

REX Recording Server - Professional Multimedia Solution

REX Recording System CF Series - Distributed Deployment Solution

The REX Recording System CF Series adopts a distributed deployment architecture, separating front-end signal capture/encoding from storage management. The system consists of REX recording servers (CF Series) and encoders, with a single server supporting synchronous recording of up to 48 visual signals.

Flexible Configuration & Cost Efficiency

- **Front-end Encoders:** Meeting rooms or training spaces can be equipped with encoders tailored to the number of signal sources (e.g., cameras, screens).
- **Centralized Storage:** All encoded data is stored and managed by the REX recording server, enabling synchronized multi-room recording and streamlined administration while reducing infrastructure costs.
- **Live/On-Demand Streaming:** Built-in high-capacity streaming supports real-time broadcasting (e.g., meetings, training sessions) and on-demand playback for remote participants.

Model Variants

The CF Series includes five models:

- **CF8/CF16/CF24/CF36/CF48**, supporting 8/16/24/36/48 encoder connections respectively.

Video Conference record and stream Integration

The REX seamlessly integrates with mainstream video conferencing systems via **H.323/SIP protocols**, offering:

- **Multi-Session Recording:** Simultaneously records 5 or 10 video conferences for archival.
- **Expanded Accessibility:** Live streaming allows remote participants to join when physical conference rooms reach capacity.
- **Scalability:** Ideal for hybrid meetings, remote training, and large-scale events.

Key Features of REX Recording Servers

1. **Modular Architecture:** Adaptable to diverse environments and scalable for varying needs.
2. **Multi-Signal Support:** Captures SD/HD video and high-resolution/frame-rate VGA signals.

3. **IP-Based Synchronization:** Combines video, audio, and dynamic screen content for unified recording/live streaming.
 4. **Cross-Platform Access:** Browser-based (B/S) management compatible with multiple OSes and browsers.
 5. **Conference Compatibility:** Records H.323/SIP-based MCUs/endpoints in multiple formats/bitrates.
 6. **Dual Playback Options:** View live/recorded content via dedicated players or web browsers.
 7. **Dual-Bitrate Recording:** Generates high/low-bitrate files simultaneously.
 8. **Standard MP4 Output:** Recorded files are editable with third-party software.
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Applications:

- **Meetings/Training:** Archive and share sessions globally.
- **Marketing:** Broadcast promotional events in real time.
- **Education:** Enable hybrid learning with on-demand playback.

Powerful Features for Seamless Recording and Streaming

1. Dual Interface Management

REX Recording Server features an innovative web-based frontend and backend management system:

- **Frontend** provides users with:
 - Live and on-demand resources
 - Player software installation packages
 - Access to public resources without login
 - Exclusive content for logged-in users
 - Commenting functionality on video resources
- **Backend** offers comprehensive configuration tools:
 - Meeting creation and management
 - File categorization
 - User/group administration
 - System parameter configuration
 - Alarm and log maintenance

2. Synchronized Recording Capabilities

REX delivers exceptional synchronous recording:

- Records video, audio, and computer screen signals simultaneously
- Supports up to 8 image signals per meeting room
- Flexible resource allocation (e.g., 4 meetings with 2 images each or 2 meetings with 4 images each)
- 60fps high-quality recording
- Supports H.323 and SIP protocol video streams
- Enables batch operations (start/pause/stop recording, begin/end meetings)
- Dual-stream recording (high and low bitrate)
- Immediate and scheduled recording options

3. Real-Time Live Streaming

Experience superior live streaming performance:

- B/S architecture accessible via Flash player across all major browsers (IE, Firefox, Chrome, Safari)
- C/S architecture through proprietary ReachPlayer
- Integration with professional media centers
- Single/batch operation for live streaming
- Adaptive layout options for multi-screen content
- Capacity for 200 concurrent streams at 2Mbps

4. On-Demand Video Services

Robust on-demand capabilities:

- Browser-based access via HTML5 technology
- Proprietary ReachPlayer for enhanced viewing
- Media center integration
- Flexible layout options for multi-screen content
- Supports 200 concurrent streams at 2Mbps
- Mobile-friendly HTML5 playback

5. Comprehensive Control Options

Multiple management approaches:

- Web-based control interface
- Professional media center management
- Third-party control system compatibility

