

AT-RB600-PRO



Recording & Broadcasting AIO | 4K H.265 6CH (5×HDMI+1×IP)

Highly integrated 4K interactive recording and broadcasting all-in-one machine supporting 6-channel (5×HDMI+1×IP) recording, live streaming, web VOD, AI face tracking, and virtual chroma-key backgrounds in a compact 1U chassis.

6CH 4K

AI Face Track

H.265/H.264

Virtual Keying

Dual-Disk Rec

1U Chassis



The AT-RB600-PRO is a highly integrated display, coding, and storage all-in-one device supporting two-way audio and video 4K interaction. It handles 6-channel (5×HDMI+1×IP) recording, live streaming, and web VOD, with local or remote picture directing and VGA+2×HDMI 3-screen display support.

Video Inputs 5×HDMI + 1×IP	Max Input Res 4K@30	Video Outputs 2×HDMI + 1×VGA
Encoding H.265 / H.264	Storage Up to 128TB	PTZ Control 6-Channel VISCA

IDEAL FOR

Lecture Capture

Record and stream classroom lessons with AI face tracking and PTZ control.

Houses of Worship

Multi-camera directing with virtual keying for professional service broadcasts.

Broadcast Studios

Chroma-key virtual sets and picture-in-picture layouts for produced content.

Corporate Events

Multi-channel recording and live broadcast for conferences and townhalls.

PRODUCT DESCRIPTION

The AT-RB600-PRO is a highly integrated display, coding, and storage all-in-one device combining two-way audio and video 4K interaction. It accepts 5 physical HDMI inputs (4KP30 or 1080P60) plus 1 network stream channel, and outputs to 2×HDMI (4KP60+4KP30) and 1×VGA for flexible three-screen directing setups.

Recording is written simultaneously to an internal SATA disk and an external USB 3.0 drive, supporting 1–128TB of user-installed storage in standard MP4 format. Live streaming is available via RTMP (pop-up player or Flash webpage) and RTSP, with full on-demand playback including thumbnails, speaker/topic metadata, and web-based download, edit, and delete controls.

A built-in 1.2T neural network inference engine powers real-time face detection, recognition, and target tracking. Virtual chroma-key backgrounds with 4 preset scenes plus 1 custom background, 9 picture-in-picture layouts (7 common + 2 custom), and 6-channel VISCA PTZ control combine to deliver a fully produced broadcast without external editing hardware.

	6CH Video Channels
	4K@30 Max Input Resolution
	1.2T AI Inference Engine
	9 PIP Layout Modes
	≤1sec Network Stream Delay
	≤1.5kg Weight

PRODUCT KEY FEATURES



6-Channel Video Input

Accepts 5×HDMI (4KP30 or 1080P60) physical inputs plus 1 network stream channel, giving flexible camera and content source combinations for any production.



AI Face Recognition & Tracking

Built-in 1.2T neural network inference engine performs real-time face detection, recognition, and target detection/tracking without external hardware.



Virtual Keying (Chroma Key)

Effortlessly replace backgrounds and blend scenes using 4 preset scene images plus 1 fully custom background for richer, more realistic visual effects.



VISCA PTZ Camera Control

Controls up to 6 channels of VISCA-protocol PTZ cameras with pan/tilt, zoom, auto/manual focus, and 6 programmable preset positions.



Dual-Disk Simultaneous Recording

Records simultaneously to an internal SATA hard drive and an external USB 3.0 drive, supporting easy playback and USB export without interrupting recording.



Power-Off Protection

Recorded data is protected in real time; the system automatically recovers in-progress recordings after sudden power outages or other abnormal shutdowns.



Three-Screen Flexible Display

Supports simultaneous VGA + 2×HDMI three-screen output with local directing, full-screen directing, and independent screen viewing at up to 4KP30.



Industrial-Grade Reliability

High-configuration chipset with embedded Linux system is stable and immune to viruses and crashes, enabling long-term operation without requiring a reboot.



Remote Web Management

No downloads required — monitor and manage recordings in real time from anywhere with internet access via standard web browser, achieving full remote control.

TECHNICAL SPECIFICATIONS

VIDEO INPUT

Video Input Channels	5×HDMI (4KP30 or 1080P60) + 1×IP
HDMI Max Input Resolution	4K@30
Supported Input Formats	4K@30, 2560P, 1080P60, 1920×1200, 1080P50, 1080P30, 1080P25, 720P60, 720P50
Auto Format Detect	Supported
Audio Input	1× Line In, 1× HDMI Embedded Audio
Audio Sampling	48kHz, AAC Coding

VIDEO OUTPUT

Video Outputs	2×HDMI (4KP60 + 4KP30), 1×VGA (up to 1920×1200)
Display Modes	3-Screen (VGA + 2×HDMI), Local/Full-Screen Directing
Audio Output	1× Line Out

ENCODE / DECODE

Video Encode	H.265 MP; H.264 HP5.1/MP/BP
Encode Resolution	3840×2160 / 1920×1080 / 1280×720 / 2560×1536 / 1920×1200
Bit Rate	128Kbps – 20Mbps
Frame Rate	5 – 60 fps
Audio Encode	AAC
Audio Bit Rate	16kbps – 256kbps
Network Stream Delay	≤1 sec

