# AP-HIC200
# HD IP Camera
## High-performance Network DVR Solution

### Preliminary Product Overview
(Without notice, following described technical spec. can be changed)

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Sales and Marketing

# Contents

- Product Overview
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- Hardware Specification
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- Network DVR Components
- Application Service
- Ordering Information

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# Product Overview

- High-End Programmable DSP Hardware Architecture
- High-Performance HD IP Camera Features
- High Quality H.264 High Profile Video Encoder Support
- Speed PAN/TILT Camera Service Features
- Optical 18 x Zoom Camera
- Up to 1280 x 720 Resolution
- RTSP Streaming Service Protocol Support
- Powerful Management and User Friendly Features
- Fault Tolerant and Scalability Architecture
- Firmware Upgradeable Architecture
- Network Interface
    - One(1) 10/100M Fast Ethernet Interface
- MIC In Interface for Audio Recording
- Audio Out Interface for Broadcasting, Announcement
- CVBS Interface for External Video Monitoring

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# Product Highlights

## AP-HIC200 HD IP Camera

**Next Generation
HD IP Camera**

**Embedded System for
Stability**

**High-End Programmable DSP
Hardware Architecture**

**Up to HD 720P(1280 x 720)
Video Resolution**

**High Quality H.264 Video
Encoder Features**

**Firmware Upgradeable
Architecture**

**Speed PAN/TILT Dome Camera
Service Features**

**APOS™Technology
Multimedia Network Protocol**

**Optical 18 x Zoom Video Camera**

**MIC In, Audio Out Interface for
Audio Recording ,Broadcasting Service**

**One(1) 10/100Mbps
Fast Ethernet Interface,
IO Interface ( 2 Alarm, 1 Relay)**

**RTSP Streaming
Protocol Support for NVR Service**

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# Hardware Specification
## AP-HIC200 HD IP Camera

- RISC + Video Processor Computing Power

- Main Chassis
  - Network Interface
    - One(1) 10/100Mbps Fast Ethernet
    - One(1)-Port RS232C Port for CLI, Debug
  - Audio Interface
    - One(1) Audio 3.5mm Stereo Input Channel
    - Two(2) Audio RCA Output Channel (Left, Right)
    - Two-Way
  - CVBS Video Out Interface
  - Camera Features
    - 18x Optical Zoom, Up to 720P(1280x720) Resolution
    - 1/3Inch CCD Camera Sensor
    - 1.3 Mega Pixel
  - I/O Interface
    - 2 Alarm Input, 1 Relay
  - Speed PAN/TILT Features
    - PAN : 360 Degree Endless
    - TILT : 90+ Degree

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# Hardware Specification

Front Side

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# Hardware Specification

## AP-HIC200 HD IP Camera



Back Side

CVBS Out

Audio In

Alarm In/
Relay Out

Power Switch

Audio Out

Power In

RS232C Interface

Fast Ethernet

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# Software Service

- **Built-in AddPac APOS Internetworking Software**
  - Scalability, Functionality, and Stability Features
  - Advanced Standalone DVR Recording & Streaming Features
  - QoS Control Features
- **Firmware Upgradeable Architecture**
- **Industry Standard Network Protocol Features**
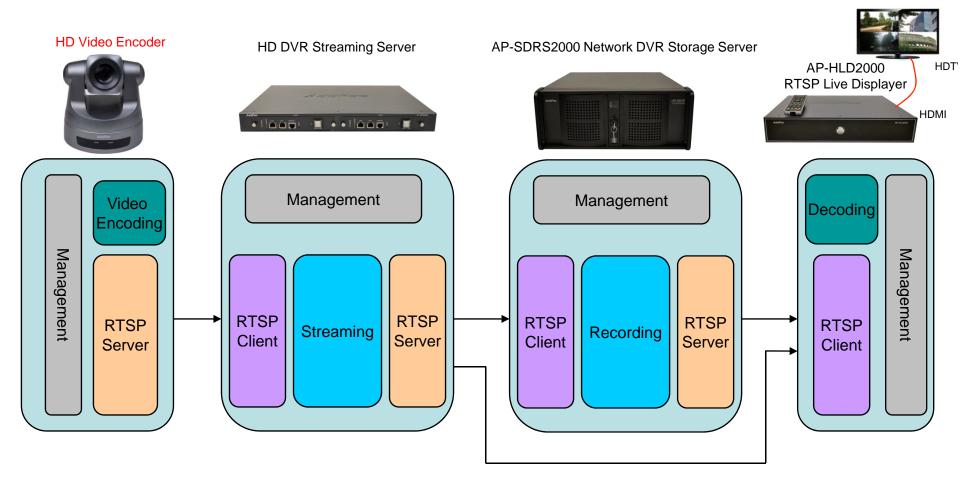- **Highly User Friendly Management Features**
  - Smart DVR Manager

