AP-DIBC100™
D1 IP Box Camera
High-performance Network DVR Solution

Preliminary Product Overview

(Without notice, following described technical spec. can be changed)

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AddPac Technology

2012, Sales and Marketing

Contents

- Product Overview
- Product Highlight
- Hardware Specification
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Product Overview

- High-End Programmable DSP Hardware Architecture
- High-Performance D1 IP Camera Features
- High Quality H.264 High Profile Video Encoder Support
- Sony 1/3" Super HAD II CCD Sensor
- Up to D1(720x480) Resolution, Various Video Resolution Support
- CS Mount Interface
- RTSP Streaming Service Protocol Support
- Dual Video Encoding (ex : D1, CIF) Support
- Powerful Management and User Friendly Features
- Smart Web Manager Support
- 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

**Next Generation
D1 IP Box Camera**

**Embedded System for
Stability**

**High-End Programmable DSP
Hardware Architecture**

**Up to D1 (720x480) Video
Resolution**

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

**Firmware Upgradeable
Architecture**

**Sony 1/3" Super HAD II CCD
Camera Sensor**

**APOS™ Technology
Multimedia Network Protocol**

CS Mount

**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-DIBC100 D1 IP Box Camera

- RISC + Video Processor Computing Power

- Main Chassis
  - Network Interface
    - One(1) 10/100Mbps Fast Ethernet
    - One(1)-Port RS485 Interface
  - Audio Interface
    - One(1) Audio 3.5mm Input/Output Channel
    - Two-Way
  - CVBS Video Out Interface
  - Camera Features
    - Up to D1 (720 x 480) Video Resolution
    - CCD Camera Sensor
    - CS Mount Lens
  - I/O Interface
    - 2 Alarm Input, 1 Relay
  - Power
    - External DC12V Power Supply
    - PoE(Power over Ethernet) Support

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Hardware Specification

AP-DIBC100 D1 IP Box Camera

- Camera Features

  - CS Mount Lens

  - Sony 1/3" Super HAD II CCD Sensor

  - 650TVL (Color)

  - 0.15 Lux (Color) / 0.01 Lux (B/W)

  - True Day & Night

  - Digital WDR
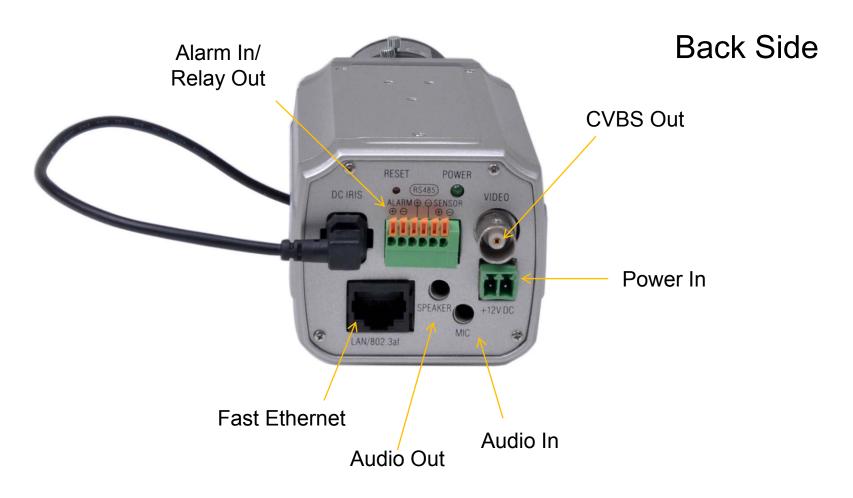
  - 3.5~8.5mm CS Mount Type Lens

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Hardware Specification

Front Side

Hardware Specification

AP-DIBC100 D1 IP Box Camera

Back Side

Alarm In/
Relay Out

CVBS Out

Power In

Fast Ethernet

Audio Out

Audio In

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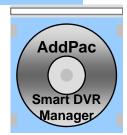# Software Service