6. Intelligent File Management

Advanced storage solutions:

- Local hard drive or network storage options (FTP servers/media centers)
- Customizable file categorization
- Resource sharing through permission allocation
- Automatic space management with priority-based overwriting
- Self-repair for corrupted files
- Download options for SD/HD content

7. Flexible File Editing

- Standard MP4 format output
- Compatibility with third-party editing software

8. User Management System

Complete user administration:

- **Operator Users:** Full system control privileges
- **Regular Users:** Content access privileges
- Customizable group permissions for meetings and resources

9. Monitoring and Maintenance

Proactive system oversight:

- Real-time alarm notifications (email/web)
- Detailed activity logging

- Comprehensive troubleshooting support

10. Data Protection

Reliable backup solutions:

- Configuration backup/restore
- Daily automatic database backups
- Manual backup options

11. System Recovery

- Hardware reset button for critical failures
- Factory reset without data loss

12. Seamless Upgrades

Future-proof your investment:

- Web-based version updates
- Version rollback capability
- Continuous performance improvements

Why Choose REX Recording Server?

REX Recording Server represents the cutting edge in multimedia recording and streaming technology. Our solution combines enterprise-grade performance with intuitive operation, delivering:

- ✓ **Unmatched Flexibility** - Adapts to your specific recording and streaming needs
- ✓ **Enterprise Scalability** - Grows with your organization's requirements
- ✓ **Reliable Performance** - Professional-grade stability for critical operations
- ✓ **Intuitive Management** - User-friendly interfaces reduce learning curves
- ✓ **Future-Ready Technology** - Regular updates keep you at the forefront

Transform your multimedia capabilities with REX Recording Server - the professional choice for organizations that demand excellence in recording and streaming solutions.

[Contact Us Today] for a personalized demonstration or to discuss how REX can meet your specific requirements.

Network Architecture Diagram:

The REX recording server interacts with various types of encoders, H.323, and SIP video conferencing systems as shown in the following diagram:

1. Signal Acquisition Group:

Multiple types of encoders form the signal acquisition group. These devices can capture:

- Video signals from cameras
- VGA signals from PCs
- Audio signals from microphones

After encoding, all signals are transmitted to the REX recording server via IP network.

2. Video Conference Connection:

H.323/SIP video conference terminals or MCUs can connect to REX recording through:

- Registering with GK short codes
- Specifying server addresses
- Direct IP address calls

This enables REX recording to receive data streams from conference terminals or MCUs.

3. Service Functions:

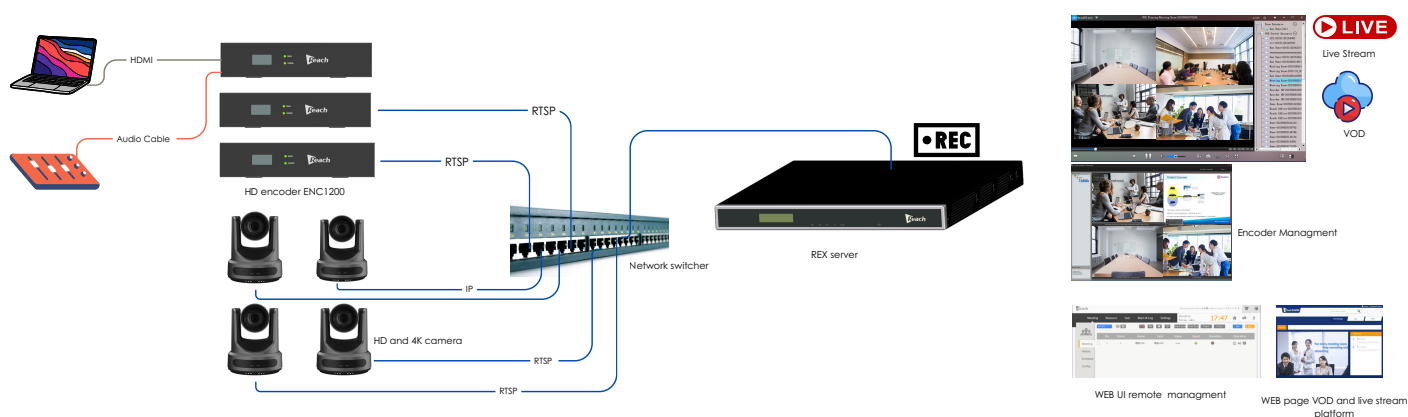
The REX recording server provides two core functions:

