



AP-MC3000™

Video MCU

High-performance Video MCU Solution

New Enhanced MCU Features



AddPac

AddPac Technology

2007, 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 following settings and callouts:

- 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**

The dialog box includes fields for Conference Name, Description, Conference Number, Conference Type, Partition, Media Type (Audio, Video + Audio), Audio Codec, Max Participant, Close on Chair, Secret Room, Room Password (4 digit), and buttons for Ok and Cancel.

Conference - Participants

Conference Properties

General | **Participants** | Virtual Audience

Phone 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
4002		
4003		

Enter External Phone Number

Add

Conference Participants							
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)

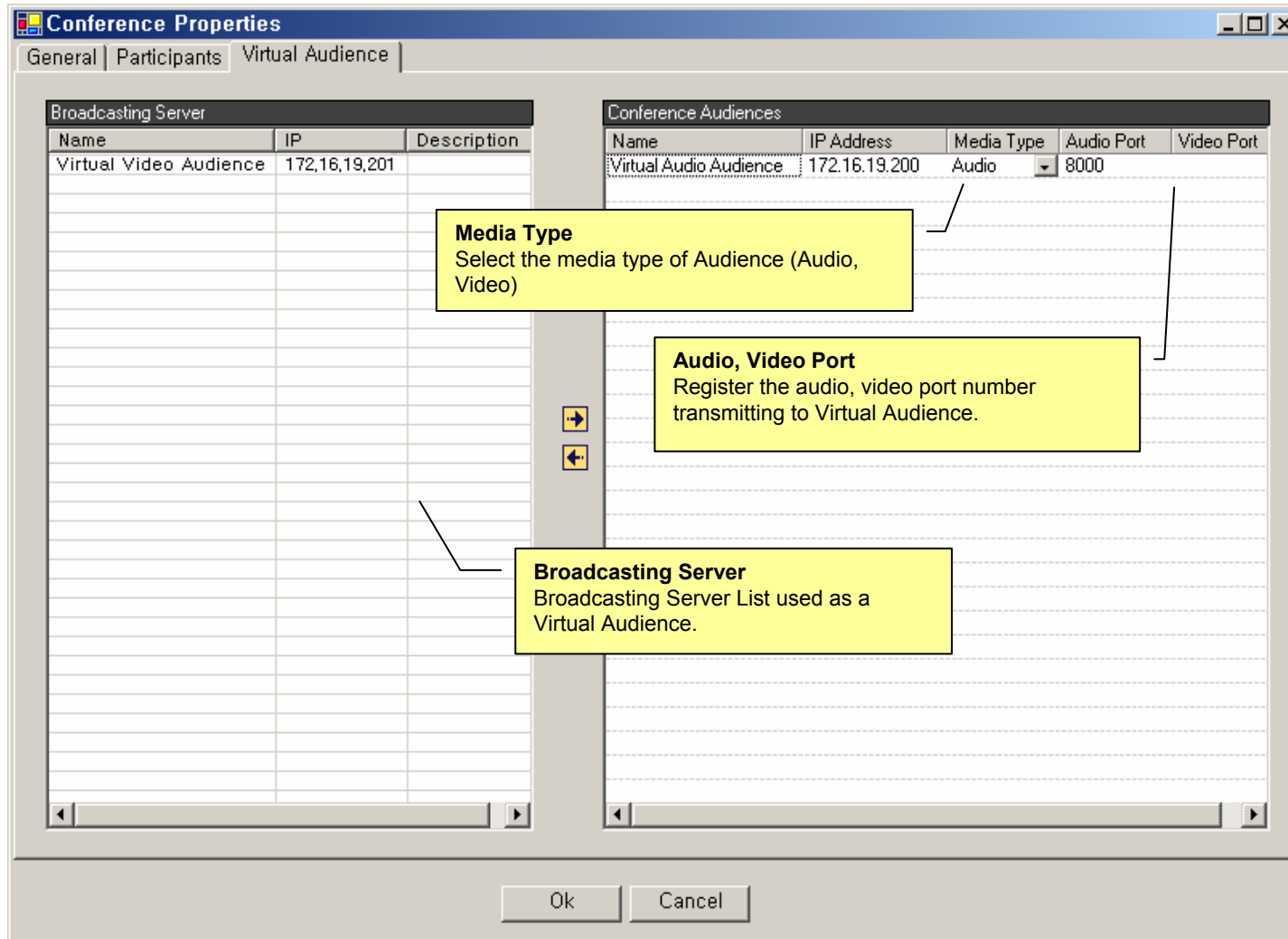
Media Type
(Audio, Audio (Seat Reserved), Video)

