

TPX Product Specification Sheet



Introduction

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Please read this manual first to use it correctly and ensure that the required functions are functioning properly.



Warning: Possible safety concerns or injuries to equipment users



Special attention: there may be situations where data integrity, device firmware, and hardware may be compromised



Explanation: Additional explanations, noun definitions, etc

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List of Abbreviations:

Abbreviation	English Explanation
1080P	Resolution ratio 1920×1080
720P	Resolution ratio 1280×720
ADAS	Advanced Driving Assistance System
DSC	Driving Safety Cockpit
DMS	Driver Monitoring System
VBR	Variable Bit Rate
CBR	Constants Bit Rate

1. Product Introduction

Streamax TP-X is a vehicle intelligent terminal product that integrates functions such as AI and Video Encoding & Decoding. The product is paired with a 4-core A55 high-performance chip, Android 11 version, 11.6-inch 1080P high-definition large screen, support for multi touch, and a comprehensive screen design.

The product supports two installation methods for the screen, horizontal and lateral, and the bracket design supports two installation schemes: tabletop installation and floating installation.

The product supports offline facial recognition of drivers through external camera expansion at the terminal, effectively achieving supervision of illegal operations by drivers; Through the terminal expansion interface, the external Streamax intelligent camera can detect and remind drivers of smoking, making phone calls, Sleep-deprived driving, distraction and other abnormal behaviors, thus comprehensively reducing traffic accidents caused by unsafe driving behaviors. In addition, this system meets the industry standards for screen products and supports uploading relevant operation, positioning, and audio and video data to the backend platform, facilitating traffic management departments and relevant enterprise units to monitor and manage the vehicle operation process.

The product supports a powerful industry business SDK and Android native SDK, and supports users to develop their own business based on the SDK.

2. Functional Features

- Highly integrated software and hardware, integrating industry Business Scenarios, Audio and Video Encoding & Decoding, and intelligent AI.
- Integrated high-definition large screen, supporting multiple installation methods, suitable for various vehicle models, and tidy and beautiful interior.
- Mic adopts array Mic design, supporting voice noise reduction and echo cancellation. Expandable speech recognition function.
- Maximum support for 3-way AHD+2-way IPC;
- Support offline facial recognition for drivers;
- Supporting 4G all network communication, GPS/BD, and WIFI functions;
- Support 2-way TF card video storage, with a maximum support of 512GB and anti-theft function;
- Special file system to protect the privacy of passengers inside the vehicle;
- Industrial design requirements, aluminum alloy shell, large area heat dissipation teeth, and good heat dissipation effect;

3. Specification Parameters

Model: TPX	
System	Android 11
Structure	
Screen Size	11.6 inches
Resolution Ratio	1920*1080
Touch	Support: Multi-touch
Physical Buttons	Reset button
Video and Audio	
Audio/Video Encoding	Support: 3-way AHD & 2-way IPC
Maximum Resources	Main stream: 1080P@60fps
Image Settings	Adjustable brightness, chromaticity, contrast, color saturation, and clarity
Video Coding	H.264/H.265

Audio Compression Method	ADPCM/G.711/G.726 (default: G.711)
CBR/VBR	Support: Default VBR, Configurable CBR
Audio	Built-in array dual mic, supporting voice noise reduction and echo cancellation
Power Amplifier	Built in 3W
Storage	
Micro SD card	Support: 2*Micro SD Card (32GB/64GB/128GB/256GB/512GB) The minimum requirement for read and write speed is Class10, and it is recommended to use Class10 or above
Sensor	
Six Axis Sensor	Support
Interfaces	
IO	Support: 3*sensor in + 2*sensor out
Serial Port	Support: 2*RS232

