

USER MANUAL

WC-COA-MPE

COALESCE: MEETING PLACE EDITION

24/7 TECHNICAL SUPPORT AT 1.877.877.2269 OR VISIT BLACKBOX.COM



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CHAPTER 1: SPECIFICATIONS

TABLE 1-1. COALESCE MPE HARDWARE SPECIFICATIONS

Hardware	
Type	Android® Based SBC
Dimensions	1.18"H x 4.72"W x 4.72"D (3 x 12 x 12 cm)
Weight	0.40 lb. (0.18 kg)
Mounting Options	Console tabletop
Connectors	(1) HDMI, (1) Optical Audio, (1) RJ-45 Ethernet (10/100/1000), (1) USB 2.0, (1) USB 3.0, (1) USB-C, (1) Micro SD (1) 5-VDC power connector
Power	
Input	5 VDC, 3 A
System	
Processor	Rockchip® RK399-6 Cores 64-bit (Dual Core A72 + Quad Core A53)
Graphics Processor	Mali-T864
Internal Storage	2 GB DDR3 RAM, 16 GB Flash Storage
Wireless*	Dual Band 802.11 a/b/g/n AC2.0
Video Output	HDMI output with Audio
Streaming Video Support	HD (1920 x 1080), HD SD (1280 x 720)
Audio Output	SPDIF Digital Optical Audio
I/O	(1) USB 2.0, (1) USB 3.0, (1) USB-C, (1) Micro SD, IR
Operating System	Android 6.0 Marshmallow
Coalesce Software Pre-installed	Includes Android version of Coalesce server software built for wireless sharing.
Security Specifications	
Network Interface Cards	(1) Ethernet NIC and (1) wireless NIC
Network Settings	Accessed via Coalesce configuration panel and an (optional) admin pin; Settings include DHCP or fixed address, DNS server, SSID Name (for wireless)
Network Modes	Wireless Access Point, Ethernet Network Deployment, Dual-Network, Wireless Client
Encryption	2048-bit length encryption key, TLS/DTLS, HTTPS
Software Security and Access Options	Disable/enable local configuration, open access, pin lock, screen key

*For indoor use only.



CHAPTER 1: SPECIFICATIONS

TABLE 1-2. COALESCE MPE FEATURE SPECIFICATIONS

Client OS	
PC Application	Windows® 10, Windows 8, WIndows 7 (limited support)
Chrome® Web Client	Google Chrome version 55+ - Windows - Mac® - Ubuntu®, Fedora® - ChromeOS®
AirPlay®	iOS® 9, 10 MacOS® 10.10, 10.11, 10,12
Android Application	Android 5 and above
iOS Application	iOS 10 64-bit device
Connectivity	Integrated wireless access point (can be enabled or disabled); Connect to a network using Ethernet and/or Wi-Fi; Connect to a network with DHCP or Static IP; Unique meeting ID generated on launch of new meeting; Optional PIN for added security when connected to Internet
Receiver Interface	Connect up to 4 participant's screens; Touch display support (or control via connected mouse/keyboard); Make any connected participant the Active Display; Drag & move client displays at receiver/display; Desktop control of full-screen client PC's (Active Display) from the receiver/display; Whiteboard/Annotation tools
Client Interface	
Windows Application: <ul style="list-style-type: none"> • Share your desktop • Choose to be the Active Display • Pause sharing • In-room and remote meeting access 	Chrome Web Client: <ul style="list-style-type: none"> • Share your desktop/selected application • Choose to be the Active Display • Pause sharing • In-room and remote meeting access
IOS Application: <ul style="list-style-type: none"> • Share a web page, image or video • Choose to be the Active Display • In-room and remote meeting access 	Android Application: <ul style="list-style-type: none"> • Share your device screen • Choose to be the Active Display • In-room and remote meeting access
AirPlay: <ul style="list-style-type: none"> • Connect via same subnet or Access Point • Share your screen • Use meeting ID to ensure secure connection 	

CHAPTER 2: THE COALESCE MPE APP

2.1 WHAT IS COALESCE MPE?

Coalesce Meeting Place Edition (MPE) is an embedded wireless presentation solution that lets 4 in-room meeting attendees stream content from their device to a large format display.

To connect more than 4 attendees or to share audio and video, you'll need Coalesce Enterprise. For more information, contact Black Box Technical Support at 877-877-2269 or info@blackbox.com.

2.2 NETWORKING

Before using Coalesce MPE, make sure that your network device is connected to a wired or wireless network. Guidance on how to do this can be found in your network device's user guide.

2.3 UPDATES

Updates will appear as a prompt within Coalesce MPE within a few minutes of being launched.



CHAPTER 3: GETTING STARTED

3.1 MEETING ID SCREEN

When the Coalesce Meeting Place Edition (MPE) application has launched, the screen shown next will appear.

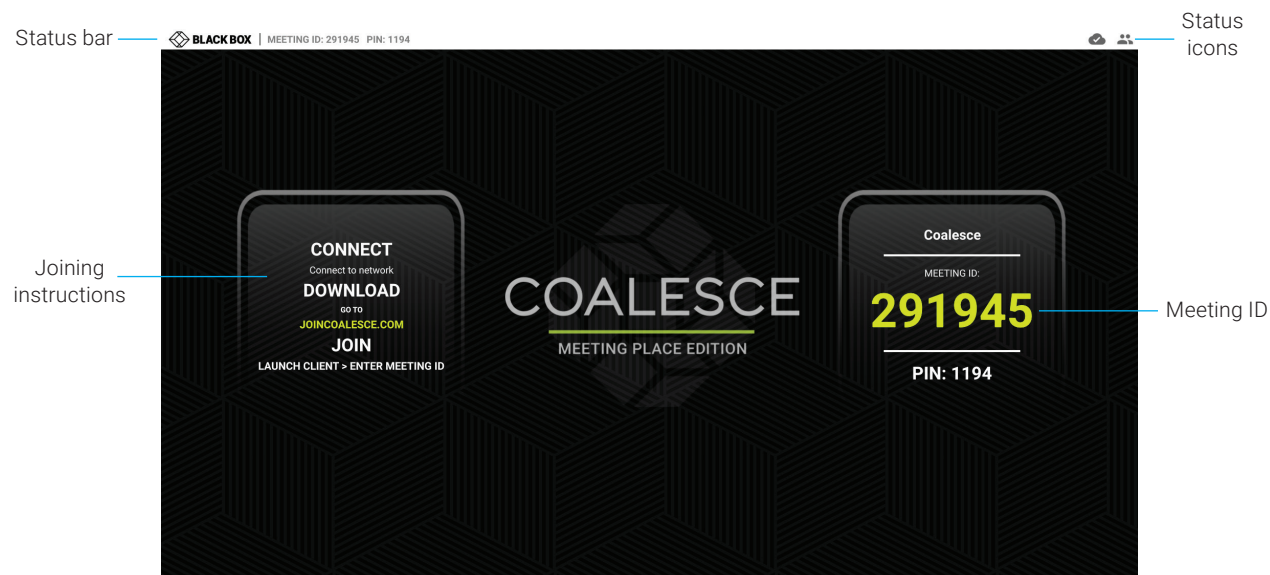


FIGURE 3-1. MEETING ID SCREEN

This screen contains the status bar at the top, the Meeting ID to join the meeting and instructions on how to connect devices on the left and right middle sides of the screen. For more information on how to connect devices, see Chapter 4.

