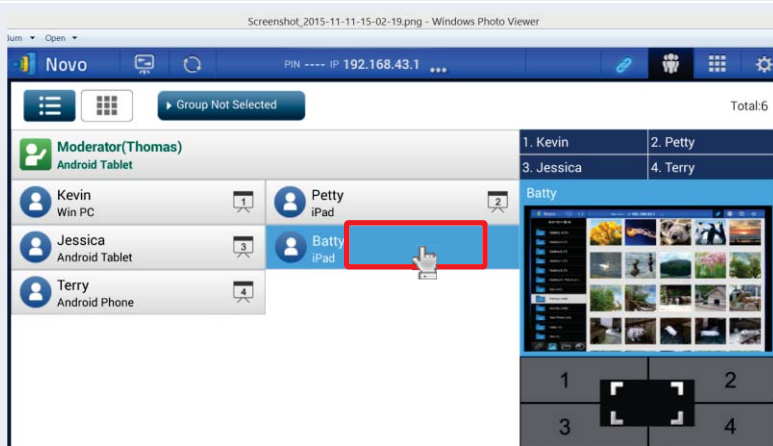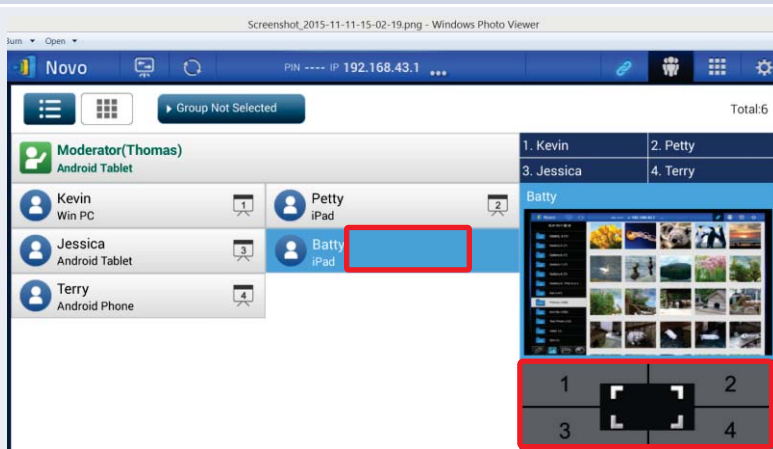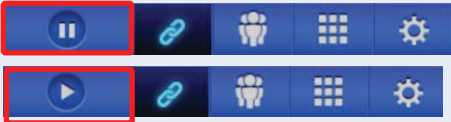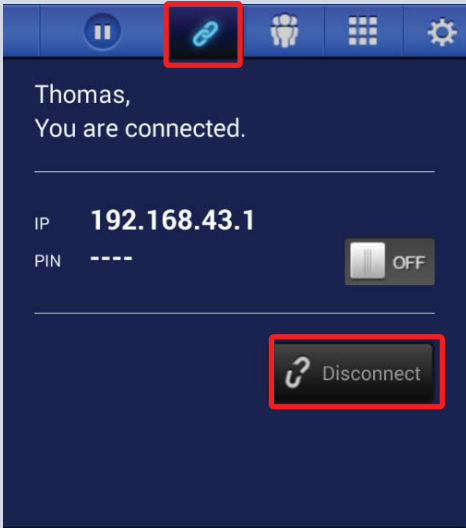|	
	To perform screen preview: (Education Edition only) Tap the tab to show the *participant* list. For *Education Edition*, all *participants* will automatically allow screen preview.
	To preview a *participant*'s screen, tap the middle part of an entry once Wait a few seconds for the screen to be sampled and displayed.In this example, Batty'siPad is selected to be previewed.
	To perform a four-way split screen presentation: Tap the tab to show the *participant* list. Select a *participant* to make a presentation.
	Four-way split screen presentation: Highlight *participant* Batty by tapping the middle part of the entry of Batty to bring up the split screen selection area . Then tap one of the four boxes (#1-4) in the split screen selection area to assign Batty to perform a presentation on one of the four boxes of the four-way split screen.

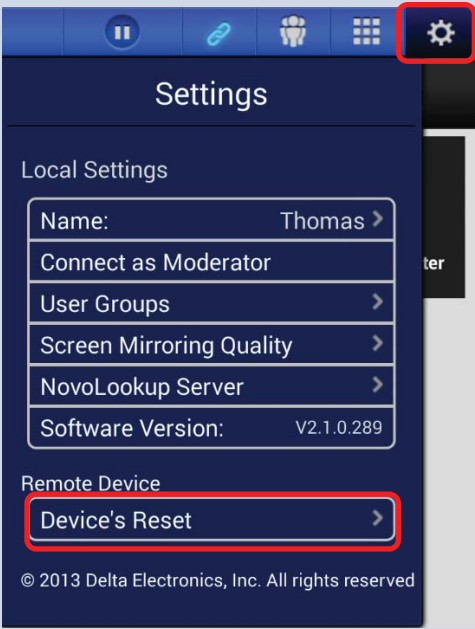|	Batty will receive a request to perform a presentation in one of the four boxes of the four-way split screen. After Batty accepts (within 20+ seconds) the request by tapping the **Yes** button, Batty's screen will appear on one of the four boxes of the four-way split screen.
Request Confirmation Would you like to the presenter? NO YES	

3.3.3.4Pause, resume, and disconnect

(*ForEducation Edition*all participants will automatically allow screen preview.)

Function	Description
Thomas, You are connected. IP **192.168.43.1** PIN **----** OFF Disconnect	**To Pause a presentation:** Tap the 🔗 tab to enter the presentation control page.
⏸ 🔗 👥 ▦ ⚙ ▶ 🔗 👥 ▦ ⚙	**Pausing and resuming a presentation:** While presenting, toggle between ⏸ and ▶ to pause and resume the presentation respectively.
Thomas, You are connected. IP **192.168.43.1** PIN **----** OFF Disconnect	**To Disconnect from a presentationgroup:** 1. Tap the 🔗 tab to enter the presentation control page. 2. Tap the Disconnect button to exit the presentation group. If the *moderator* exits the presentation session without handing over the *moderator* role, all *participants* will receive a message prompting them to take over the *moderator* role. The first to respond to the prompt will assume the role of the *host*.

3.3.3.5Reset and rename local device

Occasionally you may encounter problems with the network or the computer, causing the presentation group to malfunction on your NE3000. One way to resolve this problem is to reset the presentation group.

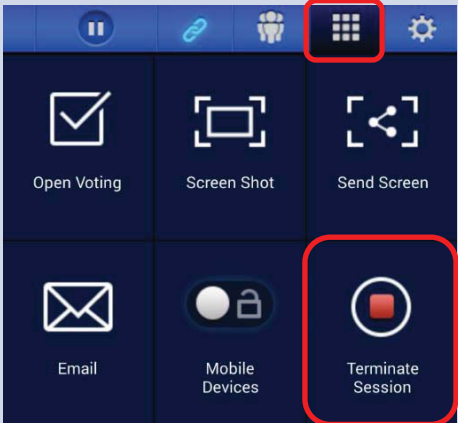| Function	Description
	To perform a Reset: First tap the ⚙ tab and tap the ▶ arrow of **Device's Reset**.
	Resetting: Tap **Quick Reset** to start a presentation group. Tap the **Full Reset** button to reset the NE3000 device. The NE3000 device will restart automatically. Conflicts may occur when multiple *participants* simultaneously attempt to reset the presentation group or the NE3000. The reset privilege priorities are as follows: 1. *Moderator*: The *moderator*has the sole privilege to quick-reset the presentation group or the NE3000 device when the *host* stays connected to the NE3000. 2. *Presenter*: If the *host* loses connection with the NE3000, the current *presenter* inherits the privilege to quick-reset the NE3000. 3. *Participant*: If the *host* and the *presenter*both lose connection with the NE3000, any *participant* can quick-reset the presentation group.

3.3.3.6 Lock/unlock students' tablets (*Education Edition* only)

This feature for PCs and tablets allows teachers to lock down student tablets. This feature is only available in the *Education Edition.*

Function	Description
	To lock/unlock students' tablets: Click the ▦ tab to bring up the toolbar page, then click **Student Tablets** to lock or unlock the students' tablets. 🔓 : Student tablets are unlocked. 🔒 : Student tablets are locked.
	Student tablets locked: A lock icon will pop up on the students' tablets to show that the screen has been locked.

3.3.3.7 Terminate session (*Education Edition* only)

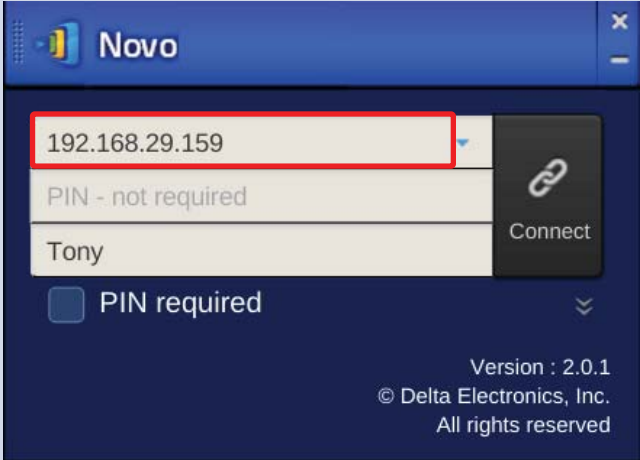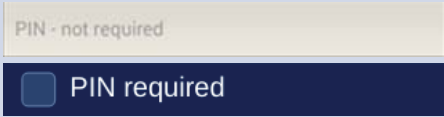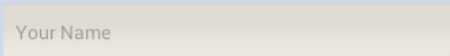Here you can disconnect all devices with the touch of one button.

| Function	Description
	To terminate the session: Tap the ▦ tab and tap **Terminate Session**.

3.4Presenting with Chromebook

The Chromebook version *NovoDesktop Streamer* appenables a Chromebook device to connect to a NE3000device and join a presentation session, participate in voting and share videos.

3.4.1Step1: Connect to your NE3000device

After launching the *Novo Desktop Streamer* app, please follow the steps below to connect to your NE3000 device.

| Function	Description
	IP address: Manually enter the IP address shown on your NE3000 home screen here, or select an entry from the drop-down menu that matches the IP address shown on your NE3000 home screen. Example: 192.168.29.159.
	PIN: If a PIN code is required to connect to the NE3000, check the **PIN Required** box and enter the PIN shown on the NE3000 home screen. If a PIN code is not required, uncheck the **PIN Required** check box.
	Your Name: (Optional) Manually enter a name for this tablet to be identified in the presentation group among other *participants*. Example: Tony. (Note: If a name is not entered in this field, the default name for your device will be used.)
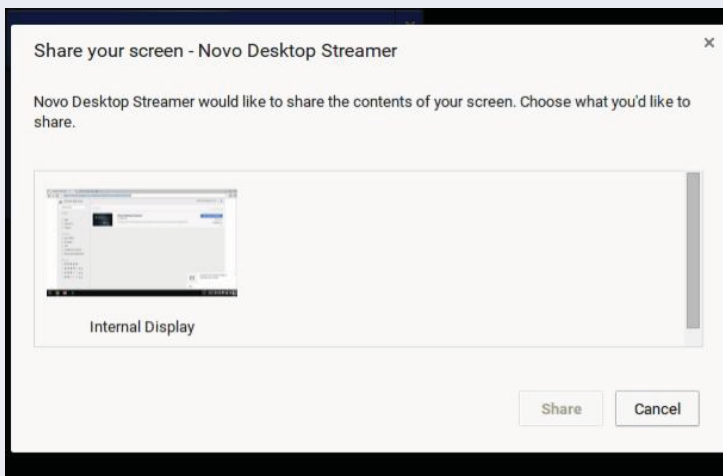
Make connection:
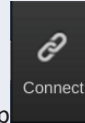
Tap [Connect] button to make a connection, and then you will be asked if you would like to share your screen contents. Click on the internal display icon and then click **Share**.

If you are the first *participant*, this will start a presentation group on your NE3000. If you are not the first *participant*, you will be joining a presentation group.
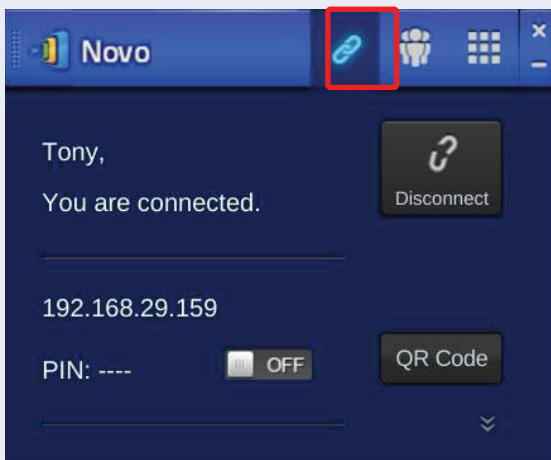
Confirm connection:

After your *Novo Desktop Streamer* app on your Chromebook is connected successfully to your NE3000, you will see the connection tab light up blue .

If you are the first *participant*, you will see that your Chromebook's on-screen display is wirelessly mirrored on your projector or TV. You can switch the PIN requirement switch to **OFF** or **ON** to disable or enable usage of a PIN code.

At the same time, you will get a pop up message from Chrome OS at low right corner to indicate that your screen is shared by *Novo Desktop Streamer* App.
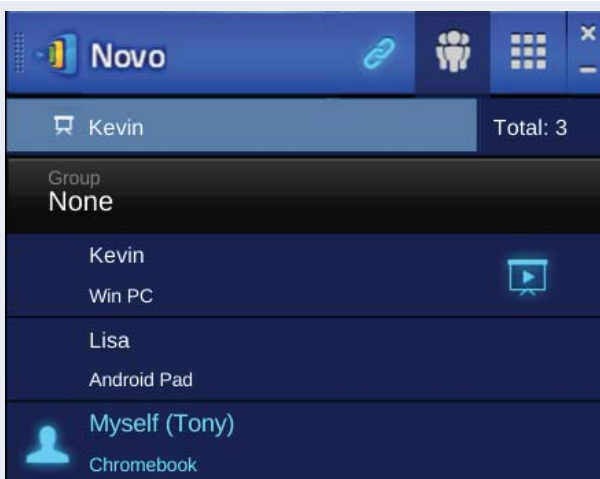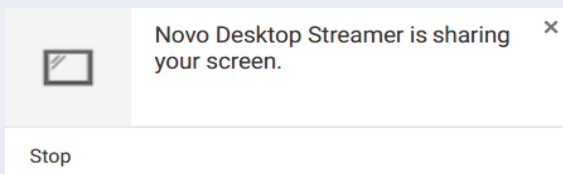
View participants list:

You can tap the [icon] tab to see the current *participant* list.

Example: There are three *participants* in the presentation group. Tony is *Moderator*, and Lisa and Kevin are *participants*. However, Tony is not making a presentation at the moment. He has assigned Kevin to be the *presenter*.

3.4.2 Step 2: Make a presentation

Novo Desktop Streamer enablesa Chromebook user to share his/her whole screen to a presentation group.So you can share whatever on your screen such as opening an online presentation file to all participants.

In addition, *Novo Desktop Streamer* allows a Chromebook user to stream videos to the NE3000 device, do online voting and share his/her file and screenshots to the group.

Please refer to the following sections for corresponding operation guideline:

- 3.7 Video file and YouTube streaming.
- 4.2 File sharing
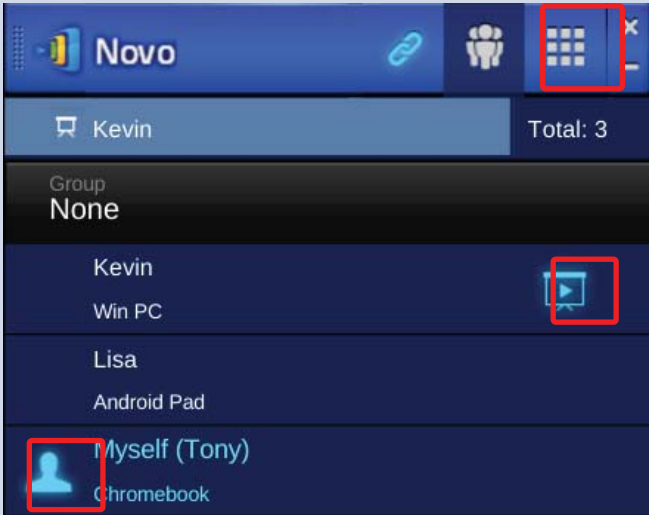- 4.4 Responding with Voting (iOS, Android, Chromebook)

3.4.3 Step 3: Presentation management

Once you have started/joined a presentation group, you are ready to make a presentation and collaborate with other *participants*.

