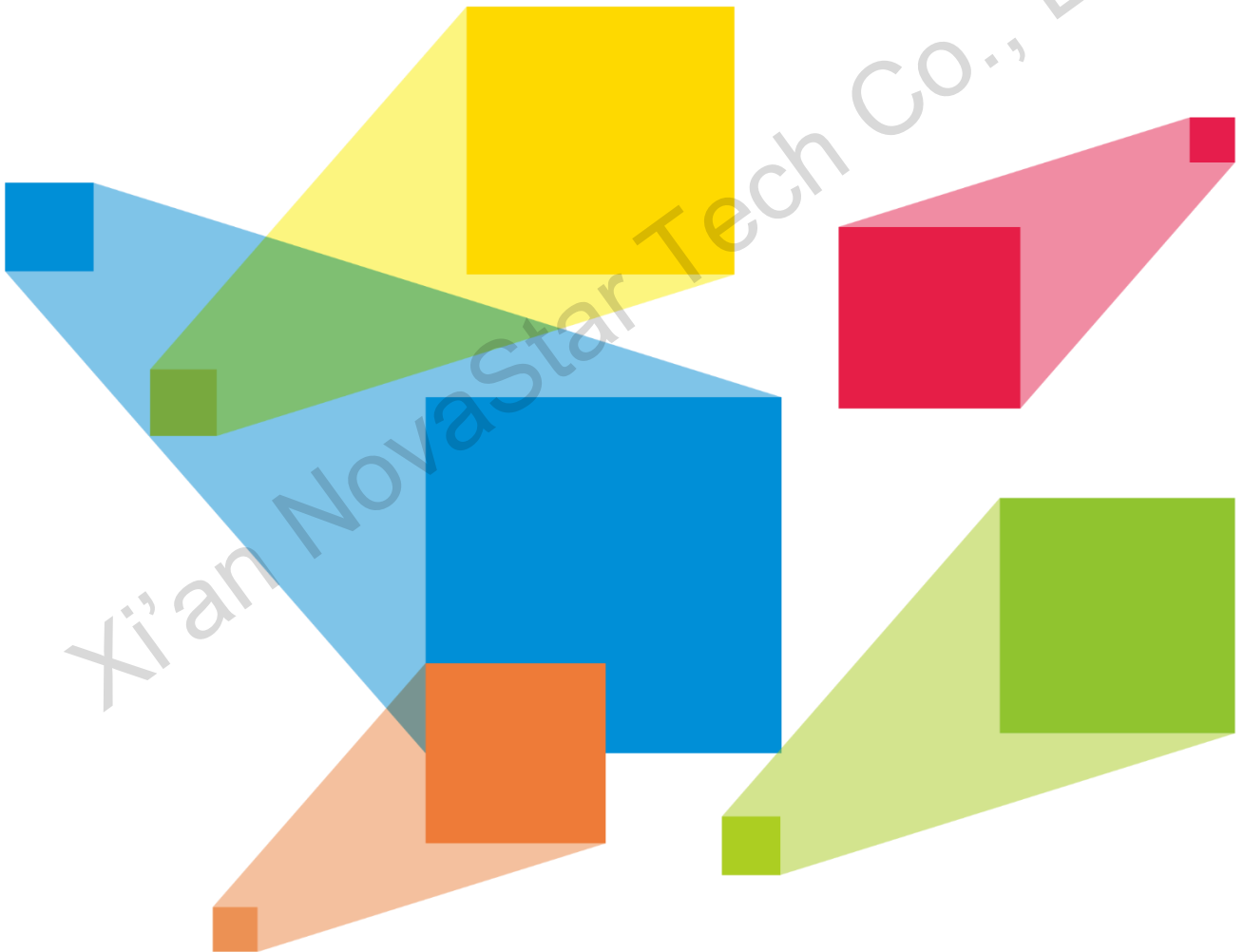


J6 Seamless Switcher

V2.1.0 NS160100441



Specification

Overview

The J6 is a NovaStar high-performance seamless switcher that integrates video processing, screen mosaic, transition effects and multi-screen display capabilities. The J6 offers powerful video signal receiving and processing abilities, and supports up to 8 inputs with the resolutions up to 4K×2K@30Hz and 6 windows. Besides, this product supports two system modes: Splicer and Switcher. When it is in Splicer mode, a maximum of 4 DVI output connectors can be used together for output, which can realize an up to 8KK loading capacity of each J6 unit. When it is in Switcher mode, a maximum of 2 DVI output connectors can be used together for output, which can realize an up to 4KK loading capacity of each J6 unit.

