

# IP Video MCU Solution



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Sales and Marketing

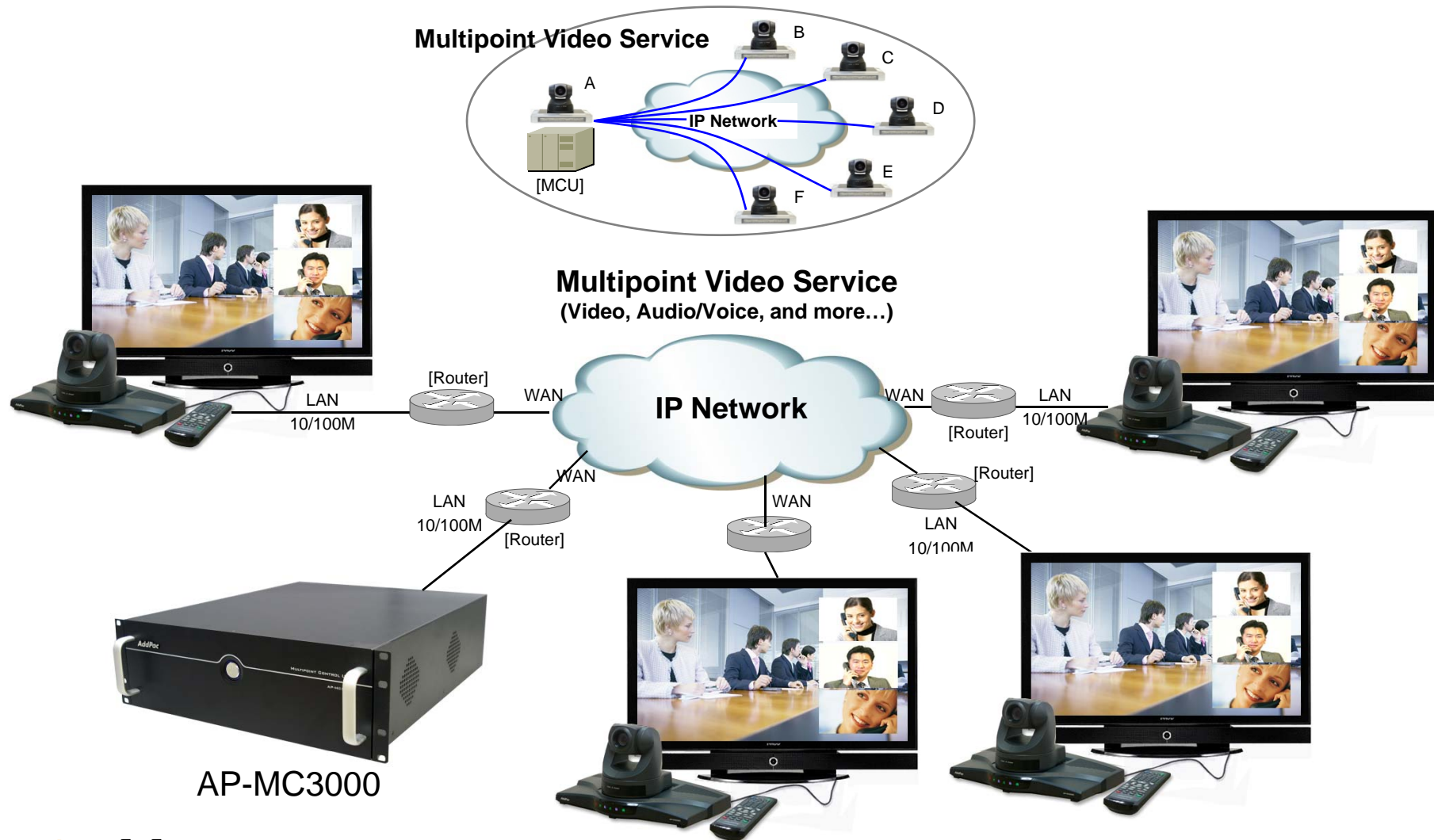
[www.addpac.com](http://www.addpac.com)

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# IP Video MCU Service Diagram



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# IP Video MCU Comparison Table

	AP-MC5000	AP-MC3000	AP-MC2000	AP-MC1800
				
Video Codec	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264
Signaling	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
Voice Codec	G.722/G.711/G.726/ G.729/G.723, etc	G.722/G.711/G.726/G. 729/G.723, etc	G.722/G.711/G.726/G. 729/G.723, etc	G.722/G.711/G.726/G.72 9/G.723, etc
Party Number	64	32	16	4/8
Multi-Session	Support	Support	Support	Support
Conference Mode	Add-Hoc, Dial-Out, Meet Me	Add-Hoc, Dial-Out, Meet Me	Add-Hoc, Dial-Out, Meet Me	Add-Hoc, Dial-Out, Meet Me
H.323 GateKeeper	Support	Support	Support	Support
Conference Video Recording	Support	Support	Support	Support
LAN Port	2	2	1	1
Power Duplication	Support	N/A	N/A	N/A



# AP-MC5000 IP Video MCU

# Main Features

## AP-MC5000 IP Video MCU

- IP based Multipoint Audio/Video Mixing Solution
- Support Various Conference System Model(Add-Hoc, Dial-Out, Meet Me)
- Multi-User/Multi-Session Video Conference Support
- H.263, MPEG4, H.264 Video Codec Support
- G.722/G.711/G.726/G.729/G.723,etc Voice Codec Support
- Up to 64-Party Video Conference Mode Support
- H.323/SIP VoIP Signaling Support
- H.323 Gate Keeper Internal Support
- External SIP Proxy Server Interworking Support
- Scalability and Flexibility
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

# Hardware Specification

## AP-MC5000 IP Video MCU

RISC  
CPU

High-end  
DSP

- High Performance Computing Power
- Programmable Hardware Architecture
- Main Chassis
  - Network Interface
    - Two(2) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)



Power ON/OFF Switch

# Hardware Specification

## AP-MC5000 IP Video MCU

RISC  
CPU

High-end  
DSP



Gigabit Ethernet  
Interface LAN0

Gigabit Ethernet  
Interface LAN0

RS232C Console Interface

Dual Power Supply





# AP-MC3000 IP Video MCU

# Main Features

## AP-MC3000 IP Video MCU

- IP based Multipoint Audio/Video Mixing Solution
- Support Various Conference System Model(Add-Hoc, Dial-Out, Meet Me)
- Multi-User/Multi-Session Video Conference Support
- Up to 32-Party Video Conference Mode Support
- H.263, MPEG4, H.264 Video Codec Support
- G.722/G.711/G.726/G.729/G.723,etc Voice Codec Support
- H.323/SIP VoIP Signaling Support
- H.323 GateKeeper Internal Support
- External SIP Proxy Server Interworking Support
- Scalability and Flexibility
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

# Hardware Specification

AP-MC3000 IP Video MCU

RISC  
CPU

High-end  
DSP

- High Performance Computing Power
- Programmable Hardware Architecture
- Main Chassis
  - Network Interface
    - Two(2) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)



Power ON/OFF Switch

# Hardware Specification

AP-MC3000 Video MCU

RISC  
CPU

High-end  
DSP



Gigabit Ethernet  
Interface LAN0

Gigabit Ethernet  
Interface LAN0

RS232C Console Interface

Power Switch & Power Inlet



# AP-MC2000 IP Video MCU

# Main Features

## AP-MC2000 IP Video MCU

- IP based Multipoint Audio/Video Mixing Solution
- Support Various Conference System Model(Add-Hoc, Dial-Out, Meet Me)
- Multi-User/Multi-Session Video Conference Support
- Up to 16-Party Video Conference Mode Support
- H.263, MPEG4, H.264 Video Codec Support
- G.722/G.711/G.726/G.729/G.723,etc Voice Codec Support
- H.323/SIP VoIP Signaling Support
- H.323 GateKeeper Internal Support
- External SIP Proxy Server Interworking Support
- Scalability and Flexibility
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