3.4.3.1 Role assignment
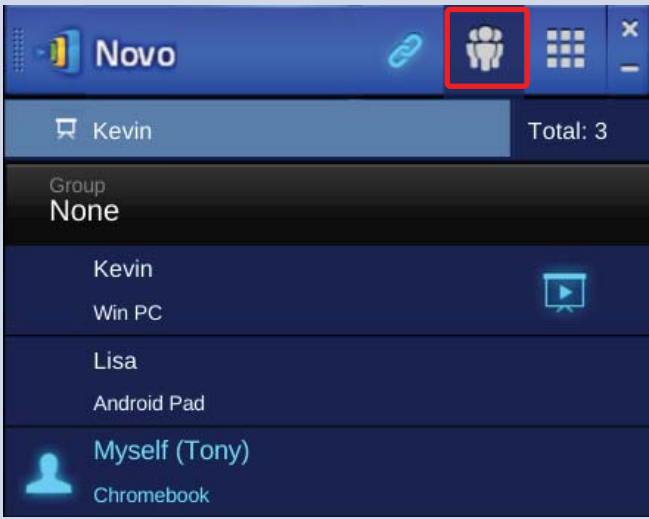
There are three roles in a presentation group: the *moderator*, the *presenter*, and the *participant*. The first person to start the presentation group with a NE3000device is assigned the *moderator* role. Subsequent joiners are assigned the *participant* role.The *moderator* is defaulted to assume the *presenter* role until he hands over the *presenter* role to another *participant*.

To view all current*participants* who have joined the presentation group, tap the tab.

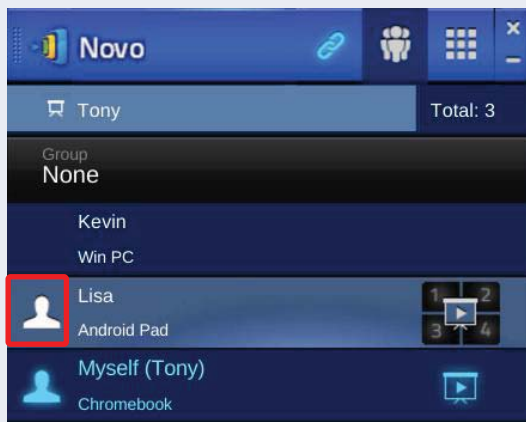| Function	Description
	Select the ![icon] tab to show *participant* list. ![icon] indicates the current *moderator*. ![icon] indicates the current *presenter*. ![icon] indicates the current *presenter* that is presenting in the indicated split-screen box number (#1-4). The example here shows a *presenter* that is presenting in Box #1. Example: There are three *participants* in the presentation group – one with Android tablet, one with Windows PC, and one with Chromebook. Tony is the *moderator* who has automatically denied screen preview. Kevin and Lisa are *presenters*. *ForEducation Edition* all participants will automatically allow screen preview.

3.4.3.2Role change, screen preview, and four-way split screen

(*ForEducation Edition* all participants will automatically allow screen preview.)

Function	Description
	Role change: change a participant to a moderator 1. Select the ![icon] tab to show the *participant* list.

2. Move your mouse cursor toone *participant* Lisa.

3. TapLisa's icon to hand over *moderator* role to her.
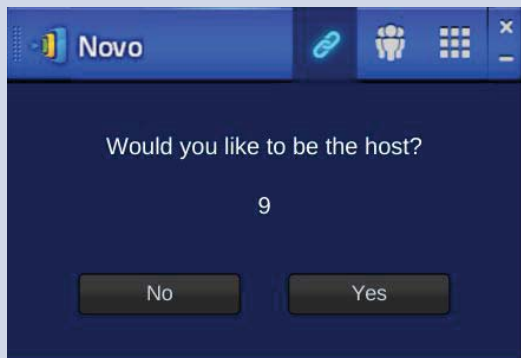
When a *participant* is asked to be a *moderator*, a dialog box will appear on the *participant*'s screen to request confirmation.

The *participant* has 20+ seconds to tap the **Yes** button to accept the new role or tap the **No** button to reject.

At the same time, a dialog box will appear on the *moderator*'s screen to request confirmation.

The *moderator* has 20+ seconds to tap the **Yes** button to accept the new role or tap the **No** button to reject.

Role change: change to be a presenter

1. Select the tab to show the *participant* list.
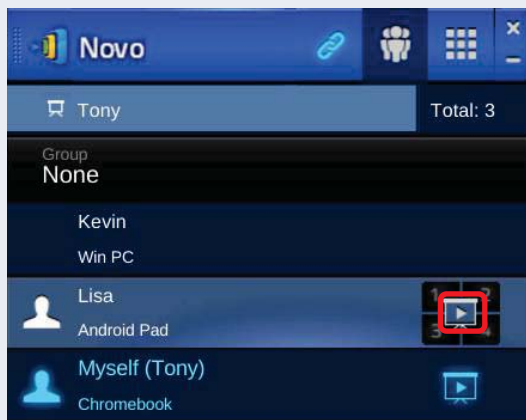
2. Move your mouse cursor to one *participant* Lisa.
3. Tap [▶] icon to transfer*presenter* role to her.
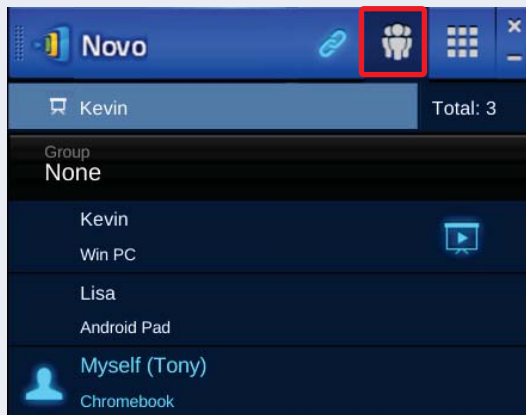
To perform screen preview: (Education Edition only)

Tap the [👥] tab to show the *participant* list.

For *Education Edition*, all *participants* will automatically allow screen preview.
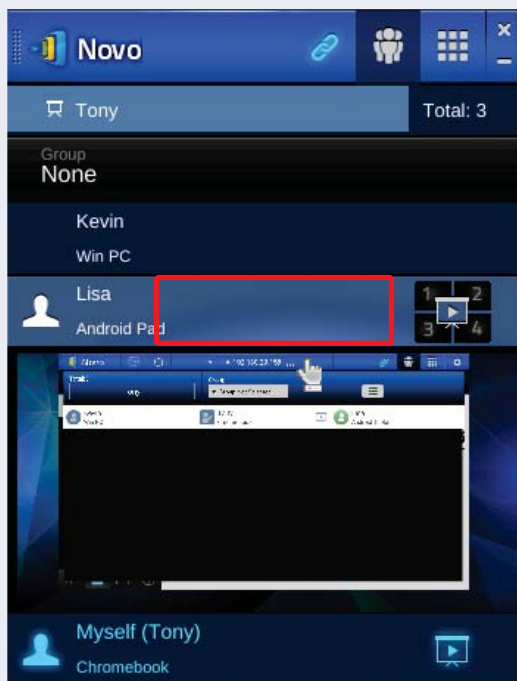
To preview a *participant*'s screen, tap the middle part of an entry once.
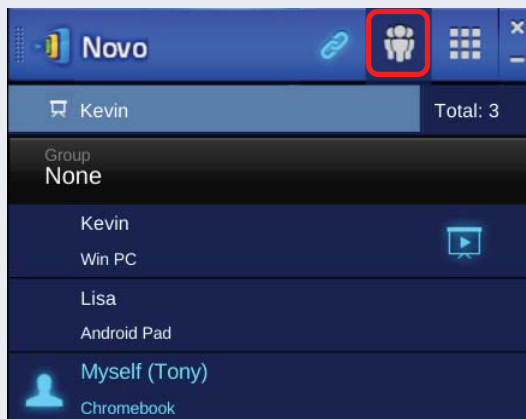
Wait a few seconds for the screen to be sampled and displayed.In this example, Lisa's Android tablet is selected to be previewed.

After you preview Lisa's screen, if you decide to share her screen, you can click the middle of [▶] icon to present Lisa's content to the screen.

You can tap the middle part of an entry to close screenpreview.
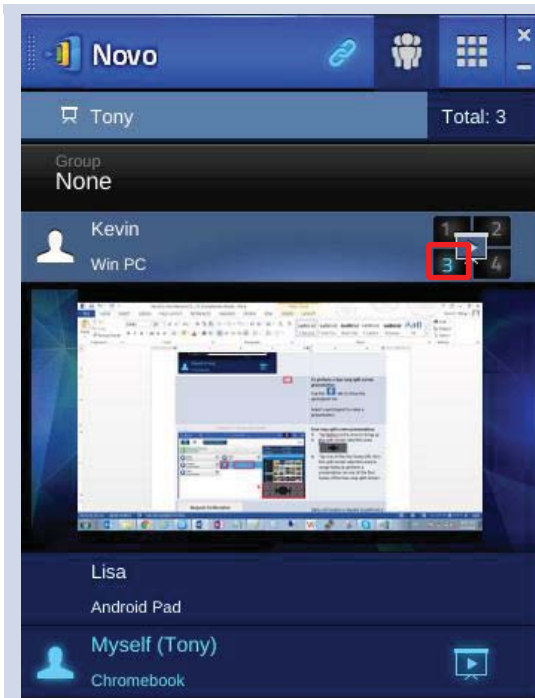
To perform a four-way split screen presentation:
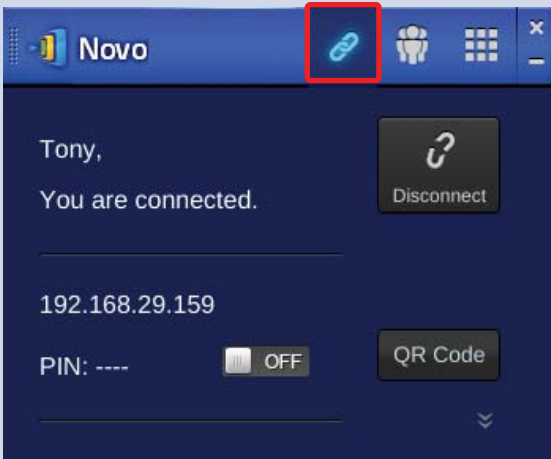
You can repeat the above screen preview process, and then move your mouse to one of 4 split screen numbers, which you want to cast its screen to. At this moment, you can see its screen number turns to blue.

Tap one of the four boxes (#1-4) in the split screen selection area to assign Kevin to perform a presentation on one of the four boxes of the four-way split screen.
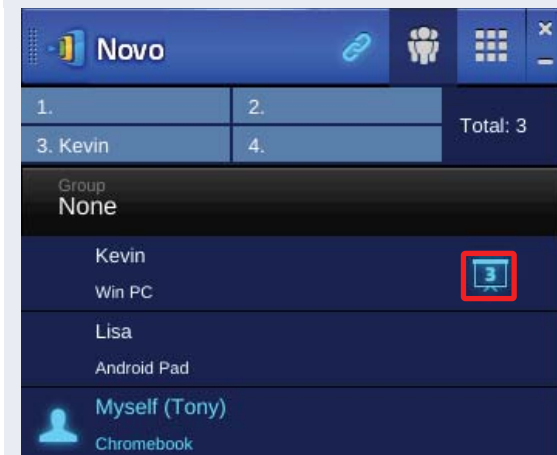
After the above action, you can see icon, which indicates that it has been presented on #3 of the split-screen.

3.4.3.3 Pause, resume, and disconnect

Function	Description
	To Pause a presentation: Tap the tab to enter the presentation control page.

Pausing and resuming a presentation:

While presenting, toggle between ▐▐ and ▶ to pause and resume the presentation respectively.

To Disconnect from a presentationgroup:

4. Tap the 🔗 tab to enter the presentation control page.

5. Tap Disconnect button to exit the presentation group.

If the *moderator* exits the presentation session without handing over the *moderator* role, all *participants* will receive a message prompting them to take over the *moderator* role. The first to respond to the prompt will assume the role of the *host*.

3.5 Presenting with the NE3000 Device

Your NE3000 device allows you to make presentations with the computing power of the device itself without the assistance ofa computer. Your presentation files may reside in a microSD card, USB memory drive, the internal storage of your NE3000 device, or in your Dropbox online storage account (Internet connection required for Dropbox access).

The steps for making a presentation with only your NE3000 are as follows:

USB port (Mouse or memory drive)　　　　　　　　microSD slot
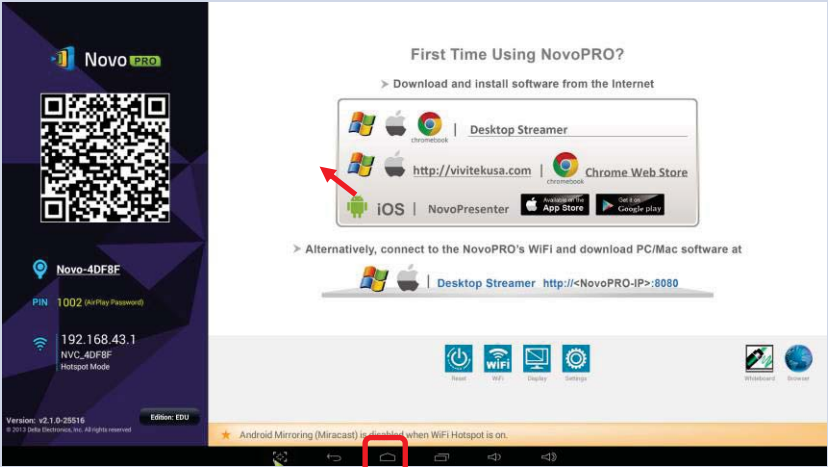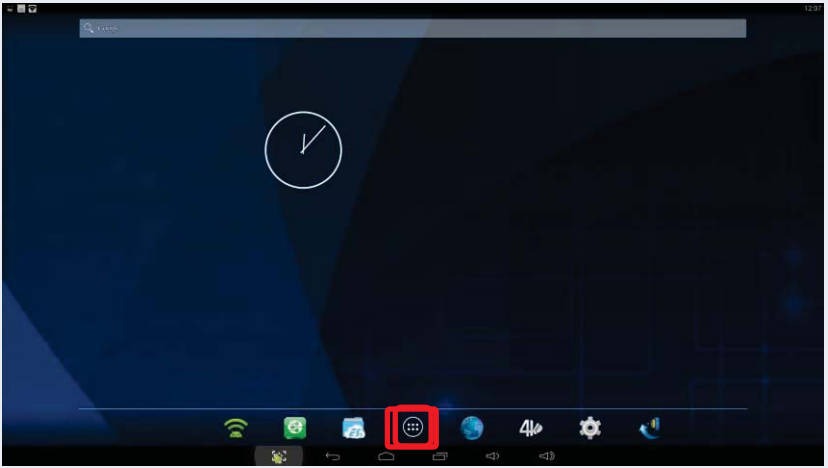
1) If your presentations are stored on a microSD card, please insert the microSD card into the microSDcard slot.

2) If your presentations are stored on a USB memory drive, please first connect a USB hub to your NE3000 device, then connect a mouse and a USB memory drive to the USB hub.

3) You can also save your presentation files in the local storage of your NE3000 or in your Dropbox online.

Note: You need a USB mouse to operate the following steps.

You are now ready to make a direct presentation with your NE3000.

