

WEONEX

W-RE Series

Easy Stream Broadcasting System



one-click live streaming



remote interaction



dual cameras



AI analysis



4K UHD



Easy Stream is a highly integrated and user-friendly recording and broadcasting solution. Its all-in-one design significantly simplifies the installation and debugging process, while its multi-functional integration makes it suitable for various scenarios such as teaching and corporate meetings.



Tracking Camera Omnidirectional Mic Control System



4 EASY STREAM

Highly Efficient, Effortless Deployment

Low power consumption, high performance.

POE one-cable connection for quick deployment.

One EASY STREAM can simultaneously distribute to up to 50 electronic blackboards.





Live Streaming Function

Large displays across campus (principal's office, staff room, classrooms, etc.) support direct live streaming, letting students watch assemblies/ events in class—ideal for pandemic protocols or special scenarios.

Dual Cameras

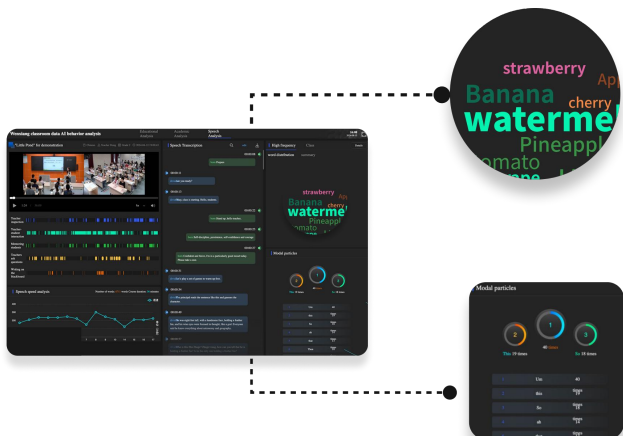
9.29MP and 4.93MP dual cameras enable simultaneous multi-angle transmission, supporting versatile scenes and varied broadcast perspectives.

Data Display

Real-time overview of student participation, activities, and head-up rates.

People Counting

Real-time statistics on classroom occupancy, including raised hands, standing, lying down, sitting, and head-turning.



Easy Operation

Connect to the school network; no special setups or complex steps needed. Quick to deploy, simple for anyone to use for smooth streaming.

Simultaneous Streaming

Supports up to 4 concurrent streams, including YouTube and on-campus network broadcasts, facilitating remote event participation.

Multi-Input & Switching

Up to 4 input channels (HDMI, LINE) for easy recording, distribution, screen switching, and video synthesis—handles multiple sources at once.



Specifications

Easy Stream Host

Product configuration	
Processor	RK3588 8-core
Internal Dimension	8G
Memory	512GB
System	Linux
Video coding	
Encapsulation Protocol	H.265 H.264
Recording Resolution	4K resolution (3840*2160)
File format	MP4 FLV TS

Peripheral Interface	
HDMI	HDMI IN*1 HDMI OUT*1
USB	USB 3.0*2
RJ45	POE*1 LAN*1 RS232/485*1
Audio frequency	3.5mm IN*1 3.5mm OUT*1
TYPE C	1

General Specification	
Size	290*155*72mm
Net weight	1.85kg
Input voltage	DC48V
Input currenton	1.36A

Close-up Image Parameters	
Sensor	1/2.7-inch, CMOS, Effectiv pixels: 8.29 million progressive scan
Scanning Method	Line by line
Lens Mount Type	M12

Teacher Close-up Lens	Focal length: f=7.37mm, horizontal field of view: 43°
Digital Zoom	2x
Minimum Illumination	0.5 Lux @ (F2.4, AGC ON)
Electronic Shutter	1/30s~1/10000s

White Balance	Auto, Indoor, Outdoor, One-Touch, Manual, Preset color temperature
Digital Noise Reduction	2D&3D Digital Noise Reduction
Backlight Compensation	Support
Horizontal Rotation Range	±40°
Vertical Rotation Range	+5°~-30°
Maximum Rotation Speed	Horizontal: 60°/s, Vertical: 30°/s
Horizontal, Vertical Flip	Support
Image Freeze	Support
Preset Position Quantity	255
Preset Position Accuracy	0.5°

Panoramic Image Parameters

Sensor	1/2.7-inch, CMOS, Effective pixels: 4.93 million, line by line
Scanning Method	Line by line
Lens Mount Type	M12

Teacher Panoramic Lens	Focal length: f=2.2mm, horizontal field of view: 110°
Minimum Illumination	0.5 Lux @ (F2.2, AGC ON)

Electronic Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One-Touch, Manual, Preset color temperature

Digital Noise Reduction	2D&3D Digital Noise Reduction
Backlight Compensation	Support
Vertical Rotation Range	+0°~-24°
Image Freeze	Support
Horizontal, Vertical Flip	Support

Tracking Camera（Teacher）

Close-up Image Parameters	
Sensor	1/2.7-inch, CMOS, Effective pixels: 8.29 million progressive scan
Scanning Method	Line by line
Lens Mount Type	M12