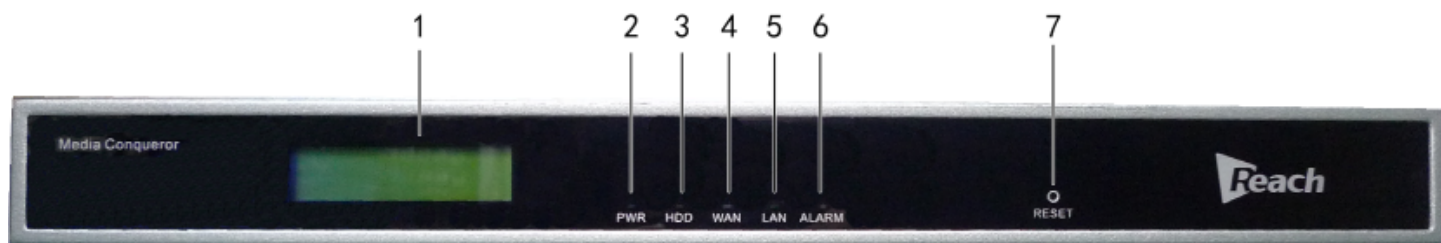
- Live Streaming: When activated, users can watch real-time broadcasts
- Recording: Captures entire events for later on-demand viewing through the REX server

4. User Access:

Authorized users can:

- Access live streams during events
- Log in to the REX server to view recorded content post-event

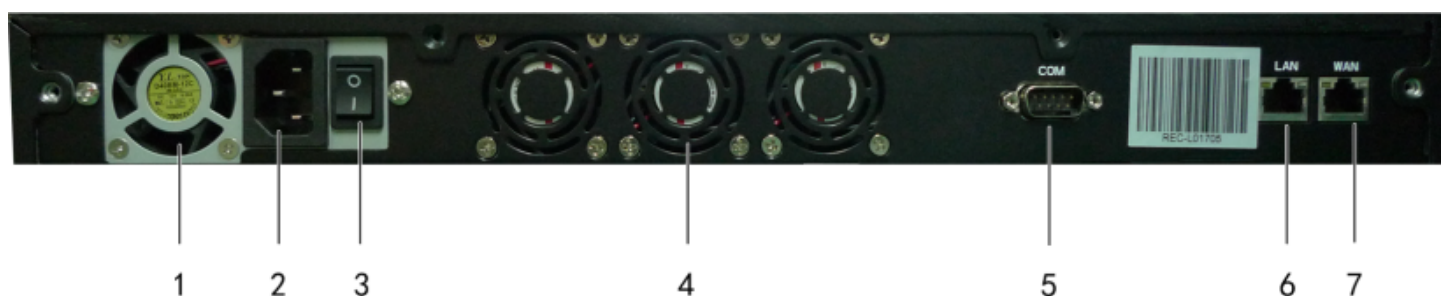




Front Panel

No.	Component	Description
1	LCD Screen	Displays system information such as IP address and hard disk space.
2	Power Indicator (PWR)	Indicates the power status.
3	Hard Disk Indicator (HDD)	Indicates the hard disk status.
4	WAN Indicator	Indicates the status of the WAN interface.
5	LAN Indicator	Indicates the status of the LAN interface.
6	Alarm Indicator (ALARM)	Indicates whether there is an alarm on the device.
7	Reset Button (RESET)	Used to restore the system in case of a malfunction.

Rear Panel



No.	Component	Description
1	Power Fan	Provides cooling for the power module.
2	Power Port	Connects to 220V AC power.
3	Power Switch	Turns the server on or off.
4	Motherboard Fan	Provides cooling for the motherboard.
5	Debug Port (COM)	Used for device debugging.
6	LAN Port	Connects to a local area network.
7	WAN Port	Connects to a wide area network.