The following table shows detailed steps on how to make a direct presentation:

Function	Description
	To present directly with your NE3000: Click an empty space of the NE3000 home screen. Then click the home button ⌂.
	To present directly with your NE3000: Click the apps button ⊞.
	To present directly with your NE3000: Click *NovoPresenter* 🔲.
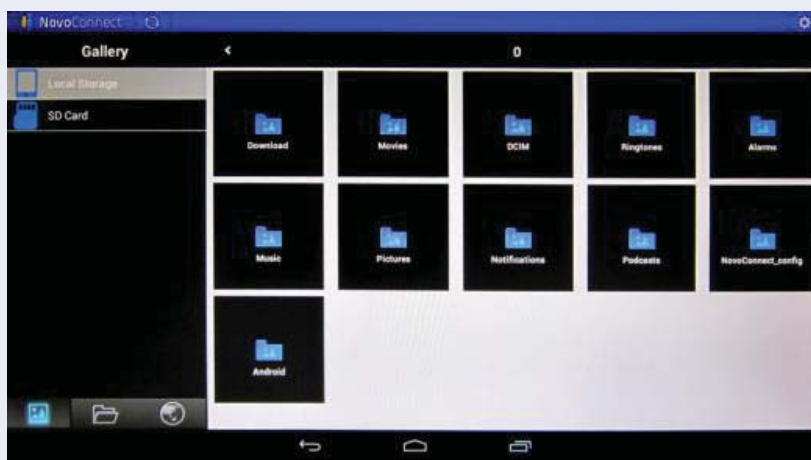
To present directly with your NE3000:
Please go to the section 3.3.2 Step 2: Make a Presentation for more details on making a presentation with *NovoPresenter*. Ignore instructions for **Snap a QR Code**.
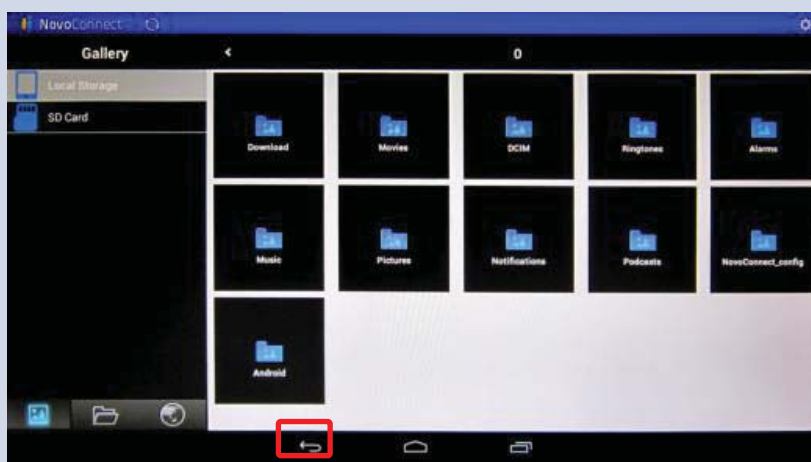
To return to *Remote Viewer*:
Click the back key one or more times until *NovoPresenter* disappears.

To return to *Remote Viewer*:
Click *Remote Viewer* .
(Note: If you do not see the app list as shown on the left, click the home button , next click the apps button , and then click *Remote Viewer*).

To return to *Remove Viewer*:
Click the back key one or more times until the system bar disappears.

3.6 User Groups

This feature allows moderator to organize and monitor participants (members)

3.6.1 Two Ways to organize a Group

A Group consists of a group name, a moderator, and some members.

- Group name and moderator are self-explanatory.
- A member's entry has two fields, Name and Device
  - o Field "Name": member's name
  - o Field "Device": device's name or some sort of number (like student ID)

There are two ways to organize a group.

1. **Use Member Name**

   In the following figure, member's "Device" fields are left empty. For a classroom teacher, she/he will ask students to use their name to connect to a NE3000 session.

   In this case, only the students (Member name) in this group can connect to this NE3000 session.

2. **Use Device name**

    In the following figure, member's "Device" field is filled. For a classroom teacher, the "Device" field could be student ID or a series of numbers, such as Tablet-01, Tablet-02, etc.

    With this Group feature, the teacher will see "human-readable" names (Emily & Jerry) instead of Tablet-01 & Tablet-02 in the user list during a NE3000 session.

    In this case, only the devices (Device name) in this group can connect to thisNE3000 session.

3.6.2 Create a User Group file

Notes: This feature is available to NE3000 PC/Mac software but not Chromebook/tablet/phone Apps.

1. Open the *NE3000Deskstop Streamer*application and expand "Settings" tab.Click on button "Edit" to add, change, and delete user groups.
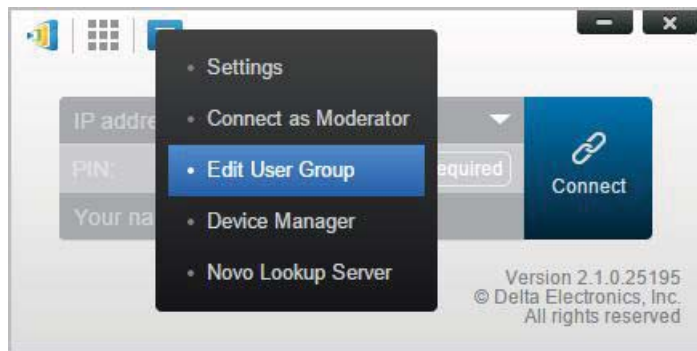
2. Click on button "Create" to add a new user group.
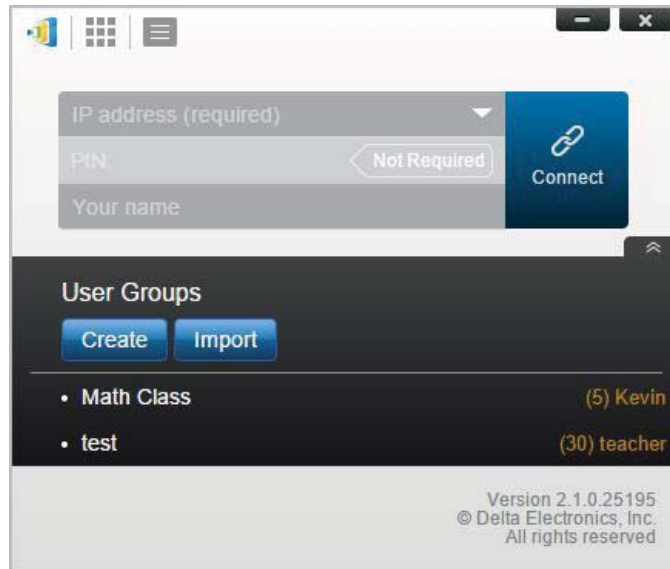
3. A new window, "Edit User Group", will pop up. In this window, you will be able to edit group name, moderator (teacher) information, and members (students) information.

4. Once you have finished adding members to a group, click "Save" and "Done" to return to the "User Groups" list. This new group should appear on the list of user groups.

3.6.3 Manage an existing User Group file

Click on one of the user groups and three action buttons will become visible on the right.

(Edit)	Open "Edit User Group" window, allowing users to make changes.
(Export)	Exporta User Group as an XML file, which can be loaded to any mobile devices and other PC/Mac.
(Delete)	Delete a User Group

3.6.4 Installing and operating the User Group file

(1) For PC/Mac

1. When you connect to a NE3000 device, the Group will be displayed as "Not Selected".
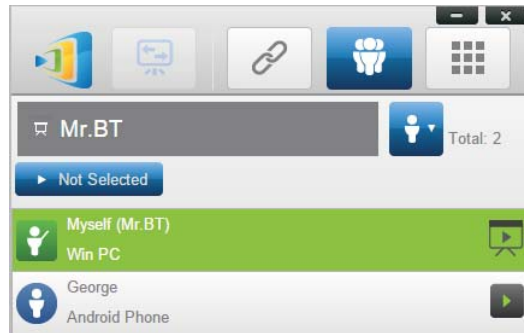
2. Click on "Not Selected" to display list of available groups, and then select the desired group and press button "OK".
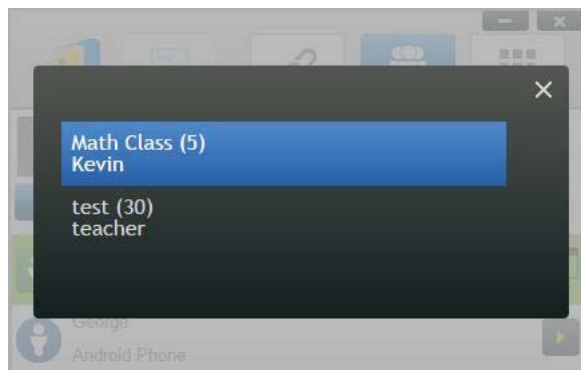
3. A user list will be displayed for the group you selected. Using tabs "All", "Online", and "Offline" are a quick way to sort users based on their status.
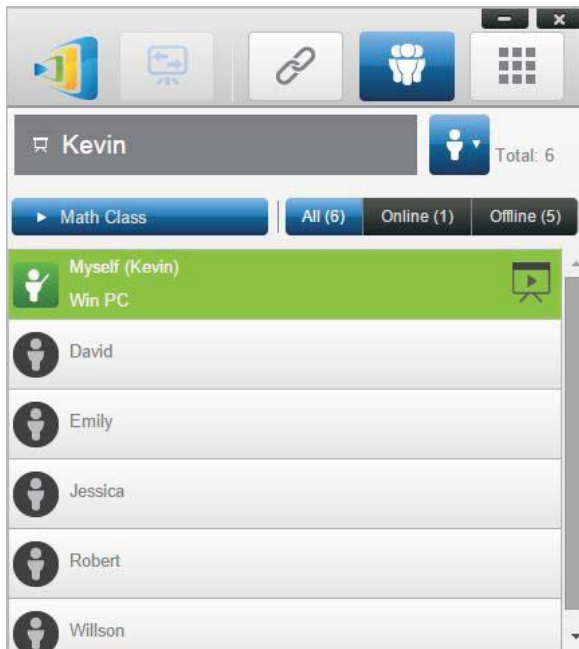
4. To de-select this group, click on icon 🗑.

(2) For iPad

iPad installation

Launch iTunes application to copy the user group file (*.xml) to NovoPresenter App. (This User Group file is generated by using the Export function on the PC/Mac software.)

The following figure outlines the necessary steps to do so.
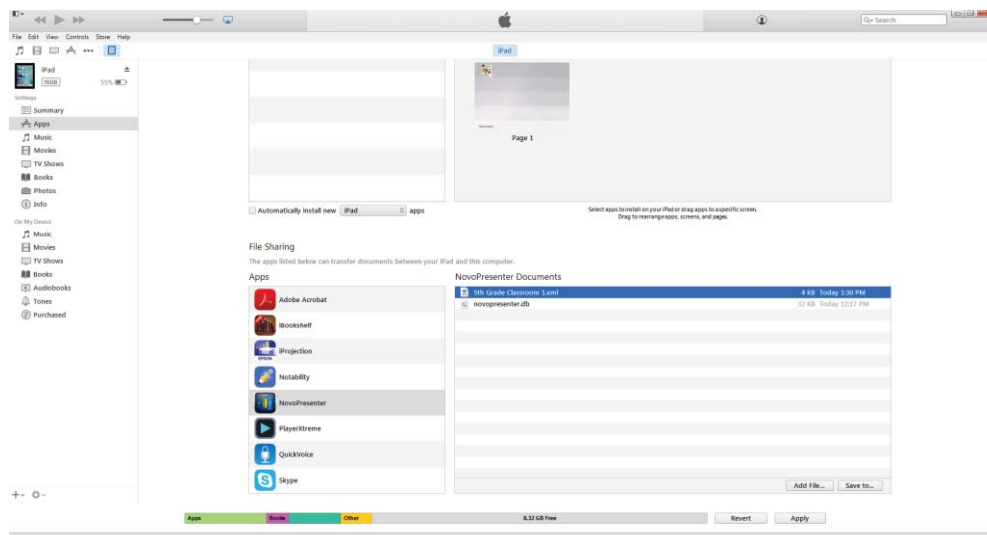
iPad Operation

1. Launch *NovoPresenter*. Go to "Settings" to Edit "User Groups".
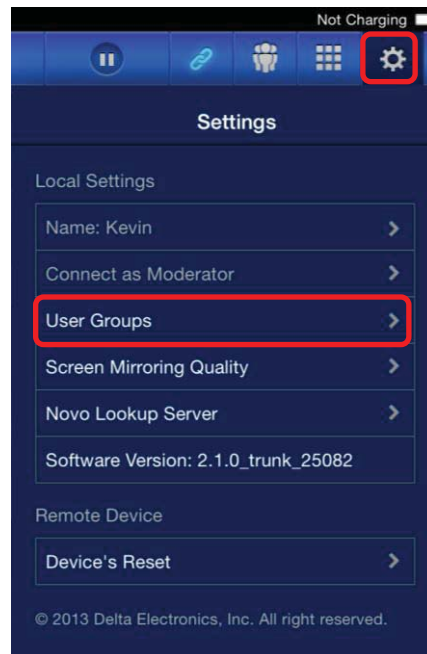
2. Click on button "Refresh" to import the User Group file you just copied to iPad.
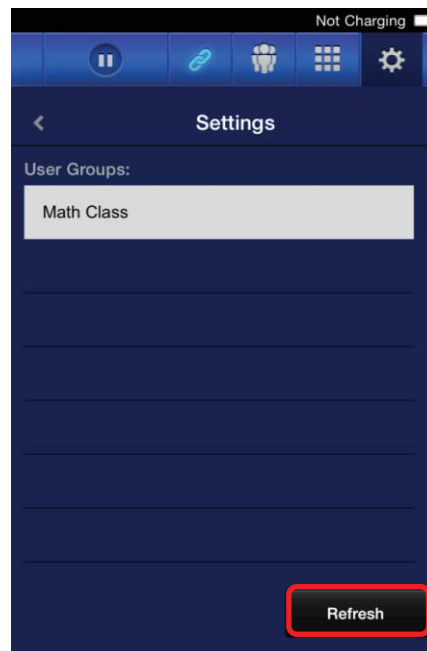
3. After connecting to the NE3000 device, the Group will be displayed as "Not Selected".
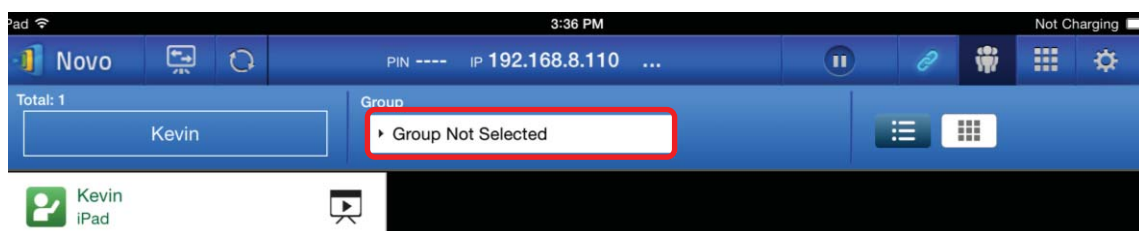
4. Click on "Not Selected" to display list of available groups, and then select the desired group and press button "OK".
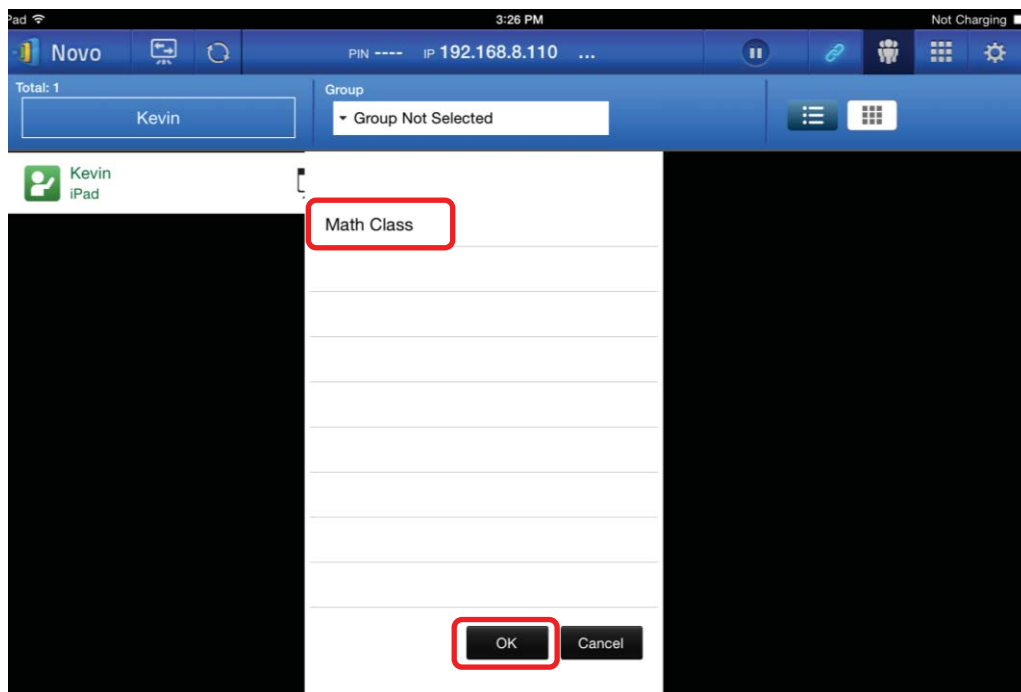
5. A user list will be displayed for the group you selected. Using tabs "All", "Online", and "Offline" are a quick way to sort users based on their status.
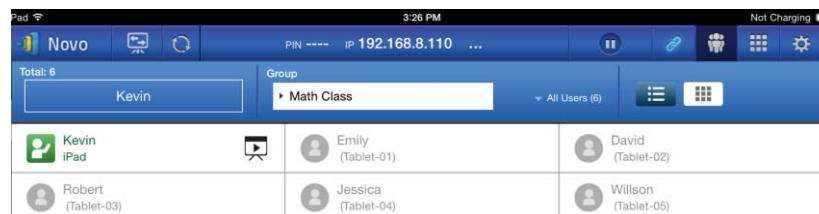
6. To de-select this group, click on icon 🗑.