3.2 STATUS BAR OVERVIEW

The status bar menu is at the top of the Coalesce MPE display and contains the meeting menu and a group of status icons to the right.



FIGURE 3-2. STATUS BAR

Access the meeting menu by tapping or clicking on the Black Box Double Diamond icon in the left corner, revealing the options below.

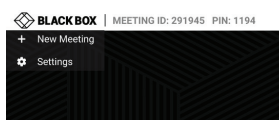





FIGURE 3-3. MEETING OPTIONS

Use these options to start a new meeting and view and change basic settings.

Click or tap on the Meeting ID in the top left corner at any time to view the Coalesce MPE Meeting ID screen. To close this screen, click anywhere on the splash screen. The status icons are on the right side of the status bar.

CHAPTER 3: GETTING STARTED

TABLE 3-1. STATUS ICONS

SYMBOL	DESCRIPTION
 	Cloud services (internet) connected/disconnected*
	Attendees (number of connected attendees shown to right)

*Coalesce Meeting Place Edition (MPE) has cloud connectivity for screen sharing only.

CHAPTER 4: CONNECTING ATTENDEES

Attendees can join a meeting by using the following applications.

TABLE 4-1. CONNECTION METHODS

PLATFORM*	CONNECTION METHOD (RECOMMENDED IN BOLD)
Windows®	Coalesce MPE Windows Application (Section 4.1), Coalesce web client (Section 4.2)
Mac OS®	Coalesce MPE web client (Section 4.2), AirPlay (Section 4.6)
Linux®	Coalesce MPE web client (Section 4.2)
Chromebook®	Coalesce MPE web client (Section 4.2)
iOS®	Coalesce MPE iOS application, (Section 4.4), AirPlay (Section 4.5)
Android®	Coalesce MPE Android application (Section 4.3)

*See section 4.7 for minimum system requirements.

NOTE: Attendees must be connected to the same local network as the Coalesce Meeting Place Edition (MPE) unit or be connected to an Access Point to use AirPlay.

4.1 CONNECT USING THE WINDOWS APPLICATION

Go to <http://www.joincoalesce.com/> to download the Windows application and follow the on-screen instructions to install on the PC. Once installed, double-click the Coalesce MPE icon to launch the application.



FIGURE 4-1. COALESCE MPE ICON

CHAPTER 4: CONNECTING ATTENDEES

When Coalesce Meeting Place Edition (MPE) opens, enter Attendee Name and the Meeting ID. You do not need to enter a PIN when connecting to a Coalesce MPE meeting.

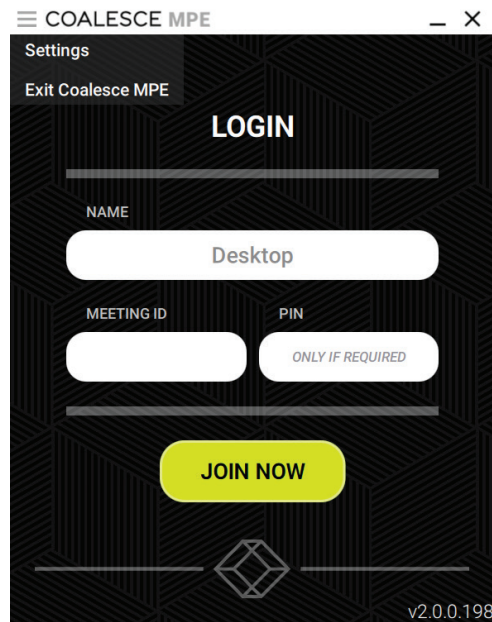


FIGURE 4-2. LOGIN SCREEN

See Chapter 6 for more information on the Windows application.

CHAPTER 4: CONNECTING ATTENDEES

4.2 CONNECT USING A WEB BROWSER

If using Windows, Mac, Linux or Chromebook, attendees can connect using the Coalesce Meeting Place Edition (MPE) Web Client in Google Chrome.

Chrome can be downloaded from <http://www.google.com/chrome>.

Open Chrome and navigate to <http://www.joincoalesce.com>—attendees will see the next page.

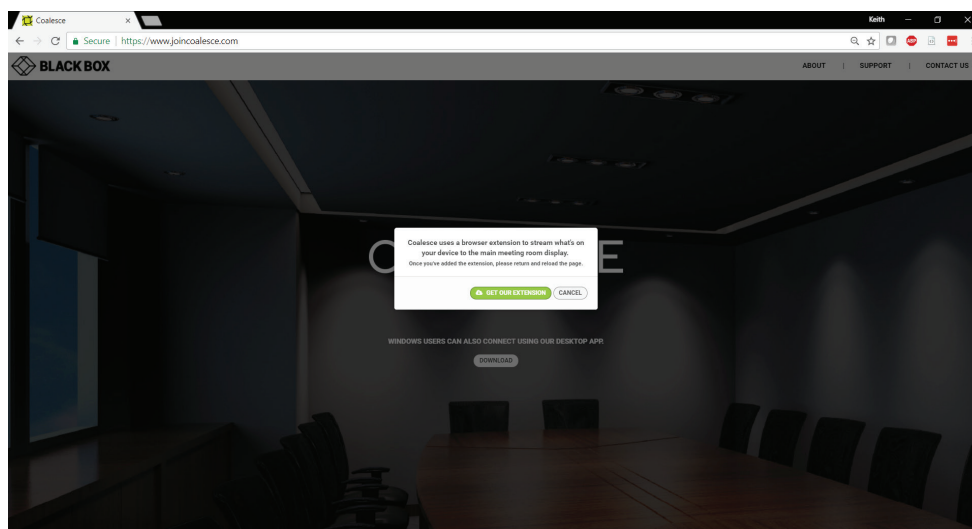


FIGURE 4-3. LOGIN SCREEN IN CHROME WEB BROWSER INTERFACE

The Coalesce MPE Extension must be installed from the Chrome® web store to share the screen. You will be prompted to do this the first time you go to www.joincoalesce.com.

4.2.1 INSTALLING THE COALESCE MPE EXTENSION

To install the extension, click on the “get our extension” link and follow the prompts on-screen to add the extension.