Based on powerful FPGA platform, the J6 supports input and output EDID management and color adjustment, seamless transition of a variety of input sources, as well as fade and other transition effects, bringing you a more flexible and rich visual experience.

What's more, the J6 is equipped with NovaStar V-Can smart control software and C1 event controller, allowing for a rich screen mosaic effect via V-Can, C1 or front panel operations. With excellent image quality, ultra-large loading capacity and flexible operation modes, the J6 can be widely used in conference reports, exhibition centers, stage control and other application scenarios.

Features

- Compatible with industry-standard video input connectors in the market
 - DVI connector: 1920×1080@60Hz input
 - HDMI 1.3 connector: 1920×1080@60Hz input
 - 3G-SDI connector: 1920×1080@60Hz input
 - DP 1.1 connector: 4K×2K@30Hz input
 - HDMI 1.4 connector: 4K×2K@30Hz input
- 4 groups (2 connectors in each group) of DVI output connectors of a single J6 unit for mosaic output

Each group includes a main connector and a backup connector. A maximum of 4 connectors can be used for mosaic output. The mosaic layout can be 4×1, 1×4 or 2×2. The maximum loading capacity can reach 9,200,000 pixels and the maximum mosaic width can be up to 15360 pixels.
- Dual system modes

The J6 supports both Splicer and Switcher modes, which can meet different application requirements.
- Multiple window display

The J6 supports up to six 4K×2K windows with random layout. Each window supports cross connector output.
- HDMI connector for output monitoring
 - Supports monitoring of a single input source, PVW or PGM.
 - Supports monitoring of all input sources, PVW and PGM.
 - Supports displaying of input resolution and refresh rate.
- Display control function

Allows you to black out or freeze the screen by simply clicking one button.
- EDID management

Supports input resolution management for DVI, HDMI and DP connectors.
- Transition effects

In Splicer mode, the J6 supports setting of transition effect for source switching.

In Switcher mode, the J6 supports setting of Take effect and effect duration.
- AUX

In Switcher mode, the J6 supports AUX setting.
- BKG capturing

The J6 supports capturing of input source and PGM, and the captured image can be used as BKG.
- BKG settings

The J6 supports both image BKG and pure color BKG. You can save at most 6 BKG images.
- Input color, window color and output color adjustable
- Preset management

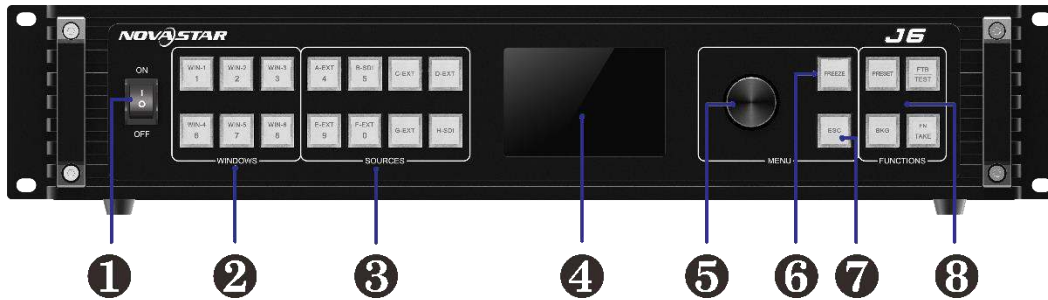
You can create at most 10 custom presets and load the preset simply by clicking one button.
- Window template management

The J6 is built-in with 7 window templates. You can load one of the window templates to quickly lay out the windows.
- Multiple operation modes

You can operate the J6 via its front panel, the V-Can smart control software or C1 event controller.
- Visualized color LCD screen and distinct button indicators on front panel, simplifying system control operations