# NVR Storage Server Protocol Block Diagram

## AP-HIC200 HD IP Camera

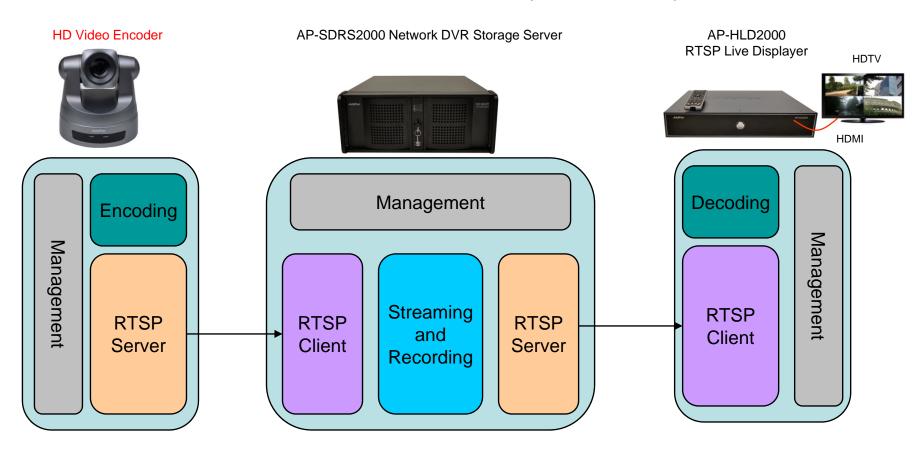### Medium & Large Scale Network DVR Solution

HD Video Encoder

HD DVR Streaming Server

AP-SDRS2000 Network DVR Storage Server

AP-HLD2000
RTSP Live Displayer

HDT'