Network Interface	Support: 2 * 100 Mbps Ethernet port
Pulse	Support: 1-channel pulse access
Can	Support: 1*can
USB	Support: Supports 1-way mini USB interface
Network	
WIFI	Support : 2.4GHz/5GHz (IEEE Std.802.11a/IEEE Std.802.11b/IEEE Std.802.11g/IEEE Std.802.11n)
4G	Support: ➤ LTE-FDD:B1/B3/B5/B8 ➤ LTE-TDD:B34/B38/B39/B40/B41 ➤ WCDMA:B1/B8  Warning: Industrial grade SIM card (MP2) is required, and ordinary grade SIM card (MP1) is prohibited. Our company is not responsible for any problems caused by the use of ordinary grade SIM cards
Location	

GPS	Support: Single GSP/single BDS/GSP+BDS/GPS+GLONASS
Power Related	
Power	Voltage Range: 9-36V Nominal Voltage: 12V
Environment	
Working Temperature	-30℃~+70℃ (-30°F~+158°F)
Storage Temperature	-40℃~+85℃ (-40°F~+185°F)
Working Humidity	0% - 90% non condensing
Storage Humidity	0% - 90% non condensing
Protection Grade	IP30 * The host is not waterproof
Size and Weight	
Size: L×W×H	284.4mm*180.2mm*33.05mm
Weight	Net weight (equipment body): 1500g Gross weight (accessories and packaging): 1700g

	Error $\pm 10\text{g}$
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* Actual dimensions and weights may vary depending on configuration, manufacturing process, and measurement methods

Packing List

Screen Host List:

- TP-X $\times 1$
- Positioning Antenna $\times 1$,
- 40P Power Cord $\times 1$.
- 20P Video Cable $\times 1$

360 Host List:

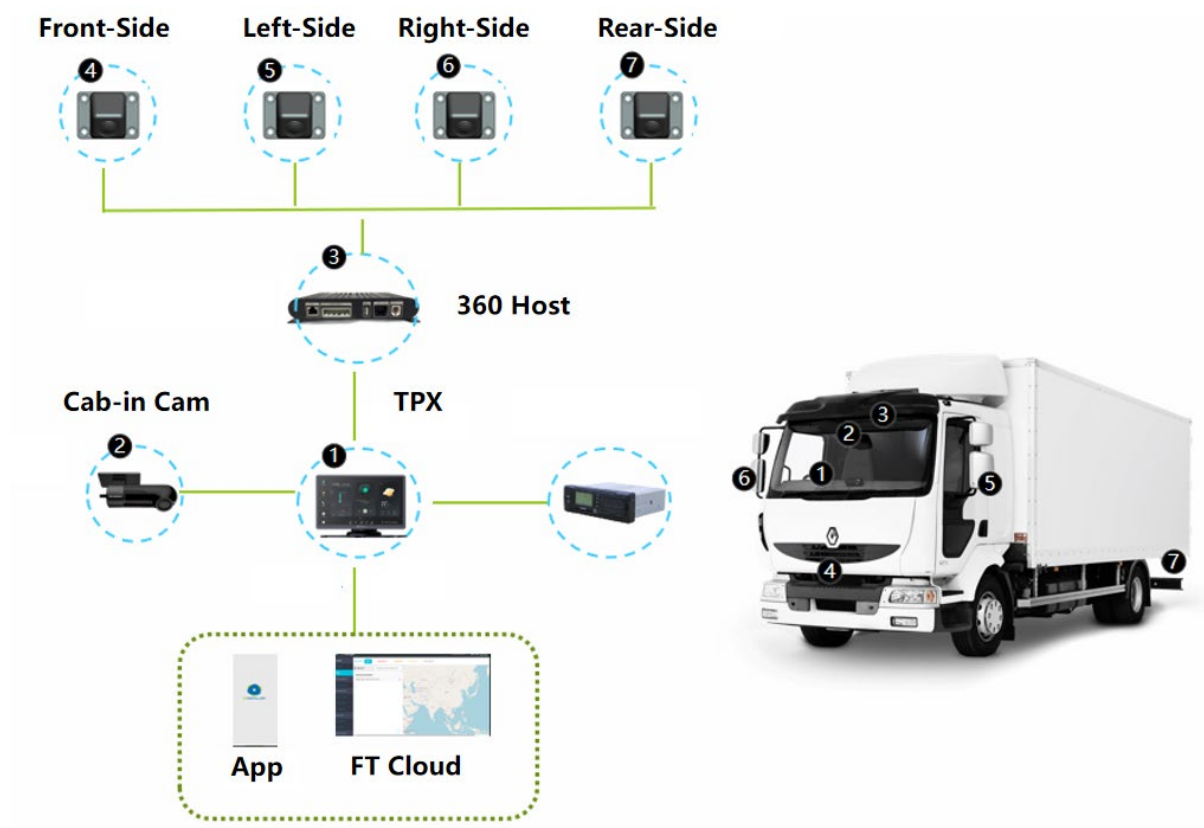
- 360 Host $\times 1$.
- 32P power cord $\times 1$
- Video output cable $\times 1$