Hardware Spec

Item	Parameter
Video Encoding	H.264 High Profile
Audio Encoding	AAC
Encoding Frame Rate	1~30 fps
Audio Sample Rate	44.1kHz, 48kHz
Audio Bitrate	64Kbps, 96Kbps, 128Kbps
Video Bitrate Range	128kbps~10Mbps
Bitrate Mode	VBR, CBR
Operating Temperature	-20°C~60°C
Relative Humidity	5%~95%
Storage Temperature	-40°C~80°C
Dimensions (D×W×H)	464.0mm×430.0mm×44.5mm
Weight	8.1kg
Operating Voltage	AC 220V
Power Consumption	40W

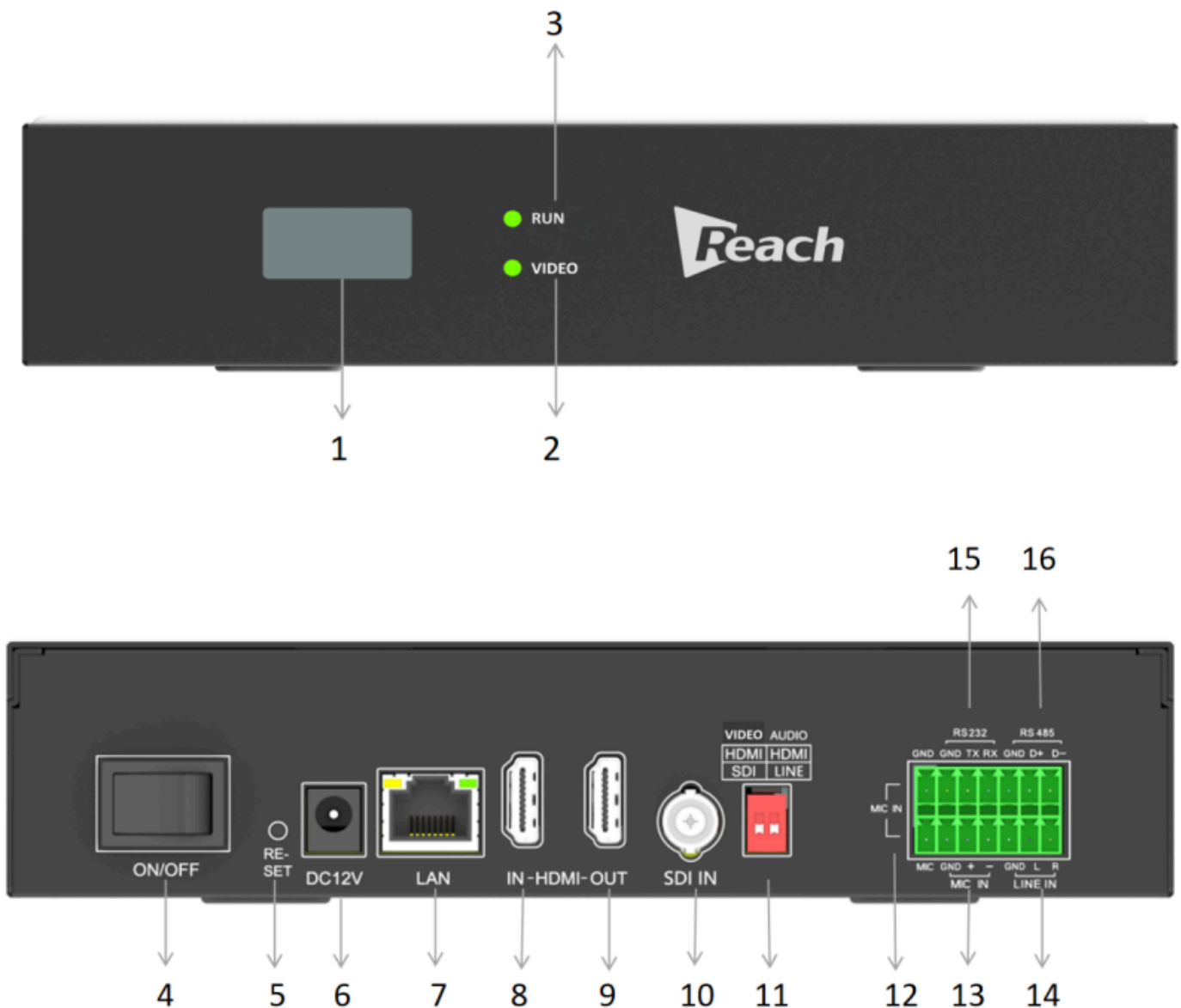
The corresponding high-definition encoder -ENC1200P

converting SDI+HDMI signals into IP streams.