HDMI

**HD Video Encoder**
- Management
- Video Encoding
- RTSP Server

**HD DVR Streaming Server**
- Management
- RTSP Client
- Streaming
- RTSP Server

**AP-SDRS2000 Network DVR Storage Server**
- Management
- RTSP Client
- Recording
- RTSP Server

**AP-HLD2000 RTSP Live Displayer**
- Decoding
- RTSP Client
- Management

# NVR Storage Server Protocol Block Diagram

## AP-HIC200 HD IP Camera

### Small Scale Network DVR Solution (All in One)



HD Video Encoder

AP-SDRS2000 Network DVR Storage Server

AP-HLD2000
RTSP Live Displayer

HDTV

HDMI

Encoding

Management

Decoding

Management

RTSP Server

RTSP Client

Streaming and Recording

RTSP Server

RTSP Client

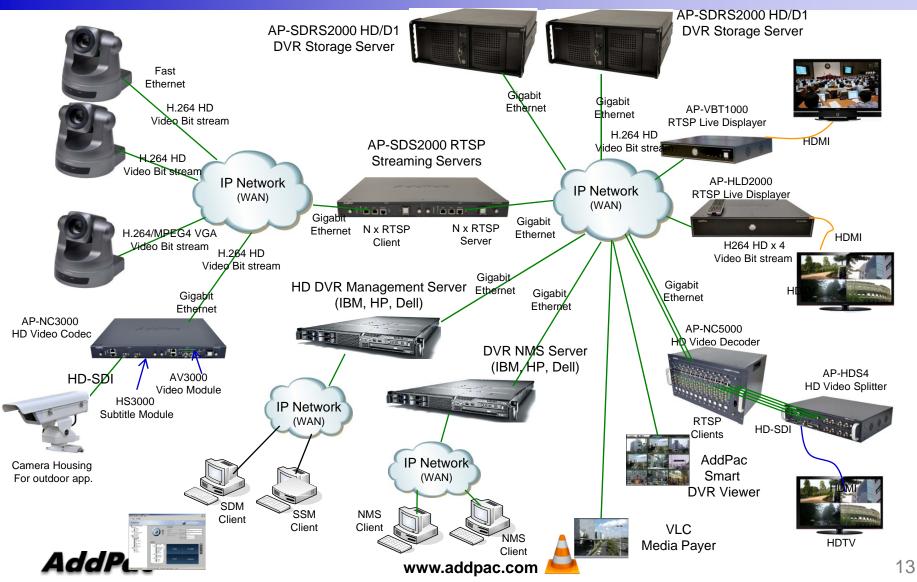Management

# Basic RTSP Message Flow

## AP-HIC200 HD IP Camera

# IP Camera Interworking

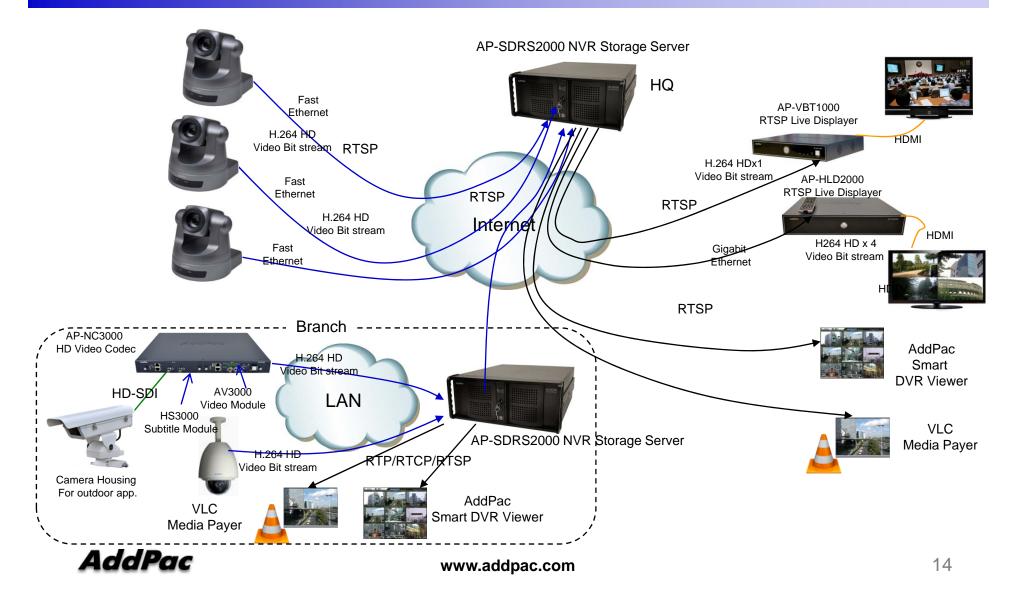# IP Camera Interworking Diagram (Large Scale)

## AP-HIC200 HD IP Camera

# IP Camera Interworking Diagram(Small Scale)

## AP-HIC200 HD IP Camera



AP-SDRS2000 NVR Storage Server

HQ

Fast Ethernet

H.264 HD Video Bit stream    RTSP

Fast Ethernet

H.264 HD Video Bit stream

Fast Ethernet

RTSP

Internet

AP-VBT1000 RTSP Live Displayer

HDMI

H.264 HDx1 Video Bit stream

AP-HLD2000 RTSP Live Displayer

RTSP

Gigabit Ethernet

H264 HD x 4 Video Bit stream

HDMI

HDTV

RTSP

Branch

AP-NC3000 HD Video Codec

H.264 HD Video Bit stream

HD-SDI

AV3000 Video Module

HS3000 Subtitle Module

LAN

Camera Housing For outdoor app.