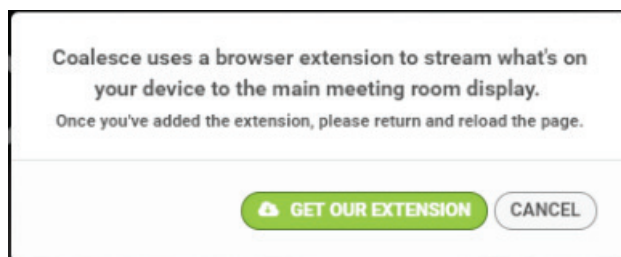


FIGURE 4-4. GET OUR EXTENSION LINK

CHAPTER 4: CONNECTING ATTENDEES

4.2.2 CONNECTING USING THE WEB CLIENT

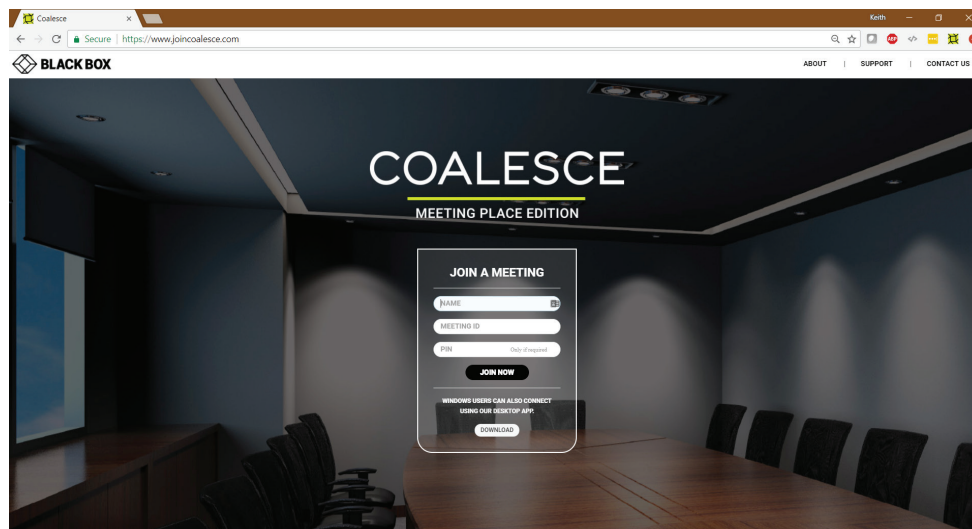


FIGURE 4-5. JOIN A MEETING SCREEN

Enter the Attendee's Name and Meeting ID. You do not need a PIN when connecting to a Coalesce Meeting Place Edition (MPE) meeting. Click "Join Now" when ready to connect.

Next, a prompt will appear asking what the attendee wishes to share—either the entire desktop or a specific window. Select an option, then click on "Share" to connect to the Coalesce MPE meeting.

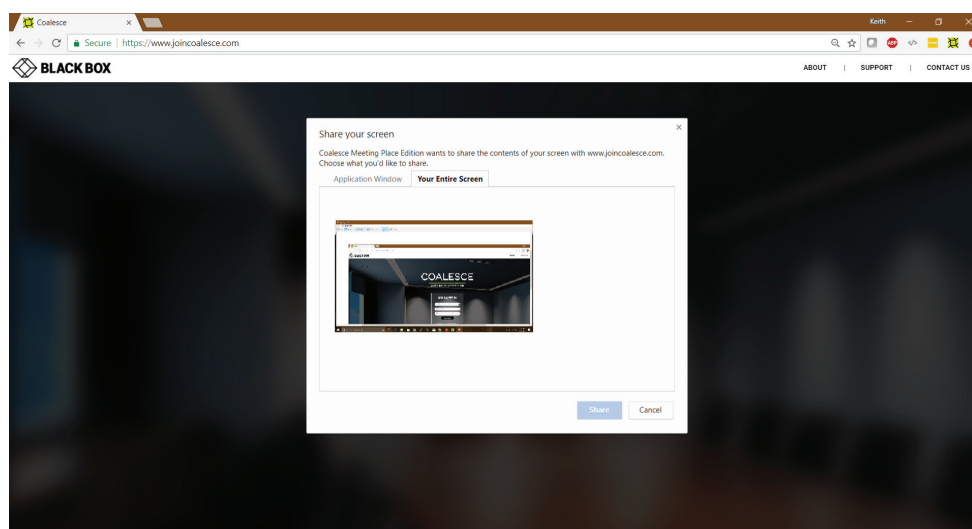


FIGURE 4-6. CLICK SHARE TO CONNECT TO THE MEETING

When connected using the web client, attendees must keep the Chrome® browser window open to stay connected to the meeting. See Chapter 7 for more information on the Web Client.

CHAPTER 4: CONNECTING ATTENDEES

4.3 CONNECT USING THE ANDROID APPLICATION

Download the Android Application from the Google Play Store—search “Coalesce MPE.”

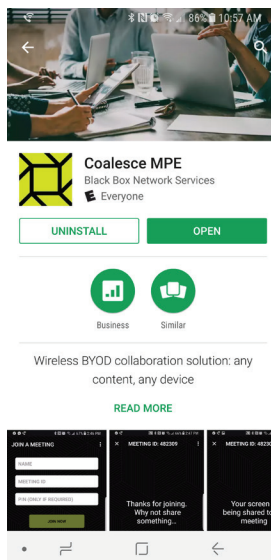


FIGURE 4-7. ANDROID APP

Once installed, tap the Coalesce Meeting Place Edition (MPE) icon to open the app.

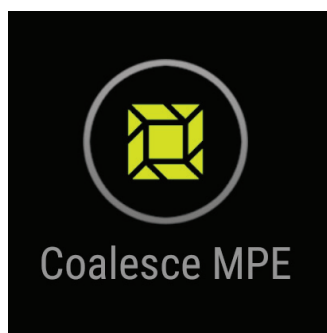


FIGURE 4-8. COALESCE MPE ICON

When the app launches, enter the criteria to join the meeting—Name, Meeting ID and PIN (if required).

CHAPTER 4: CONNECTING ATTENDEES

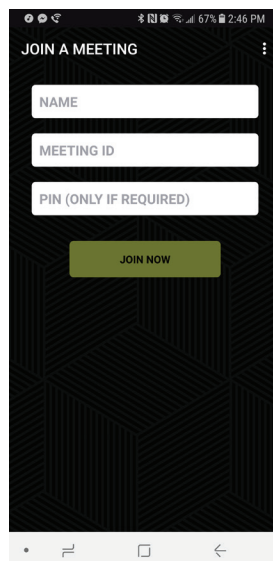


FIGURE 4-9. ANDROID JOIN MEETING SCREEN

See Chapter 8 for more information on the Android application.

4.4 CONNECT USING THE IOS APPLICATION

Download the iOS Application from the Apple App Store—search “Coalesce MPE.”

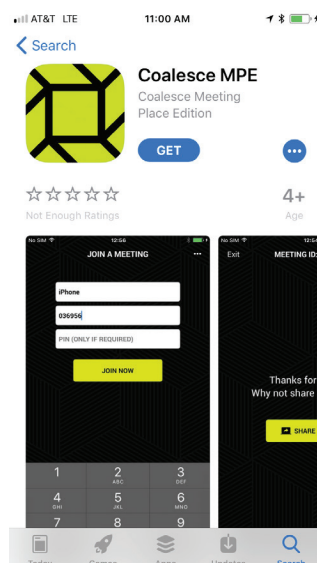


FIGURE 4-10. IOS APP

CHAPTER 4: CONNECTING ATTENDEES

Once installed, tap the Coalesce Meeting Place Edition (MPE) icon to open the app.