The ENC1200P high-definition encoder is the latest generation of dedicated hardware equipment independently developed by SZ Reach. for encoding high-definition video signals. The ENC1200P features a compact design, allowing two units to be installed side by side in a standard equipment rack.

Key features of the ENC1200P include:

- Embedded operating system ensures stable and reliable performance.
- Supports Reach's proprietary protocol (EncoderManager) and RTSP media streaming.
- Enables remote camera control.
- Supports subtitle and time display functions.
- Features CBR (Constant Bit Rate) video encoding mode.



No.	Component	Description
1	LCD Display	2-inch display screen
2	VIDEO Indicator	Signal source indicator light
3	RUN Indicator	System operation indicator light
4	Power Button	Controls device power on/off
5	Reset Button	Used for system recovery
6	Power Interface	Connect to DC 12V power supply
7	Network Interface	Connect to local area network
8	HDMI IN Interface	HDMI signal input port, connects HDMI signal
9	HDMI OUT Interface	HDMI loop-out video output
10	SDI IN Interface	SDI signal input port, connects SDI signal
11	DIP Switch	Controls signal input and audio input switching
12	Audio Input (MIC IN)	Reserved interface
13	Audio Input (MIC IN)	Reserved interface
14	Audio Input (LINE IN)	Connects stereo audio signal
15	Camera Control (RS232)	Camera control interface based on RS232 standard