* Due to differences in configuration in different regions, the final unpacking result shall prevail

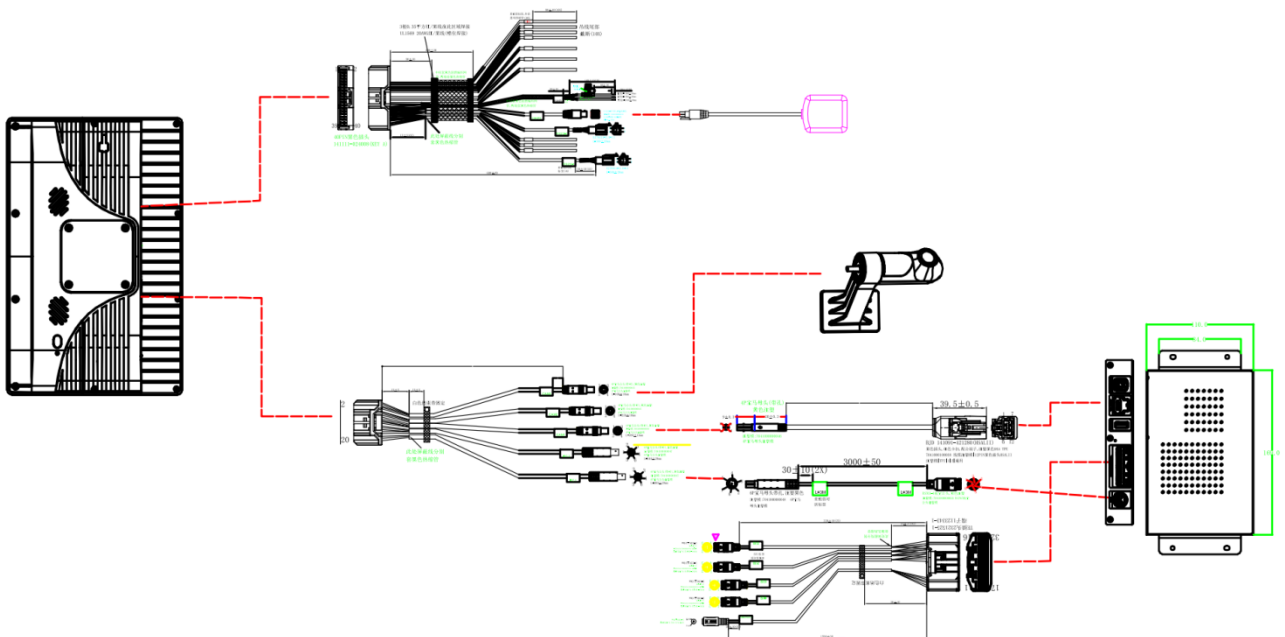
4. Dimensional Drawing (in mm)



5. System Connection Diagram



5.1. ACC Power Supply System Connection Diagram



5.2.1. AHD Signal Wires



6. Special Instructions

- 1) This product requires professional installation, otherwise there is a risk of electric shock, damage to vehicle wiring, impact on AI experience, and equipment detachment
- 2) This product requires professional installation, otherwise there is a risk of electric shock, damage to vehicle wiring, impact on AI experience, and equipment detachment

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