

AP-MC5500 IP Video MCU

High-performance Video MCU Solution



New Enhanced MCU Features

AddPac

AddPac Technology

Sales and Marketing

www.addpac.com

Contents

- Video Display Layout
- Dynamic Session Management
- Personal Feature
- Video Conference Signaling
- MCU Management (SMM)
- OSD (Video Phone, Video Terminal,etc)
- Conference Service Diagram : Example

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)

MCU Management (SMM)

Smart Multimedia Management

- 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

Conference Room

Conference Name & Description
Conference Name
Description

Conference Number
Conference Number

Conference Type
: Dial-out, Meet me, AddHoc
Conference Type: Dial-Out Conference

Media Type
Select Conference Media Type
Media Type: Audio Video + Audio

Audio Codec
Select a conference audio codec
Audio Codec: G.711U

Maximum Participant
(Can select in Meet-Me conference type only)
Max Participant: 16

Close on Chair Out
Conference Disconnected if chair hang up phone
 Close on Chair Out

Secret Room
-Secret room and Room Password
-(Can select in Meet-Me conference type only)
 Secret Room
Room Password: (4 digit)

Video Endpoint
In case of Video Media type, select the video parameter of endpoint.
Video Support | EndPoint | Layout
Video Type: Continuous presence
Target Rate: 1024K
Picture Size: 640x480
Video Codec: MPEG4
Frame Rate: 30 fps

Video Support
In case of Video Media Type, select the video information

Ok Cancel

Conference - Layout

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

- Layout Mode:** Manual
- Arrange Mode:** Dynamic
- Video Layout:** 3 (with a diagram showing three video windows)
- Floor to Full Screen:** Symmetric (checked), Asymmetric (unchecked)
- Floor Assign Mode:** After Release (selected), On Request (unselected)
- Display Participant Name:** (unchecked), Layout: Top Left
- Color:** Border Line (unchecked), Floor Line (unchecked), Background Line (unchecked), Background (black)
- Mic Off of Invisible Participant:** (unchecked)

Yellow callout boxes provide additional information for several settings:

- Video Layout Mode:** - Auto (symmetric, asymmetric) - manual
- Arrange Mode:** -(dynamic, fixed, fixed reserved)
- Video Layout:** - Select the video layout
- Floor Assign Mode:** Floor 권한 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:**

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 jung hyuk
1027		kim so young
1101		choi woo suk
1102		sin kwang woong
1500		choi jin suk
3003		
		kim kyoung nam
		kim so young
4002		
4003		

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		

Phone Number
Participant Phone List

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

User Class
(Chair, Operator, Participant, Audience)