(3) For Android Device

Android installation

1. Connect your Android tablet to your PC.

2. Open your file manager and go to the NovoPresenter folder on your Android tablet. You will see a folder named "UserGroups". Copy your XML file into this folder.

The rest of the operation is the same as it is for the iPad.

3.7 Video file and YouTube streaming

This feature allowsyou to smoothly stream videos from a variety of formats.

3.7.1 Application features

- The teacher or members of the class (if given permission by the moderator/teacher) can stream videos smoothly that are stored on local media such as computer hard drives and flash memory sticks (thumb drives).
- The teacher or members of the class (with moderator permission) can stream videos from YouTube video website. This function will only work if the NE3000 unit is set to Wi-Fi mode and will not work in hotspot mode.

3.7.2 Streaming local video files

1. From the "Tools" menu, click on and launch the "Video & YouTube" tool.
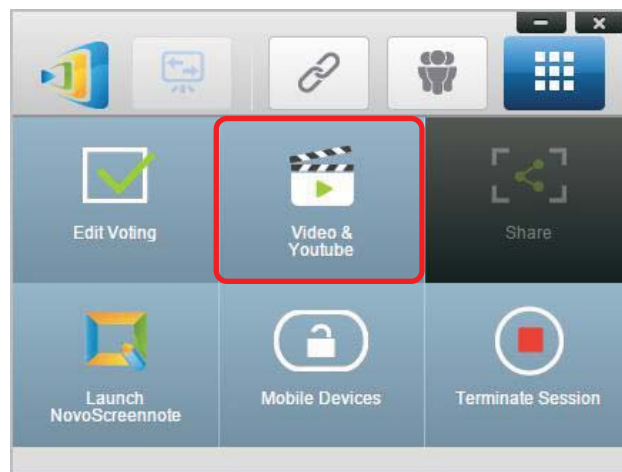
2. When the video player bar opens, click the browse button to locate the video file on your computer.
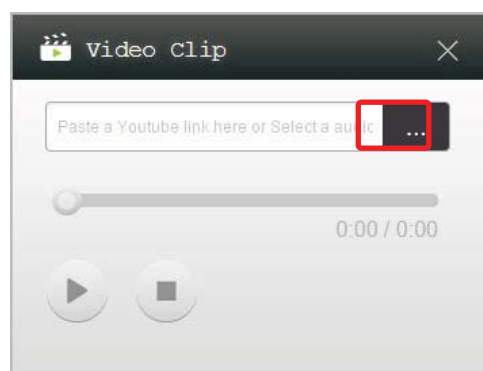
3. Select the video file and click "open." The file should begin to play.
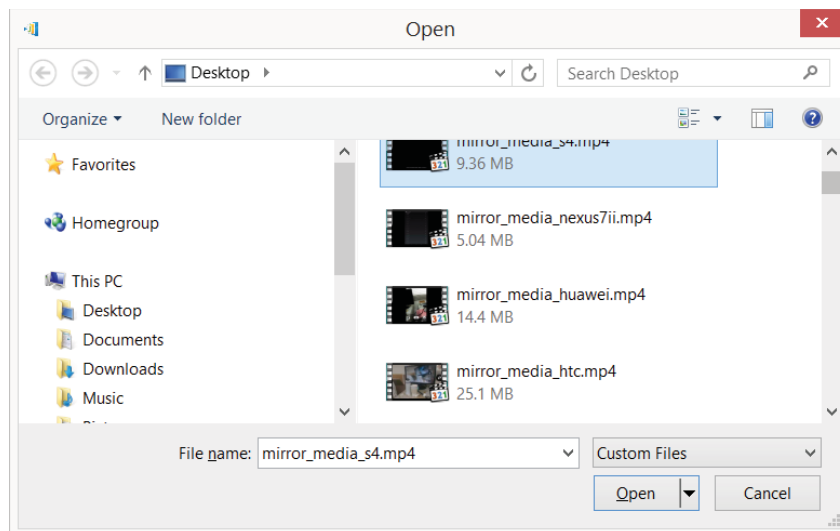
3.7.3 Streaming YouTube Video

1. From the "Tools" menu, click on and launch the "Video & YouTube" tool.
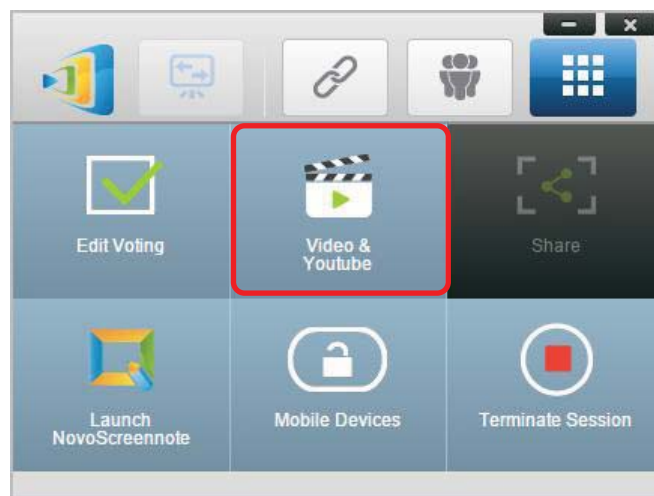
2. When the video player bar open, paste or type the URL for the YouTube video you wish to play in the window.
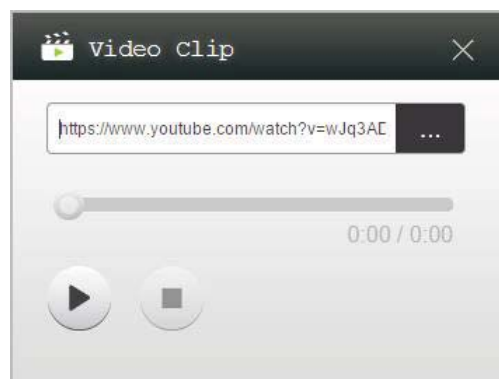
3. Press play arrow ▶ and YouTube video should begin to play.

3.7.4 Video controls

1. You can play the video by clicking the play arrow ▶.

2. You can stop the video by clicking the stop square ■.

3. You can skip forward or backward by moving ○━━━━━━━━━━━━ 0:03 / 13:08
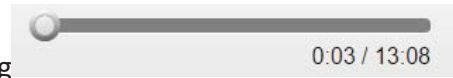
4. New Features

4.1 Moderator credentials

The latest version of NE3000 software (V1.6 and above) allows you to preset your moderator status while offline, so that you will always connect to a session as the moderator, even if you are not the first user to connect.

Overview

When using NE3000, the first connected user is assigned as the meeting moderator by default. However, this may not be the intended result in real world as the "real" moderator may not be the first user to join the session. New feature, "Moderator Credentials", is designed to address this issue.

Here is how it works.

1. Moderator Credentials, consisting of a list of moderators and the corresponding passwords, are stored on NE3000 units. (Moderator Credentials are managed via software Remote Manager.)

2. When a user device connects to a NE3000 unit, the user device send its moderator password (if any) to the NovoConenct unit. If the password matches the one stored on the NE3000 unit, the user device will be assigned as the moderator, regardless it is the first device to connect or not.

The picture below illustrates the process. The remaining sections describe how to configure and use this feature

Setting up Moderator Credentials in Remote Manager

1. Connect to your NE3000 device via Remote Manager

Manage "Moderator Credentials"

RemoteManager

Moderator Credentials
```
Moderator David, Password AAA
Moderator John,  Password BBB
Moderator Kate,  Password CCC
......
```

Submit "Password" for authentication

If matched, the user device is assigned as the moderator automatically.

User Devices
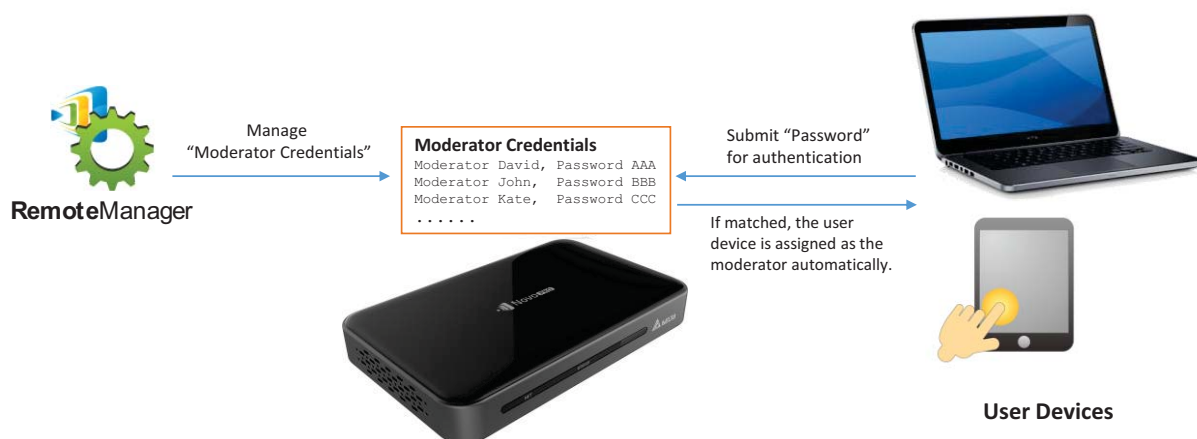
2. Make sure your NE3000 device is online (the connection indicator is green).
3. Click the "Set Moderator" tab.

4. There are three ways to add data when setting up the moderator credentials:
   A. Click the "Load" tab to import data from an existing file.
   B. Click "Load from Device" to import from another device.
   C. Input data manually by entering the moderator name and password in the "Content" windows.

5. **To import from a file:** Click "Load" to locate file. This will open a file manager window. Select a file with the ".ncmc" file extension and click "OK".
6. **To load from a device:** Click the "Load from Device" tab. The warning "Do you want to save changes?" will pop up. Click "OK" to begin the file download.
7. **To input new data manually:** Type a new moderator name and password in the designated windows. Click the ⊕⊖ buttons to add or remove moderator windows.
8. Once you have input the moderator data, upload the moderator file by clicking "upload". Once the file has uploaded, click the "Go Back" button.

Setting up Moderator Credential status in NovoPresenter

1. To enable Moderator Credentials while offline, select the "Settings" tab in the upper right of the screen. Tap "Connect as Moderator" to open the setup tab.   The default setting is disabled.
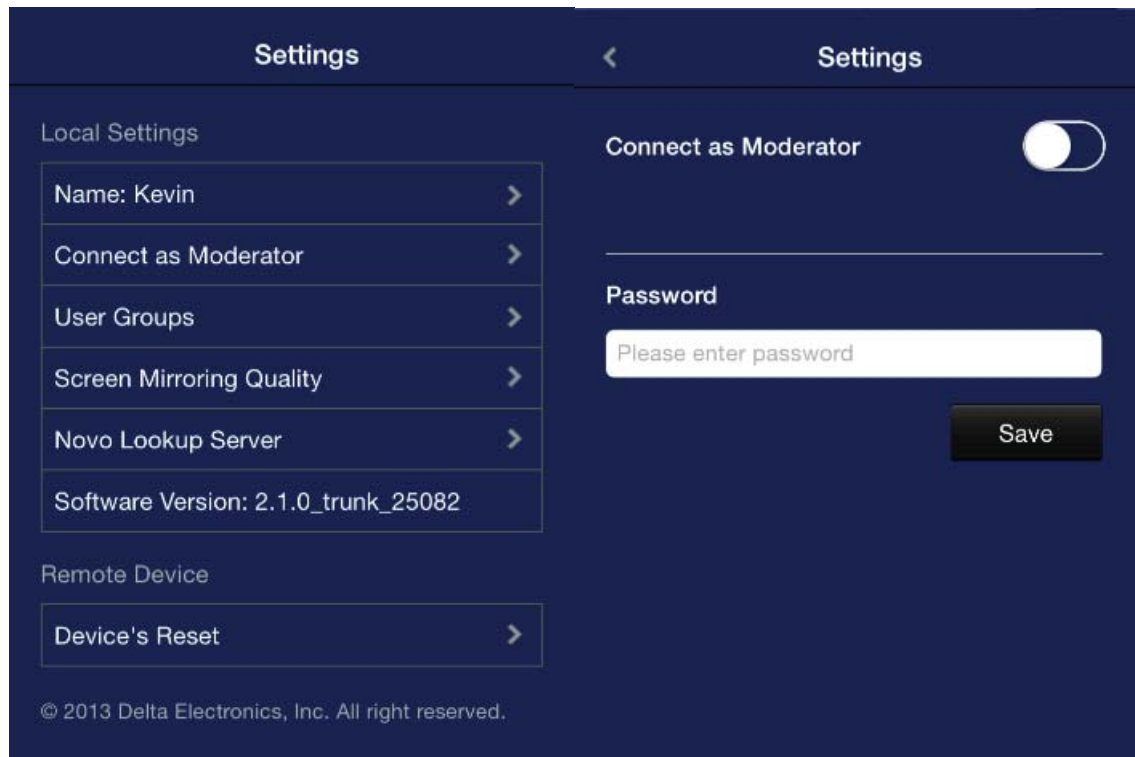
2. To enable Moderator Credentials, click the check box next to "Connect as Moderator" and enter a password into the "Change password' box.

3. Note, if you check the "Connect as Moderator box without entering a password, a ⚠ will appear next "Connect as Moderator" tab showing that the feature is enabled, but you have not entered a password.
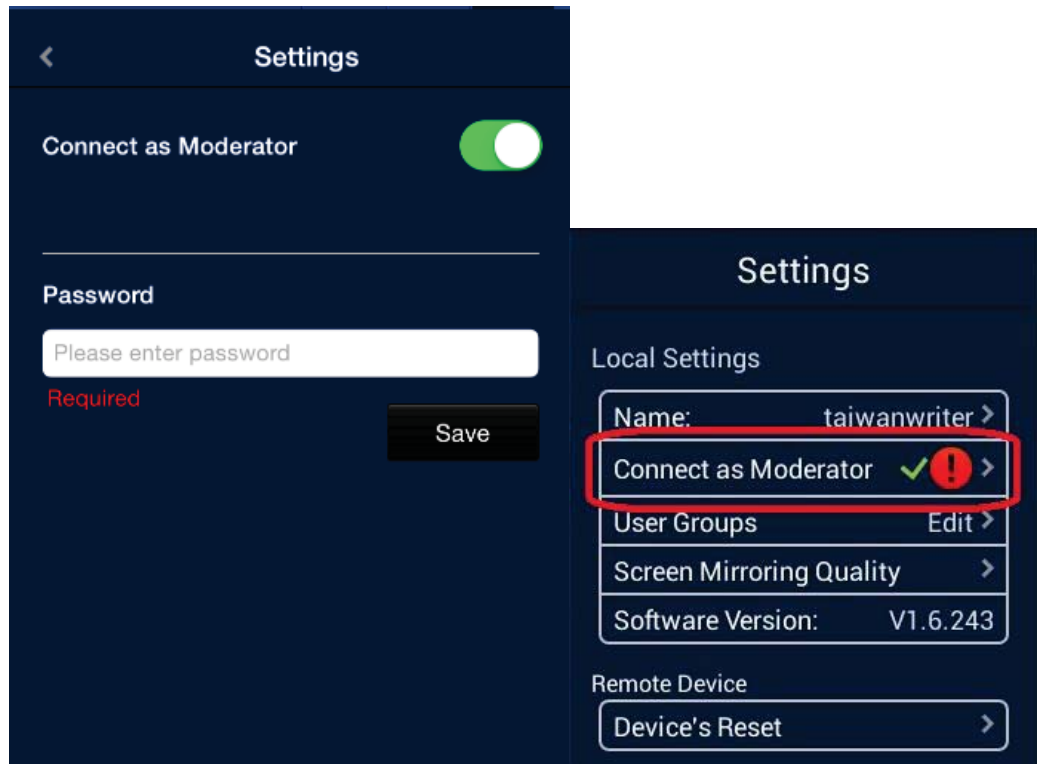
4. When Moderator Credentials have been enabled correctly, a single check will appear next to "Connect as Moderator."