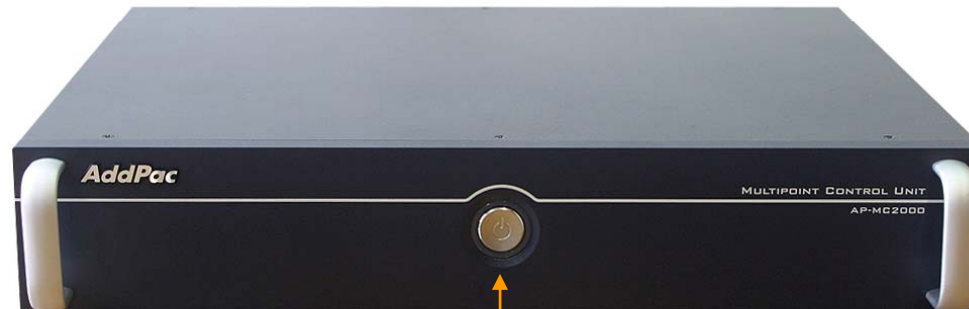
# Hardware Specification

AP-MC2000 IP Video MCU

RISC  
CPU

High-end  
DSP

- High Performance Computing Power
- Programmable Hardware Architecture
- Main Chassis
  - Network Interface
    - One(1) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)



Power ON/OFF Switch

# Hardware Specification

AP-MC2000 Video MCU

RISC  
CPU

High-end  
DSP



Gigabit Ethernet  
Interface LAN

RS232C Console Interface

Power Switch & Power Inlet





# AP-MC1800 IP Video MCU

# Main Features

## AP-MC1800 IP Video MCU

- IP based Multipoint Audio/Video Mixing Solution
- Support Various Conference System Model(Add-Hoc, Dial-Out, Meet Me)
- Multi-User/Multi-Session Video Conference Support
- Up to 4/8-Party Video Conference Mode Support
- H.263, MPEG4, H.264 Video Codec Support
- G.722/G.711/G.726/G.729/G.723,etc Voice Codec Support
- H.323/SIP VoIP Signaling Support
- H.323 GateKeeper Internal Support
- External SIP Proxy Server Interworking Support
- Scalability and Flexibility
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

# Hardware Specification

AP-MC1800 IP Video MCU

RISC  
CPU

High-end  
DSP

- High Performance Computing Power
- Programmable Hardware Architecture
- Main Chassis
  - Network Interface
    - One(1) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)



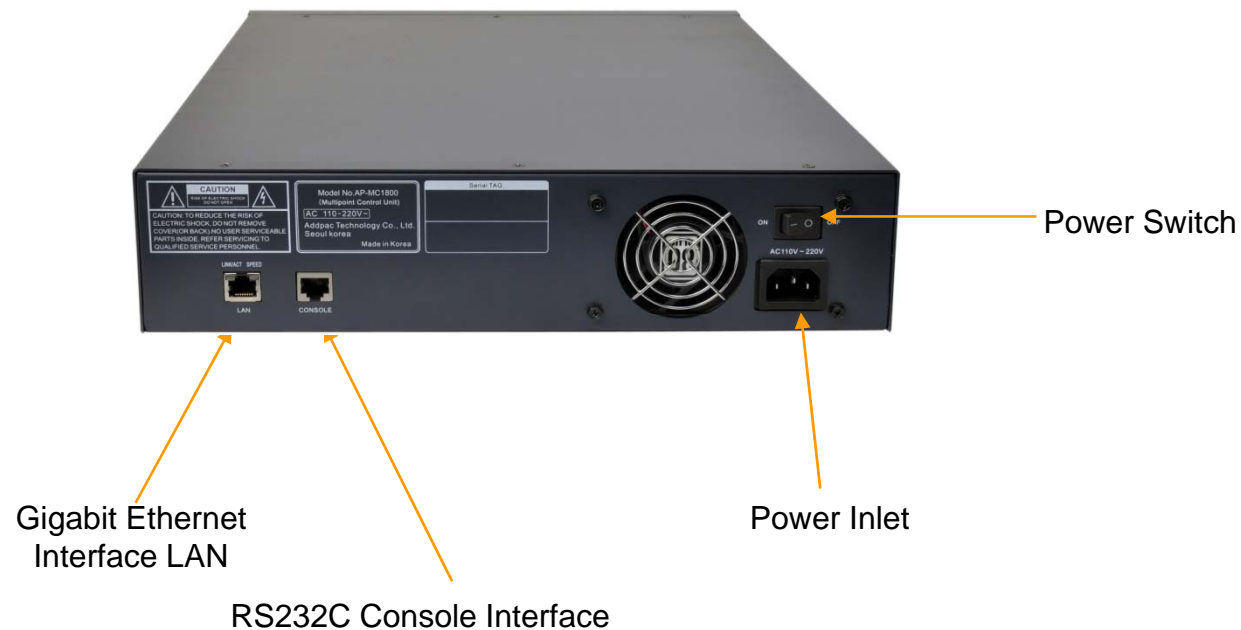
Power ON/OFF Switch

# Hardware Specification

AP-MC1800 Video MCU

RISC  
CPU

High-end  
DSP





# Video MCU Service Features

# Contents

- Video Display Layout
- Dynamic Session Management
- Personal Feature
- Video Conference Signaling
- SMM(Smart Multimedia Management) for MCU
- OSD (Video Phone, Video Terminal, etc)
- Conference Service Diagram : Example
- New SMM Feature: Media Class
- New SMM Feature : Conference Room (Speaking Mode, Voice Switching)
- New SMM Feature : Active Conference
- New SMM Feature : Conference Scheduling

# Video Display Layout

- **Various Layout**
  - 31 types (Symmetric Layout, Asymmetric Layout)
    - Symmetric Layout : same participant picture size
    - Asymmetric Layout : asymmetric participant picture size
  - Auto, Manually : can choice a specific video layout when a conference is started
- **Dynamic control**
  - Dynamic layout change
  - Dynamic participant movement
- **Floor**
  - Can distinguish a participant by using the concept of the right of a speaking participant
  - Floor to full screen
- **Name display**
  - Display or hide the name of a participant dynamically
- **Border**
  - Three kind of a participant picture border : empty border, a participant boarder, a speaker boarder

# Personal Feature\*

- Individual (Per Connection) Rate Control for Down Stream
  - Codec, Picture Size, etc
- Personal Layout
  - Example, Zooming for Detailed View



# Video Conference Signaling

- **Dial-in**
  - Even in Dial-out started Video Conference, a participant can join the Video Conference if a participant knows the conference room number in outside.
- **Mic off of invisible participant**
  - Can turn off MIC of a invisible participant.
- **Forced Mute (audio, video)**
  - Can mute Audio/Video Capability of a participant via SMM or in Chair, Operator Terminal (Video Phone).
- **Virtual Audience**
  - Broadcasting solution
  - Can monitor the video conference via inter-working with AddPac Broadcasting Server.
- **H323 Support \***
  - Floor control(H.243)
  - Dual Video (H.239)

# SMM (Smart Multimedia Management) for MCU

- Initial Setting
  - Video Layout Setting
  - User class
    - Chair, Operator, Participant, Audience
  - Initial position
- Active Monitoring
  - Monitoring
    - Snapshot
  - Control
    - Layout
    - Move party
    - Floor
    - Mute
- Video Conference Scheduling\*
  - Scheduled Dial-Out Conference

# SMM : Conference Room

The screenshot shows the 'Add Conference' dialog box with the following fields and callouts:

- Conference Name & Description:** Fields for 'Conference Name' and 'Description'.
- Conference Number:** Field for 'Conference Number'.
- Conference Type:** Dropdown menu set to 'Dial-Out Conference'. Callout: 'Conference Type : Dial-out, Meet me, AddHoc'.
- Media Type:** Radio buttons for 'Audio' and 'Video + Audio'. Callout: 'Media Type Select Conference Media Type'.
- Audio Codec:** Dropdown menu set to 'G.711U'. Callout: 'Audio Codec Select a conference audio codec'.
- Max Participant:** Spin box set to '16'. Callout: 'Maximum Participant (Can select in Meet-Me conference type only)'.
- Close on Chair Out:** Checked checkbox. Callout: 'Close on Chair Out Conference Disconnected if chair hang up phone'.
- Secret Room:** Unchecked checkbox. Callout: 'Secret Room -Secret room and Room Password -(Can select in Meet-Me conference type only)'.
- Room Password:** Text field with '(4 digit)' label.
- Video Support:** Sub-dialog box with 'Support' tab selected. Callout: 'Video Support In case of Video Media Type, select the video information'. Fields include:
  - Video Type: 'Continuous presence'
  - Target Rate: '1024K'
  - Picture Size: '640x480'
  - Video Codec: 'MPEG4'
  - Frame Rate: '30 fps'
- Video Endpoint:** Sub-dialog box with 'EndPoint' tab selected. Callout: 'Video Endpoint In case of Video Media type, select the video parameter of endpoint'.