H.264 HD Video Bit stream

AP-SDRS2000 NVR Storage Server

RTP/RTCP/RTSP

VLC Media Payer

AddPac Smart DVR Viewer

AddPac Smart DVR Viewer

VLC Media Payer

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# HD NVR Storage Solution Component Features

# AP-SDRS2000
# HD NVR Storage Server

# Product Overview

## AP-SDRS2000  HD NVR Storage Server

- High-Performance HD/D1 Network DVR Features
- Linux Operating System (Option : Window Version)
- H.264 Video Codec BP/MP/HP
- Full HD, HD, D1 Video Resolution Support
- HD Video Recording and Streaming Service
- Smart DVR Viewer Support (MS-Window S/W)
- Smart DVR Manager Support (MS-Window S/W)
- File Back Manager Support (MS-Window S/W)
- Powerful Management and User Friendly Features
- High-performance Audio and Video Service
- Firmware Upgradeable Architecture
- Up to 4 x 3.5Inch Hard Disk (SATA Type, 2Tera Byte Support)
- One(1) DVD Writer for Video File Backup
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- USB  Interface Support (Front Side, Back Side)

# Hardware Specification
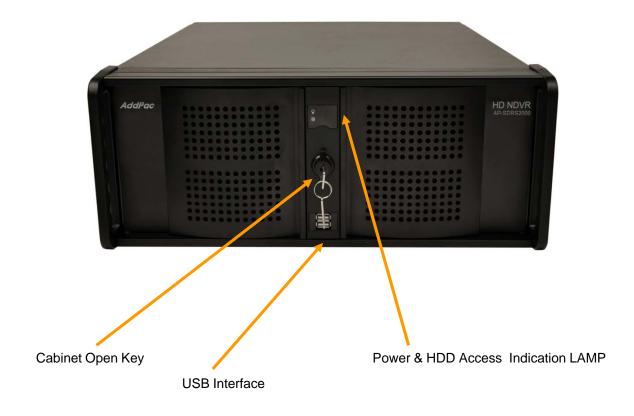## AP-SDRS2000  HD NVR Storage Server

- High Performance Computing Power

- Main Chassis

    - Network Interface

        - One(1) 10/100/1000Mbps Fast Ethernet

    - Video Output Interface

        - HDMI, DVI,RGB Video Output

    - USB 2.0 Interfaces for Mouse, Keyboard, etc

    - One(1) DVD Writer for Video File Backup

    - Up to Four(4) Hard Disk

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# Hardware Specification

## AP-SDRS2000  HD NVR Storage Server

AP-SDRS2000 Front Side



Cabinet Open Key

USB Interface

Power & HDD Access  Indication LAMP

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# Hardware Specification

## AP-SDRS2000  HD NVR Storage Server

AP-SDRS2000 Back Side



Power Input

Power ON/OFF Switch

USB Interface for
Mouse, Keyboard, etc

Audio In/Out

Video Output
HDMI,DVI, RGB Out

IR interface

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# HD NVR Storage Server Features

- **Encoder / Decoder Interface**
  - UDP/RTP
  - RTSP (Real Time Streaming Protocol)

- **Recording**
  - Manual Recording
  - Schedule Based Recording
  - Recording Monitoring
  - Recording Media File Maintenance

- **Management**
  - Web Based Management
  - Smart DVR Manager (SDM)
  - SNMP (Simple Network Management Protocol)

# Smart DVR Manager

# Smart DVR Manager Features

- ## System Management
  - User, Group Management
  - Camera Management
  - Schedule Management