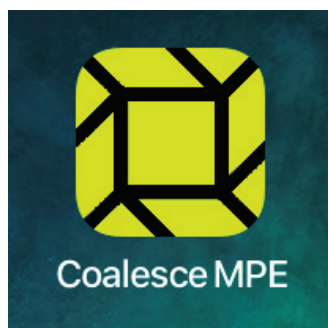


FIGURE 4-11. COALESCE MPE ICON

When the app launches, enter the criteria to join the meeting—Name, Meeting ID and PIN (if required).

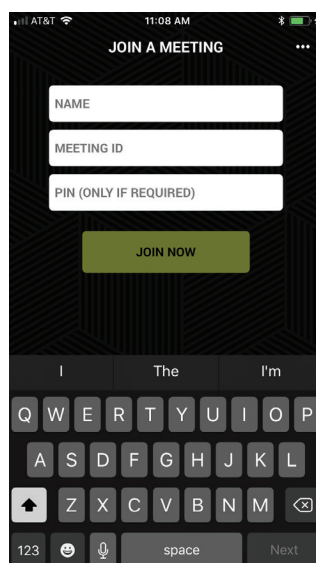


FIGURE 4-12. IOS JOIN MEETING SCREEN

Please see Chapter 8 for more information on the iOS application.

CHAPTER 4: CONNECTING ATTENDEES

4.5 CONNECT IOS DEVICES USING AIRPLAY

Make sure the iOS device is on the same network as Coalesce MPE.

Swipe up from the bottom of the screen on the iOS device to reveal the Control Center.

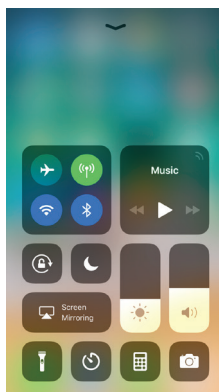


FIGURE 4-13. CONTROL CENTER

Select the applicable AirPlay name (you can view/change this in the Coalesce Meeting Place Edition [MPE] settings). An AirPlay password is required—this will be the Meeting ID.

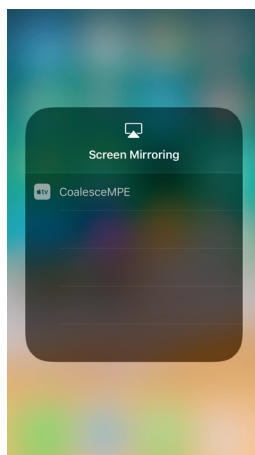


FIGURE 4-14. SELECT AIRPLAY NAME FOR IOS

After tapping ok, the screen of the iOS device will appear on the Coalesce MPE display.

CHAPTER 4: CONNECTING ATTENDEES

4.6 CONNECT MACOS USING AIRPLAY

Mac computers can currently join using the Web Client (see Section 4.2) or by using AirPlay.

To mirror the screen using AirPlay, make sure the Mac is connected to the same network as Coalesce Meeting Place Edition (MPE).

When connected to a valid network with AirPlay, the AirPlay icon will be shown in the top right of the MacOS Menu Bar. Click this to see a list of available AirPlay receivers on the local network. Select the applicable AirPlay name from the drop-down list (you can view/change this in the Coalesce MPE settings).

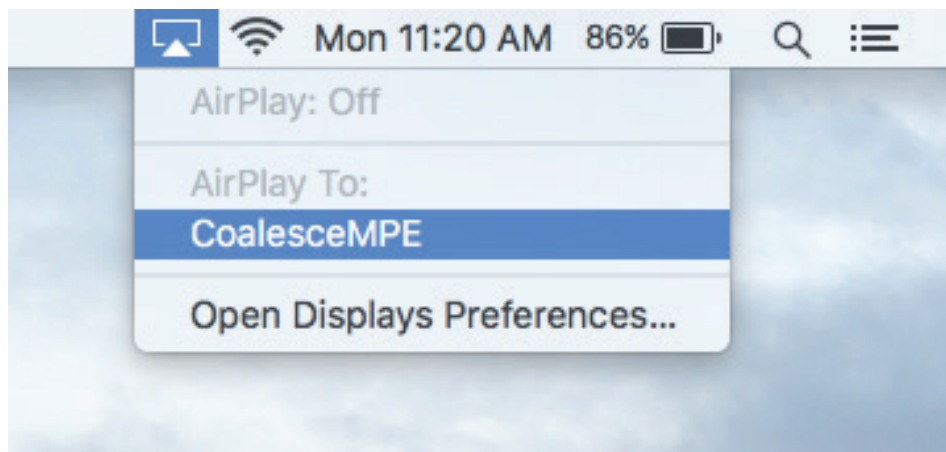


FIGURE 4-15. LIST OF AIRPLAY NAMES FOR MAC

AirPlay will prompt for a password (this will be the Meeting ID); enter this and the Mac screen will be mirrored to the display.

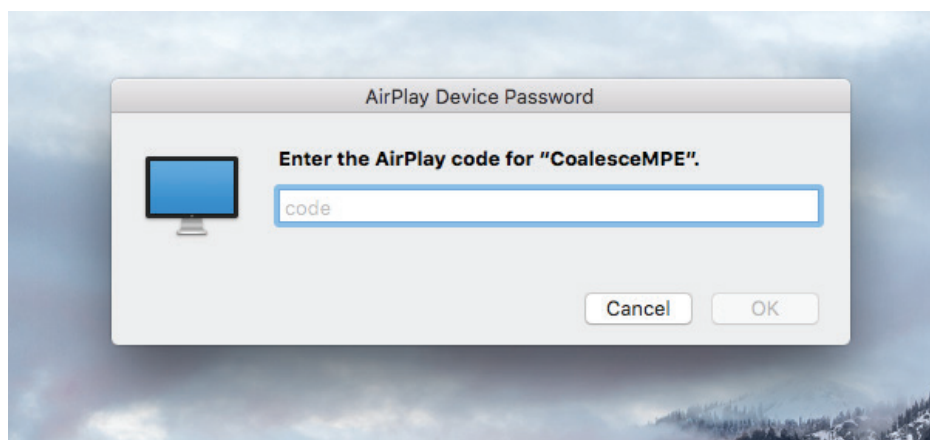


FIGURE 4-16. ENTER AIRPLAY DEVICE PASSWORD

CHAPTER 4: CONNECTING ATTENDEES

4.7 MINIMUM REQUIREMENTS OF CONNECTING DEVICES

TABLE 4-2. CONNECTING DEVICES REQUIREMENTS

APPLICATION	MINIMUM REQUIREMENTS
Windows Application	Windows 10, Windows 8, Windows 7 (limited support); Minimum processor & graphics requirement: 3rd Generation Intel® Processor with Intel® HD Graphics 4000 or Intel® HD Graphics 2500 (with latest drivers)
Chrome Web client	Google Chrome® version 55+ <ul style="list-style-type: none"> ♦ Windows ♦ Mac ♦ Ubuntu®, Fedora® ♦ Chrome OS
AirPlay	iOS 9, 10; MacOS 10.10, 10.11, 10.12
Android Application	Android 5 and above
iOS Application	iOS 10; 64-bit device



CHAPTER 5: MANAGING ATTENDEES

5.1 RE-ORDERING ATTENDEES AND CHANGING VIEW

Attendees will appear in the Coalesce Meeting Place Edition (MPE) view when connected, as seen below. Up to a maximum of 6 attendees can be connected at once.