4.2 File sharing

Moderator can share files with all participants and participant can share with moderator.

This NE3000DesktopStreamer and NovoPresenter feature is available in version 1.6 and above for both the Corporate and Education editions. It allows session hosts (moderators) and participants to share files and screenshots between their devices.

4.2.1 Opening File Sharing in NE3000DesktopStreamer Windows/Mac PC

1. To open the File Sharing feature, click the tools tab. If you have recently upgraded from an older version of your software, you will notice that some new features have been added to your tool tab. The File Sharing tool is labeled "Share".

   Note: The file sharing button will only be illuminated when there is at least one other participant connected to the session besides the host (moderator).

2. Clicking on this button will bring up three options

   a. Open "GroupShare" Folder: This is the default folder at ":\Users\<user name>\GroupShare"

   b. Share File: This will bring up a file browser for users to select the file for sharing.

   c. Send Desktop Screen: This will send the current deskstop screenshot for sharing.
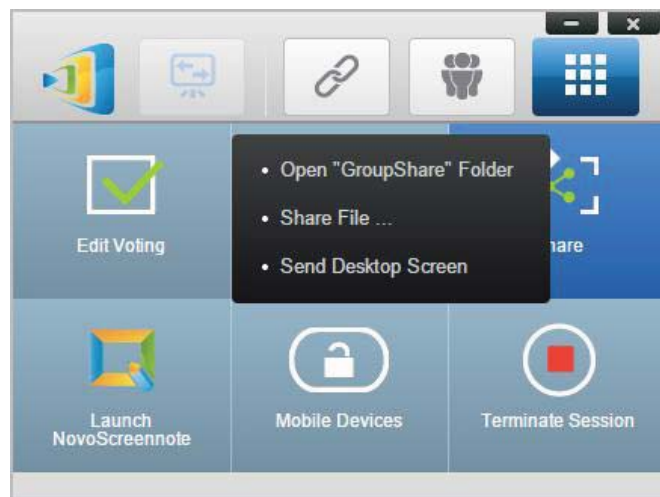
4.2.2 Using File Sharing to share a file with participants

1. To share a file in the GroupShare folder, select the "Share" function from the tools tab.

2. When the pop-up menu appears, select "Share File." This opens the file manager window. Go to the "GroupShare" folder and select a file to share. A box will pop up to ask if you are sure you want to send the file. Select "Yes" to begin sending or "No" to cancel.

3. If you are sending more than one file at a time, a box will pop up warning "Current Transfer Is Still On-Going." You will be asked if you want to abort the current transfer and send the new file instead.
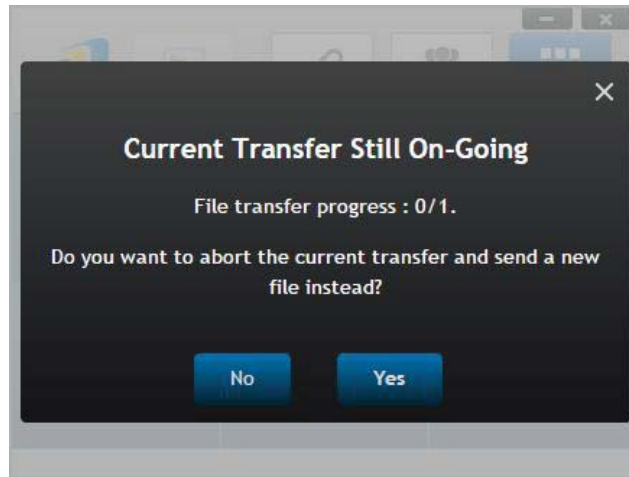
4. Selecting "No" will take you back to the previous step. Selecting "Yes" will cancel the current transfer and open the GroupShare folder, allowing you to select a new file. As before, a box will pop up to ask you are sure you want to send the file. Select "Yes" to begin sending or "No" to cancel.
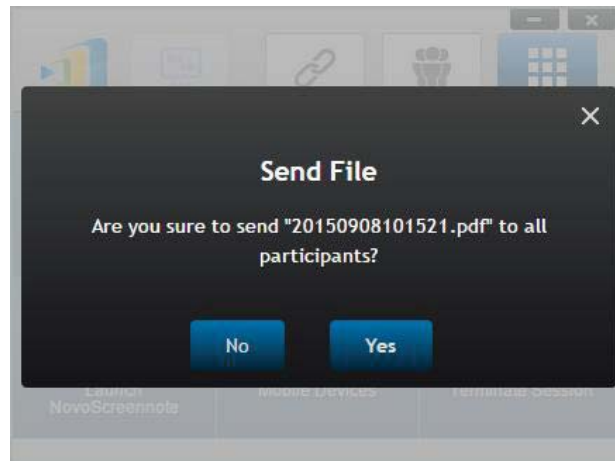
5. If you select "No" or 5 seconds pass without any response, a message will pop up and show system is busy and you will return to the DesktopStreamer tool window.

6. When a transfer is active, the will appear next to the "Share" tool button, showing the transfer is in progress. A progress window will also appear showing the progress of the files being shared to the participant's device. The progress window displays the percentage of the file that has

been transferred as well as the number of other recipients that have received files (in this example 0 of 30 participants).
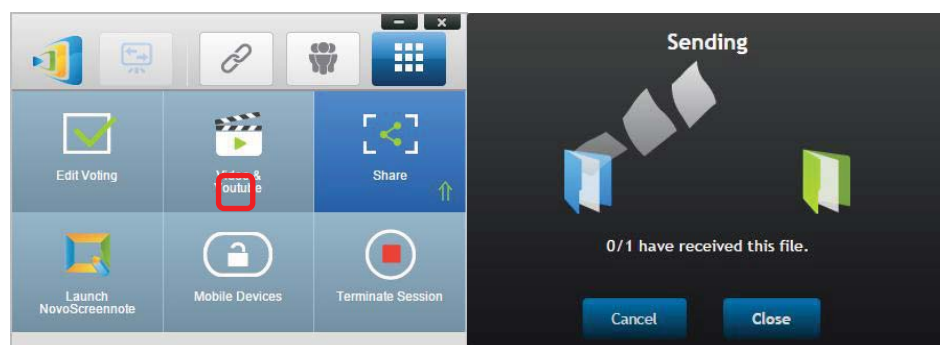
7. During the transfer, a "Cancel" and "Close" button will be displayed at the bottom of the status window. Clicking "Close" will continue the transfer in the background. "Cancel" will end the transfer and you will return to the DesktopStreamer tool window.   When the file transfer is complete, you will return to the DesktopStreamer tool window.

4.2.3 Using File Sharing to share a desktop screenshotPC

1. Sharing a desktop screenshot is similar to sharing a file, but you do not need to select a file. Click the "Share" tool and select "Send Desktop Screen" from the pop-up menu. A dialog box will open displaying the screenshot and asking you to confirm "Are you sure you want to send this screen shot to all participants?"

2. If you select "Yes," the screen shot will be sent to the participants and a copy will be saved to your GroupShare folder.

4.2.4 Receiving a file to your PC withNE3000DesktopStreamer

1. When you are sent a file from a session participant you will receive a pop-up notice. Click either "OK" to close the message or "Open Folder" to go to the GroupShare folder to view the file.

2. Note: The file will be given a file name format will be "sender-name_original-filename".
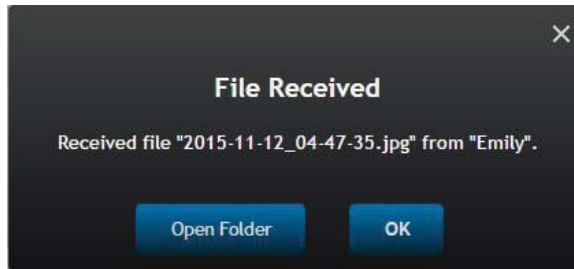
4.2.5 Troubleshooting and rules to remember with DesktopStreamer PC

1. If a file transfer is in progress when you are attempting to send a new file you will receive the message: "System is busy. Please try again later."

2. If you attempt to share a file and no other users are logged into the session, the "Share" tool button will not be illuminated and you will receive the message: "No recipient; Nobody else is online."(can't touch the "share" button.)
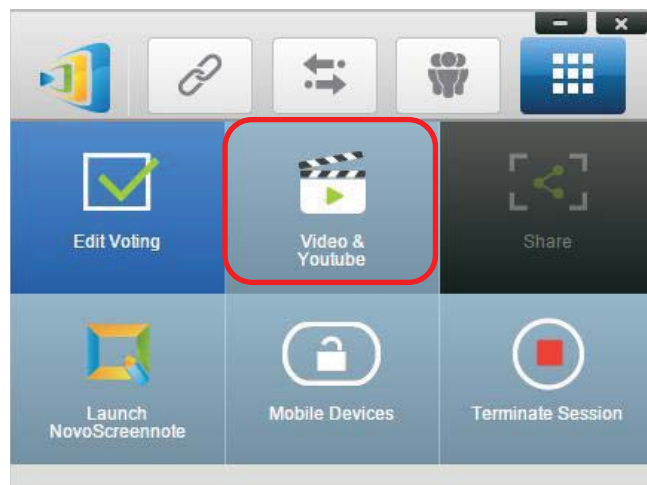
3. If you attempted share a file that is larger than 3 MB, you will received the message: "Failed to send; The file exceeds the size lime (3 MB)." File sharing cannot handle files larger than 3 MB.

4.2.6 How to send and receive files using NovoPresenter

Note: Make sure you have installed the latest version of NovoPresenter on your Android or iOS device (version 1.6 or later).

1. After updating, NovoPresenter will create a new folder on your device called "GroupShare". This fold can be located by tapping the file folder tab in the lower left corner of the home screen. This folder is for receiving shared files.
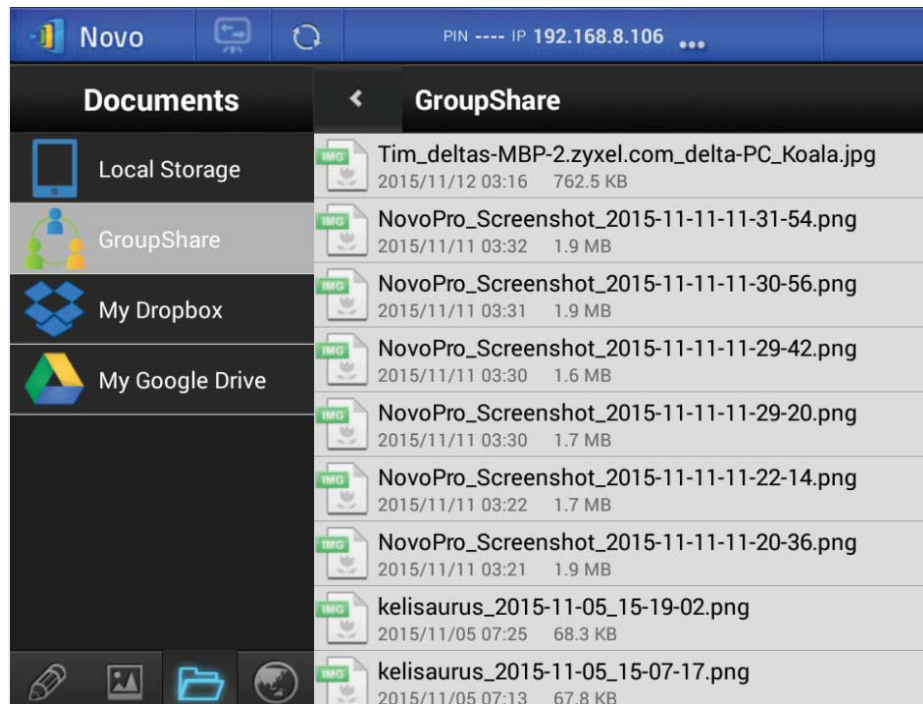
2. To share a file, first navigate to the folder where the file is stored. Tap the GroupShare tab from the Documents screen to access files in the group share folder. Tap Local Storage for files stored elsewhere on your device. For video and images in your Gallery, tap the Gallery button ![Gallery icon] at the bottom of the page.

3. If you are the moderator/teacher of the session, you may send a file to all participants. Locate the files and press and hold the screen over the file until the "Send to All" button pops up. Tap the button to begin sending the file.
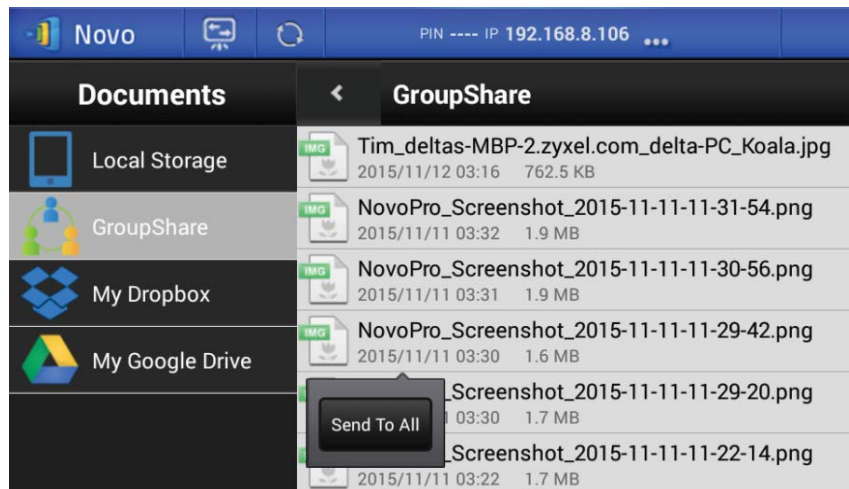
4. If you are a participant in the session, you may send a file to the moderator. Locate the files and press and hold the screen over the file until the "Send to Moderator" button pops up. Tap the button to begin sending the file.
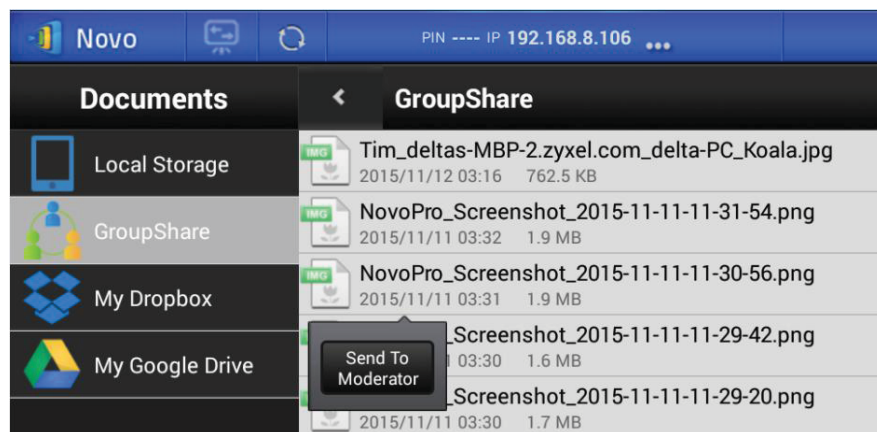
5. A confirmation box will open asking you to confirm the transfer. Tap "Yes" to continue or "No" to cancel.

6. When sending a file the system will check to make sure that a file is not already in the process of being sent. If a file is already being transferred, an error message will pop up saying "The System is Busy." You will have to resend the file when the prior transfer is complete.

7. If no other files are currently being transferred, a progress box will pop up to showing that the transfer is proceeding. You can cancel the transfer by tapping "Cancel" or tap "Close" to close progress window and continue transferring in the background.

4.2.7 Send a screenshot with Send Screen in NovoPresenterPC

1. To send a screenshot in NovoPresenter, open the tool bar and select the "Send Screen" tool.
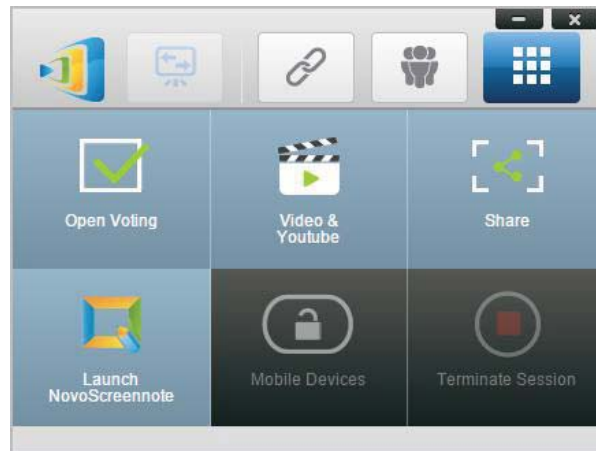
2. A dialog box will pop up asking, "Are you sure to send this screenshot to (moderator name/all participants)." The recipient will depend on whether you are the moderator/teacher or a participant. Select "Yes" to begin the transfer or "No" to cancel.