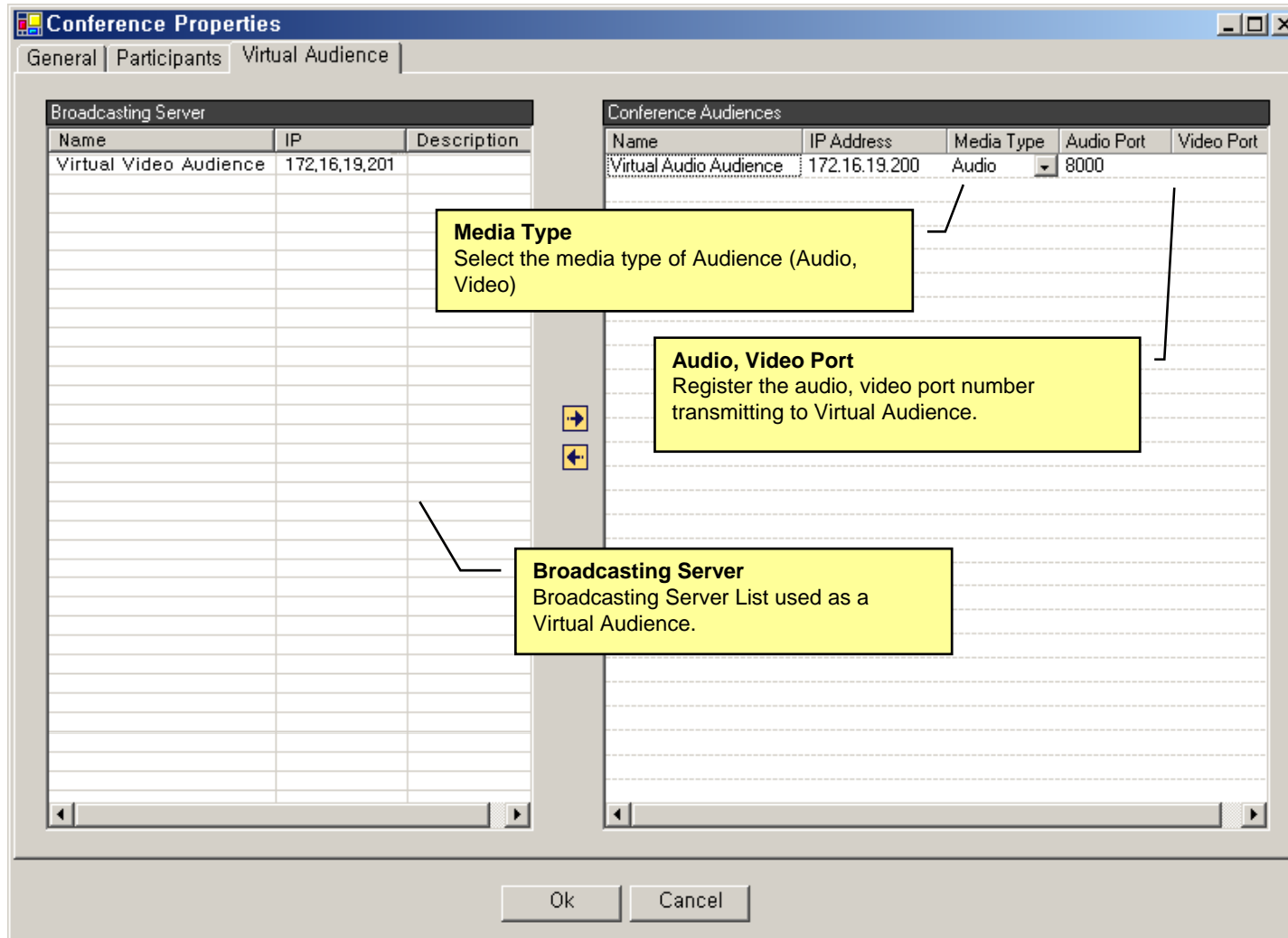
Media Type
(Audio, Audio (Seat Reserved), Video)

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

Display Name
A Participant Display Name

Ok Cancel

Conference – Virtual Audience



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

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					
kim kyoung nam(kn...	3500	172.16.12.30	Connected					
lee joungh hyuk(jh.lee)	6010	172.16.11.110	Connected					

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

Conference
Display the current conference room list

Participants
Display the participant list in conference room each

Active Conference (2)

The screenshot shows the 'Smart Multimedia Manager - [Active Conferences]' window. A yellow callout box highlights the 'Conference' section, stating: 'Conference parameter setting is possible dynamically in current conference call'. A green-bordered menu is open over the 'Layout' column of the conference table, displaying various grid and window layouts for selection.

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	173	Video	On	Manual	Dynamic	[Layout Icon]	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	[Audio Icon]	[Video Icon]		[Floor Icon]		
kim kyoung nam(kn...	3500	172.16.12.30	Connected	[Audio Icon]	[Video Icon]		[Floor Icon]		
lee jong hyuk(jh.lee)	6010	172.16.11.110	Connected	[Audio Icon]	[Video Icon]		[Floor Icon]		

Active Conference (3)

The screenshot displays the 'Smart Multimedia Manager' interface. At the top, there is a menu bar (File, View, Tools, Window, Help) and a toolbar. The main area features a 'Conference' table and a 'Participants' table. A 'Conference Snapshot' window is open, showing a grid of video thumbnails. A status bar at the bottom shows the current date, time, version, and user information.