- ## Recording
  - Recording Start/Stop
  - Recording Media File Searching and Maintenance
  - File Download and Excel Exporting

- ## Monitoring
  - System Resource Monitoring (CPU, Memory, HDD and etc)
  - Live Session Monitoring
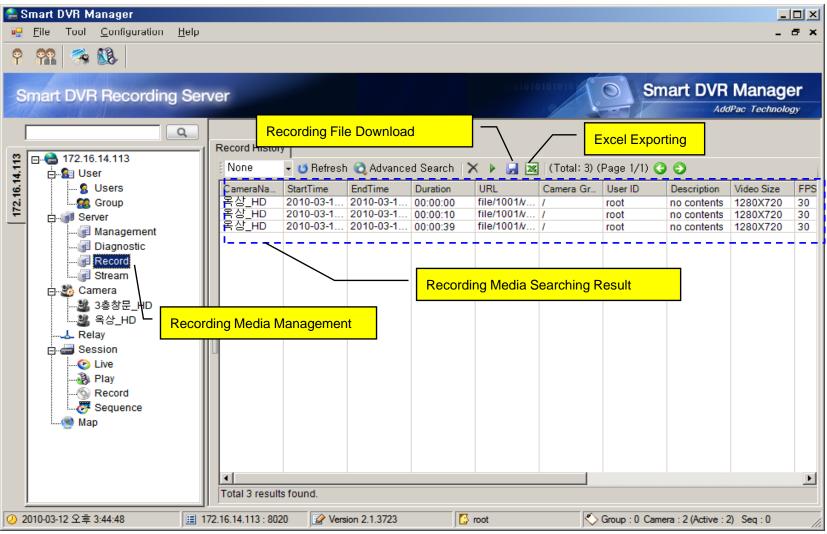  - Media File Play Session Monitoring