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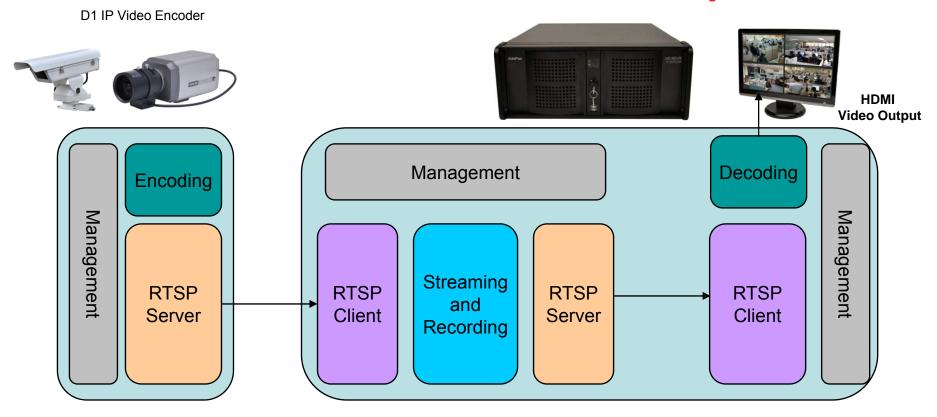 - Smart DVR Manager

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NVR Storage Server Protocol Block Diagram

AP-DIBC100 D1 IP Box Camera

Small Scale Network DVR Solution (All in One)
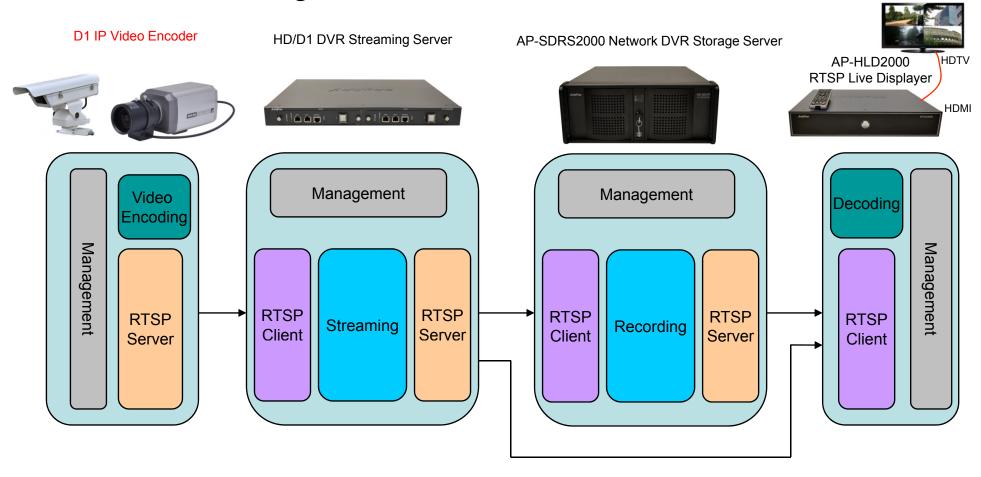
AP-HNR104 Network DVR Storage Server

D1 IP Video Encoder

HDMI
Video Output

Management

Encoding

RTSP Server

Management

RTSP Client

Streaming and Recording

RTSP Server

Decoding

RTSP Client

Management

NVR Storage Server Protocol Block Diagram

AP-DIBC100 D1 IP Box Camera

Medium & Large Scale Network DVR Solution

D1 IP Video Encoder

HD/D1 DVR Streaming Server

AP-SDRS2000 Network DVR Storage Server

AP-HLD2000
RTSP Live Displayer

HDTV

HDMI

Management	Video Encoding
	RTSP Server

Management		
RTSP Client	Streaming	RTSP Server

Management		
RTSP Client	Recording	RTSP Server

Decoding	Management
RTSP Client	

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Basic RTSP Message Flow

AP-DIBC100 D1 IP Box Camera

RTSP Server		RTSP Client
	← OPTION	
	200 OK →	
	← DESCRIBE	
	200 OK →	
	← SETUP	
	200 OK →	
	← PLAY	
	200 OK →	
	← RTP/RTCP →	
	← TEARDOWN	
	200 OK →	

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IP Camera Interworking

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IP Camera Interworking Diagram (Large Scale)

AP-DIBC100 D1 IP Box Camera

AP-DIBC100

AP-DIBC100

Fast Ethernet

H.264 D1 Video Bit stream

Camera Housing For outdoor app.