# SMM : Conference - Layout

The screenshot shows the 'Add Conference' dialog box with the following settings and callouts:

- General Tab:**
  - Conference Name: [Empty text box]
  - Description: [Empty text box]
  - Conference Number: [Empty text box]
  - Conference Type: [Dial Out Conference]
  - Partition: [Empty text box]
  - Media Type:  Audio,  Video + Audio
  - Audio Codec: [Empty text box]
  - Max Participant: [16]
  - Close on Chair
  - Secret Room
  - Room Password: [Empty text box] (4 digit)
- Video Tab:**
  - Support: [Endpoint] [Layout]
  - Layout Mode: [Manual]
  - Arrange Mode: [Dynamic]
  - Video Layout: [3] [Icon]
  - Floor to Full Screen:  Symmetric,  Asymmetric
  - Display Participant Name:  Display Participant Name, Layout: [Top Left]
  - Color:  Border Line (Blue),  Floor Line (Red),  Background Line (Black), Background (Black)
  - Mic Off of Invisible Participant

**Callout Boxes:**

- Video Layout Mode:** - Auto (symmetric, asymmetric) - manual
- Arrange Mode:** -(dynamic, fixed, fixed reserved)
- Video Layout:** - Select the video layout
- Floor Assign Mode:** Floor권한 할당에 대한 방법 설정. (After Release, On Request)
- Floor to Full Screen:** - Floor to Full Screen Enable/Disable in symmetric, asymmetric Layout Mode.
- Display Participant Name:** - Participant Name Display Enable/Disable and Location of Name Display
- Color:** - Layout border and Floor, Background Color Setting.
- Mic off of Invisible Participant**

# SMM : Conference - Participants

**Conference Properties**

General | **Participants** | Virtual Audience

Number	Par...	User
1002		hwang woo sun
1003		sim sang kwon
1004		lee young sik
1005		oh hyoung suk
1006		lee myoung won
1007		choi jin suk
1008		lee min ji
1010		kwon jong hwi
1012		kim sang mi
1013		you jae won
1015		jang byoung ju
1018		kim kyoung nam
1019		kim chang yeon
1020		kwon young pil
1021		kim do hyoung
1024		kim kwang
1026		lee joung hyuk
1027		kim so young
1101		choi woo suk
1102		sin kwang woong
1500		choi jin suk
3003		kim kyoung nam
		kim so young

Enter External Phone Number

Add

Number	Partition	User	Type	User Class	Media Type	Position	Display Name
3001		Steven	Internal	Chair	Video		
3004		John	Internal	Participant	Video		
3005		Jane	Internal	Participant	Video		
3010		Sally	Internal	Participant	Video		

**User Class**  
(Chair, Operator, Participant, Audience)

**Media Type**  
(Audio, Audio (Seat Reserved), Video)

**Position**  
In case of video media type,  
Select the location of a  
participant in video layout

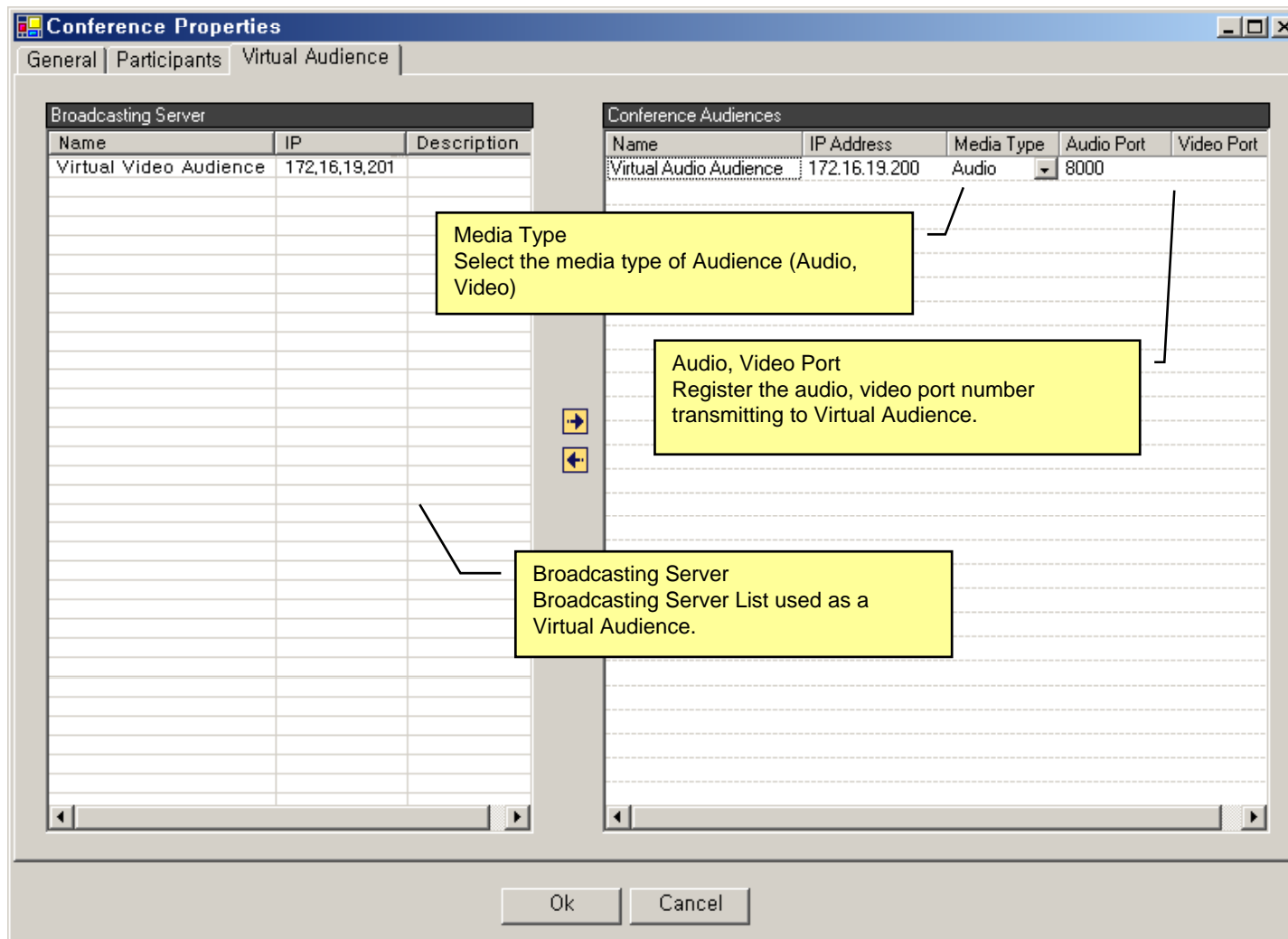
**Display Name**  
A Participant Display Name

Ok Cancel

**Phone Number Participant Phone List**

**External Phone Number**  
Register the external phone  
line number by inputting  
number directly

# SMM : Conference – Virtual Audience



# SMM : Active Conference (1)

Smart Multimedia Manager - [Active Conferences]

File View Tools Window Help

AddPac Smart Multimedia Manager

172.16.201.100 172.16.11.120

Conference Name	Conference Number	Status	Conference Type	Start Time	Duration (s..	Media Type	Floor to Full...	Layout Mode	Arrange Mode	Layout	No. of Pa..
nms conference	7100	Running	Dial-Out	20061207-14:33:45	82	Video	On	Manual	Dynamic		3