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	[Grid Icon]	3

Participant Name	Phone Number	IP	Status	Audio	Video	Floor	In Picture	Reason
choi jin suk(js.choi)	1500	172.16.19.103	Connected	[Icon]	[Icon]		[Grid Icon]	
kim kyoung nam(kn...)	3500	172.16.12.30	Connected	[Icon]	[Icon]		[Grid Icon]	
lee joung hyuk(jh.lee)	6010	172.16.11.110	Connected	[Icon]	[Icon]		[Grid 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 Conference Terminal, etc)

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



Conference Room

- Application >> Conference Room
 - conference list

Conference Room

ON AIR | [Icons]

	Conference name	Conference number	User in conference / maximum	Conference room -Lock -unlock	Conference type -video -audio	Conference layout
	Conference 1	1000	3/16			
	Conference 2	2000	0/4			
	Conference 3	8888	0/16			

See Detail Participant list

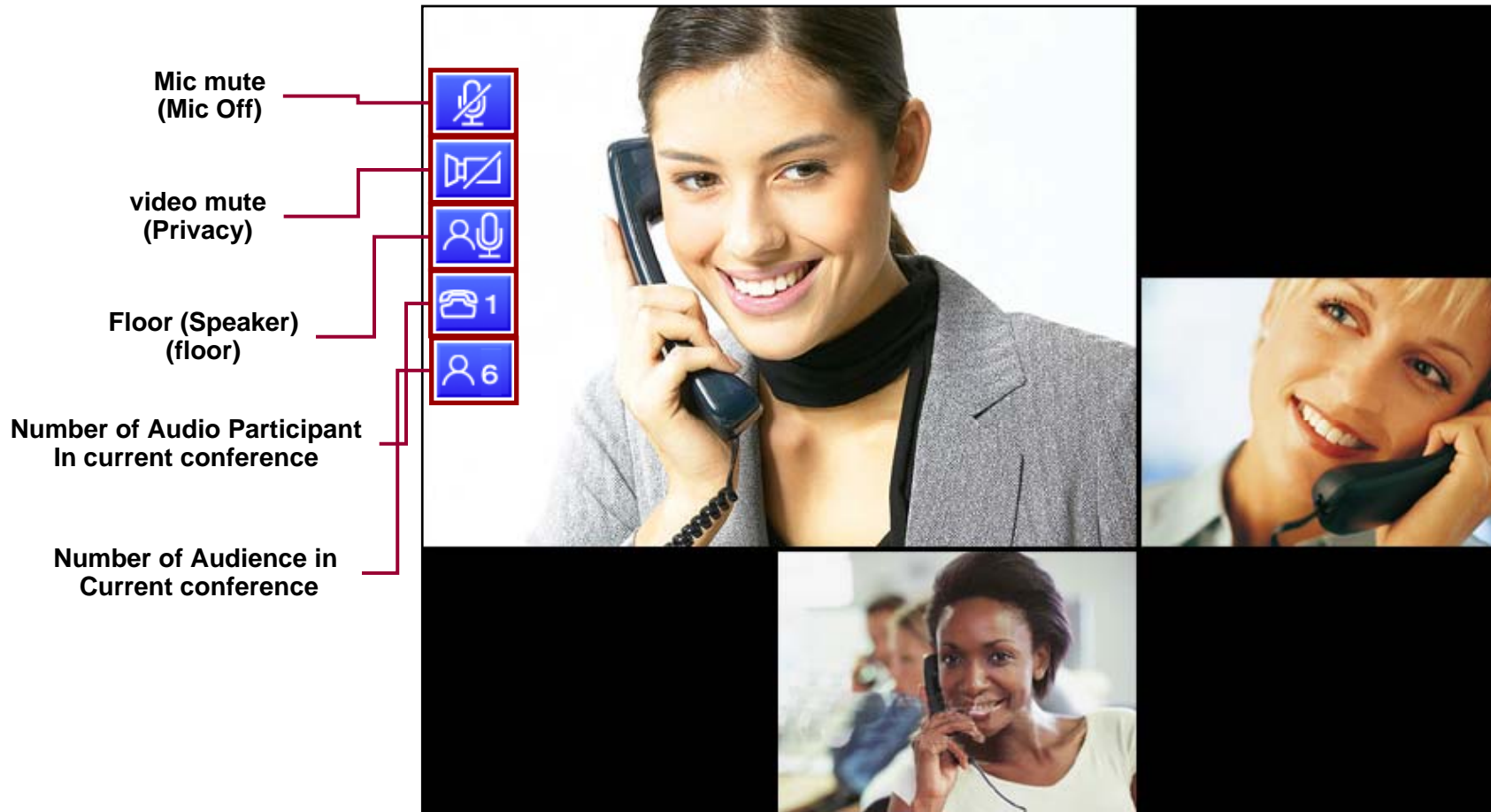
Detail View

Conference Open

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

Indicators

- User conference status information (function key)



Add Party

- New User Invite in Current Conference

Invite new user

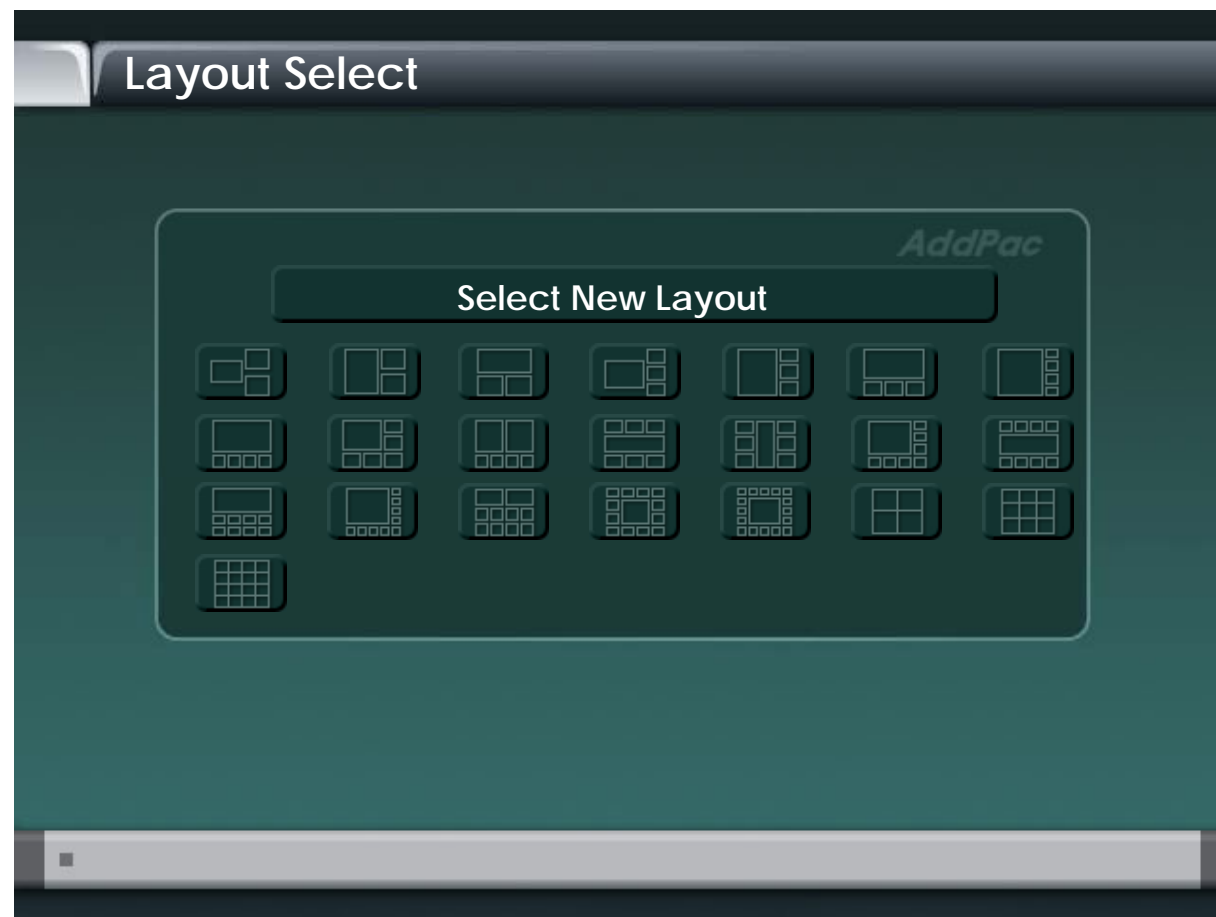
Select User class
-participant
-audience