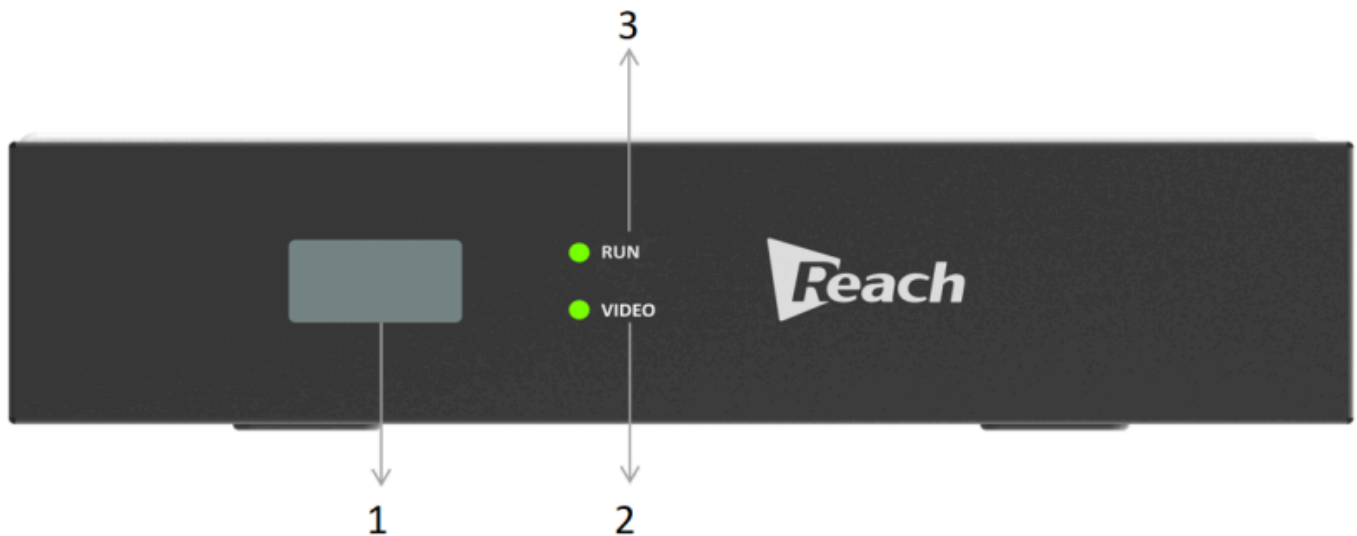
16	Camera Control (RS485)	Reserved interface
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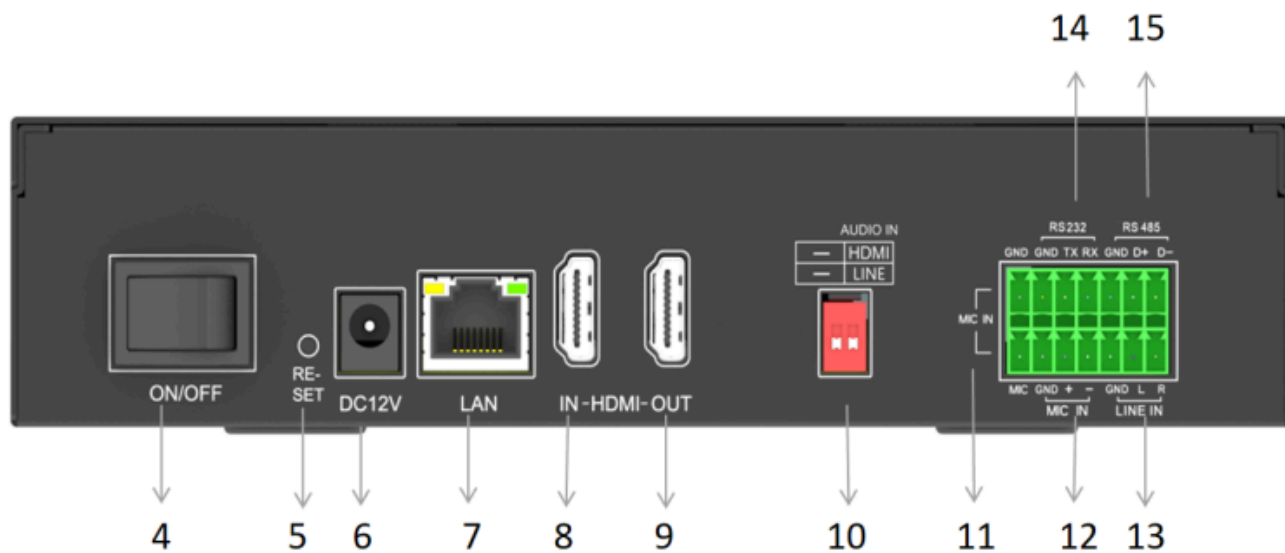
1. Feature Description
2. The host LCD panel displays normally, with information automatically cycling through the following:
 - Device IP
 - Version information
 - Audio input type
 - Video input type
3. Supports 1 SDI IN or 1 HDMI IN signal input, compatible with I/P signal formats.
 - Maximum resolution: 3840×2160@30/25
 - Minimum resolution: 1280×720@25
 - Supports HDMI OUT signal loop-through.
4. Supports 1 Line IN or 1 HDMI IN audio input, with HDMI OUT audio loop-through.
5. Supports WEB configuration, including:
 - System version and status information display
 - Video/audio parameter settings (e.g., encoding frame rate, bitrate, etc.)
6. Supports subtitle settings and PTZ control protocols.
7. Enables PTZ control operations via:
 - Web interface
 - Visual signal management platform
 - ReachPlayer
8. Supports:
 - Chinese/English language switching
 - Time synchronization and optional on-screen time display
9. Compatible with RTSP and encodemanager protocols, allowing integration with:
 - Distributed recording servers
 - Visual signal management platforms
 - Supports simultaneous connections to at least two meeting rooms.
10. Features a DIP switch for switching between video/audio input sources.
11. Allows firmware upgrades/downgrades and encoder reboots via the web interface.

The corresponding high-definition encoder -ENC1200PE

converting HDMI signals into IP streams.

1. Front-panel LCD display showing device information (1. Device IP, 2. Version info)
2. Supports 1 HDMI IN input with I/P signal formats; Max resolution 3840x2160@30@25, min resolution 1280x720@25; Supports HDMI OUT loop-through
3. Supports 1 Line IN or 1 HDMI IN audio input with HDMI OUT audio loop-through
4. WEB configuration support including system version, status display, and video parameters (encoding resolution, frame rate, bitrate, I-frame interval)
5. Supports subtitle settings and PTZ control protocols
6. Enables PTZ control via web interface, visual signal management platform, and reachplayer
7. Supports Chinese/English UI switching, time synchronization, and optional time display
8. Supports RTSP and encodemanager protocols for integration with distributed recording servers and visual signal management platforms; Supports concurrent connection to ≥ 2 conference rooms
9. Features DIP switches for video/audio source switching
10. Supports firmware upgrade/downgrade and encoder reboot via web interface