Appearance

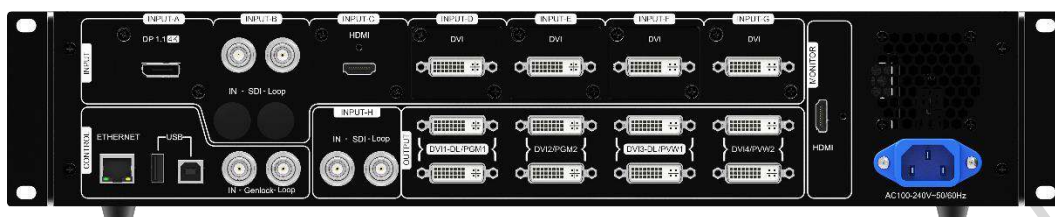
Front Panel



No.	Button	Description
①	ON/OFF button	<ul style="list-style-type: none"> Press ON to power on the device. Press OFF to power off the device.
②	Window buttons	<p>Press a window button to open the corresponding window and enter the window settings menu, or press the window button to input the corresponding number on the button.</p> <p>Button indicator descriptions:</p> <ul style="list-style-type: none"> On: The window is open, and the input source is accessed normally. Dim: The window is open, but the input source is abnormal or not accessed. Off: The window is not opened. Flashing: The window is being edited. On the home screen, hold down the window button for 2s or longer to close the opened window.
③	Input source buttons	<p>Press an input source button to quickly select an input source for the window.</p> <p>Button indicator descriptions:</p> <ul style="list-style-type: none"> On: The input source is accessed and in normal use. Dim: The input source is accessed but not in use. Off: The input source is not accessed.
④	LCD screen	Display current device status and settings menu.
⑤	Knob	<ul style="list-style-type: none"> On the home screen, press the knob to enter the operation menu screen. On the operation menu screen, rotate the knob to select a menu item, and press the knob to confirm the selection or enter the submenu. When a menu item with parameters is selected, rotate the knob to adjust the parameters. Please note that after adjustment, you need to press the knob again to confirm the adjustment.
⑥	Freeze button	<p>Freeze or unfreeze the output image.</p> <p>Button indicator descriptions:</p> <ul style="list-style-type: none"> On: The output image is frozen. Off: The output image is unfrozen.
⑦	ESC button	Press the button to exit the current menu or cancel the operation.
⑧	Function buttons	<ul style="list-style-type: none"> PRESET: Enter the preset menu. BKG: Enable or disable the BKG function.

No.	Button	Description
		<ul style="list-style-type: none"> • FTB/TEST: Press the button to make the screen fade to black and press the button again to exit the FTB mode. Hold down the button for 2s or longer to enter the test pattern menu. • FN/TAKE: The function of this button varies in different system modes (Splicer and Switcher). <ul style="list-style-type: none"> – In Splicer mode, press the button to enter the menu of the function that has been customized for FN button, Hold down the button to enter the FN settings menu. – In Switcher mode, press the button to send PVW to PGM.

Rear Panel



Input		
No.	Connector	Description
Input-A	DP1.1	Input resolution up to 4K×2K@30Hz and downward compatible Supports HDCP 1.3. Can be changed to HDMI 1.4 input card. Input resolution up to 4K×2K@30Hz and downward compatible Supports HDCP 1.4.
Input-B	3G-SDI	Input resolution up to 1920×1080@60Hz and downward compatible Supports 3G-SDI loop output.
Input-C	HDMI1.3	Input resolution up to 1920×1080@60Hz and downward compatible Supports HDCP 1.4. Can be changed to DVI input card.
Input-D	DVI	Input resolution up to 1920×1080@60Hz and downward compatible Supports HDCP 1.4. Can be changed to HDMI 1.3 input card.
Input-E		
Input-F		
Input-G		
Input-H	3G-SDI	Input resolution up to 1920×1080@60Hz and downward compatible Supports 3G-SDI loop output.
Output		
Connector	Quantity	Description
DVI	8	<ul style="list-style-type: none"> • 4 groups (2 connectors in each group) of DVI output connectors can be used for mosaic output. • Each group includes a main connector and a backup connector. • The J6 supports dual-link DVI output mode. When the output is set to dual-link mode, DVI1

		and DVI3 are used as output connectors, while DVI2 and DVI4 are unavailable. • In Switcher mode, DVI3 can be used as AUX connector.
Monitor	1	An HDMI connector is used as monitoring connector to monitor all input sources, single input source, PVW and PGM. Resolution up to 1920×1080@60Hz
Control		
Connector	Quantity	Description
Ethernet	1	Communicate with PC or connect to the network.
USB (Type-B)	1	Connect to the PC for device control.
USB (Type-A)	1	A reserved connector
Overall		
Connector	Quantity	Description
Power	1	AC100V~240V 50/60Hz