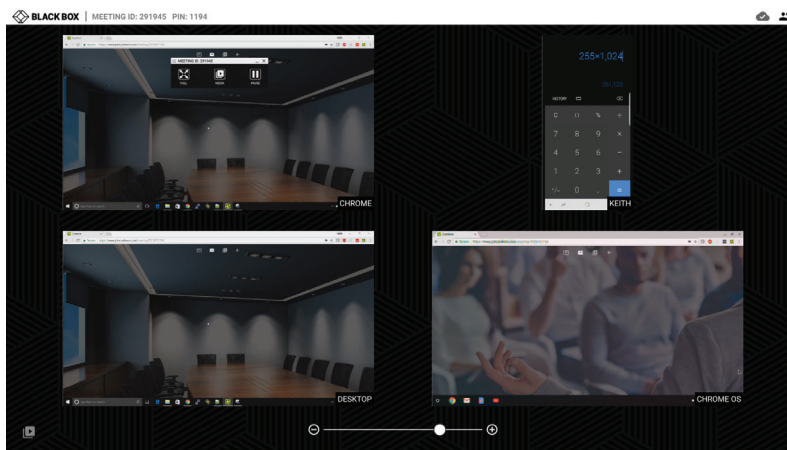


FIGURE 5-1. COALESCE MPE VIEW

You can alter this view by using the slider at the bottom of the screen. You can change from having 1 device on screen to a arrangement of up to 4 screens.



FIGURE 5-2. SLIDER BAR

5.2 ADDING AND REMOVING ATTENDEES

Attendees can join at any time during a session. If joining after a session has started, the Meeting ID will be visible in the top left corner of the Coalesce MPE display. Tapping on this will open the Coalesce MPE Meeting ID screen with the Meeting ID in a larger format. If the maximum amount of attendees are already connected, attendees can easily be removed by dragging an attendee's display to the trash bin. If an attendee wants to disconnect he can select to "Leave Coalesce MPE" in the app, or disconnect from Airplay or Miracast®.

5.3 MAKE AN ATTENDEE FULL SCREEN (ACTIVE DISPLAY)

To select an attendee as the Active Display, double tap that attendee in the Coalesce MPE view; this display will then become full screen. This screen is now the "Active Display."

Attendee's displays can be easily swapped between by using the Sidebar—expand the Sidebar by pulling the tab from the right side of the screen. Drag and drop the desired screen to change the Active Display.

CHAPTER 5: MANAGING ATTENDEES

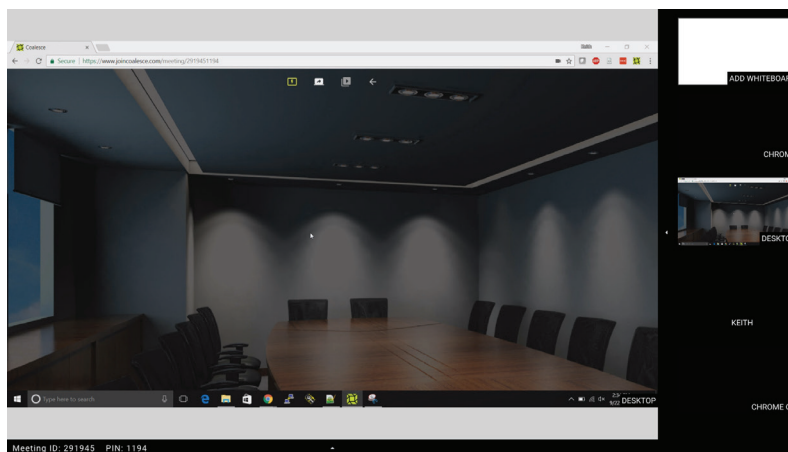


FIGURE 5-3. DRAG AND DROP TO CHANGE THE ACTIVE DISPLAY

Attendees will also be able to set themselves as the Active Display from within the Windows application (see Section 6.2) and web client (see Section 7.2).

5.4 TAKE CONTROL OF A PC

When a Windows PC using the Coalesce Meeting Place Edition (MPE) Windows application is set as the Active Display, Coalesce MPE has full mouse control of that PC from the display.

CHAPTER 5: MANAGING ATTENDEES

5.5 ACTIVE DISPLAY MENU OPTIONS

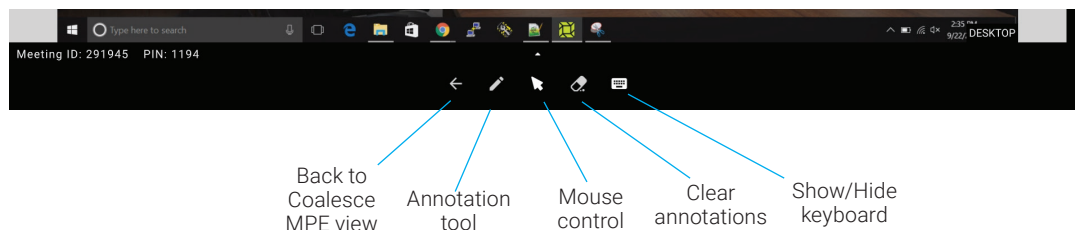


FIGURE 5-4. ACTIVE DISPLAY MENU OPTIONS

TABLE 5-1. ACTIVE DISPLAY MENU OPTIONS

OPTION	DESCRIPTION
Back to Coalesce MPE view	Select this option to return to the Coalescence Meeting Place Edition (MPE) view of all connected devices.
Annotation tool	Used to annotate over the current display. Click or tap to cycle through colors.
Mouse control	Take mouse control of a PC connected using the Coalescence MPE Windows Application.
Clear annotations	Delete all annotations from the current screen.
Show/hide keyboard	Show or hide the on-screen keyboard.

5.6 ADD A WHITEBOARD

If required, you can add a whiteboard to the meeting view by dragging and dropping the “Add whiteboard” window from the sidebar.