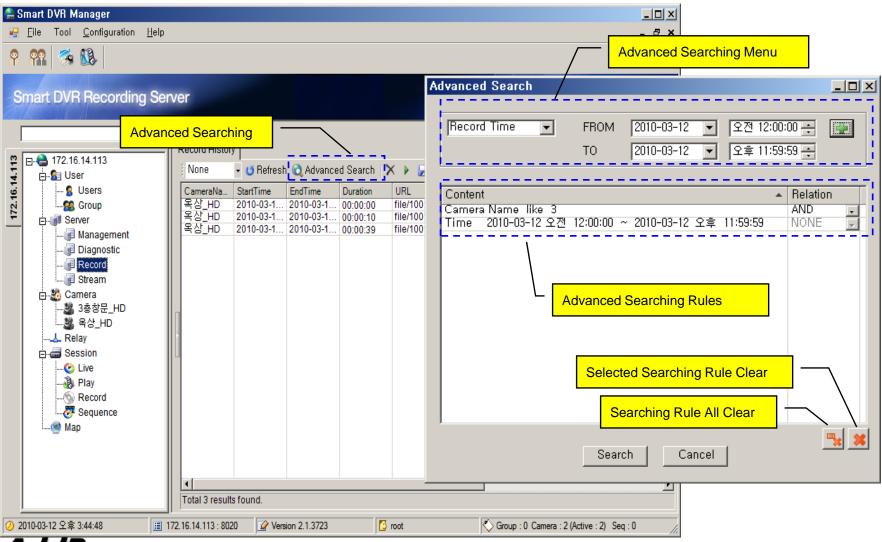
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# Smart DVR Manager : Main Layout
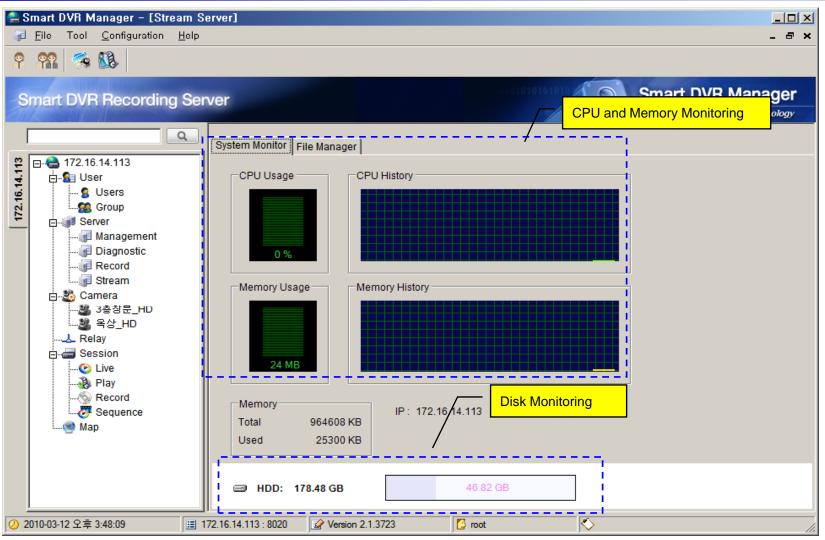
# Smart DVR Manager : Recording File Searching
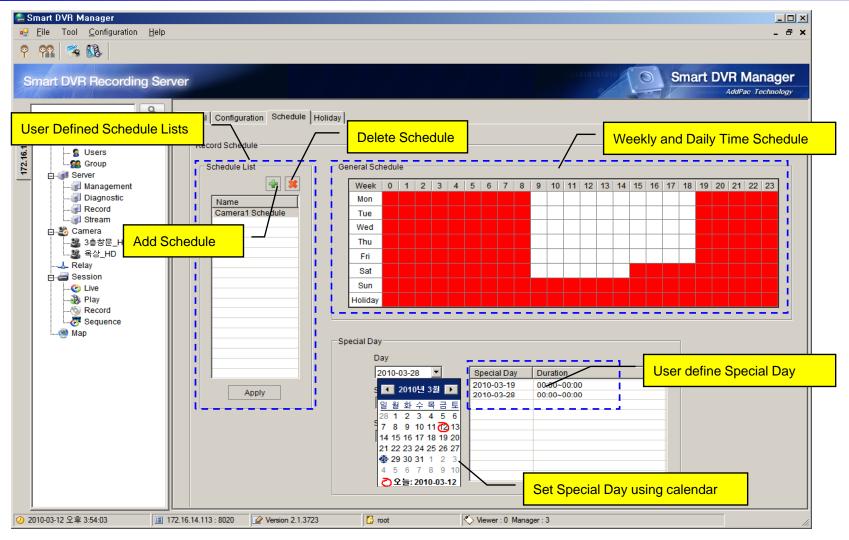
# Smart DVR Manager : Advanced Recording Searching