Conference  
Display the current conference room list

Participant Name	Phone Number	IP	Status	Audio	Video	Floor	In Picture	Reason
choi jin suk(js.choi)	1500	172.16.19.103	Connected					
kim kyoung nam(kn...	3500	172.16.12.30	Connected					
lee jung hyuk(jh.lee)	6010	172.16.11.110	Connected					

Participants (nms conference)

Participants  
Display the participant list in conference room each

172.16.201.100 [Ok] 172.16.11.120 [Ok]

2006-12-07 오후 2:35:08 Version 2.9.2532.21338 172.16.201.100:389 administrator

# SMM : Active Conference (2)

Smart Multimedia Manager - [Active Conferences]

File View Tools Window Help

Advanced Smart Multimedia Manager

AddPac Technology

172.16.201.100 172.16.11.120

Conference

Conference Name: nms conference, Conference Number: 7100, Status: Running, Conference Type: Dial-Out, Start Time: 20061207-14:33:45, Duration (s.): 173, Media Type: Video, Floor to Full...: On, Layout Mode: Manual, Arrange Mode: Dynamic, Layout: [Grid Icon], No. of Pa.: 3

Participants (nms conference)

Participant Name	Phone Number	IP	Status	Audio	Video	Floor	In Picture	Reason
choi jin suk(js.choi)	1500	172.16.19.103	Connected	[Microphone Icon]	[Video Icon]		[Floor Icon]	
kim kyoung nam(kn...)	3500	172.16.12.30	Connected	[Microphone Icon]	[Video Icon]		[Floor Icon]	
lee jounghyuk(jh.lee)	6010	172.16.11.110	Connected	[Microphone Icon]	[Video Icon]		[Floor Icon]	

172.16.201.100 (Ok) 172.16.11.120 (Ok)

2006-12-07 오후 2:36:34 Version 2.9.2532.21338 172.16.201.100:389 administrator

Conference parameter setting is possible dynamically in current conference call



# SMM : Active Conference (3)

The screenshot displays the 'Smart Multimedia Manager - [Active Conferences]' window. The main interface shows a table of active conferences. A 'Conference Snapshot' window is open, displaying a real-time still image of a current video conference call. Below the snapshot, there is a 'Participants (nms conference)' table listing participant details.

Conference Name	Conference Number	Status	Conference Type	Start Time	Duration (s..	Media Type	Floor to Full..	Layout Mode	Arrange Mode	Layout	No. of Pa..
nms conference	7100	Running	Dial-Out	20061207-14:33:45	318	Video	On	Manual	Dynamic	[Layout Icon]	3

Participant Name	Phone Number	IP	Status	Audio	Video	Floor	In Picture	Reason
choi jin suk(j.s.choi)	1500	172.16.19.103	Connected	[Audio Icon]	[Video Icon]		[In Picture Icon]	
kim kyoung nam(kn...)	3500	172.16.12.30	Connected	[Audio Icon]	[Video Icon]		[In Picture Icon]	
lee joungh hyuk(jh.lee)	6010	172.16.11.110	Connected	[Audio Icon]	[Video Icon]		[In Picture Icon]	

**Conference Snapshot**  
Display the real-time still image of a current video conference call

**Participants**  
Participant parameter setting is possible dynamically in current conference call

# OSD (Video Phone, Video Terminal, etc)

- Conference Management (Chair, Operator)
  - Layout
  - Move party
  - Floor
  - Mute
- Indicator
- Floor



# OSD : Conference Room

- Application >> Conference Room
  - conference list

Conference Room

ON AIR NUM

Conference Name	Conference Number	User in conference / maximum	Conference room	Conference type	Conference layout
Conference 1	1000	3/16	Lock	video, audio	Layout 1
Conference 2	2000	0/4	Unlock	audio	Layout 2
Conference 3	8888	0/16	Unlock	video, audio	Layout 3

Dial-in conference  
 - gray : not active  
 - Colored : active

Meet-me conference  
 - gray : not active  
 - Colored : active

Conference name  
 Conference number

User in conference / maximum  
 Conference room  
 -Lock  
 -unlock

Conference type  
 -video  
 -audio

Conference layout

See Detail Participant list  
 Detail View

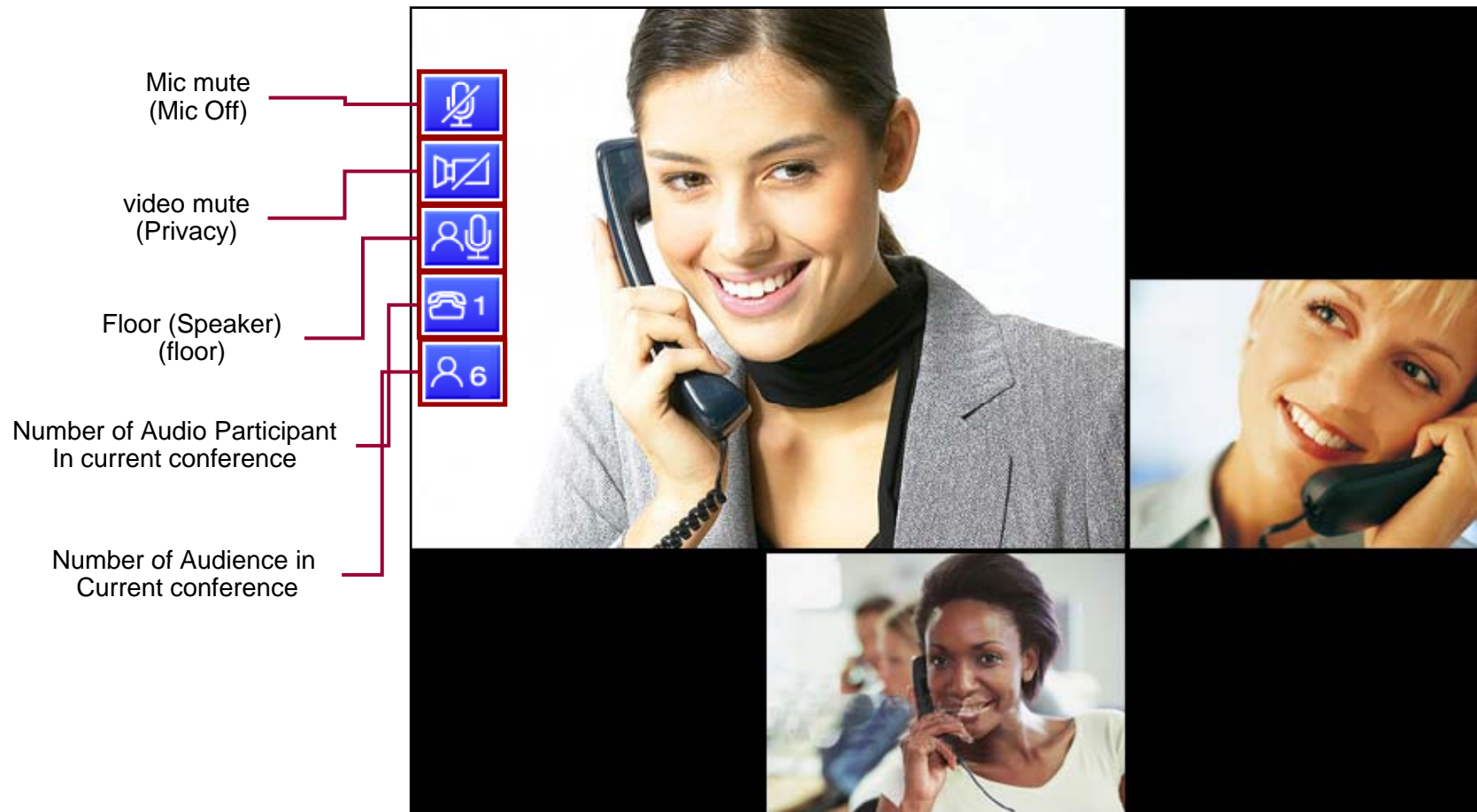
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# OSD : Conference Open

- Conference open
  - OK or Send Key in Conference Room List
  - Dialing using Conference Room List

# OSD : Indicators

- User conference status information (function key)