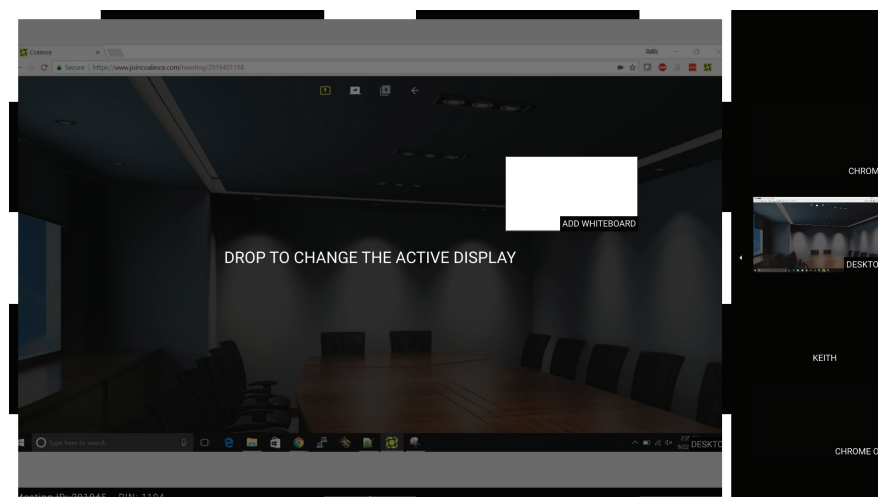


FIGURE 5-5. ADD WHITEBOARD

CHAPTER 6: WINDOWS APPLICATION

6.1 WINDOWS APPLICATION MENU

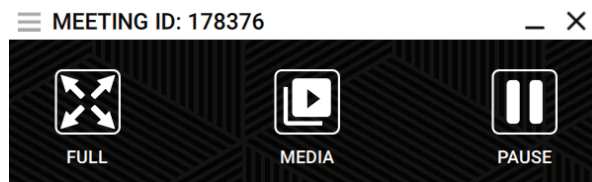


FIGURE 6-1. WINDOWS APPLICATION MENU

NOTE: Additional features are not available on Coalesce Meeting Place Edition (MPE). To use these features, the Coalesce Enterprise solution is required. For more information on this, contact Black Box Technical Support at 877-877-2269 or info@blackbox.com.

6.2 BECOME THE ACTIVE DISPLAY

A device can be made the Active Display by clicking the “FULL” icon in the menu bar. This will make that attendee’s device full screen on the main display.

When an attendee is presenting, he can take control of his PC from the main display.

6.3 PAUSE SCREEN SHARING

The attendee can press the “PAUSE” button at any time, allowing them to use other applications without them being shared to the main display. Click again to resume sharing.

NOTE: To connect via the Web Client, see Section 4.2.

7.1 WEB CLIENT MENU

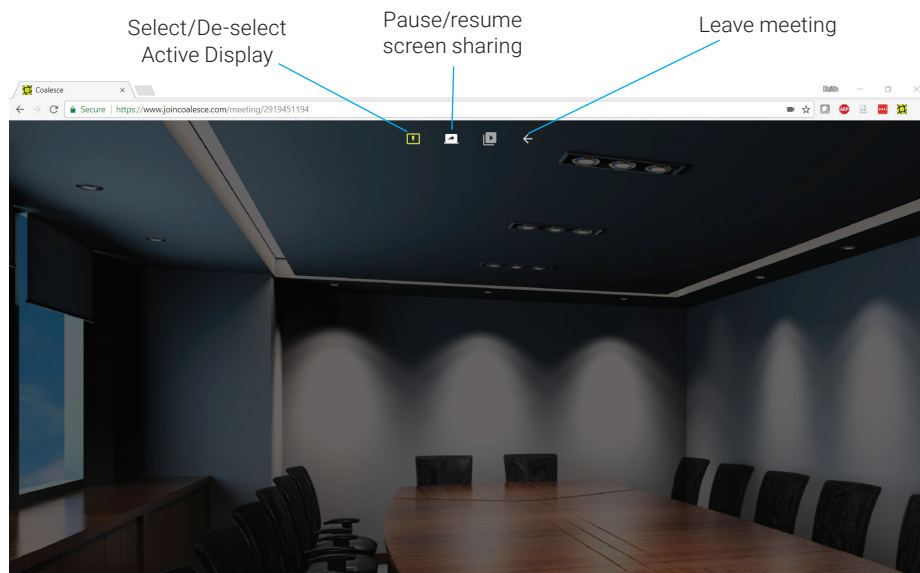


FIGURE 7-1. WEB CLIENT MENU

7.2 BECOME THE ACTIVE DISPLAY

A device can be made the Active Display by clicking the “Select/De-select as Active Display” icon in the menu bar. This will make that attendee’s device full screen on the main display.

NOTE: Mouse control of the Active Display is not available when using the web client.

7.3 PAUSE SCREEN SHARING

The attendee can press the “pause screen sharing” button at any time, allowing them to use other applications without sharing them to the main display. Click again to resume sharing.

NOTE: To connect with the Android Application, see Section 4.3.

8.1 ANDROID APPLICATION MENU (AFTER JOINING THE MEETING)

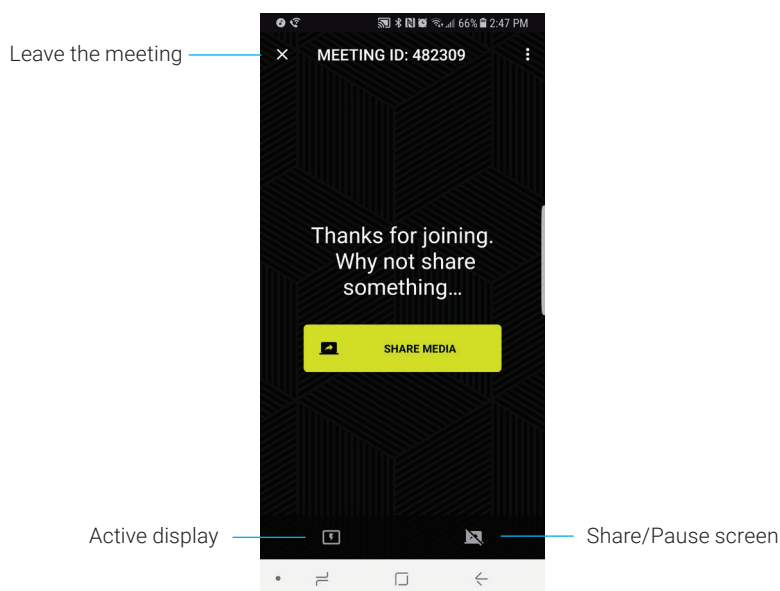


FIGURE 8-1. ANDROID APPLICATION MENU

NOTE: More features are not available on Coalesce Meeting Place Edition (MPE). To use these features, the Coalesce Enterprise solution is required. For more information on this, contact Black Box Technical Support at 877-877-2269 or info@blackbox.com.

8.2 SHARE YOUR SCREEN

Tap the “Screen share” button on the tool bar to pause or resume screen sharing. The button will indicate whether the screen is being shared—see below.