Applications

The J6 supports two system modes: Splicer and Switcher. The connections for two modes are shown in 图 1 and 图 2.

图1 Connections for Splicer mode

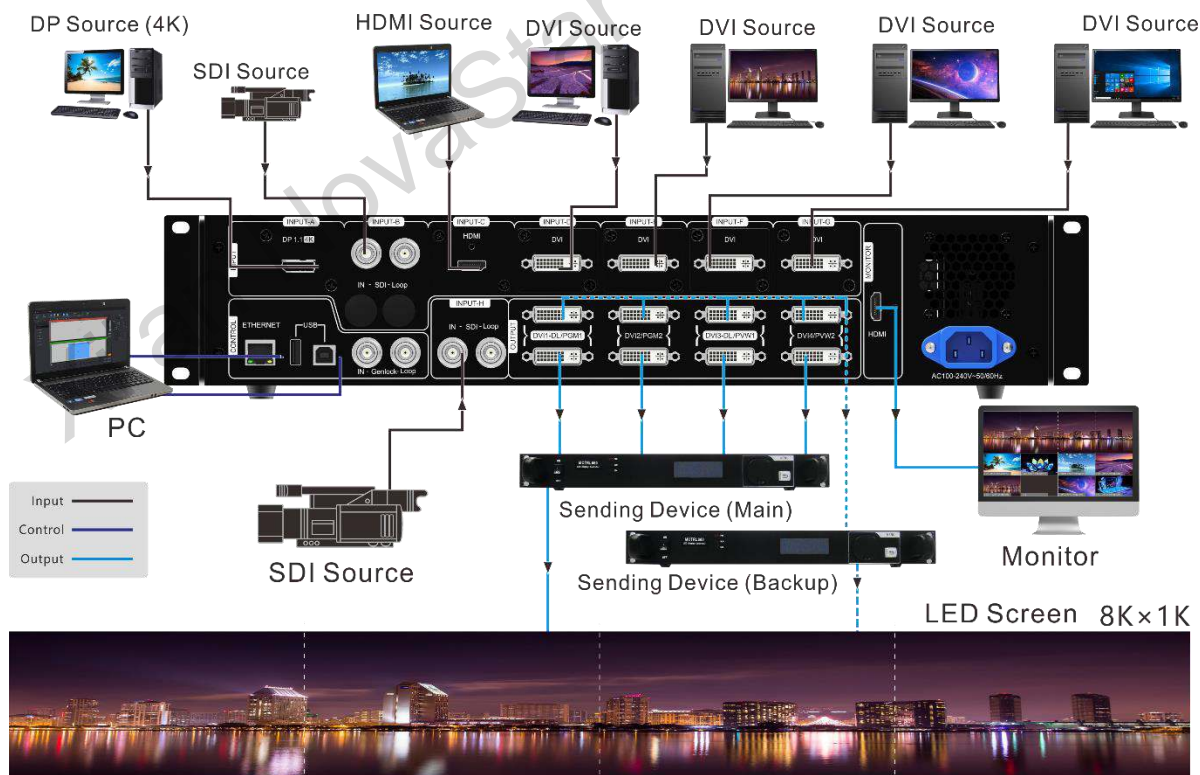
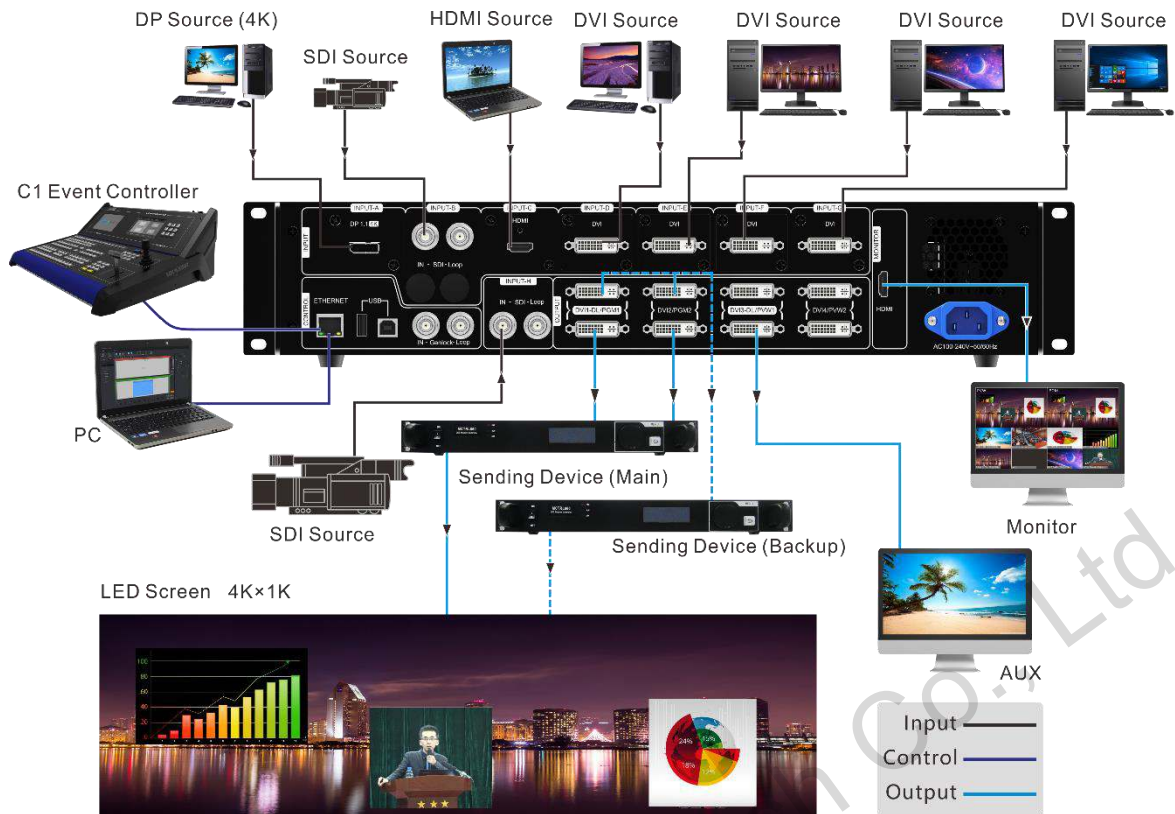
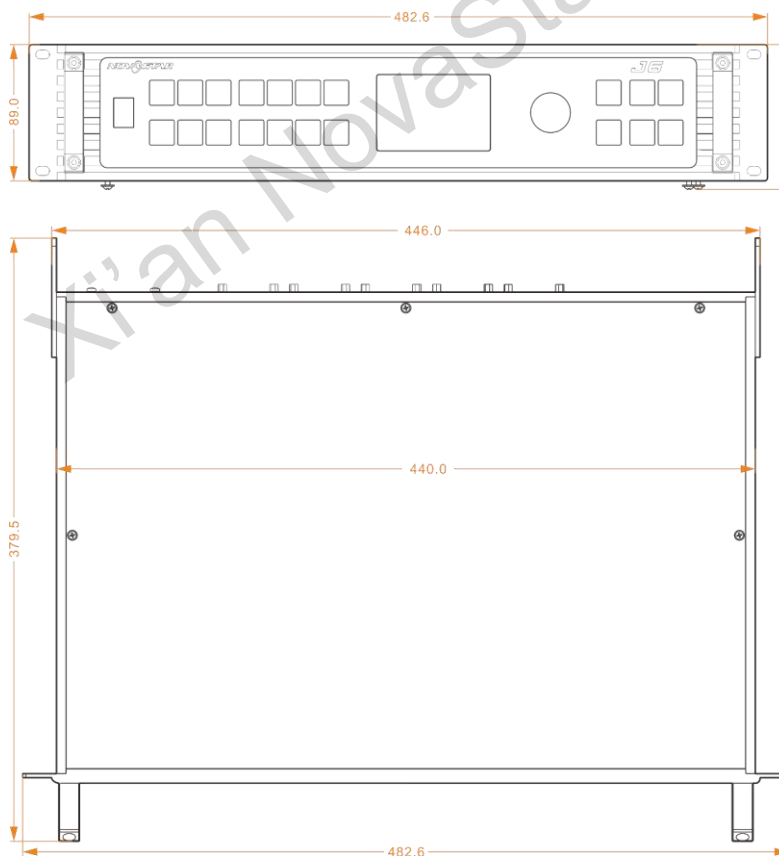