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 AddPac Technology

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)

Smart Multimedia Manager - [Active Conferences]

File View Tools Window Help

AddPac Advanced Smart Multimedia Manager

Conference

172.16.201.100 172.16.11.120

Conference parameter setting is possible dynamically in current conference call

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		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 2:36:34 Version 2.9.2532.21338 172.16.201.100:389 administrator

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 window title is 'Smart Multimedia Manager - [Active Conferences]'. Below the title bar, the 'AddPac' logo and 'Smart Multimedia Manager' text are visible, along with 'AddPac Technology'.

The interface shows two IP addresses: 172.16.201.100 and 172.16.11.120. A 'Conference' table is displayed with the following data:

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

A 'Conference Snapshot' window is open, showing a grid of video thumbnails. A yellow callout box points to this window with the text: 'Conference Snapshot Display the real-time still image of a current video conference call'.

A 'Participants (nms conference)' table is also visible, listing the following participants:

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]	[In Picture Icon]	
kim kyoung nam(kn...)	3500	172.16.12.30	Connected	[Audio Icon]	[Video Icon]	[Floor Icon]	[In Picture Icon]	
lee jounghyuk(jh.lee)	6010	172.16.11.110	Connected	[Audio Icon]	[Video Icon]	[Floor Icon]	[In Picture Icon]	

A yellow callout box points to this table with the text: 'Participants Participant parameter setting is possible dynamically in current conference call'.

The bottom status bar shows the date and time '2006-12-07 오후 2:39:02', the version 'Version 2.9.2532.21338', the IP address '172.16.201.100:389', and the user 'administrator'.

OSD (Video Phone, Video Terminal,etc)