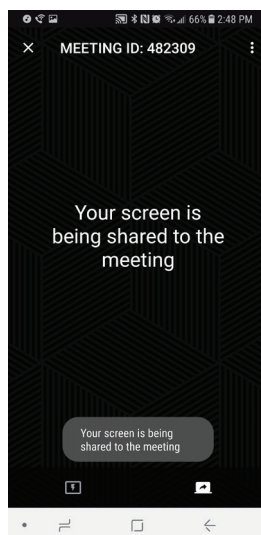


FIGURE 8-2. SCREEN SHARING BUTTON

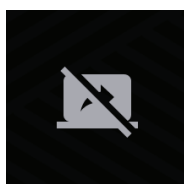


FIGURE 8-3. NOT SHARING SCREEN BUTTON

8.3 BECOME THE ACTIVE DISPLAY

If the attendee on the Android device wishes to become the Active Display, he can do this by tapping the “Active Display” button.

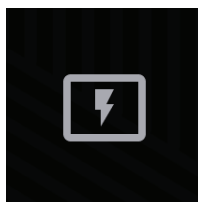


FIGURE 8-4. ACTIVE DISPLAY BUTTON

This will make that attendee’s device full screen on the main display, which will also share the content to anyone viewing the active display on the Windows Application, Web Client or iOS and Android applications.

NOTE: To connect with the iOS application, see Section 4.4.

9.1 IOS APPLICATION MENU

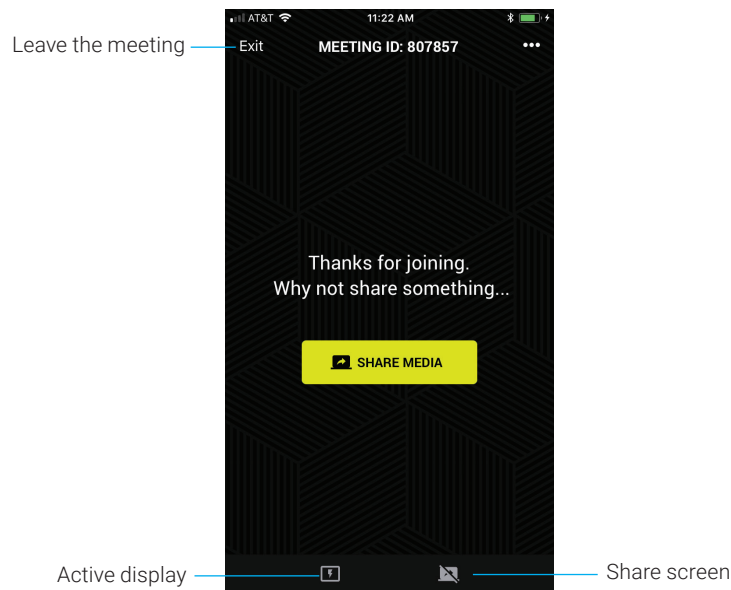


FIGURE 9-1. IOS APPLICATION MENU

9.2 SCREEN SHARING

Tap the “Screen share” button on the tool bar to pause or resume screen sharing. The button will indicate whether the screen is being shared.

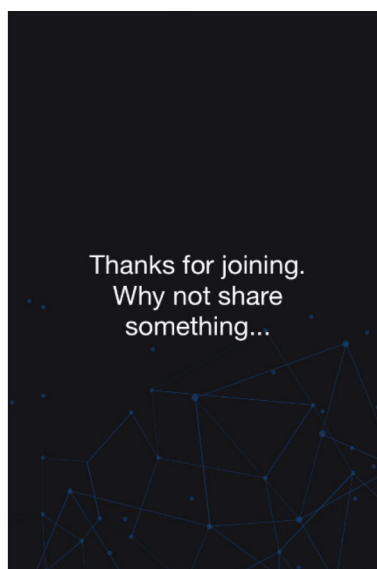


FIGURE 9-2. NOT SHARING THE SCREEN

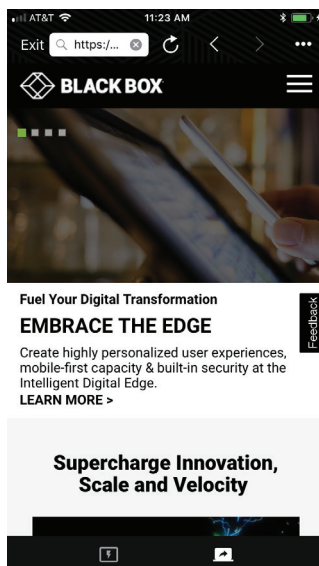


FIGURE 9-3. SHARING THE SCREEN

NOTE: Currently only a web browser, image or video can be shared using the iOS application.

9.3 BECOME THE ACTIVE DISPLAY

If the attendee on the iOS device wishes to become the Active Display, he can do this by tapping the “Active Display” button.

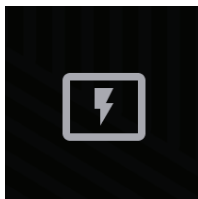


FIGURE 9-4. ACTIVE DISPLAY BUTTON

This will make that attendee’s device full screen on the main display, which will also share the content to anyone viewing the active display on the Windows® Application, Web Client or iOS and Android applications.

NOTE: Currently only a web browser, image, or video can be shared using the iOS application.

CHAPTER 10: COALESCE MPE SETTINGS

To access the settings menu, click or tap on the top left corner of the Coalesce Meeting Place Edition (MPE) home screen. The drop-down menu will appear—tap or click on Settings.

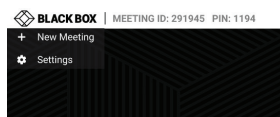


FIGURE 10-1. DROP-DOWN MENU

10.1 ABOUT TAB

The About tab in the settings contains information about Coalesce MPE.

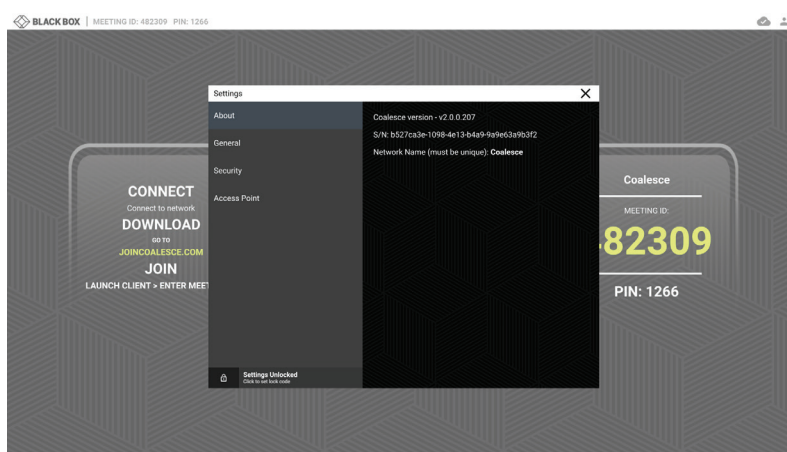


FIGURE 10-2. ABOUT TAB OPENED

TABLE 10-1. ABOUT TAB SETTINGS

ITEM	DESCRIPTION
Coalesce MPE version	The version of Coalesce MPE currently running. The Coalesce MPE unit will check for updates automatically when connected to the Internet; install these when prompted.
S/N	The Coalesce MPE Serial Number
Network name	The network name that will show on devices connecting by Airplay

CHAPTER 10: COALESCE MPE SETTINGS

10.2 AIRPLAY TAB

The AirPlay tab of the Settings screen allows for the AirPlay name to be changed—type the new name into the text box and tap “Apply” to confirm.