# OSD : Add Party

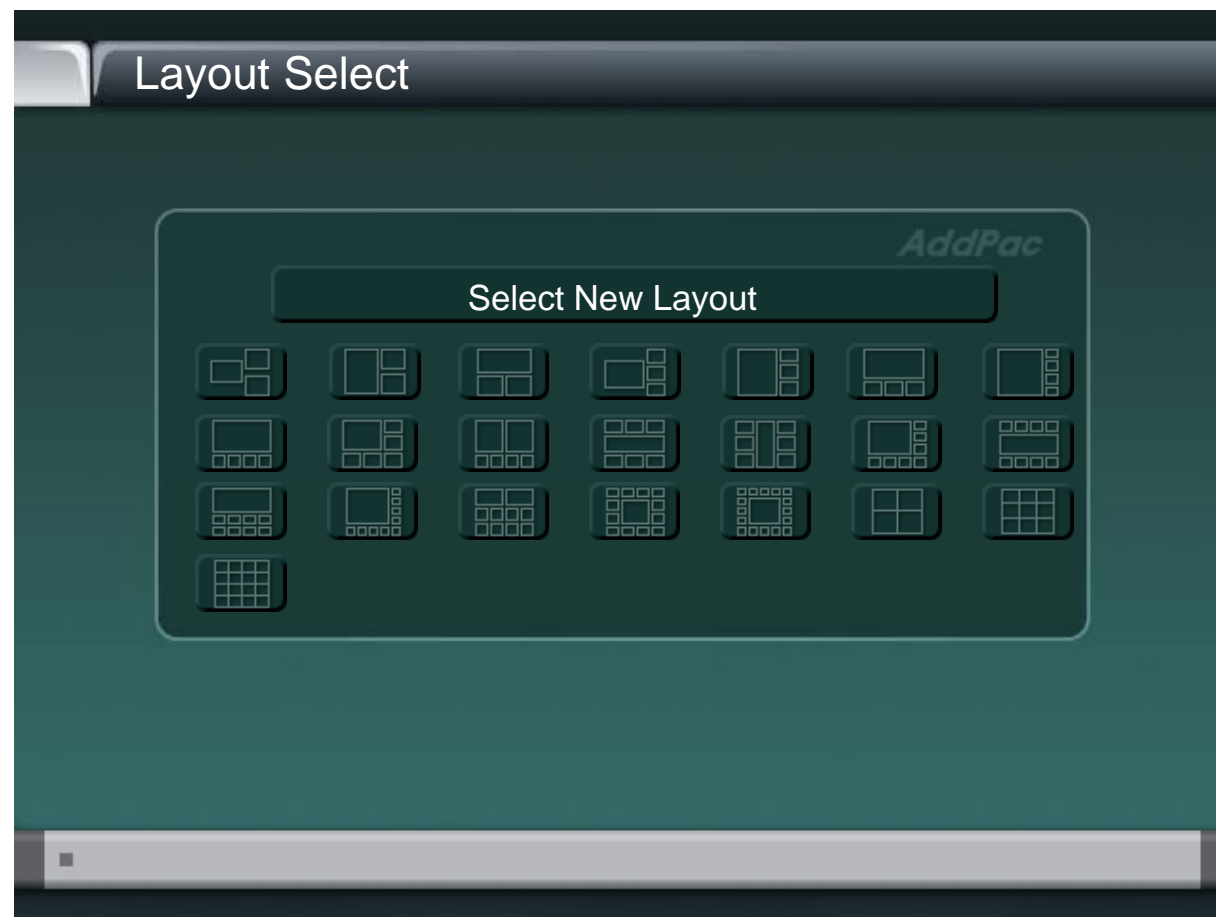
- New User Invite in Current Conference

The screenshot shows the 'Add Party' interface. At the top, there is a title bar with 'Add Party' and several icons: 'ON AIR', a grid icon, a phone icon, 'NUM', and a window icon. The main area is a grid of video thumbnails. A central overlay displays 'Incoming Call' with the number '3000'. Below the grid, there are two buttons: 'Participant' and 'Audio Call'. Red lines connect text labels on the left to these elements:

- Invite new user (points to the 'Incoming Call' overlay)
- Select User class
  - participant
  - audience(points to the 'Participant' button)
- Select Media type
  - audio call
  - video call(points to the 'Audio Call' button)

# Layout

- Video Layout Change in current conference



# Floor To Full Screen

- Large view display mode : Floor Participant





# Display Name

- Conference Participant Name Display Enable/Disable



# Accept

- User unregistered want to join the conference
  - User can join the conference by Chair or Operator's Permission,



Conference Join  
Accept

Conference Join  
Reject

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User class  
-participant  
-audience

Media type  
-audio call  
-video call

# Participant info

- Party Info
  - Simple Participant info list View/Modification
  - Chair, Operator can modify the status of participant
  - Participant, Audience can read only the status of participant



# Detail participant list

- Can view the status information of member In conference

The screenshot shows the 'Participant List' interface. At the top, there are control buttons: 'ON AIR', a grid icon, a microphone icon, 'NUM', and a moon icon. The list contains four participants: Sally (3010), Steven (3001), Jane (3005), and John (3004). Each row includes a user class icon, name, number, media type icons (video and audio), and an audio/video enable status icon. A 'position' icon is also present. At the bottom, there are buttons for 'Assign Floor', 'Remove Party', 'Position', and 'more'.

User class	Participant's name	Participant's number	Media type	Audio/Video enable status	position
[User Class Icon]	Sally	3010	[Video/Audio Icons]	[Status Icon]	[Position Icon]
[User Class Icon]	Steven	3001	[Video/Audio Icons]	[Status Icon]	[Position Icon]
[User Class Icon]	Jane	3005	[Video/Audio Icons]	[Status Icon]	[Position Icon]
[User Class Icon]	John	3004	[Video/Audio Icons]	[Status Icon]	[Position Icon]

# Assign floor

- Give floor (Right of Speaking) to Participant selected in List
  - The ICON of Participant having Floor is changed as MIC ICON

The screenshot shows the 'Participant List' interface. At the top, there are icons for 'ON AIR', a grid, a microphone, 'NUM', and a moon. The list contains four participants:

Name	ID	Status Icon
Sally	3010	Person icon
Steven	3001	Person with microphone icon
Jane	3005	Person icon
John	3004	Person icon

Annotations on the left side:

- 'Have a right of speaking' points to Steven's microphone icon.
- 'Don't have a right of speaking' points to Jane's person icon.
- 'Give Floor (Speaker) to Participant' points to the 'Assign Floor' button at the bottom.

The bottom navigation bar includes: Assign Floor, Remove Party, Position, and more.

# Remove Party

- Conference Call Disconnect of a Participant selected in List

Participant Select

Conference call disconnect of a participant selected



# Position

- Participant Location Change In Conference View Layout
- Display the Position List in current conference view layout