Select Media type
-audio call
-video call

Participant Audio Call

Layout

- Video Layout Change in current conference



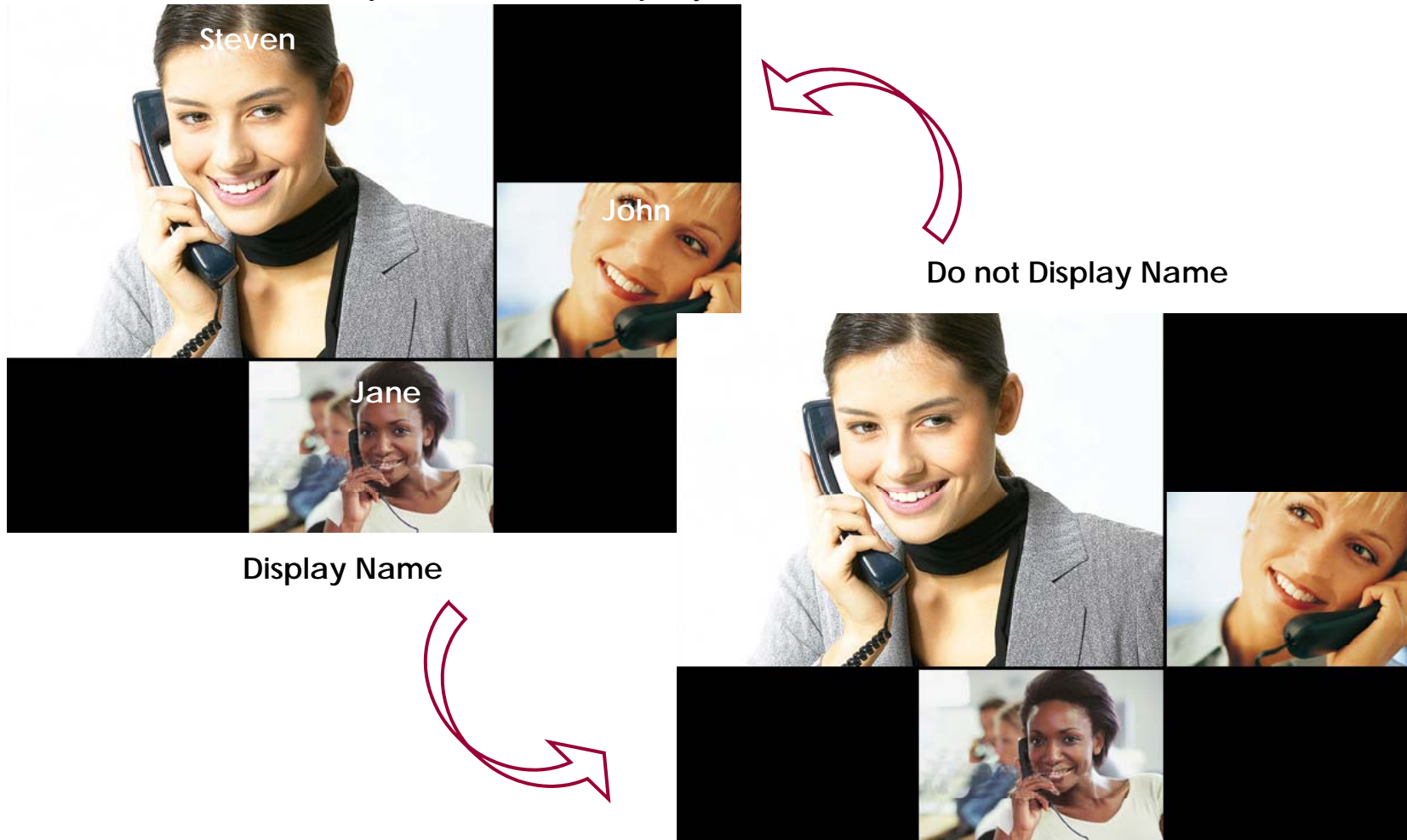
Floor To Full Screen

- 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,

Accept

ON AIR

NUM

Incoming Call

3000

Conference Join Accept

Conference Join Reject

Accept

Reject

Participant

Audio Call

User class
-participant
-audience

Media type
-audio call
-video call

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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 refresh icon. The list contains four participants: Sally (3010), Stever (3001), Jane (3005), and John (3004). Each row includes a user class icon, name, number, and status icons for video, audio, and position. A bottom bar contains 'Assign Floor', 'Remove Party', 'Position', and 'more' buttons.

Media type
-video
-audio

Audio/Video enable status

position

User class

Participant's name

Participant's number

User class	Participant's name	Participant's number	Video	Audio	Position
Person icon	Sally	3010	Video icon	Audio icon	Position icon
Person icon	Stever	3001	Video icon	Audio icon	Position icon
Person icon	Jane	3005	Video icon	Audio icon	Position icon
Person icon	John	3004	Video icon	Audio icon	Position icon

Assign Floor Remove Party Position more