Teacher Close-up Lens	Focal length: f=13.1mm, horizontal field of view: 25°
Digital Zoom	2x
Minimum Illumination	0.5 Lux @ (F2.8, AGC ON)
Electronic Shutter	1/30s~1/10000s

White Balance	Auto, Indoor, Outdoor, One-Touch, Manual, Preset color temperature
Digital Noise Reduction	2D&3D Digital Noise Reduction
Backlight Compensation	Support
Horizontal Rotation Range	±40°
Vertical Rotation Range	+5°~-30°
Maximum Rotation Speed	Horizontal: 30°/s, Vertical: 30°/s
Horizontal, Vertical Flip	Support
Image Freeze	Support
Preset Position Quantity	255
Preset Position Accuracy	0.5°

Tracking Camera（Teacher）	
Network Features	
Video Encoding Standard	H.265 / H.264 / MJPEG
Frame Rate	25/30fps Default 25fps
Audio Compression Standard	AAC/G.711A
Audio Bitrate	96Kbps, 128Kbps, 256Kbps
Supported Protocols	TCP/IP, HTTP, HTTPS, NDI, SRT, RTSP, RTMP, Onvif, DHCP, GB28181, Multicast, etc.

Input/Output Interfaces	
USB Interface	1 channel, USB 3.0: TYPE-C
Network Interface	Supports 10M/100M adaptive, supports PoE power supply (802.3af), optional support for NDI protocol
Line Input Interface	1 channel, Line In, 3.5mm audio input
Line Output Interface	1 channel, Line out, 3.5mm audio output
Power Interface	DC005 type (DC 12V)
Reset Button	RESET
Indicator Light	POWER blue, STANDBY green

General Specifications	
Input Voltage	DC 12V/PoE (802.3af)
Input Current	Maximum 1A
Size	242.05*86.03*70.55mm
Net Weight	0.62kg

Basic Parameters	
Microphone Type	Single-direction high-fidelity small diaphragm microphone
Frequency Response	20Hz-20KHz
Signal-to-Noise Ratio	>68dB(A)
Sensitivity	-35dB
Picking Distance	8 meters
Microphone Expansion Cascade	Supported
Interface	Microphon signa output interface RJ45*1, expandabl microphon inpu interface RJ45*1, slav microphon outpu selection DIP switch*1
Power Supply	Master microphone interface
Size	φ143mm×38mm
Weight	0.246KG

Omnidirectional Mic（Main Mic）	
Basic Parameters	
Microphone Type	Omnidirectional High-Fidelity Microphone
Microphone Array	Equipped with 7 high-fidelity microphones forming a ring array
Picking Method	360-degree omnidirectional pickup
AI Intelligent Noise Reduction	Supported
Reverberation Suppression	Supported
Automatic Gain Control	Supported
Echo Cancellation	Supported
Local Sound Amplification	Supported
Signal-to-Noise Ratio	>68dB(A)
Sensitivity	-35dB
Frequency Response	20Hz-20KHz
Sampling Rate	48K
Picking Distance	8 meters

AFC Parameters	
AFC Feedback Suppression	8 fixed frequency filters tuned according to the sound field
AFC Adaptive Filtering	8 adaptive frequency filters
AFC Suppression Frequency Adjustment	Supports manual adjustment
Transducer Gain Enhancement	≥15dB
Feedbac Suppressio	Supported
Control Switch	

AEC Parameters	
Echo Cancellation Tail Length	512ms
Echo Cancellation Amplitude	60dB
Echo Cancellation Convergence Speed	100dB/S
AEC Energy Value Update Switch	Supported
AEC Level	16 levels adjustable
AEC Delay	4-255ms

ANS Parameters	
AI Noise Reduction Capability	Effectively suppresses or filters out steady-state and transient noise in the room
Noise Reduction Amplitude	≥36dB
AG Parameter Automati Gain Control Range	-24dB~24dB
Debug Interface	Supports USB serial port debugging

Other Parameters

Environmental Parameters Display	Displays quantified values of environmental noise, signal-to-noise ratio, and reverberation time
Environmental Parameters Acquisition	Supports real-time acquisition
One-Click Adaptive Sound Field Tuning	Automatically calculates acoustic field parameters and optimizes system parameters by playing test sounds and collecting data
Sound Field Optimization Capability	Compensates for acoustic field defects in classrooms
Tuning Status Display	Displays the number of microphones, tuning success/failure status
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Audio Matrix Debugging	Support channel switching and volume control
Matrix Mode	Supports adaptive adjustment for multiple scenarios

Expansion Connection Parameters

Microphone Expansion Cascade	Supports cascading up to 3 slave microphones
Expansion Microphone Gain Control	Supports individual control
One-Click Tuning	Supported
Desktop Conference Mic Application	Supported
Power Supply Method	USB5V/DC12V
Interface	
USB Interface	2 USB/Type-C interfaces
USB Protocol	Supports UAC1.0 protocol
USB Function	Supports audio data communication, software upgrade, and parameter configuration
Main Mic Interface	RJ45*1 (signal input/output/power supply)
Expansion Mic Interface	RJ45*1 (slave microphone input)