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



Conference Room

- Application >> Conference Room
 - conference list

Conference Room

ON AIR | AddPac

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

See Detail Participant list

Detail View

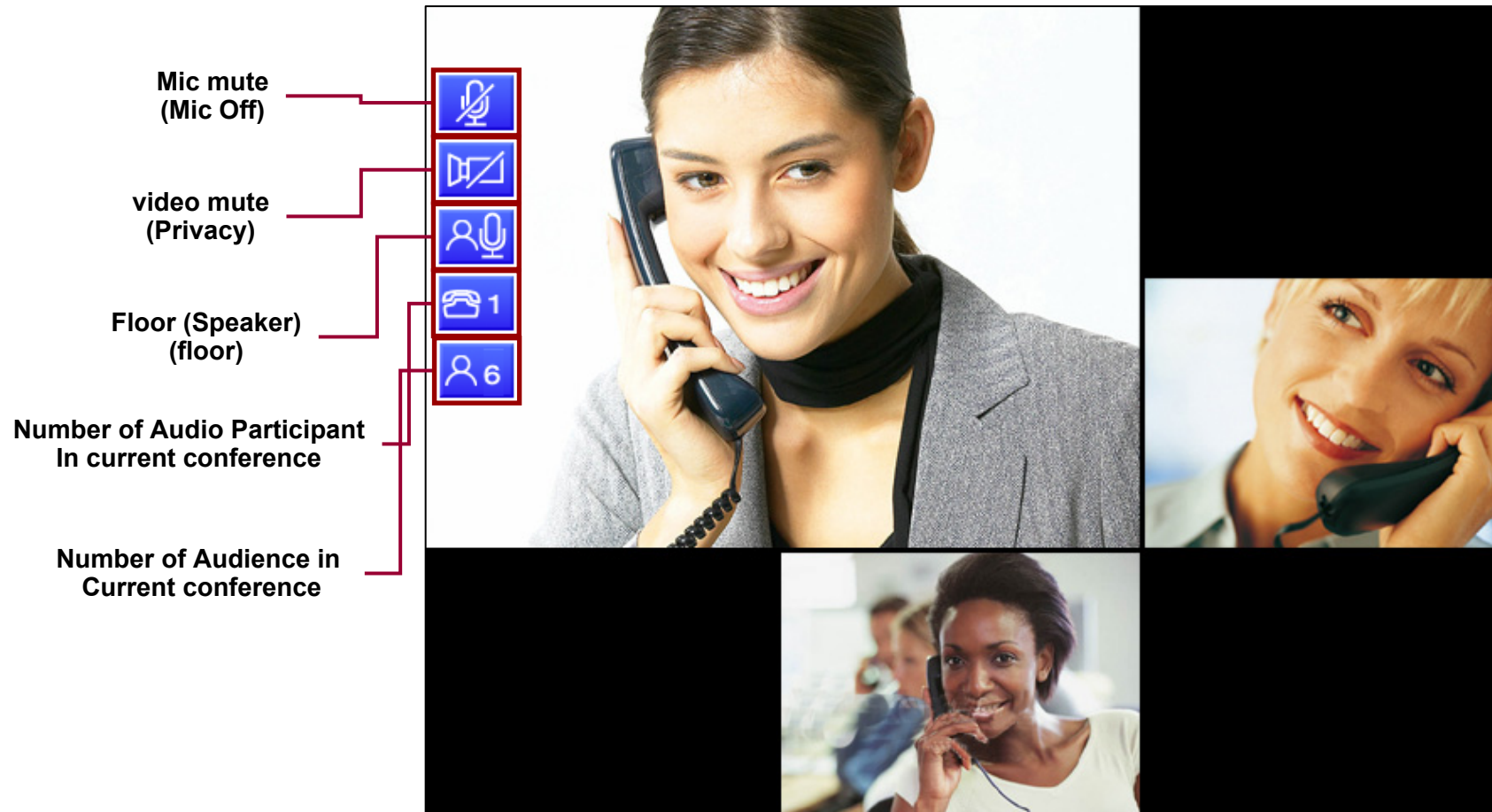
Conference layout

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

Add Party

ON AIR

NUM

Incoming Call

3000

Participant

Audio Call

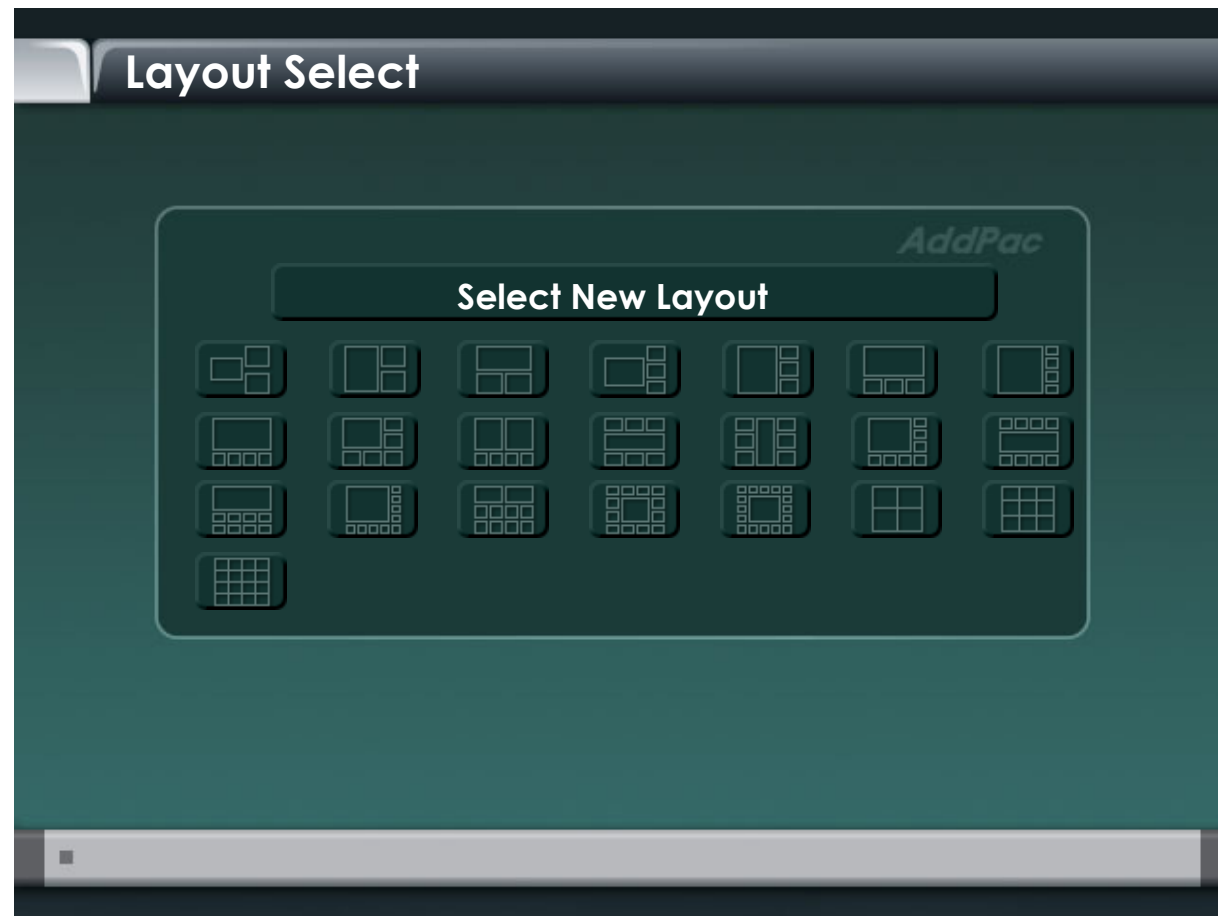
Invite new user

Select User class
-participant
-audience

Select Media type
-audio call
-video call

Layout

- Video Layout Change in current conference



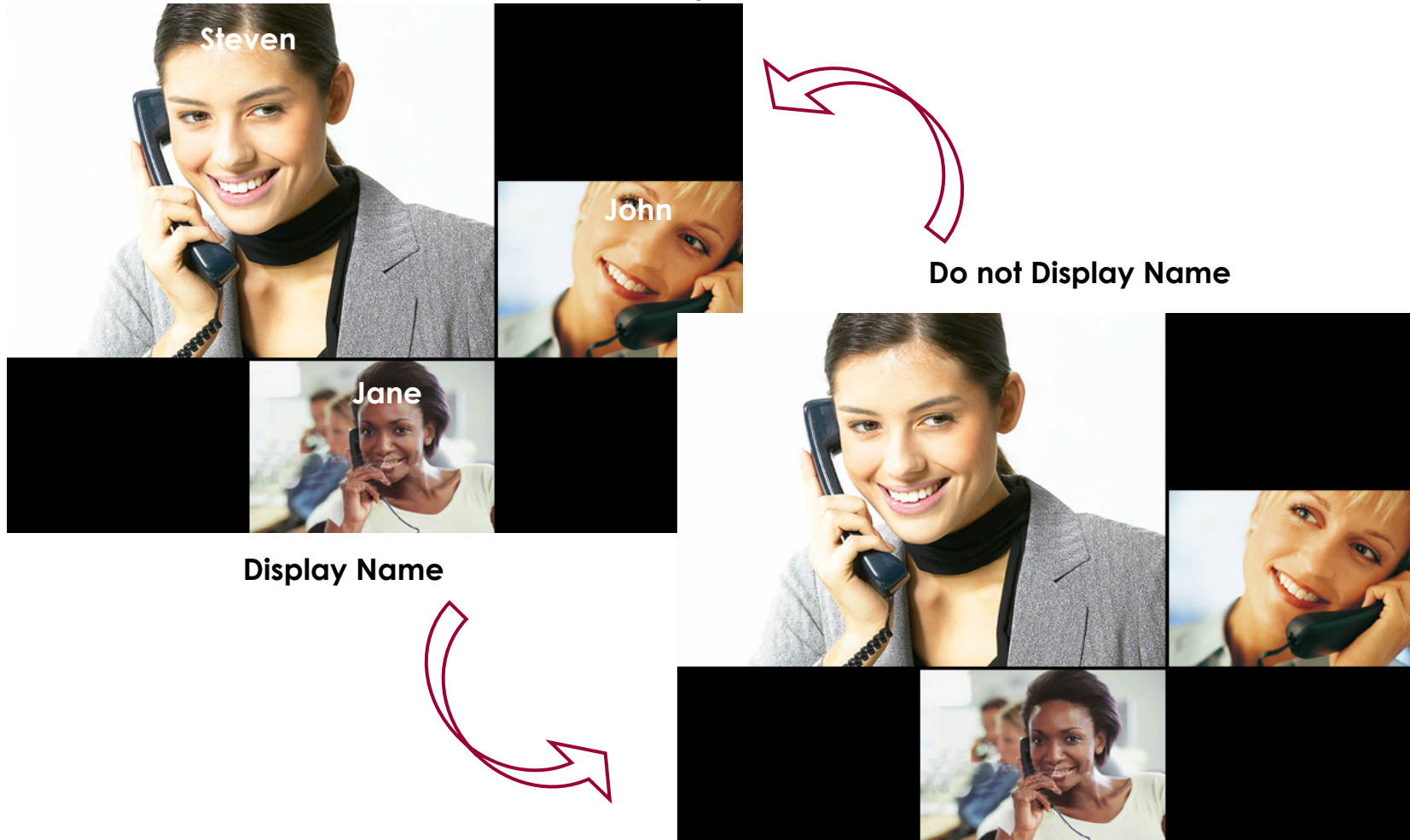
Floor To Full Screen

- 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,

The screenshot displays the AddPac interface for handling an incoming call. At the top, a dark header bar contains the word "Accept" and several icons: "ON AIR", a grid icon, a telephone icon, "NUM", and a moon icon. Below the header, a large video window shows a woman on the left holding a phone, with the text "Incoming Call" and the number "3000" overlaid. To the right of this window are smaller video thumbnails of other participants. At the bottom, a control bar features four buttons: "Accept", "Reject", "Participant", and "Audio Call".

Annotations on the right side of the interface:

- User class**
 - participant
 - audience
- Media type**
 - audio call