# Smart DVR Manager : System Monitoring
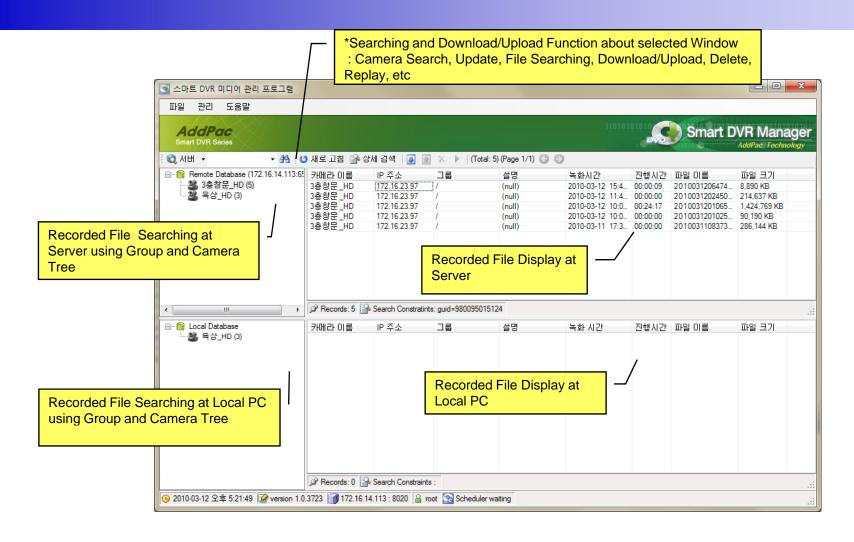
# Smart DVR Manager : Schedule

# Smart DVR Media Manager

# Smart DVR Media Manager Features

- Recording History Searching
- Recording History Management
- Recording File Upload / Download
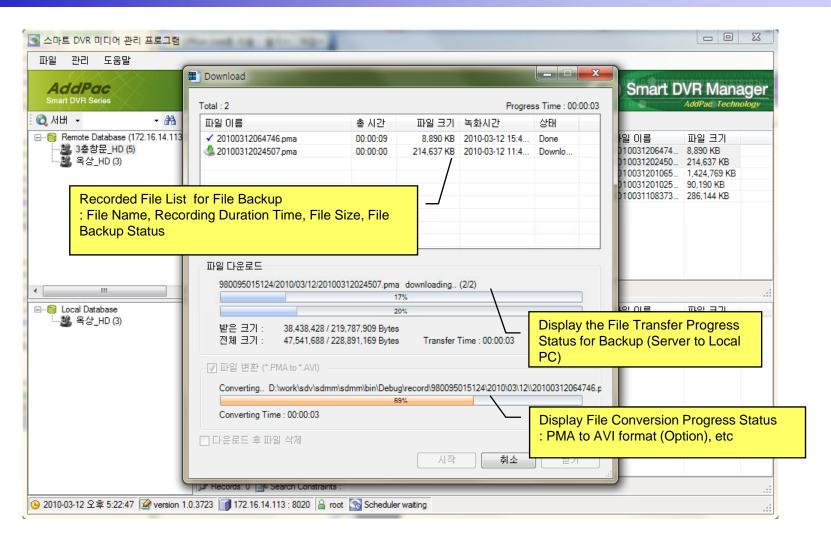- Play Recording Media File
- Schedule Backup
- Event History

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# Smart DVR Media Manager : Main Layout



*Searching and Download/Upload Function about selected Window
 : Camera Search, Update, File Searching, Download/Upload, Delete,
Replay, etc

Recorded File Searching at Server using Group and Camera Tree

Recorded File Display at Server

Recorded File Searching at Local PC using Group and Camera Tree

Recorded File Display at Local PC

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# Smart DVR Media Manager : Recorded File Upload / Download



Recorded File List for File Backup
: File Name, Recording Duration Time, File Size, File Backup Status

Display the File Transfer Progress Status for Backup (Server to Local PC)

Display File Conversion Progress Status
: PMA to AVI format (Option), etc

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# Smart DVR Media Manager : Media Replay



Recorded File Replay
- Recorded File Replay at Server or Local PC using media Player

# Smart DVR Media Manager : Media File Attribute



Recorded File Attribute Display

# Smart DVR Media Manager : Schedule



Schedule Backup Configuration :
Scheduled Backup Configuration for
Automatic File Backup
- Start Time, Repetition (Daily, Weekly,
Monthly)

Schedule Backup Option
-Backup Duration, File Delete. File
Conversion, Camera Setting, etc

# Ordering Information

- **AP-HIC200 HD IP Camera Hardware**
  - AP-HIC200 Main Body
  - Including Network Cable Set & Power Supply Cable, etc.
- **Built-in APOS Internetworking Software for AP-HIC200**
- **Including 1 Year Hardware Warranty**
- **Product Documents**
  - Install and Operation Guide (PDF)
- **Pricing**
  - AddPac Technology Regional Sales Manager
  - Authorized Sales and Marketing Representatives
  - Please Contact www.addpac.com

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# Thank you!

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