3. If no other transfer is in progress, Send Screen will appear as it does any other file sharing process.

4.2.8 Receiving files in NovoPresenter

1. After receiving a file in NovoPresenter, a notification box will pop up alerting you "File Received". You will be given the choice of opening and viewing the file or closing the notification and viewing the file later.
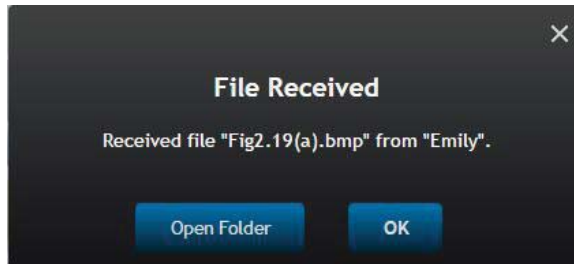
2. The file name format will be "sender-name_original-filename".

4.2.9 Troubleshooting and rules to remember with NovoPresenterPC

1. If you attempt to share a file and no other users are logged into the session, you will receive the message: "No recipient. Nobody else is online."
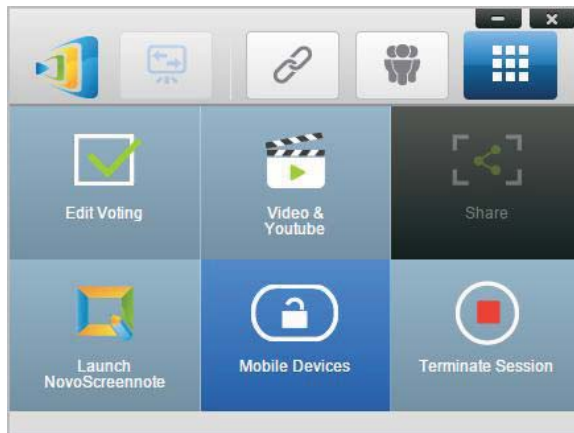
2. The moderator and all participants must be using the latest version (1.6 or later) of either NovoPresenter or NE3000DesktopStreamer software for File Sharing to work properly. The NE3000 device must also be upgraded to version 1.6 or later firmware. If this is not the case, you will receive an error message stating, "To enable this feature, upgrade your NE3000 device firmware to version 1.6 or above."

3. Files transferred with File Sharing must be no larger than 3 MB. If you attempt to share a larger file, you will receive the following error message: "Failed to Send; file exceeds size limit (3 MB)."

4.3 Remote manager

Manage multiple NE3000 devices from a single PC

Remote manager is a stand-alone Windows/Mac application that allows the settings of multiple NE3000 devices to be managed from a single PC, making it ideal for corporations, schools or other large institutions.

4.3.1 Software setup

(1) Download the installation package from the NE3000 website.
(2) Click on the installation package and follow the on-screen instructions.

4.3.2 Adding devices

1. To add a new device to the device list, click on "+ Device" button at the top of the screen.

2. This will open the "Create New Device" window. Enter the device's ID, description (such as location), and IP address. You can also select a group (optional) from the group list pull-down menu. Click "OK" to complete adding the new device.

3. When the new device is successfully added it will appear in the device list.

4. If the device is currently connected, the connection indicator will be green. Otherwise, it is red.

Connected

Disconnected

4.3.3 Removing a device

1. To remove a device from the device list, click on the device you wish to remove from the list then click the [trash icon] icon.
2. A pop-up box will ask "Are you sure to delete." Click "Yes" to confirm or "No" to cancel.

4.3.4 Refreshing device list

1. To refresh the list of devices in Remote Manager, click the "Refresh" in the upper left of the program screen.

4.3.5 Managing device settings

1. By selecting a device and clicking the device settings button [settings icon] you will be taken to the device settings management screen. From here you will be able to remotely view and/or preset the settings for each NE3000 device on your network. You will be able to edit settings for Device Name, Display Setting, Language, and Device Password. You can view setting/status for Model, Edition, App Version, Build Version, Wi-Fi Mode, SSID, Wi-Fi IP, and LAN IP.

2. To edit the modifiable settings, select windows or menus next to the edit symbol ✏.
3. Click "Refresh" to display latest settings.
4. Click "Firmware Upgrade" to check for the latest device firmware. If an upgrade package is available, the upgrade process will be triggered.
5. Click "Quick Reset" to reset the application.
6. Click "Full Reset" to reboot the device.
7. Click "Go Back" to return to the main screen.

4.3.6 Uploading a logo

1. To upload a custom logo to a device, select the device and click "Upload Logo."
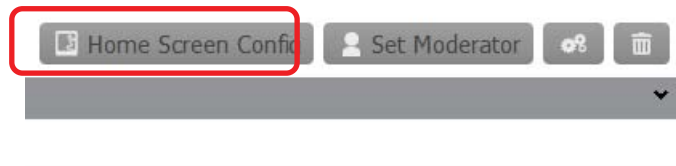
2. This will open the Logo Upload screen from which you can select, crop, and resize your logo.
3. Click "Open" to select an image file.

4. Select either "Cropped" or "Full Sized." When "Cropped" is selected, drag the cropping box to trim the photo to the desired size. The resized image and dimensions will be displayed in the "Target" window. Click "Full Sized" to undo your changes.

5. Click "Save" to save the new logo image locally or "Upload" to send it to the device.

4.3.7 Updating firmware

1. Remote Manager allows you to check and update the firmware of multiple NE3000 devices on your network at once.
2. Click "Firmware Update" on the home screen to go the Firmware Update screen.

3. A list of connect devices will be displayed with check boxes in the left column. Select the device or devices you wish to check for updates, or click "Select All" to check all devices on the list. Click "Unselect All" to remove all checks.

4. Once you have selected the devices to update, click "Update Now."

4.3.8 Setting moderator credentials

1. To set moderator credentials for a device, select the device from the device list and click "Set Moderator."

2. This will open the Moderator Credentials window. Note: For changes to take effect, make sure the green connection indicator is lit in the upper left of the screen.
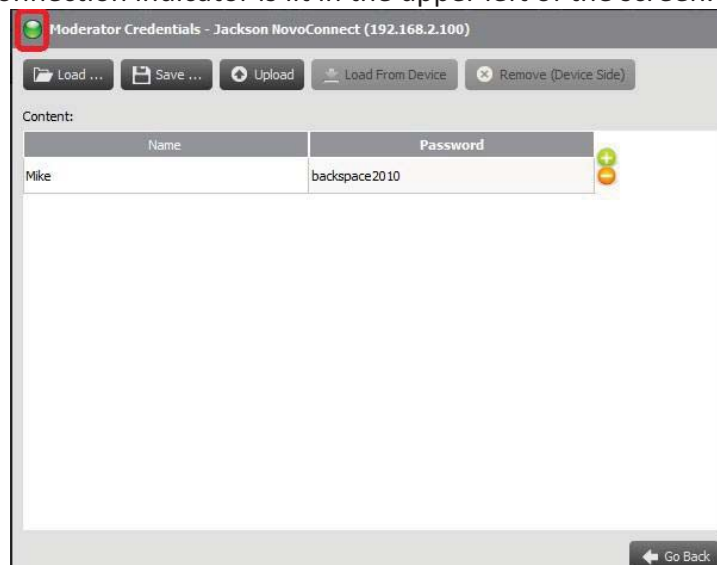
3. Enter the moderator name and password in the corresponding windows.

4. Use the buttons to add or delete moderators from the list.
5. Click "Save" to save the moderator credential file to the local PC.
6. Click "Upload" to upload the new moderator credential file to the device.
7. Click "Load from Device" to download a file saved on the device.
8. Click "Load" to load a moderator credential file stored on local storage.
9. Click "Remove (Device Side)" to remove moderator credentials currently stored on device.

Note: Moderator credential files will be stored in the XXXX.NCMC file format.

4.4 Responding with Voting (iOS, Android, Chromebook)

4.4.1 Answering Voting questions with Android Phone and Tablet

Voting allows Android users to respond to a teacher or moderator submitted questions.

1. Open Voting by selecting it from the Tools tab.

2. No question will appear until the moderator or teacher sends a question.
3. Once a question is sent, it will appear on the participant's screen. Select the correct answer and then the "Submit" button. If the question is open-ended, you can select an image file (.png format) from your device to submit as your answer.
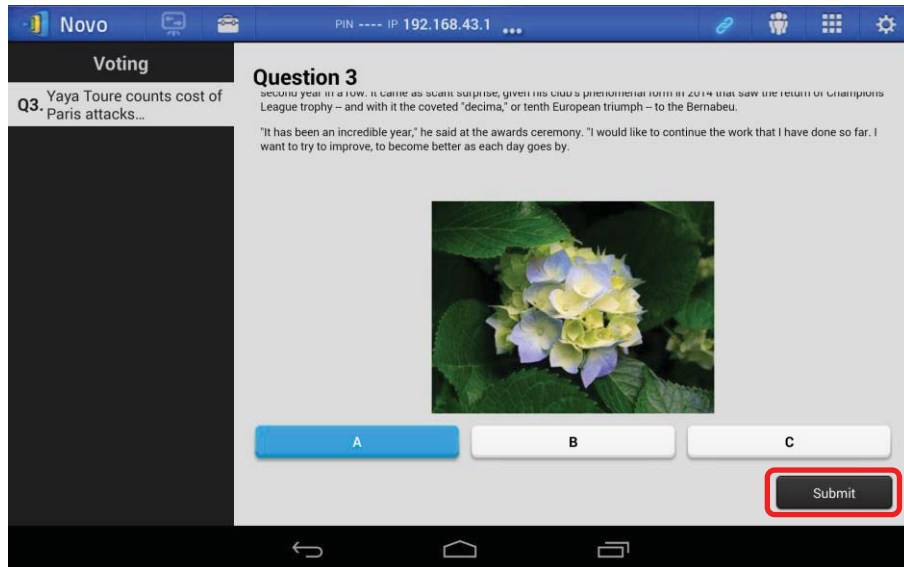
4. You will receive a confirmation message when your answer has been sent successfully.

4.4.2 Answering Voting questions in iOS (iPhone, iPad)

1. Open Voting by selecting it from the Tools tab.
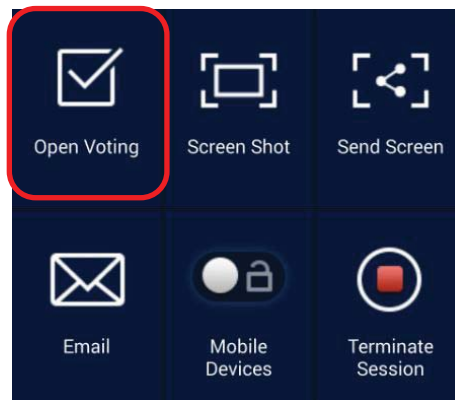
2. No question will appear until the moderator or teacher sends a question.
3. Once a question is sent, it will appear on the participant's screen. Select the correct answer and then the "Submit" button. If the question is open-ended, you can select an image file (.png format) from your device to submit as your answer.
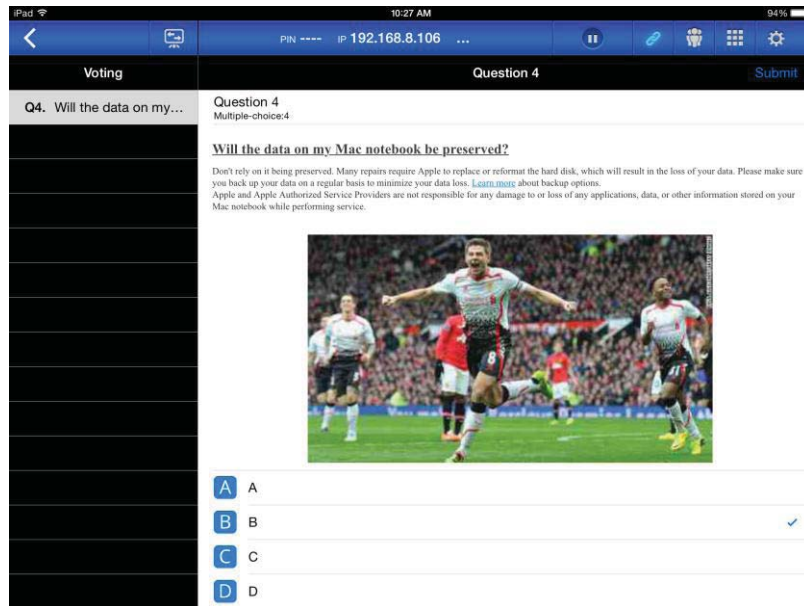
4. You will receive a confirmation message when your answer has been sent successfully.

4.4.3 Answering Voting questions with Chromebook

Voting allows Chromebook users to respond to a teacher or moderator submitted questions.

1. Open Voting by selecting it from the Tools tab.

Open Voting
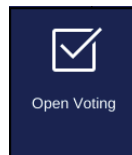
2. No question will appear until the moderator or teacher sends a question.
3. Once a question is sent, it will appear on the participant's screen. Select the correct answer and then click the "Submit" button. If the question is open-ended, you can select an image file (.png format) from your device to submit as your answer.
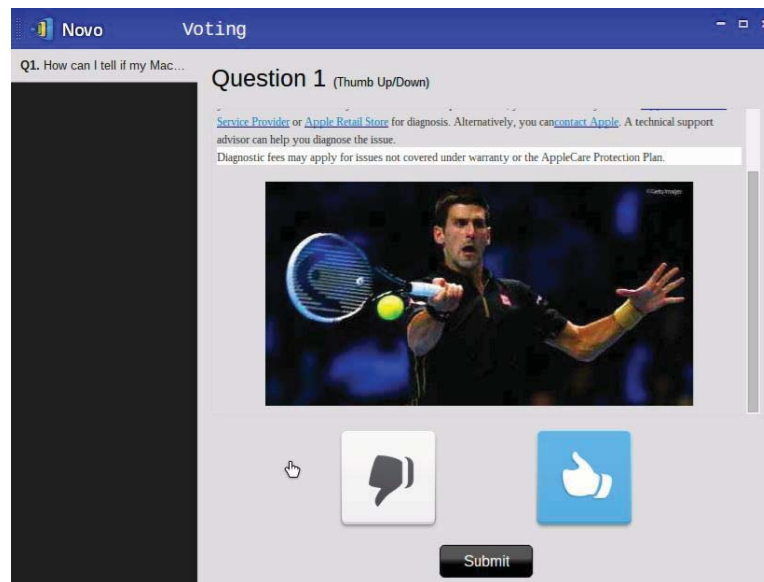
4. You will receive a confirmation message when your answer has been sent successfully.

4.5 iOS device mirroring

All participants in a meeting using Apple iOS devices can mirror their screens by using NE3000's Airplay service. No App is required to use this function.