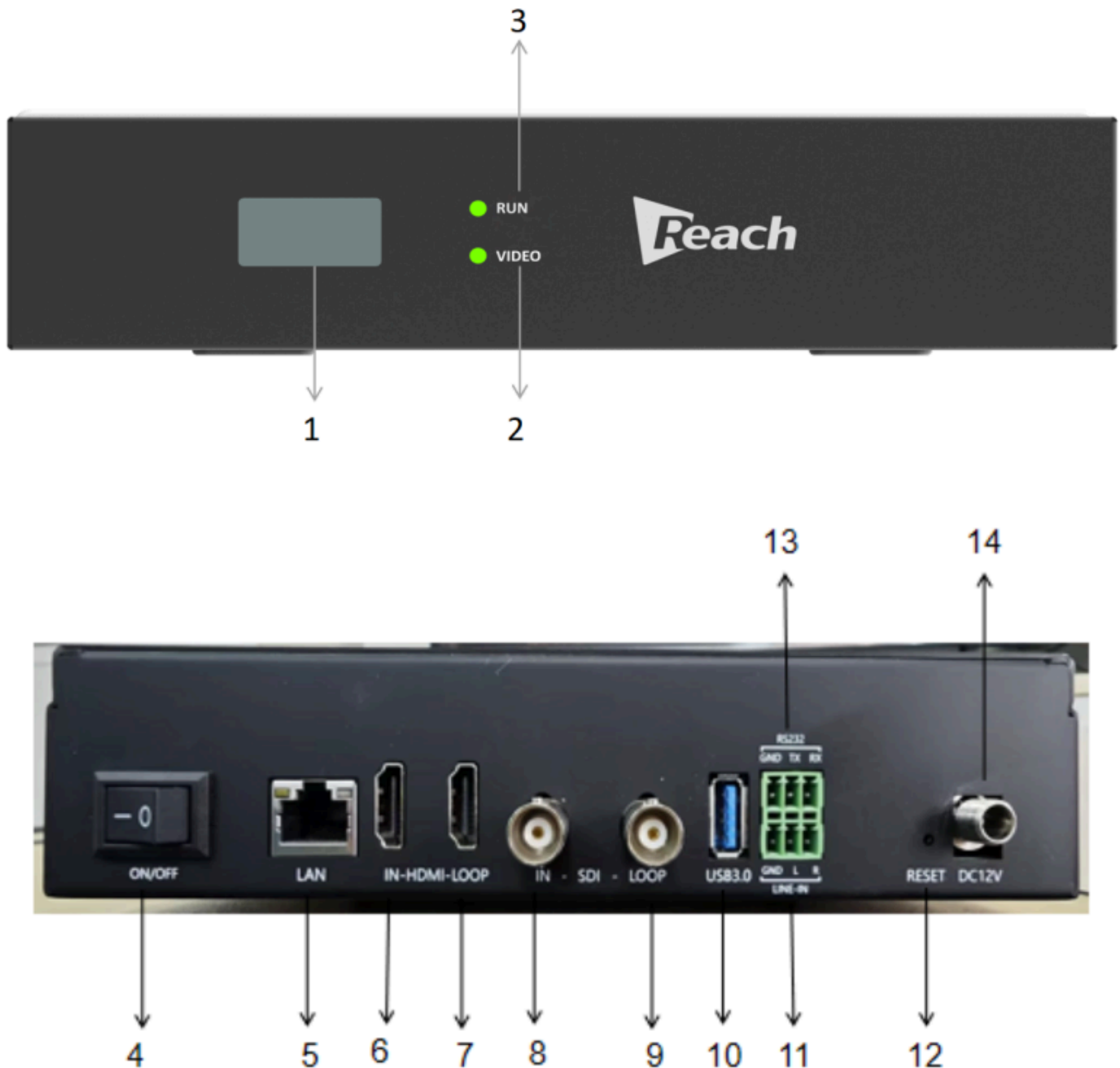
No.	Component	Description
1	LCD Display	2-inch display screen
2	VIDEO Indicator	Signal source indicator light
3	RUN Indicator	System operation indicator light
4	Power Switch	Controls device power on/off
5	Reset Button	Used to restore the system
6	Power Interface	Connects to DC 12V power supply
7	Network Interface	Connects to local area network (LAN)
8	HDMI IN Interface	HDMI signal input port (connects HDMI signal)
9	HDMI OUT Interface	HDMI loop-out video output
10	DIP Switch	Switches AUDIO IN input audio
11	Audio Input (MIC IN)	Reserved interface
12	Audio Input (MIC IN)	Reserved interface
13	Audio Input (LINE IN)	Connects stereo audio signal
14	Camera Control (RS232)	RS232 standard camera control interface
15	Camera Control (RS485)	Reserved interface