 - video call

Annotations on the left side of the interface:

- Conference Join**
 - Accept
- Conference Join**
 - Reject

AddPac logo is located at the bottom left, and the website www.addpac.com is centered at the bottom.

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

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	Media type	Audio/Video enable status	position
	Sally	3010			
	Steven	3001			
	Jane	3005			
	John	3004			

ON AIR

NUM

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 displays 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's icon is highlighted with a red box. Steven's icon is a microphone, indicating he has the right of speaking. Jane's icon is a person, indicating she does not have the right of speaking. At the bottom of the interface, a control bar includes an 'Assign Floor' button, which is also highlighted with a red box. Annotations with red lines point to these elements: 'Have a right of speaking' points to Steven's icon, 'Don't have a right of speaking' points to Jane's icon, and 'Give Floor (Speaker) to Participant' points to the 'Assign Floor' button.

Participant	ID	Right of Speaking
Sally	3010	No
Steven	3001	Yes
Jane	3005	No
John	3004	No

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 network icon, a microphone icon, 'NUM', and a moon icon. The main area contains a list of participants with columns for a profile icon, name, ID number, and various control icons. The participant 'Jane' (ID 3005) is highlighted with a red box. A red line connects the text 'Participant Select' to the profile icon of Jane. Another red line connects the text 'Conference call disconnect of a participant selected' to the 'Remove Party' button in the bottom navigation bar. The bottom bar also includes 'Assign Floor', 'Position', and 'more' buttons.

Participant Select	Name	ID	Control Icons
	Sally	3010	[Speaker, Microphone, Camera, Screen]
	Steven	3001	[Microphone, Camera, Screen]
Participant Select	Jane	3005	[Microphone, Camera, Screen]
	John	3004	[Microphone, Camera, Screen]

Conference call disconnect of a participant selected

Assign Floor Remove Party Position more

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. Below these are two labels: 'Audio Mute/Enable' and 'Video Mute/Enable', with red lines pointing to the microphone and camera icons in the participant rows. The participant list includes Sally (3010), Steven (3001), Jane (3005), and John (3004). Steven and Jane have red 'X' marks over their microphone icons, indicating they are muted. At the bottom, a navigation bar contains 'User Class', 'Audio Enable', 'Video Mute', and 'more'. A red box highlights the 'Audio Enable' and 'Video Mute' buttons, with a red line pointing to the text '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

Video MCU Series

Thank you!

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