1. Connect your Apple iOS device to the same network where your NE3000 device stays.
2. Swipe up from the bottom of the iPad or iPhone to show the Control Center.
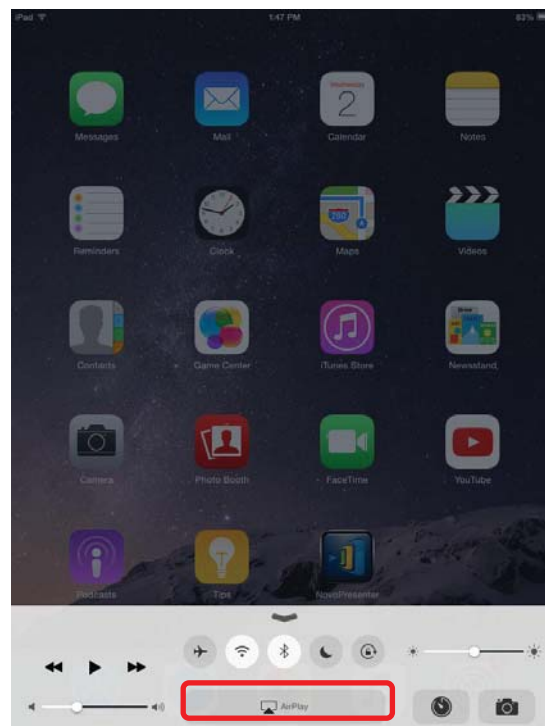
3. Click AirPlay and selectNE3000's AirPlay device name. By defaultNE3000's AirPlay device is named as "Novo-XXXXX", where XXXXX is a device-generated combination of letters and numbers.
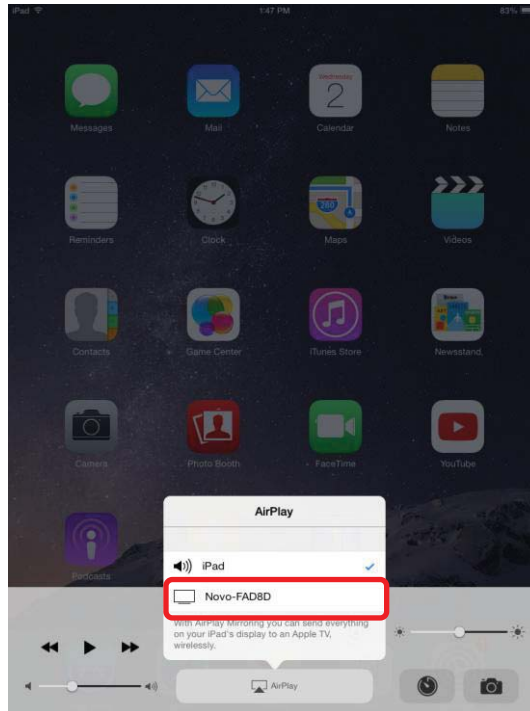
4. Then you should switch on "Mirroring" option, and an "Airplay Password" prompt window pops up. Please enter 4-digit PIN code, which you can get from NE3000's home screen (illustrated below). After the correct PIN is entered, your iPad or iPhone's whole screen will be mirrored to yourprojector or TV.
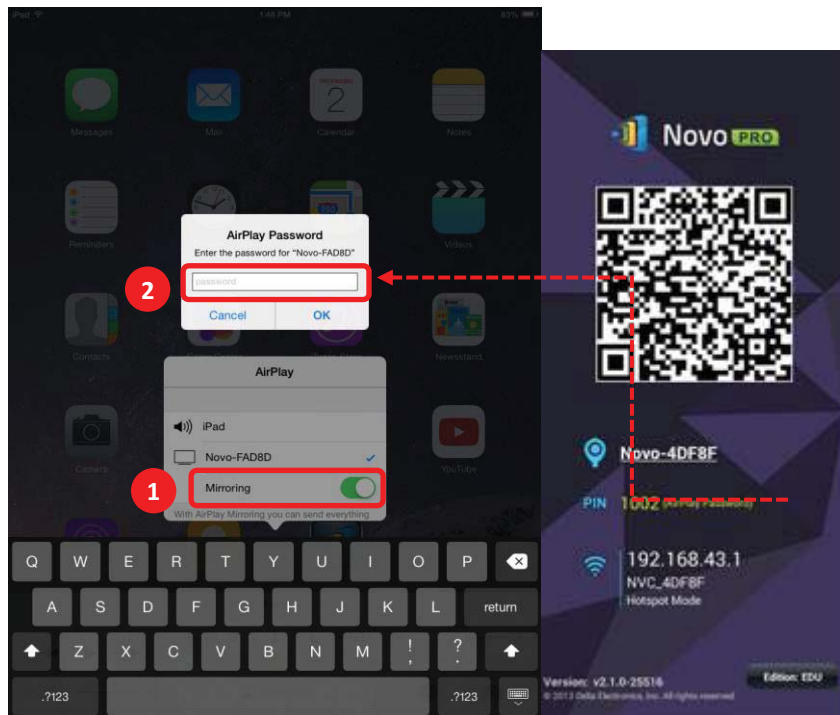
5. To stop mirroring your iOS device, you should swipe up from the bottom of the iPad or iPhone to show the Control Center. Tap "Novo-XXXXX" name, and then switch off mirroring function.
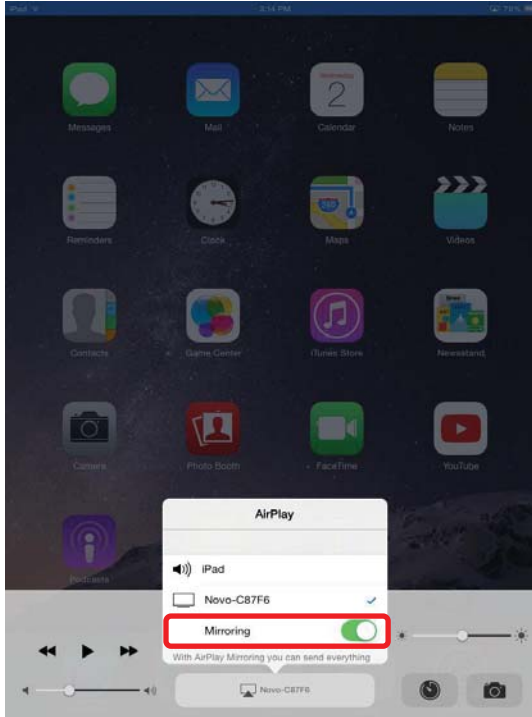
4.6 Android device mirroring

All participants in a meeting using Android tablets or phones can mirror their screens by using NE3000'sMiracast service. No App is required to use this function.

Please note: the concreted operation steps might be different due to different Android OS releases or different customized Android builds. The following steps are illustrated using Google's Nexus 7 Android tablet.

1. Connect your AndroidiOS tablet or phone to the same network where your NE3000 device stays.
2. Swipe down from the top of the Android device to show the Control Center, and then tap **Cast** button.
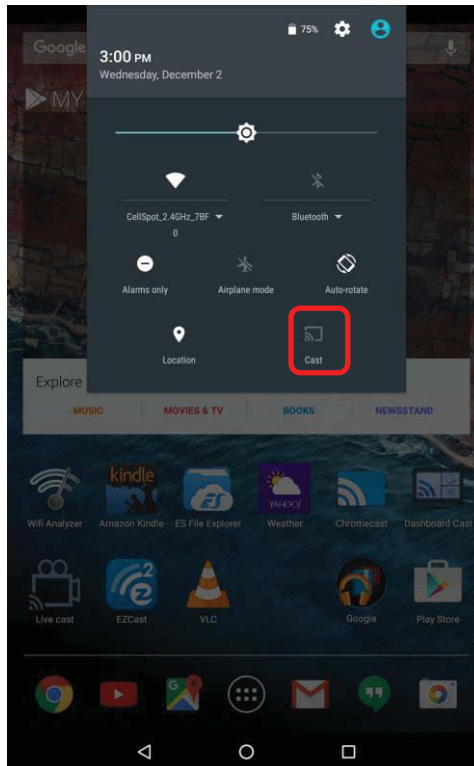
3. Here shows all devices you can cast your Android device to. If this is the first time you set up such a connection, you might not see any availale device here. Please tap "MORE SETTINGS" to set up a new Miracast service device.
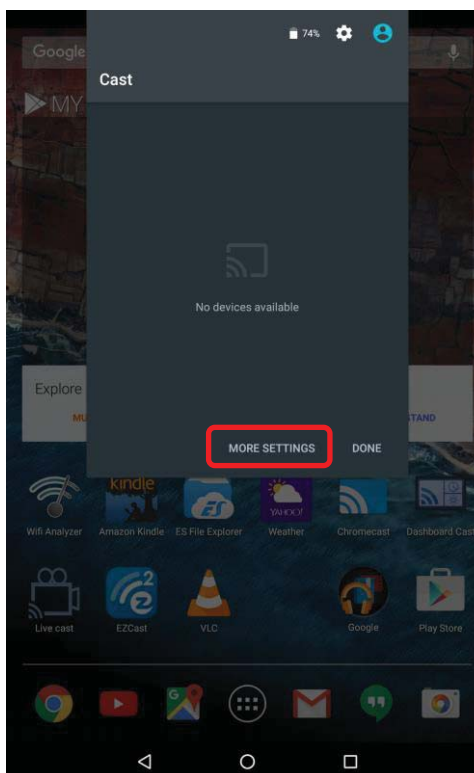
4. Here shows all available Miracast capable devices you can cast to. In this case, "Novo-C87F6" is a Miracast service device, and you tap on such a device name.
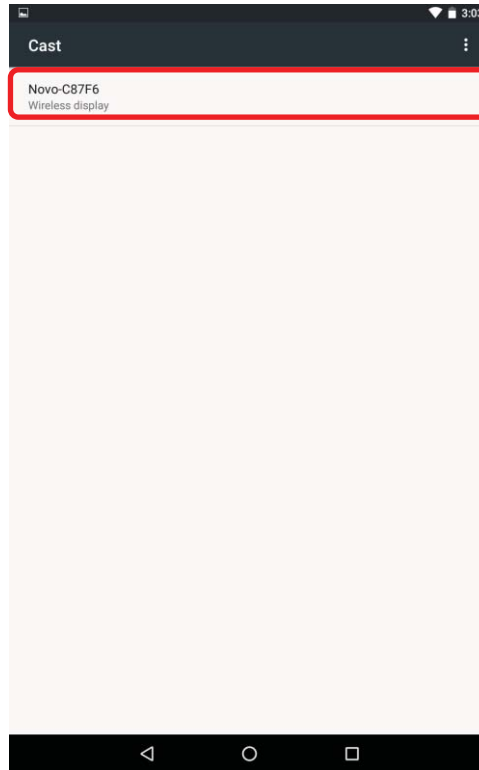
5. It shows your Android device is connecting to such a Miracast service device.
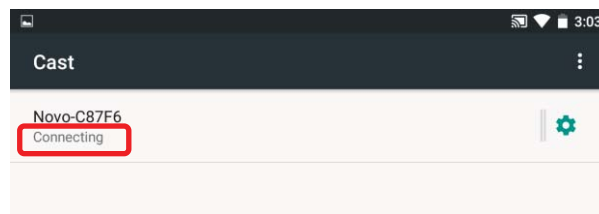
6. After a few seconds, if connection is successfully setup, it shows "**Connected**". At this moment, your Android device full screen should have been mirrored to your projector or TV.
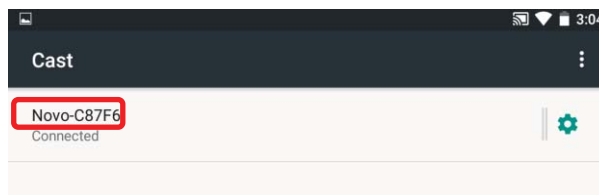
7. To stop mirroring, please swipe down from the top of the Android device to show the Control Center, and then tap **Cast** Icon. Pls note, here "Cast" wording is changed to the Miracast service device name.
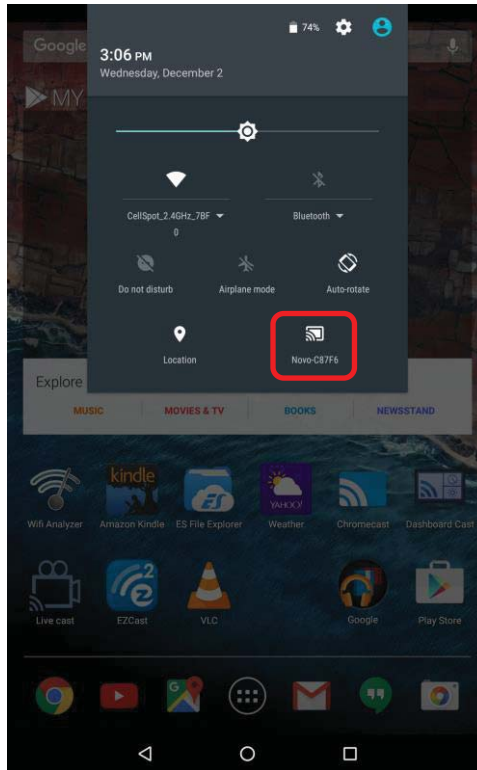
8. Tap ⊗ icon to finish disconnection.
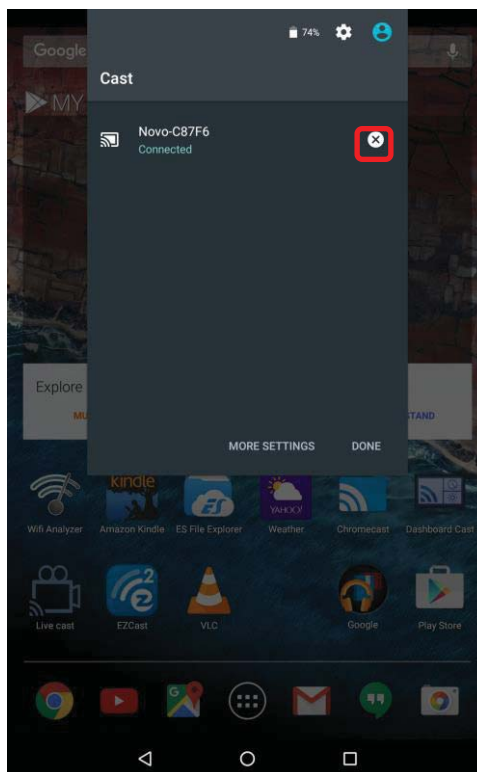
5. NE3000 Configuration

5.1 Configure NE3000system locally

Remote Viewer is the application software on the NE3000 device that hosts the presentation group. The main function of *Remote Viewer* is to manage and control all presentation sessions between the *participant* devices and the NE3000. In addition to presentation management, *Remote Viewer* supports the configuration of the following parameters on the NE3000 device:

- Setup Guide
- Wi-Fi
- Display
- Settings
- Reset
- Presentation Group Name

Note: Following any clicking activity on the screen, the system bar [icons] appears.

Clickthe back key [icon] one or more times until the system bar disappears.
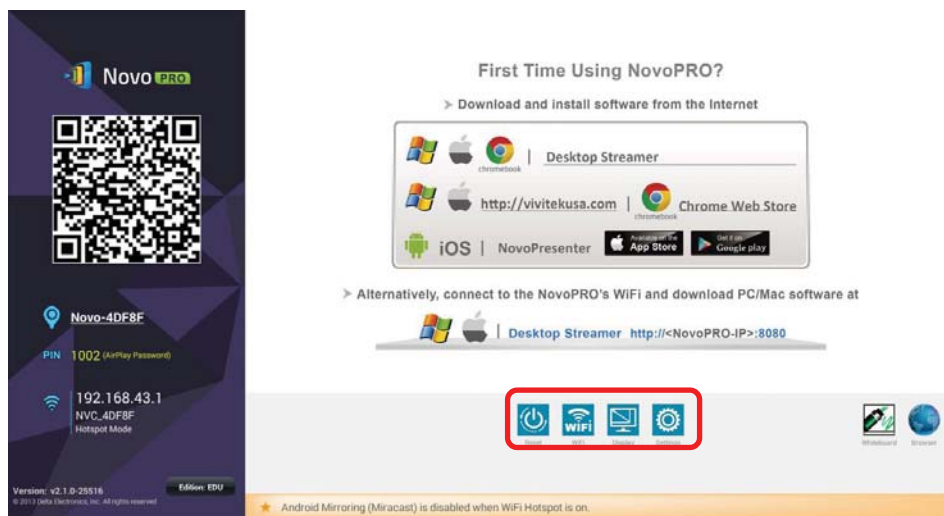
Please go to the NE3000 home screen to locate the parameters. You will need a USB-based mouse to perform setting changes.

Function	Description
	Setup Guide and QR Code: The NE3000 connection setup guide is initially selected when NE3000 is first powered on. To show or hide this guide, click [Setup Guide]. For quick connection with iPad or Android tablets, the NE3000 connection QR code is continuously displayed and updated on the lower right corner of the NE3000 home screen. For more details regarding the use of this setup guide and the QR code, please refer to the section <u>1.2.2 The NE3000 Home Screen</u> earlier in this document.
WiFi WiFi ON Enable WiFi Hotspot Connect to WiFi Use Hotspot if connection fails Configure Cancel	**Wi-Fi**: Click the **WiFi** button to bring up the Wi-Fi configuration window. To use the NE3000 as the Wi-Fi host, select "**Enable WiFiHotspot**"and click **Apply**. To use an external router as the Wi-Fi host with Internet access, select "**Connect to WiFi**"; click **Configure** to bring up the relevant Android system menu. Enable Wi-Fi connection. Select the SSID of the external router. Enter the router's password if needed. Click **Connect**.

Display:
Click the **Display** button to bring up the *Select Display Output Format* window.
Select one of the following screen resolutions (the *presenter'*s , Windows and Mac PC,will be automatically adjusted to match the selected option):

Display Resolution Scaling Auto Config XGA (1024x768) WXGA (1280x800) 720p (1280x720) 1080p (1920x1080) WUXGA (1920x1200) Save Cancel	
Auto Config	This setting automatically determines the optimal screen resolution.
XGA(1024x768) **WXGA(1280x800)** **720p (1280x720)** **1080p (1920x1080)**	You can specify your desired display output resolution.
Click **Save** to confirm the selection, or click **Cancel** to abort the selection.	