# User Class

- Change the Right of Participant selected in List
- User class icon change





# Audio/Video Mute

- audio, video mute enable/disable

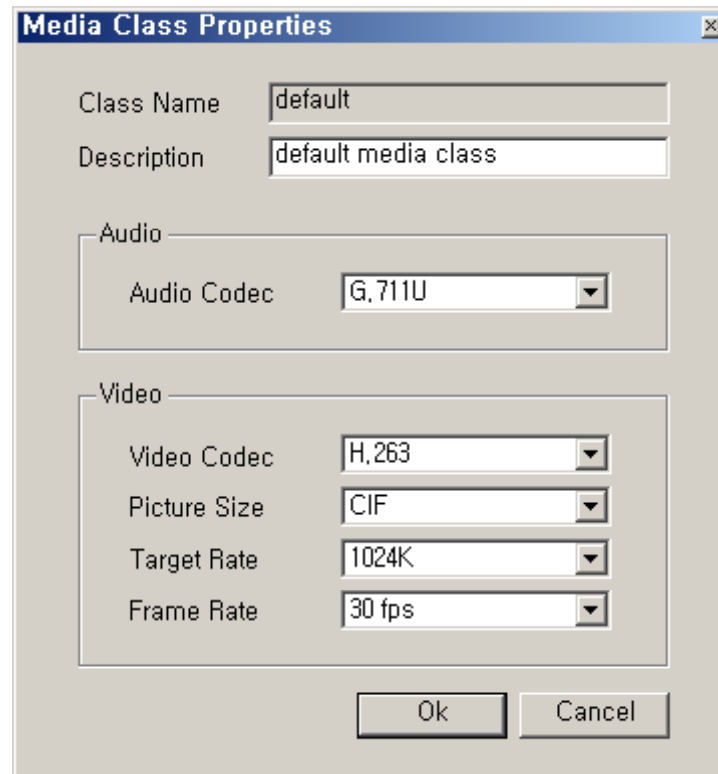
The screenshot displays the 'Participant List' interface. At the top, there are icons for 'ON AIR', a grid, a phone, 'NUM', and a monitor. Below this is a table of participants with columns for a profile icon, name, ID, and control icons. The control icons include a speaker, a microphone, a camera, and a grid. Red boxes highlight the microphone and camera icons for Steven and Jane, and the 'Audio Enable' and 'Video Mute' buttons in the bottom navigation bar. Red lines connect these elements to text labels: 'Audio Mute/Enable' and 'Video Mute/Enable' at the top, and 'Audio, video mute/ enable' on the left.

Participant	ID	Audio Mute/Enable	Video Mute/Enable
Sally	3010	Enabled	Enabled
Steven	3001	Muted	Muted
Jane	3005	Muted	Muted
John	3004	Enabled	Enabled

Navigation bar: User Class | Audio Enable | Video Mute | more

# New SMM Feature : Media Class

- Media Class represents the profile information about Audio, Video Codecs, and is used for configuration at conference setup



The screenshot shows a dialog box titled "Media Class Properties" with the following fields and options:

- Class Name: default
- Description: default media class
- Audio section:
  - Audio Codec: G.711U
- Video section:
  - Video Codec: H.263
  - Picture Size: CIF
  - Target Rate: 1024K
  - Frame Rate: 30 fps

Buttons: Ok, Cancel

# New SMM Feature : Conference Room

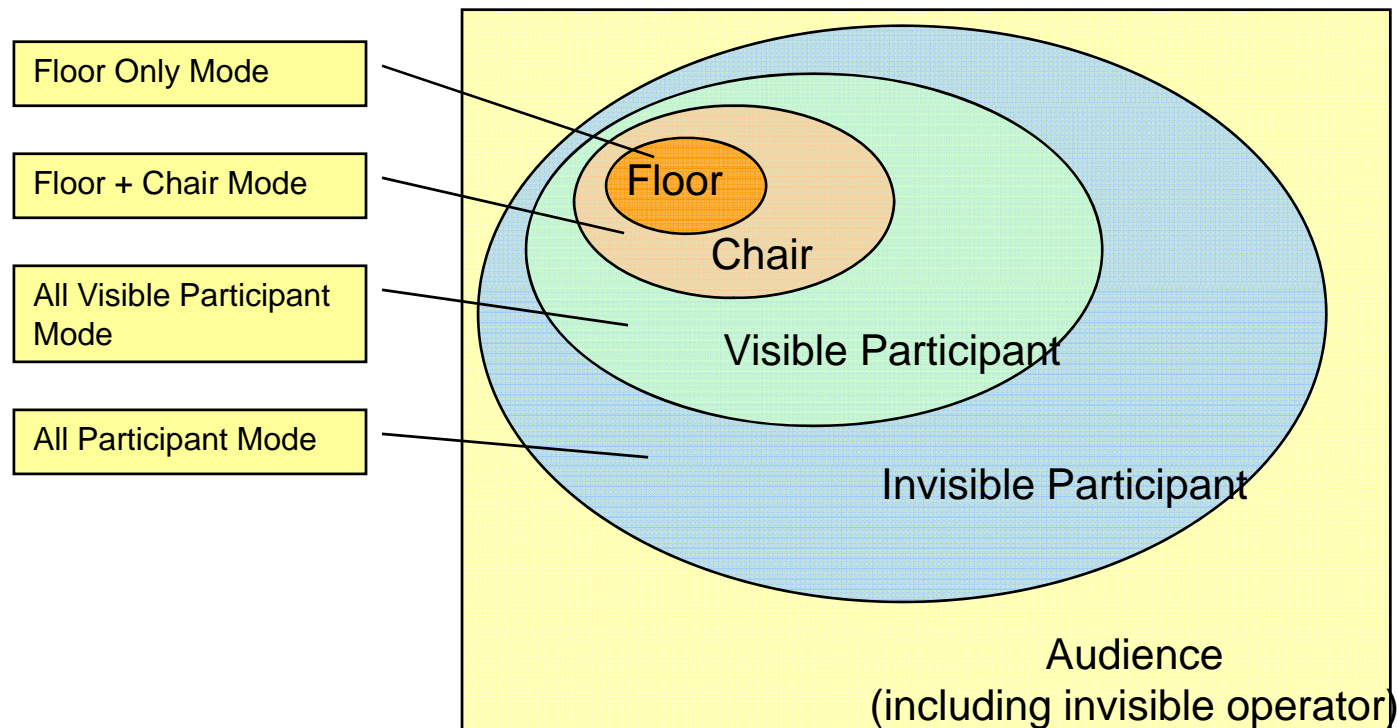
\*Blue Box is newly implemented functions.

The screenshot shows the 'Add Conference' dialog box with the following fields and callouts:

- Conference Name & Description**: Callout pointing to the 'Conference Name' and 'Description' text boxes.
- Conference Number**: Callout pointing to the 'Conference Number' text box.
- Conference Type**: Callout pointing to the 'Conference Type' dropdown menu, with a sub-callout box stating: 'Conference Type : Dial-out, Meet me, AddHoc'.
- Media Type**: Callout pointing to the 'Media Type' dropdown menu, with a sub-callout box stating: 'Media Type Select Conference Media Type'.
- Media Class**: Callout pointing to the 'Media Class' dropdown menu, with a sub-callout box stating: 'Media Class Select a Media Class for a conference room. Second, third media class are reserved for first media class Mismatch.'
- Speaking Mode**: Callout pointing to the 'Speaking Mode' dropdown menu, with a sub-callout box stating: 'Speaking Mode Set up Who can speak out at conference'.
- Encryption Mode**: Callout pointing to the 'Encryption Mode' dropdown menu, with a sub-callout box stating: 'Encryption Mode Encryption mode setup for secure conference'.
- Enable Voice Switching**: Callout pointing to the 'Enable Voice Switching' checkbox, with a sub-callout box stating: 'Enable Voice Switching Provide the Voice Activity Switching Function'.
- Video Terminal**: Callout pointing to the 'Video Terminal' section, with a sub-callout box stating: 'Video Terminal In case of Video Media type, select the video parameter of endpoint.' This section includes a checkbox 'Apply below settings to terminal' and dropdowns for 'Target Rate' (384K), 'Frame Rate' (30 fps), 'Picture Size' (CIF), and 'Dynamic Picture Size' (enable).
- Maximum Participant**: Callout pointing to the 'Max Participant' spinner box, with a sub-callout box stating: 'Maximum Participant (Can select in Meet-Me conference type only)'.
- Conference Priority**: Callout pointing to the 'Conference Priority' spinner box, with a sub-callout box stating: 'Conference Priority Conference Priority Setting'.
- Close on Chair Out**: Callout pointing to the 'Close on Chair Out' checkbox, with a sub-callout box stating: 'Close on Chair Out Conference Disconnected if chair hang up phone'.
- Secret Room**: Callout pointing to the 'Secret Room' checkbox and the 'Room Password' field, with a sub-callout box stating: 'Secret Room -Secret room and Room Password -(Can select in Meet-Me conference type only)'.

# New SMM Feature : Speaking Mode

- Speaking Mode
  - Determine the scope of participant who can speak out at conference.