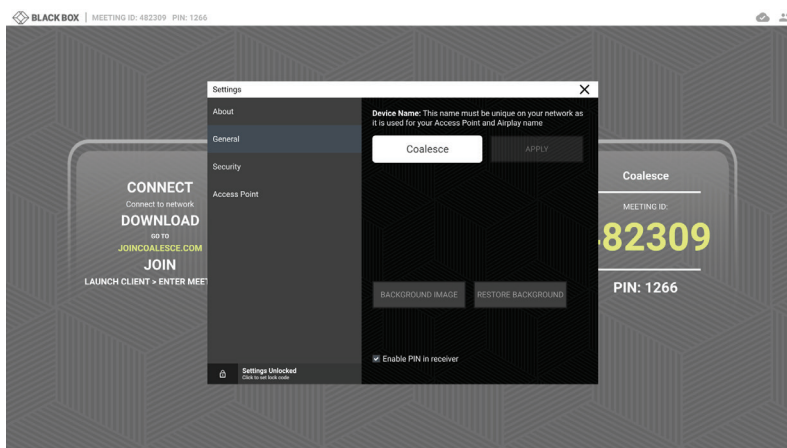


FIGURE 10-3. CHANGE AIRPLAY NAME

10.3 SECURITY TAB

The Security tab of the Settings screen enables you to remove or change the Unlock Code—click on the appropriate button.

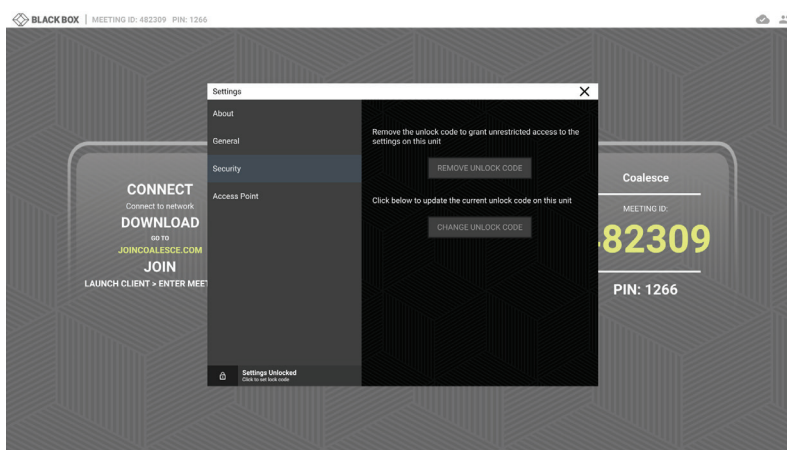


FIGURE 10-4. REMOVE OR CHANGE THE UNLOCK CODE

CHAPTER 10: COALESCE MPE SETTINGS

If you clicked on the Change Unlock Code button, the following screen appears. Enter a 4-digit unlock code.

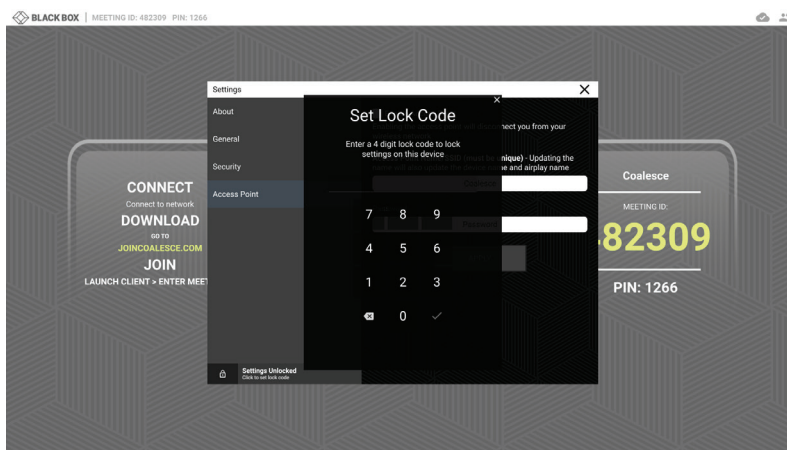


FIGURE 10-5. ENTER THE UNLOCK CODE

10.4 ACCESS POINT TAB

The Access Point tab of the Settings screen allows you to add an access point—type the SSID and password into the text box and tap “Apply” to confirm.

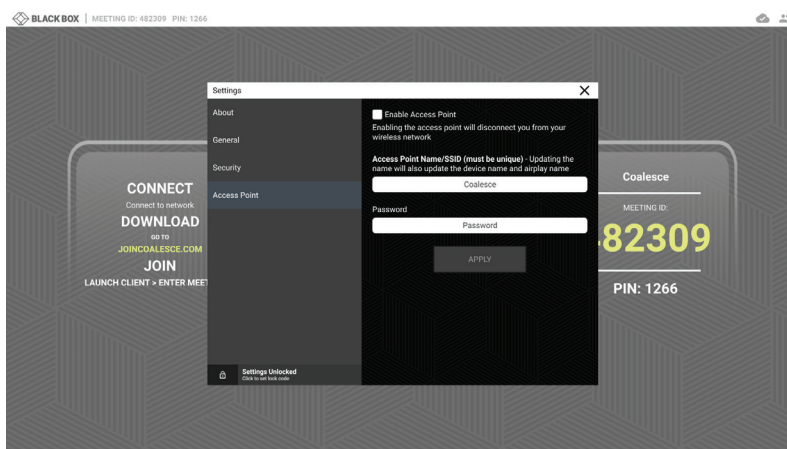


FIGURE 10-6. ADD AN ACCESS POINT SCREEN

APPENDIX A: SUPPORT

A.1 CONTACTING TECHNICAL SUPPORT

If you determine that your Coalesce MPE is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Black Box Technical Support at 877-877-2269 or info@blackbox.com.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including:

- ♦ the nature and duration of the problem.
- ♦ when the problem occurs.
- ♦ the components involved in the problem.
- ♦ any particular application that, when used, appears to create the problem or make it worse.

A.2 SHIPPING AND PACKAGING

If you need to transport or ship your Coalesce MPE:

- ♦ Package it carefully. We recommend that you use the original container.
- ♦ If you are returning the unit, make sure you include everything you received with it. Before you ship for return or repair, contact Black Box to get a Return Authorization (RA) number.

APPENDIX B: DISCLAIMER/TRADEMARKS

B.1 DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

B.2 TRADEMARKS USED IN THIS MANUAL

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