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 in the AddPac software. The list contains four participants: Sally (ID 3010), Steven (ID 3001), Jane (ID 3005), and John (ID 3004). Each participant row includes a status icon, name, ID, and several control icons. Steven's status icon is a microphone, indicating he has the right of speaking. Jane's status icon is a person, indicating she does not have the right of speaking. The 'Assign Floor' button at the bottom is highlighted with a red box and labeled 'Give Floor (Speaker) to Participant'.

Participant	ID	Status Icon
Sally	3010	Person
Steven	3001	Microphone
Jane	3005	Person
John	3004	Person

Remove Party

- Conference Call Disconnect of a Participant selected in List

The screenshot displays the 'Participant List' interface. At the top, there are icons for 'ON AIR', a grid, a phone, 'NUM', and a refresh icon. The list contains four participants: Sally (3010), Steven (3001), Jane (3005), and John (3004). Each participant row includes icons for a person, a microphone, a camera, and a screen. The 'Jane' row is highlighted with a red box, and a red line connects this box to the text 'Participant Select'. At the bottom, a navigation bar contains buttons for 'Assign Floor', 'Remove Party', 'Position', and 'more'. The 'Remove Party' button is highlighted with a red box, and a red line connects this box to the text 'Conference call disconnect of a participant selected'.

Participant	ID	Microphone	Camera	Screen
Sally	3010	Yes	Yes	Yes
Steven	3001	Yes	Yes	Yes
Jane	3005	Yes	Yes	Yes
John	3004	Yes	Yes	Yes