# New SMM Feature : Voice Switching

- Voice Switching
  - Voice Activity Switching or Voice Detect Switching
  - Detect the Voice Activity of participants during video conference, and dynamically change the MCU display layout mode to display a participant who is speaking out currently
  - If one participant obtains Floor, Voice Switching is inactive automatically till Floor is released.
- Display Priority Control
  - Floor > Voice Switching > Chair

# New SMM Feature : Conference Room - Layout

The screenshot shows the 'Add Conference' dialog box with the 'Video' tab selected. The dialog is divided into several sections: General, Participants, and Virtual Audience. The 'Video' section contains the following settings:

- Terminal:** Layout
- Layout Mode:** Auto(Asymmetric)
- Arrange Mode:** Dynamic
- Video Layout:** 3 (with a diagram of three squares)
- Floor to Full Screen:**  Symmetric,  Asymmetric
- Floor Assign Mode:**  After Release,  On Request
- Display Participant Name:**  (with sub-options for Layout: Top Left and Size: Small)
- Color:**  Border Line (black),  Floor Line (white),  Background Line (blue),  Background (black)

Yellow callout boxes provide additional information:

- Video Layout Mode:** - Auto (symmetric, asymmetric) - manual
- Arrange Mode:** -dynamic, fixed, fixed reserved
- Video Layout:** - Select the video layout
- Floor Assign Mode:** -After Release, On Request
- Floor to Full Screen:** - Floor to Full Screen Enable/Disable in symmetric, asymmetric Layout Mode.
- Display Participant Name:** - Participant Name Display Enable/Disable and Location of Name Display
- Color:** - Layout border and Floor, Background Color Setting.

# New SMM Feature : Conference Room - Participants

**Search Phone Number**  
Used for phone number or user search

**Filter**  
Filter Name: Phone Number | Rule: is exactly | Word: | [Advanced Search](#) | Find

Phone Number			Conference Participants								
Number	Partition	User	Number	Partition	User	Type	User Class	Media Type	Position	Display Name	Media Class
5007	Factory...		5007	Factory_in		Internal	Chair	Video		Steven	default
5008	Factory...		5008	Factory_in		Internal	Participant	Video		John	default
5009	Factory...		5009	Factory_in		Internal	Participant	Video		Jane	default
5010	Factory...		5010	Factory_in		Internal	Participant	Video		Sally	default
5011	Factory...										
5012	Factory...										
5013	Factory...										
5014	Factory...										
6000	external...										
6001	external...										
6005	external...										
6006	external...										
6010	external...										
6020	external...										
6029	external...										

**Phone Number Participant Phone List**

**User Class**  
(Chair, Operator, Participant, Audience)

**Media Type**  
(Audio, Audio (Seat Reserved), Video)

**Position**  
In case of video media type,  
Select the location of a participant in video layout

**Display Name**  
A Participant Display Name

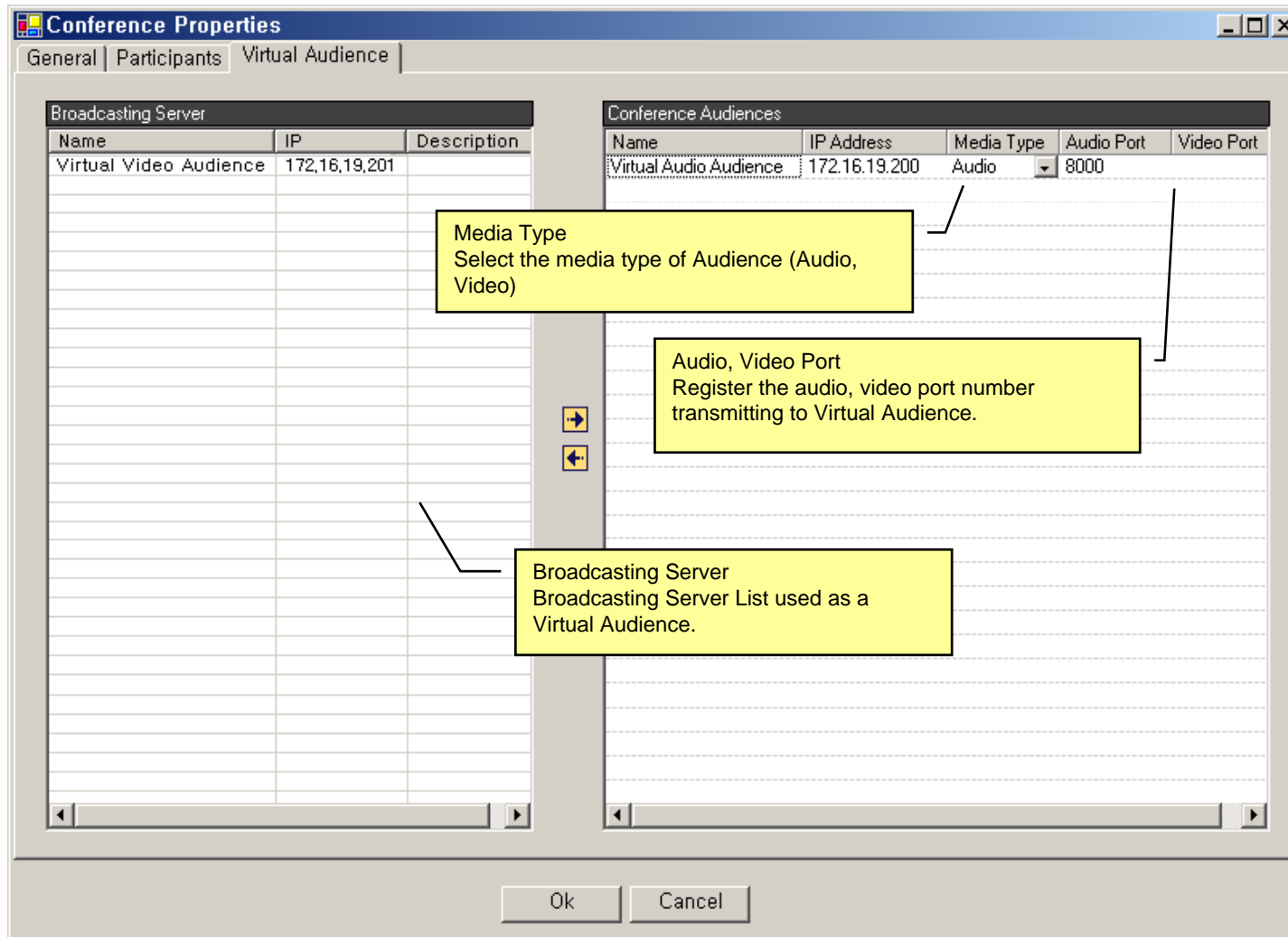
**Media Class**  
Select a Media Class for a conference participant

**External Phone Number**  
Register the external phone line number by inputting number directly

Enter External Phone Number | Add

Ok | Cancel

# New SMM Feature : Conference Room – Virtual Audience





# New SMM Feature : Active Conference (1)

The screenshot displays the 'Smart Multimedia Manager' interface. At the top, there is a menu bar (File, View, Search, Tools, Window, Help) and a toolbar with various icons. Below the toolbar, the 'AddPac' logo and 'Smart Multimedia Manager' title are visible. The main area is divided into two sections: 'Conference' and 'Participants (n>AddPac Conference)'. The 'Conference' section shows a table with one active conference room. The 'Participants' section shows a list of participants with their names, phone numbers, IP addresses, and status.

**Conference Room List:**

Conference Na...	Conference Number	Status	Conference Type	Start Time	Duration	Media Type	Floor to Full...	Layout Mode	Arrange Mode	Layout	No. of Pa...
n>AddPac Conference	7002	Running	Dial-Out	20050714-15:30:22	00:02:01	Video	Off	Manual	Dynamic		4

**Participants List:**

Participant Name	Phone Number	IP	Status	Audio	Video	Mic.	Speaker	Floor	In Picture	Reason
Kown.jh	7030	172.16.10.1	Joined			8	10	10		
Choi.js	7031	172.16.10.2	Joined			8	10	10		
Lee.mj	7032	172.16.10.3	Joined			8	10	10		
JJang.hg	7033	172.16.10.3	Left			8	10	10		

**Annotations:**

- Conference:** Display the current conference room list
- Participants:** Display the participant list in conference room each

At the bottom of the window, there is a status bar showing connection status for three IP addresses (172.17.250.250 [Ok], 172.16.31.13 [Connect fail], 172.16.31.2 [Ok]), the date and time (2007-10-18 오후 3:35:55), the version (3.0.2846), and the user name (Manager).