Settings	**Settings:** Click the **Settings** button for more device settings for the NE3000. , access the Android system menu.
	Firmware Upgrade: Click to upgrade the NE3000 to the latest firmware version. **General Settings**: Click to access the Android system menu. **Settings Protection**: Click to set password protection for the NE3000. The **Configure Settings Protection** dialog window will pop up.
	Configure Settings Protection: To disable the password, click **Disable Protection**. To set A password, click **Enable Protection**, then enter a password followed by its confirmation on the line below.
	Reset: To restart the NE3000: Press and hold on the **Reset** tab for two (2) seconds. The NE3000 will restart.
	Presentation group name: Click on the presentation group name shown in the lower right corner of the NE3000 home screen. This will bring up the *Edit Room Name* window. Enter the new presentation group name using the on-screen soft keyboard. Click **Save** to confirm the name change, or click **Cancel** to abort the name change.

Set edition:

Click on the edition name shown on the top left corner of the NE3000 home screen. This will bring up the edition selection window. Select either **Corporate Edition** or *Education Edition*, then click **Confirm** to make the edition change official, or click **Cancel** to abort the edition change.

The main difference between these two editions are as follows:
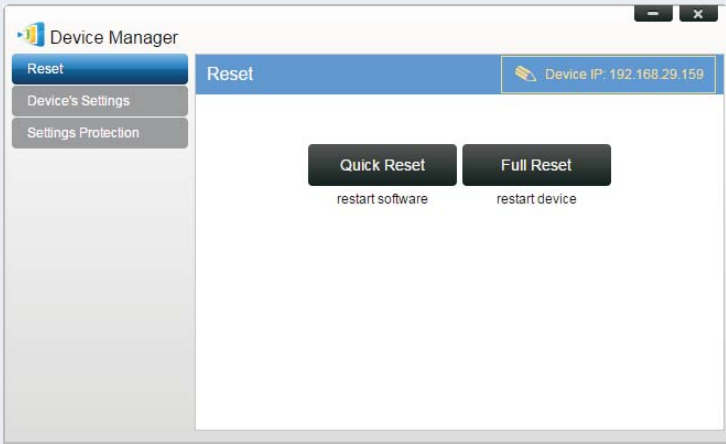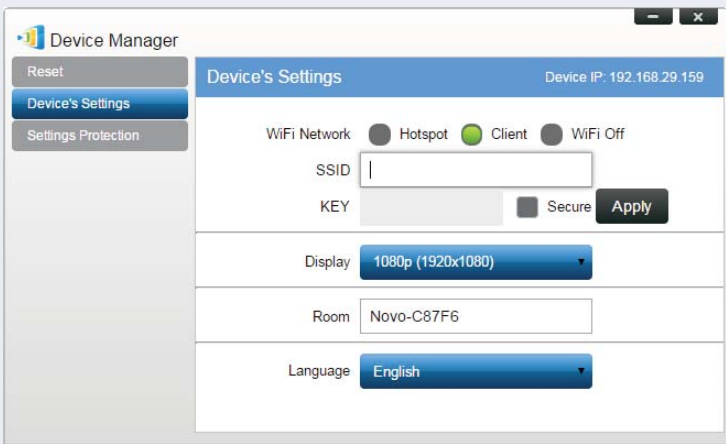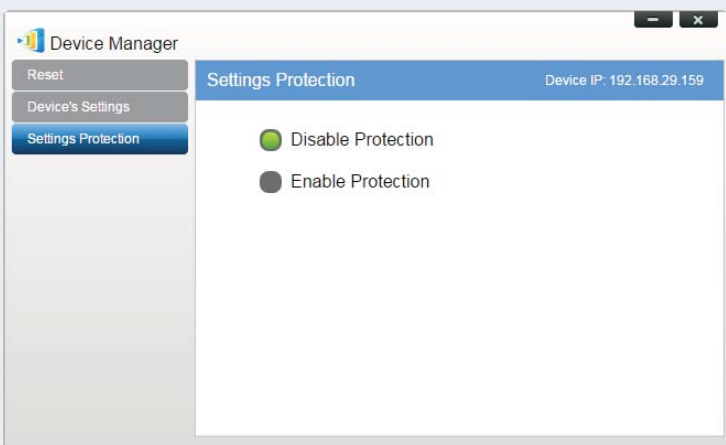
Corporate Education	1. All *participants* can project screen contents directlyonto the NE3000 screen.
	2. Moderator on/off function.
	3. Tool bar:
	   a) PC/MAC – Supports *NovoScreenote.*
	   b) iOS/Android Tablets – Supports *Screenshot and Share.*

Edition: Edition:	1. The *moderator* can preview the screen of any *participant* without permission.
	2. Tool bar:
	   a) PC/MAC – Supportsall functions.
	   b) Chromebook/iOS & Android Tablets – Supports all functions.

5.2Configure NE3000 system remotely

You can remotely configure your NE3000 device through *NovoDesktop Streamer*. Click the ☰ button after launching *Novo Desktop Steamer*, and select "Device Manager".
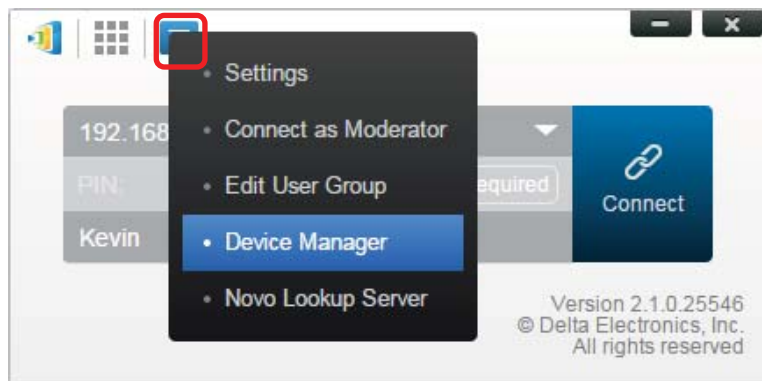
Please follow the steps below to access the functions described above.

Function	Description
	Do quick or full reset to NE3000 device.
	Remotely configure your NE3000 parameters from your desktop including: • WiFi network parameters; • Display resolution; • Room Name; • Display language.
	Enable or disable setting protection.

5.3 Custom configuration file

5.3.1 Create and install custom configuration file

This function allows you to create and install a custom configuration file to set your Wi-Fi mode and logo file via a microSD card.

5.3.2 Download and openNE3000Config.xml template file

1. Go the NE3000 Web site and download the zip file "SD Configuration". Extract the "NE3000Config.xml" file from the zip archive.

2. Using either WordPad or another XML editing program, open the file "NE3000Config.xml".

3. If you are using WordPad, follow these steps. Otherwise follow the procedures of your preferred XML editor.

4. Launch WordPad and open the template file. Use the view "All Documents" option when Open File window appears.
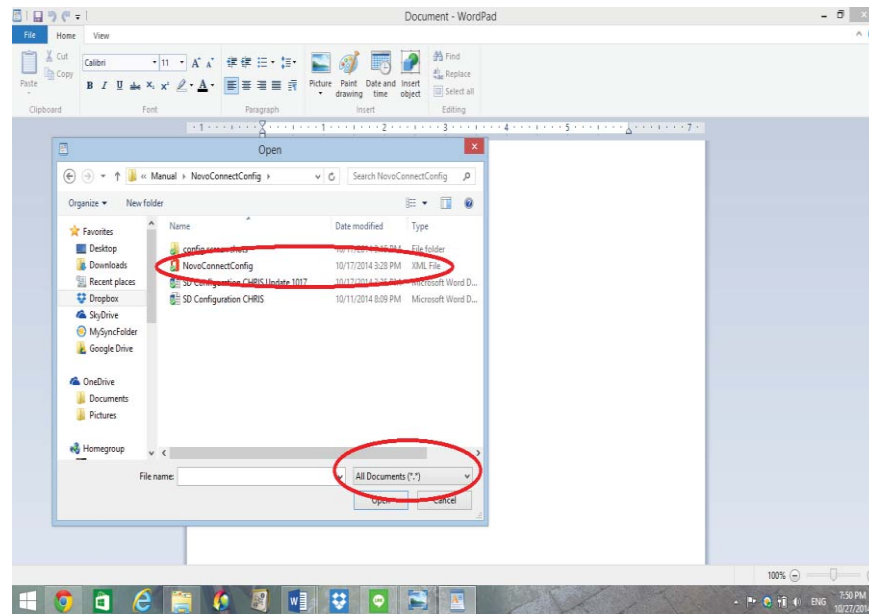
5.3.3 Fill in the values for personal configuration

1. When opened, the text will look like this:

```xml
<?xml version="1.0" encoding="utf-8"?>
<configuration>
<wifi-ssid>example_wifi</wifi-ssid>
<wifi-password>password_abcd</wifi-password>
<logo-file-name>home_screen_logo.png</logo-file-name>
</configuration>
```

2. Replace the example SSID with your network's SSID. The example SSID in the template is "example_wifi".

3. Replace the example password with your Wi-Fi password. The Wi-Fi password in the in the template is "password_abcd".

4. Save your changes to the template.

5.3.4 Add a home-screen logo (optional)

1. Choose an image for your logo. The image should be in the .png file format and no larger than 300 pixels height x 600 pixels width.

2. Replace the example image file name in the template with your custom image file name. The example image file name in the template is "home_screen_logo.png".
3. Save your changes.

5.3.5 Copy and install files

1. Copy NE3000Config.xml file and your logo image file (optional) to a microSD card.
2. Insert the microSD card to the NE3000 device.
3. Press the "reset" button to reboot the NE3000 device.
4. After the reboot, both the Wi-Fi and the home-screen logo will be automatically set to the user's custom configuration.

5.4 Wi-Fi reconnection

This feature allows tablet users to reconnect to NE3000 after it has either powered down or lost its Wi-Fi connection. When the device is powered on again and reestablishes a Wi-Fi connection, a box will pop up asking if the user would like to reconnect to their last session.
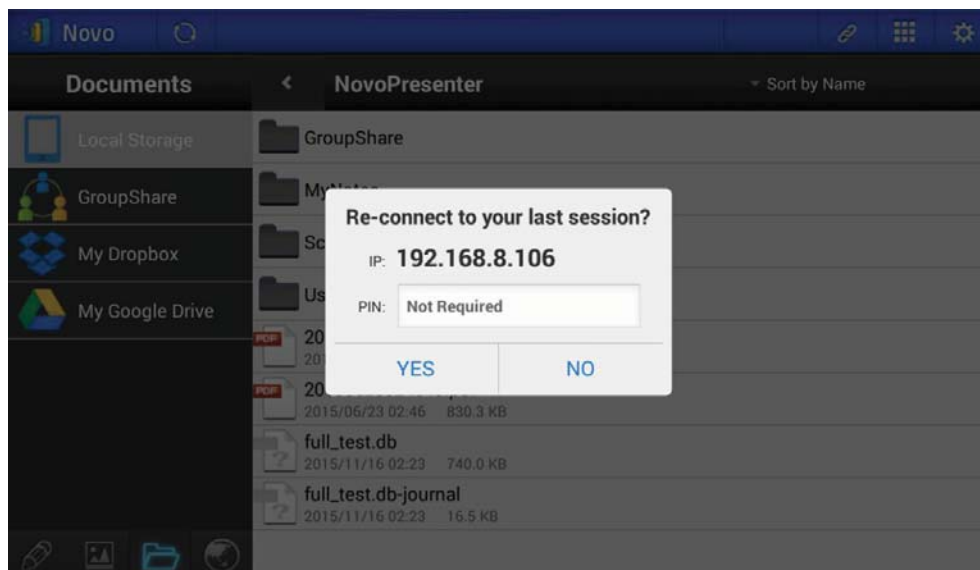
6. Specifications

Hardware Specifications	
Power Supply	5.35VDC, 2A
Power Consumption	< 10W
Output Resolutions	1024x768 (XGA), 1280x720 (HD), 1280x800 (WXGA), 1920x1080 (Full HD), Auto Config
CPU (SoC)	ARM Cortex A9 Quad-Core 1.6GHz
Memory	DDR 1024MB
Storage	Internal: 8GB (eMMC Flash) External: microSD Card Slot
Wi-Fi	802.11 a/b/g/n/ac (2.4GHz & 5GHz)
Bluetooth	BT V4.0+EDR
Input/Output	USB Input USB Type A x 1 Video Output HDMI x 1 Card Reader microSD Card Slot x 1 Ethernet 10/100 RJ45 type x 1 Power Input Micro USB (5.35V 2A)
LED Indicator	Green (System Power On) , Red (System Stand By) , Blue(Network Activity)
Button/Switch	Reset
Dimensions	120x 75 x 26 mm (L x W x H)
Weight	128 g
PC/Notebook Application Requirements	
CPU	Intel Pentium, 2GHz (Intel Core i3 and above are preferred)
Operating System	Windows XP, Windows 7, Windows 8 /10 (32 bits and 64 bits), Mac 10.6 and above
RAM	4 GB
Android Mobile Device Application Requirements	
Operating System	Android 3.2 and above (Android 4.0 and above are recommended)
Resolution	1024x768, 1280x800, or higher are recommended
iOS Mobile Device Application Requirements	
Operating System	iOS 5.1 and above
Device Type	iPad, iPad 2, iPad 3, iPad 4, iPad mini, and iPad Air

7. Troubleshooting

Q: NE3000 does not power up or operate.

A: Check if the proper DC power supply with the appropriate operating voltage and sufficient operating current (5VDC, 2A) is connected to the Micro-USB port of the NE3000.

Q: My PC cannot link to NE3000 wirelessly.

A: For your PC to link to NE3000, your PC must either have a built-in a Wi-Fi module or an external Wi-Fi adapter, and Wi-Fi must be enabled. If the NE3000 is set to Hotspot Mode (factorydefault mode), choose NE3000's SSID from the available SSID list. If NE3000 is set to Client Mode and is connected to a specific Wi-Fi AP, choose that AP's SSID from the available SSID list.

Q: The play/pause buttons do not work.

A: These buttons are functional only for the current *presenters*.

Q: I cannot connect to the Internet on NE3000.

A: This is normal if the NE3000 is set to Hotspot Mode, since NE3000 by itself does not support WAN (wireless wide area network) access. To access theInternet for tasks such as Web browsing on NE3000, please set the Wi-Fi to Client Mode and connect to a Wi-FiAP that that is connected to the Internet.

Q: My PC or mobile device has failed to connect to NE3000.

A: First, make sure that Wi-Fi is enabled on your device. If NE3000 is set to Hotspot Mode (factorydefault mode), choose theNE3000's SSID from the available SSID list. If NE3000 is set to Client Mode and is connected to a Wi-Fi router, choose that router's SSID from the available SSID list.

Q: I cannot choose to present in full screen or in one of the split screens.

A: Only the *host*has the authority to decide whether your presentation is to be seen in full screen or one of the split screens. You may be invited to be the *host*:1) if the Reset button is clicked on the NE3000, 2) if the *host* explicitly hands over *host* control to you, or 3) if all other *presenters* have disconnected from NE3000.

Q: I am the *host*, but I cannot preview other *participants'* screens.

A: To preview a *participant's* screen before sending a presentation invitation, that *participant* must have screen preview enabled on his device.

Q: My device's on-screen display looks stretched or compressed on NE3000's screen output.

A: There may be an aspect ratio mismatch between the NE3000's chosen output resolution and your device's screen aspect ratio (e.g. your device's screen has the 4:3 aspect ratio, and you have set NE3000's output resolution to a 16:9 or 16:10 option). Try to set the display resolution on the NE3000 so that it has an aspect ratio that either matches that of your device or is as close to your device's screen aspect ratio as possible. You have the option of lettingNE3000 automatically determines the best output resolution by selecting Auto Config in the display settings.

Q: During the presentation, my PC/Mac computer's cursor is flickering.

A: You can try a different screen resolution for your PC/Mac computer. You can also try different settings for Projection Mode, Visual Quality, and Screen Refresh Rate (which need to be set before you connect your PC/Mac computer to your NE3000)until the problem disappears or is minimized.

8. Safety Information

Refer to the manual and take note of the safety instructions before operating your device.

- Ensure that the power source's output voltage matches your device's operating voltage.

- To prevent the risk of electric shock, do not operate this device near water or in environments of high moisture.

- Do not disassemble or try to repair this device by yourself. Contact your local Delta service center for assistance.

- Keep the device's plastic packages out of the reach of children.

9. Copyright Information

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10. Index

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Reorient or relocate the receiving antenna.

- Reorient or relocate the receiving antenna.

-Consult the dealer or an experienced radio/TV technician for help important announcement

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.