H.264 D1 Video Bit stream

AP-SDRS2000 HD/D1 DVR Storage Server

AP-SDRS2000 HD/D1 DVR Storage Server

Gigabit Ethernet

Gigabit Ethernet

AP-VBT1000 RTSP Live Displayer

H.264 HD Video Bit stream

HDMI

AP-SDS2000 RTSP Streaming Servers

IP Network (WAN)

H.264/MPEG4 VGA Video Bit stream

H.264 HD Video Bit stream

AP-HIBC100

Gigabit Ethernet

Gigabit Ethernet

N x RTSP Client

N x RTSP Server

Gigabit Ethernet

IP Network (WAN)

AP-HLD2000 RTSP Live Displayer

H264 HD x 4 Video Bit stream

HDMI

HD

AP-NC3000 HD Video Codec

HD DVR Management Server (IBM, HP, Dell)

Gigabit Ethernet

Gigabit Ethernet

Gigabit Ethernet

AP-NC5000 HD Video Decoder

HD-SDI

AV3000 Video Module

HS3000 Subtitle Module

DVR NMS Server (IBM, HP, Dell)

AP-HDS4 HD Video Splitter

Camera Housing For outdoor app.

IP Network (WAN)

IP Network (WAN)

RTSP Clients

HD-SDI

AddPac Smart DVR Viewer

HDMI

SDM Client

SSM Client

NMS Client

NMS Client

VLC Media Payer

HDTV

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IP Camera Interworking Diagram(Small Scale)

AP-DIBC100 D1 IP Box Camera

AP-DIBC100

AP-DIBC100

AP-HIBC100

Camera Housing
For outdoor app.

Fast
Ethernet

H.264 D1
Video Bit stream

RTSP

Fast
Ethernet

H.264 HD
Video Bit stream

Fast
Ethernet

RTSP

Internet

AP-SDRS2000 NVR Storage Server

HQ

RTSP

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

HD

RTSP

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Smart
DVR Viewer

Branch

AP-NC3000
HD Video Codec

H.264 HD
Video Bit stream

HD-SDI

AV3000
Video Module

HS3000
Subtitle Module

LAN

AP-SDRS2000 NVR Storage Server

Camera Housing
For outdoor app.

H.264 HD
Video Bit stream

RTP/RTCP/RTSP

VLC
Media Payer

AddPac
Smart DVR Viewer

VLC
Media Payer

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D1 NVR Storage Solution Component Features

AP-HNR1004
HD/D1 Standalone Network DVR

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Product Overview

- High-Performance HD/D1 Standalone Network DVR Features
- H.264 Video Codec BP/MP/HP
- HD, D1 Video Resolution Support
- Video Out : HDMI, DVI, RGB Interface
- 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)
- One(1) DVD Writer for Video File Backup
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- USB Interface Support (Front Side, Back Side)

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Hardware Specification
AP-HNR1004 HD/D1 Standalone Network DVR

- 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
    - IR Input port for Remote Control
    - Up to Four(4) Hard Disk

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Hardware Specification

AP-HNR1004 HD/D1 Standalone Network DVR

High End
Processor

AP-HNR1004 Front Side

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HD NDVR
AP-HNR1004

Cabinet Open Key

USB Interface

Power & HDD Access Indication LAMP

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Hardware Specification

AP-HNR1004 HD/D1 Standalone Network DVR

High End Processor

AP-HNR1004 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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AP-SDRS2000
HD/D1 NVR Storage Server

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Product Overview

AP-SDRS2000 HD/D1 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/D1 NVR Storage Server

High End Processor

- 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/D1 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/D1 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/D1 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