# New SMM Feature : Active Conference (2)

The screenshot displays the 'Smart Multimedia Manager' interface for an active conference. The window title is 'Smart Multimedia Manager - [Active Conferences - IPNext200\_Slave]'. The interface includes a menu bar (File, View, Search, Tools, Window, Help), a toolbar, and a main workspace. The workspace is divided into several sections:

- Conference Information:** Shows IP addresses (172.17.250.250, 172.16.31.13, 172.16.31.2) and a table of conference details.
- Participants:** A table listing participants with their names, phone numbers, IP addresses, and status.
- Layout Selection:** A grid of layout icons is visible, with a 'New 2 Party Layout' icon highlighted in a red box.

Annotations in the image include:

- A yellow box with the text: "Conference parameter setting is possible dynamically in current conference call".
- A blue box with the text: "New 2 Party Layout".

Conference Na...	Conference Number	Status	Conference Type	Start Time	Duration	Media Type	Floor to Full...	Layout Mode	Arrange Mode	Layout	No. of Pa...
n>AddPac Conference	7002	Running	Dial-Out	20050714-15:30:22	00:02:01	Video	Off	Manual	Dynamic	[Icon]	4

Participant Name	Phone Number	IP	Status	Audio	Video	Mic.	Speaker	Floor	In Picture
Kown.jh	7030	172.16.10.1	Joined	[Icon]	[Icon]	8	10	[Icon]	[Icon]
Choi.js	7031	172.16.10.2	Joined	[Icon]	[Icon]	8	10	[Icon]	[Icon]
Lee.mj	7032	172.16.10.3	Joined	[Icon]	[Icon]	8	10	[Icon]	[Icon]
JJang.hg	7033	172.16.10.3	Left	[Icon]	[Icon]	8	10	[Icon]	[Icon]

# New SMM Feature : Active Conference (3)

The screenshot displays the Smart Multimedia Manager interface for an active conference. The main window title is "Smart Multimedia Manager - [Active Conferences - IPNext200\_Slave]". The interface includes a menu bar (File, View, Search, Tools, Window, Help) and a toolbar with various icons. The main content area is divided into several sections:

- Conference Information:** A table showing conference details.
 

Conference Na...	Conference Number	Status	Conference Type	Start Time	Duration	Media Type	Floor to Full...	Layout Mode	Arrange Mode	Layout	No. of Pa...
n>AddPac Conference	7002	Running	Dial-Out	20050714-15:30:22	00:02:01	Video	Off	Manual	Dynamic	[Layout Icon]	4
- Conference Snapshot:** A panel on the left showing a real-time still image of a current video conference call. It includes an "Auto Refresh" checkbox, a "Refresh" button, and a "Refresh Interval" set to 5 seconds.
 

Conference Snapshot  
Display the real-time still image of a current video conference call
- Participants (n>AddPac Conference):** A table listing participants with their names, phone numbers, IP addresses, and status. It also includes columns for audio and video settings, and a highlighted area for mic and speaker volume control.
 

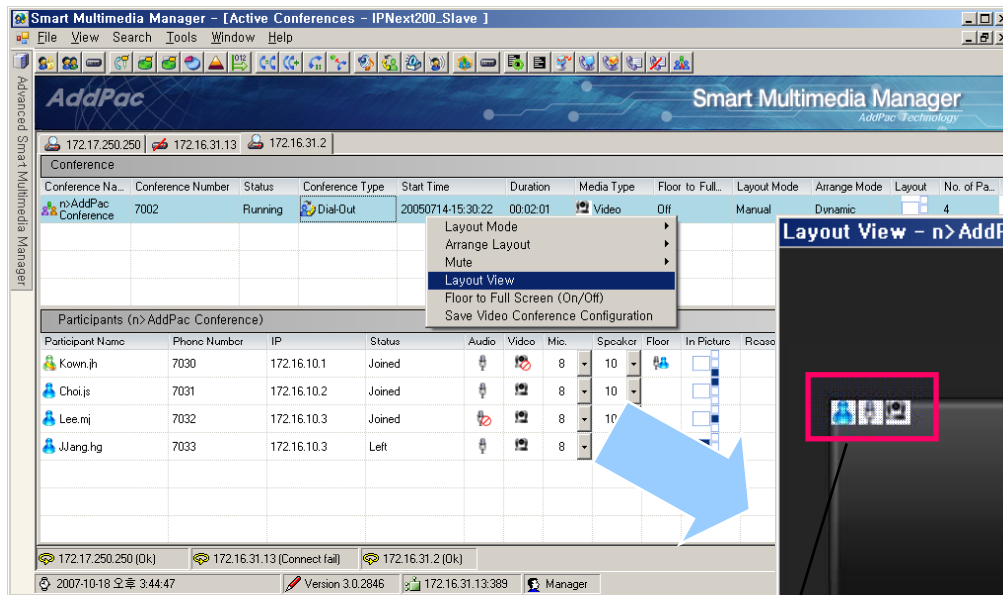
Participant Name	Phone Number	IP	Status	Audio	Video	Mic.	Speaker	Floor	In Picture	Res
Kown.jh	7030	172.16.10.1	Joined	[Icon]	[Icon]	8	10	[Icon]	[Icon]	[Icon]
Choi.js	7031	172.16.10.2	Joined	[Icon]	[Icon]	8	10	[Icon]	[Icon]	[Icon]
Lee.mj	7032	172.16.10.3	Joined	[Icon]	[Icon]	8	10	[Icon]	[Icon]	[Icon]
JJang.hg	7033	172.16.10.3	Left	[Icon]	[Icon]	8	10	[Icon]	[Icon]	[Icon]

Mic, Speaker  
Mic or Speaker Volume Control for a Conference participant

Participants  
Participant parameter setting is possible dynamically in current conference call
- Bottom Status Bar:** Shows connection status for three participants (172.17.250.250 (Ok), 172.16.31.13 (Connect fail), 172.16.31.2 (Ok)), the date and time (2007-10-18 3:38:57), the version (3.0.2846), and the current user (Manager).

# New SMM Feature : Active Conference (4)

Layout view function provide the layout status of a conference participant



**Layout View**  
User can change a participant layout easily via Mouse Drag & Drag at Layout view window. Floor configuration, participant add or delete function is also provided.



**Indicator**  
User class configuration, audio/video on/off and configuration is possible

**Status**  
Display the status of each participant such as phone number, nick name, alias. Using font color, show whether a user participate conference room or not. ( yellow color : participating , grey color : not participating)

**Floor**  
Background of Floor participant among a conference room is displayed as red color to distinguish floor participant with other participant.

# New SMM Feature : Conference Schedule

Conference scheduling is used for configuration of repeated conference or a specific day conference

The screenshot shows a dialog box titled "Add a New Conference Schedule" with the following fields and callouts:

- Schedule Name:** Conference Schedule | Callout: Schedule Name, Description Conference Schedule Name and Explanation
- Description:** | Callout: Conference Room Conference Room Setup
- Conference Room:** Dial | Callout: Conference Room Conference Room Setup
- Start Datetime:** 2007-10-18 | 오후 4:00:45 | Callout: Start Date time Schedule start day and time setup
- Duration:** | sec | Callout: Duration Conference duration time (sec)
- Schedule Recurrence:**  | Callout: Schedule Recurrence Repeated conference setup
- Recurrence:**
  - Daily
  - Weekly | Callout: Daily, Weekly, Monthly Set up Conference schedule
  - Monthly
- Weekly Options:**
  - Recur every  1  2  3  4  5 week
  - Mon  Tue  Wed  Thu
  - Fri  Sat  Sun
- Range Of Recurrence:**
  - End By : 2007-10-18 | Callout: Range Of Recurrence Schedule end-day setup
- Enable Schedule:**  | Callout: Enable Schedule Schedule enable or disable Setup

Buttons: Ok, Cancel

## Video MCU Series

# Thank you!

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