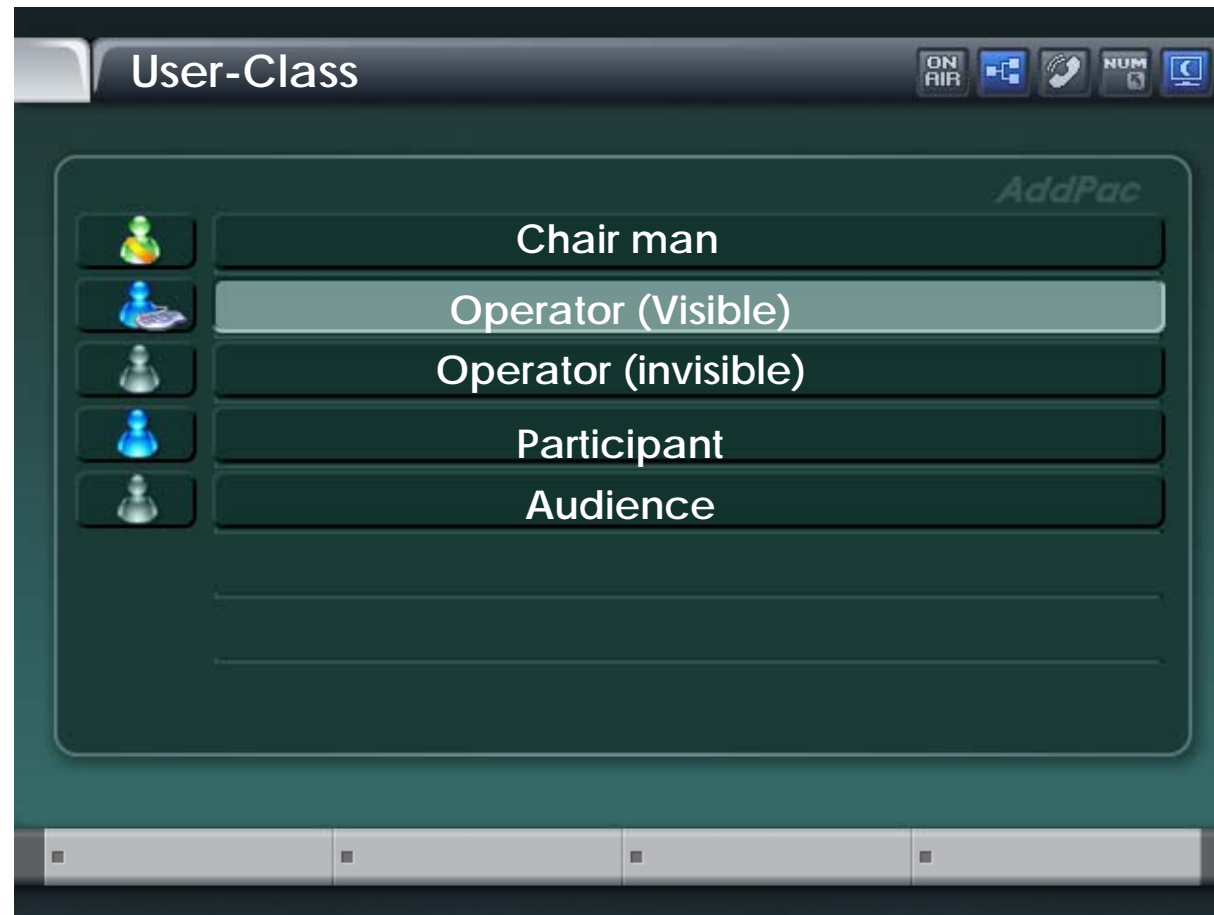
Position

- 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 right, there are control buttons for 'ON AIR', a grid icon, a phone icon, 'NUM', and a mute icon. Two red lines point from the text 'Audio Mute/Enable' and 'Video Mute/Enable' to the phone and mute icons respectively. The main area contains a table of participants with columns for a profile icon, name, ID, audio status, video status, and a grid icon. The participants listed are Sally (ID 3010), Steven (ID 3001), Jane (ID 3005), and John (ID 3004). Red boxes highlight the audio and video status icons for Steven and Jane. A red line points from the text 'Audio, video mute/ enable' to the 'Audio Enable' button in the bottom navigation bar. The bottom navigation bar includes buttons for 'User Class', 'Audio Enable', 'Video Mute', and 'more'.

Profile Icon	Name	ID	Audio Icon	Video Icon	Grid Icon
	Sally	3010			
	Steven	3001			
	Jane	3005			
	John	3004			

Audio Mute/Enable

Video Mute/Enable

Audio, video mute/ enable

User Class Audio Enable Video Mute more

Video MCU Series

Thank you!

AddPac Technology Co., Ltd.
Sales and Marketing

Phone +82.2.568.3848 (KOREA)

FAX +82.2.568.3847 (KOREA)

E-mail sales@addpac.com