RECORDING

Recording Format	MP4
Recording Modes	Multi-Stream Multi-Screen (Resource) / Single-Stream Single-Screen (Movie) / Single-Stream Multi-Screen (PIP)
Local Director	Touch Screen / Mouse
Remote Director	Supported
Recording Control	Start / Pause / Stop / Status
Auto Segmentation	Supported
Circular (Loop) Coverage	Supported
Power-Loss Recovery	Automatic Real-Time Protection
Dual-Disk Recording	Simultaneous Internal SATA + External USB 3.0
Local Playback Speed	16× / 32×
Recording File Management	Web Browser / FTP
Storage Capacity	1 – 128TB (User-Installed)
Internal Disk Bay	3.5" × 1

LIVE STREAMING & NETWORK

Live Streaming	RTMP (Pop-up Player / Flash Webpage), RTSP (Pop-up Player)
On-Demand Playback	Thumbnail, File Name, Speaker, Topic, Start/End Time, Duration
On-Demand Management	Edit, Download, Delete, HTML/Player On-Demand
Network Protocols	TCP/IP, UDP, IPv4, IPv6, RTMP/RTMP Server, RTSP/TCP, HTTP, FTP, NTP
Network Port	1× 10/100/1000M
Serial Ports	2× RS-232 (Central Control + PTZ Camera)
USB Ports	1× USB 3.0, 1× USB 2.0
Mobile App	Apple & Android

CAMERA CONTROL

PTZ Control	6-Channel VISCA
PTZ Functions	Pan/Tilt, Zoom In/Out, Auto/Manual Focus, 6 Preset Positions

INTELLIGENT FEATURES

AI Face Recognition & Tracking	Built-in 1.2T Neural Network Inference Engine
Virtual Keying (Chroma Key)	4 Preset Scenes + 1 Custom Background
Picture-in-Picture Modes	7 Common + 2 Custom
Caption & Logo Overlay	Supported

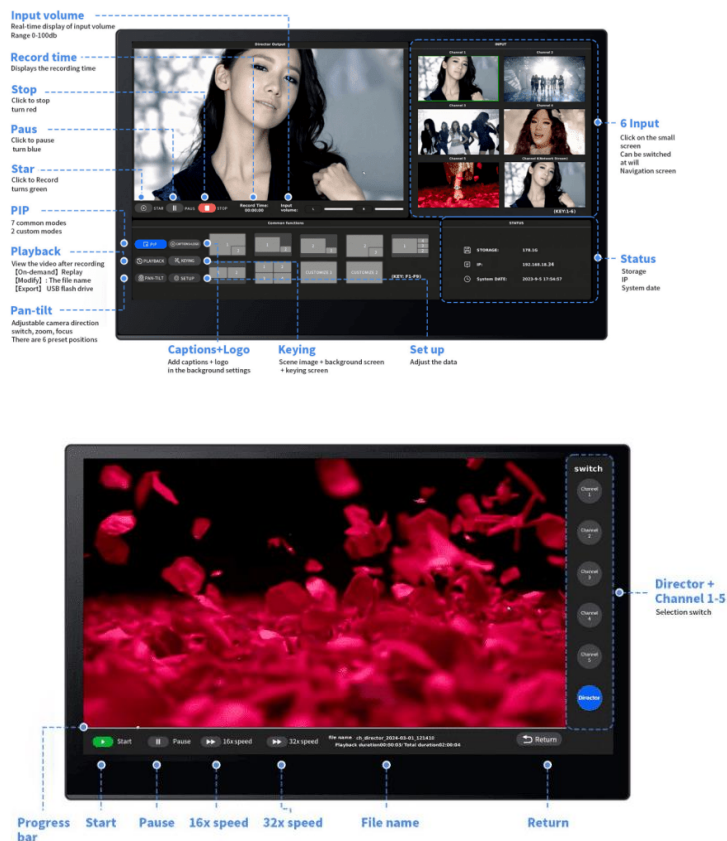
TECHNICAL SPECIFICATIONS

GENERAL

System	Embedded Linux
Power Supply	AC 100–240V
Power Consumption	≤25W
Operating Temperature	-10°C to +55°C
Operating Humidity	10% ~ 90%, Non-Condensing
Dimensions	440 × 210 × 44 mm (1U)
Weight	≤1.5 kg

PACKAGE CONTENTS

Included Items	Host Unit, AC Power Cord, HDMI Cable, VGA Cable, Driver/Manual Disc, Certificate/Warranty Card
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Thumbnail	File Name	Speaker	Topic	Time	Play	Change	Export	Delete
Small thumbnails Easy to view	Name Default Time Can be modified	Can be added	Can be added	Start time/Stop time/Duration	Play video	File name can be added Speaker, theme	Export video to USB drive	Delete video
	File Name	Speaker	Topic	Start time	Stop time	Duration	Play	Change
	2024-03-01_14...			2024-03-01 14:14:15	2024-03-01 14:42:39	28Min26S	Play	Change
	2024-03-01_12...			2024-03-01 12:14:10	2024-03-01 14:14:15	120Min4S	Play	Change
							Export	Delete