图2 Connections for Switcher mode



Dimensions



Unit: mm

Specifications

Connector	Input	DVI	Input resolution up to 1920×1200@60Hz and downward compatible HDCP 1.4	
		3G-SDI	Input resolution up to 1920×1080@60Hz and downward compatible 3G-SDI loop output	
		HDMI1.3	Input resolution up to 1920×1080@60Hz and downward compatible HDCP 1.4	
		DP1.1	Input resolution up to 4K×2K@30Hz and downward compatible HDCP 1.3	
		HDMI1.4	Input resolution up to 4K×2K@30Hz and downward compatible HDCP 1.4	
	Output	DVI	4 groups (2 connectors in each group) of DVI output connectors can be used for mosaic output. Each group includes a main connector and a backup connector.	
		HDMI	A monitoring connector	
	Control	Ethernet	Communicate with PC or connect to the network.	
		USB (Type-B)	Connect to the PC for device control.	
		USB (Type-A)	A reserved connector	
Connector performance	Common input and output resolutions	<ul style="list-style-type: none"> DVI HDMI1.3 	800×600@50/60/75/85Hz 1024×768@48/50/60/75/85Hz 1152×864@75Hz 1280×720@48/50/60Hz 1280×768@48/50/60/75Hz 1280×800@50/60Hz 1280×960@50/60/85Hz 1280×1024@48/50/60/75/85Hz 1360×768@60Hz 1364×1024@48/50/85Hz	1366×768@50/60Hz 1366×800@50/60Hz 1400×1050@48/50/60/75Hz 1440×900@60/75/85Hz 1600×900@48/50/60Hz 1600×1200@48/50/60Hz 1680×1050@60Hz 1792×1280@60Hz 1920×1080@30/48/50/60Hz 1920×1200@50/60Hz
		<ul style="list-style-type: none"> DP1.1 HDMI1.4 	800×600@50/60/75/85Hz 1024×768@48/50/60/75/85Hz 1152×864@75Hz 1280×720@48/50/60Hz 1280×768@48/50/60/75Hz 1280×800@50/60Hz 1280×960@50/60/85Hz 1280×1024@48/50/60/75/85Hz 1360×768@60Hz 1364×1024@48/50/85Hz 1400×1050@48/50/60/75Hz	1680×1050@60Hz 1792×1280@60Hz 1920×1080@30/48/50/60Hz 1920×1200@50/60Hz 2048×1080@30/48/50/60Hz 2048×1152@30Hz 2304×1152@60Hz 2048×1152@60Hz 2560×1080@50/60Hz 2560×1400@50/60Hz 2560×1600@50/60Hz

			1440×900@60/75/85Hz 1600×900@48/50/60Hz 1600×1200@48/50/60Hz	3840×1080@30/50/60Hz 3840×2160@30Hz
		3G-SDI	480i, 576i 1280×720p@24/25/30/50/60Hz 1920×1080p@24/25/30/50/60Hz	
Electrical specifications		Power connector	AC100V~240V 50/60Hz。	
		Power consumption	50W	
Operating environment		Operating temperature	0℃~60℃	
		Storage temperature	-20℃~60℃	
Physical specifications		Dimensions	482.6mm×379.5mm×94.7mm	
		Package dimensions	550mm × 561mm × 155mm	
		Net weight	5.3 kg	
		Total weight	15 kg	

Copyright © 2019 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

 is a registered trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via contact information given in document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

Xi'an NovaStar Tech Co., Ltd.