The corresponding 4K encoder (model: ENC1400N)

The ENC1400N 4K encoder is the latest generation of dedicated hardware equipment independently developed by SZ Reach. for encoding high-definition video signals. The ENC1400N features a compact design, allowing two units to be installed side by side in a standard rack.

The ENC1400N offers the following functional features:

- Embedded operating system for stable and reliable performance.
- Supports Reach's proprietary protocol (EncoderManager) and RTSP media streaming.
- Supports remote camera control.
- Supports subtitle and timestamp display.
- Supports CBR (Constant Bitrate) video encoding mode.



No.	Component	Description
1	LCD Display	2-inch display screen
2	VIDEO Indicator	Signal source indicator light
3	RUN Indicator	System operation indicator light
4	Power Button	Controls device power on/off
5	LAN Port	Connects to a local area network
6	HDMI IN Port	HDMI input for receiving HDMI signal
7	HDMI OUT Port	Loop-through HDMI output
8	SDI IN Port	SDI input for receiving SDI signal
9	SDI OUT Port	Loop-through SDI output
10	USB 3.0 Port	Reserved interface
11	Audio Input (LINE IN)	Stereo signal input
12	Reset Button	Used for system recovery
13	Camera Control (RS232)	RS232-based camera control interface
14	Power Port	DC 12V power input

Function Introduction

1. The front-panel LCD screen displays device information (1. Device IP, 2. Version information).

2. Supports 1 HDMI IN signal input, compatible with I/P signal formats. Maximum resolution: 3840×2160@30/60, minimum resolution: 1280×720@25. Supports HDMI OUT loop-through.
3. Supports 1 SDI IN signal input, compatible with I/P signal formats. Maximum resolution: 1920×1080@30/60, minimum resolution: 1280×720@25. Supports SDI OUT loop-through.
4. Supports 1 Line IN or 1 HDMI IN audio input.
5. Supports WEB configuration, including system version, status information display, and video parameter settings (e.g., encoding resolution, frame rate, bitrate, etc.).
6. Supports subtitle settings and PTZ control protocol.
7. Enables PTZ control via web interface, visual signal management platform, or ReachPlayer.
8. Supports Chinese/English UI switching, time synchronization, and optional time display.
9. Supports RTSP and EncodeManager protocols, compatible with distributed recording servers, visual signal management platforms, etc. Allows simultaneous connections to no fewer than two meeting rooms.
10. Features a DIP switch for switching input video/audio sources.
11. Supports firmware upgrade/downgrade and encoder reboot via web interface.

Spec

Specification	Detailed Parameters
Audio/Video Input	
Video Input	1x HDMI, 1x SDI
Audio Input	1x HDMI embedded audio, 1x Line-In
Video Output	
Video Output	1x HDMI and 1x SDI video loop-out
Video Parameters	
Encoding Type	H264, H265
Supported Bitrate	Adjustable 512kbps-8192kbps
Frame Rate	25/60 FPS
Video Input Type	I signal/P signal
Supported HDMI Input Resolutions	3840x2160, 1920×1080, 1360×768, 1280×720
Supported SDI Input Resolutions	1920×1080, 1280×720
Supported Encoding Resolutions	3840X2160, 1920×1080, 1280×720, 960×540, etc.
Stream Control	CBR
Streaming Protocol	RTSP\Proprietary protocol (EncoderManager)
Audio Parameters	
Encoding Type	AAC
Audio Sample Rate	48kHz
Streaming Protocol	RTSP\Proprietary protocol

	(EncoderManager)
Other Parameters	
Network Interface	RJ45 ×1
Operating Temperature	-20°C to +60°C
Power Adapter Specification	12V 2A
Dimensions	21019845.5mm
Weight	1200g