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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
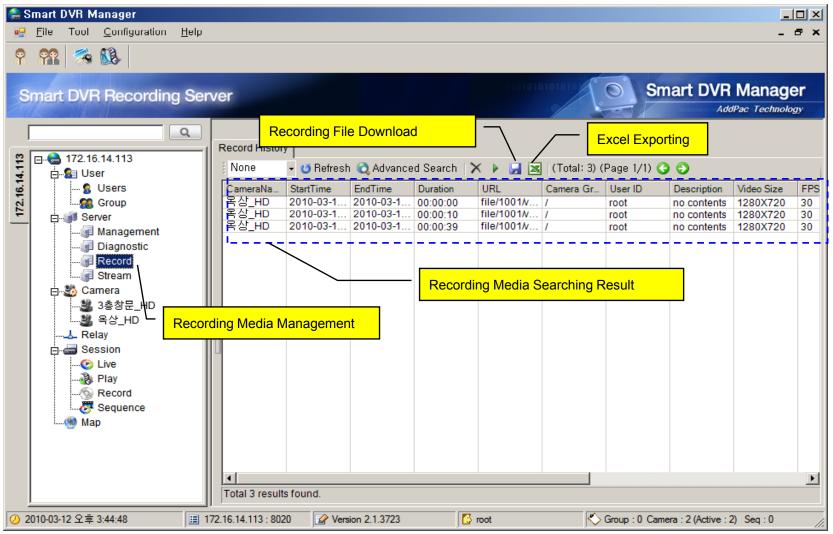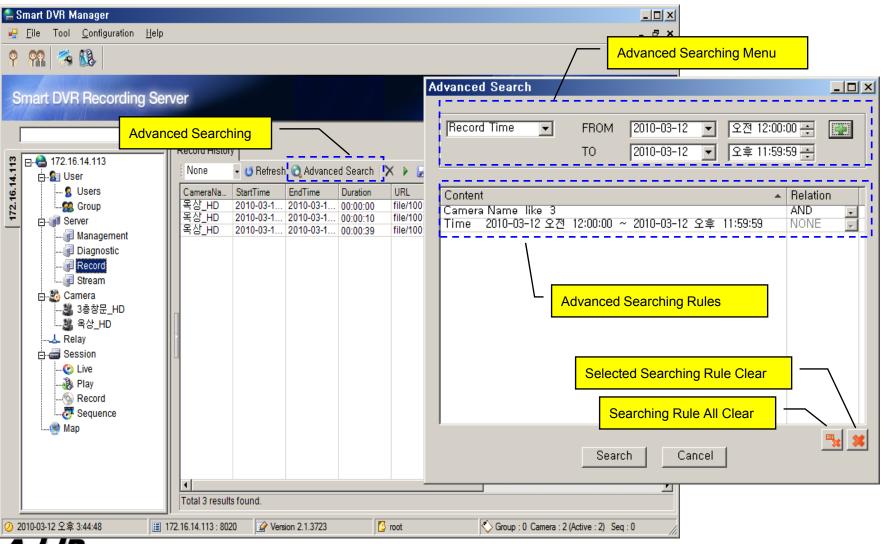 - Media File Play Session Monitoring

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Smart DVR Manager : Main Layout

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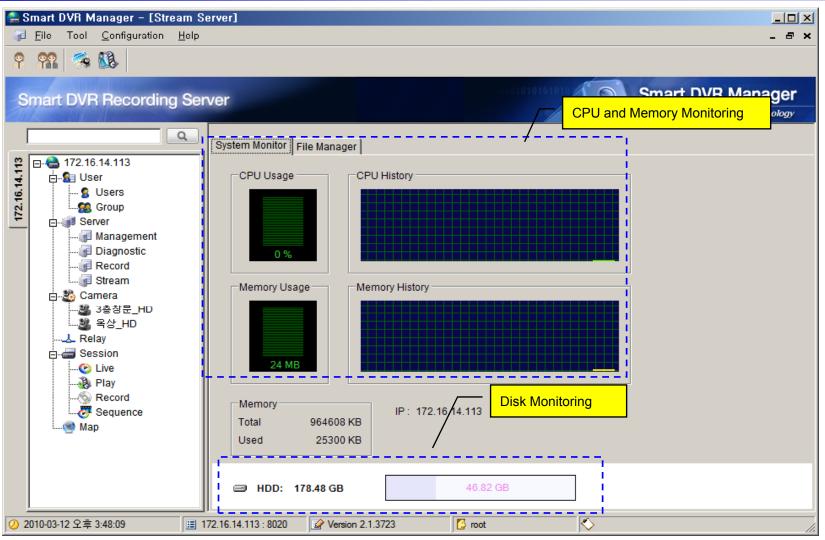# Smart DVR Manager : Recording File Searching

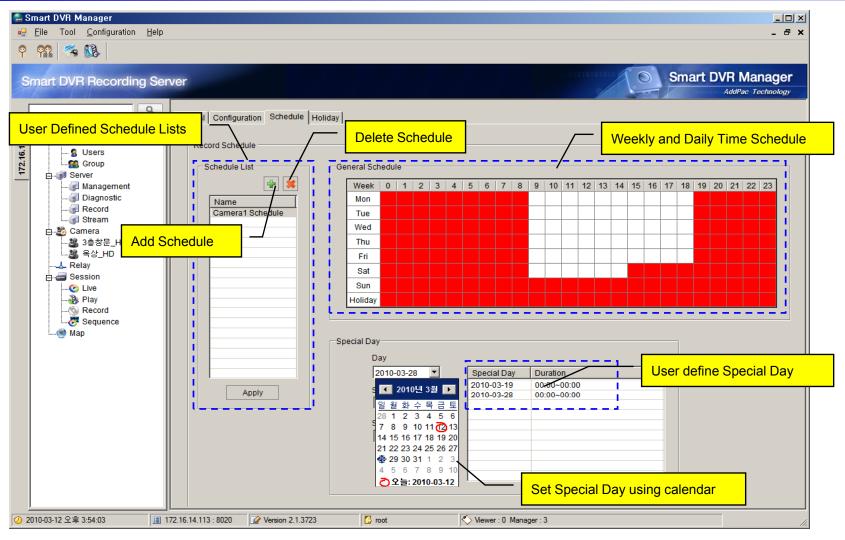# Smart DVR Manager : Advanced Recording Searching

Smart DVR Manager : System Monitoring

Smart DVR Manager : Schedule
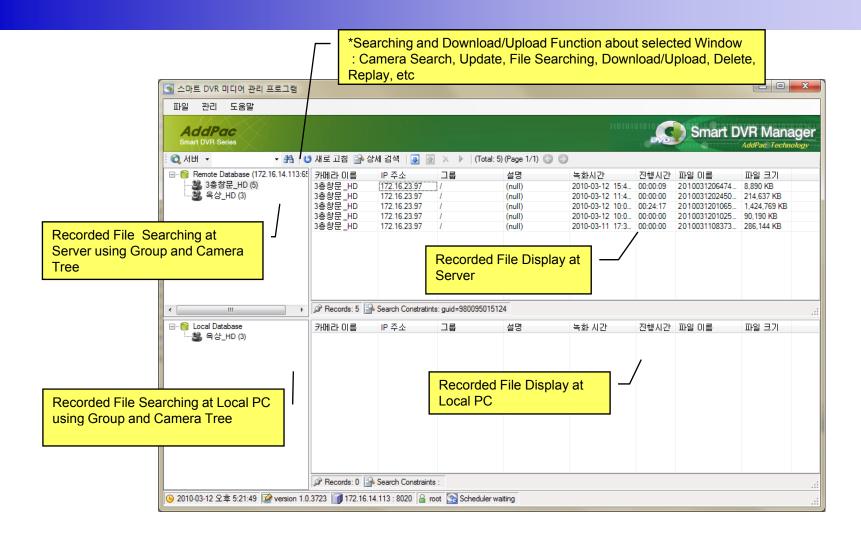
Smart DVR Media Manager

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Smart DVR Media Manager Features

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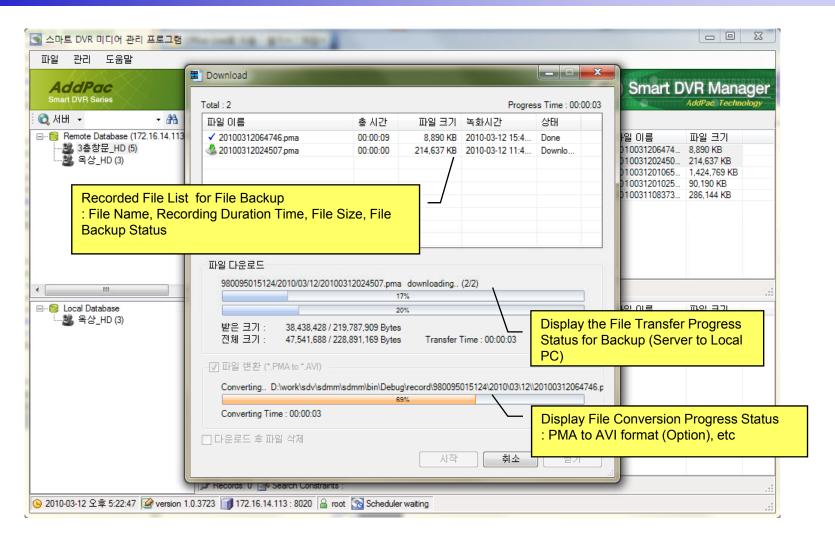- Schedule Backup
- Event History

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

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-HIBC100 HD IP Box Camera Hardware
    - AP-HIBC100 Main Body
    - Including Network Cable Set & Power Supply Cable, etc.
- Built-in APOS Internetworking Software for AP-HIBC100
- 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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