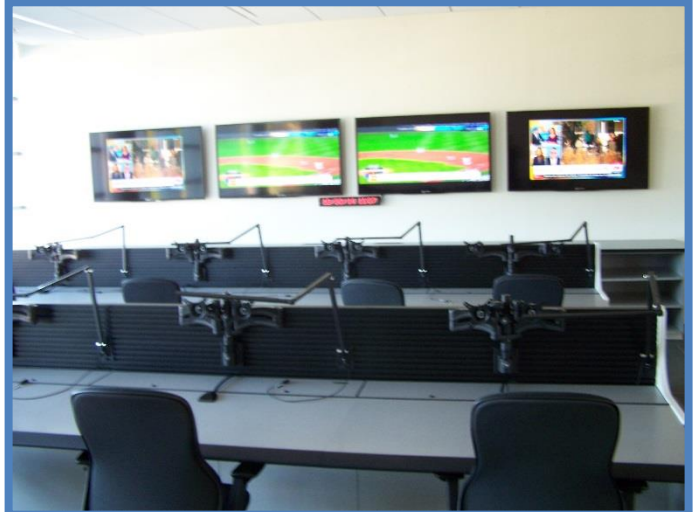
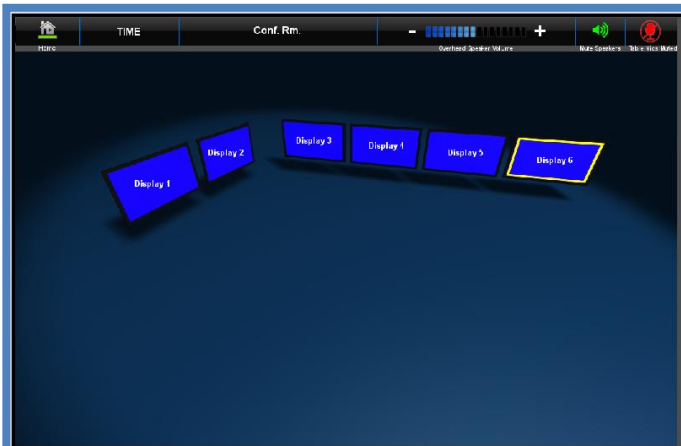


MULTIMEDIA and VOICE Conference Room User's Guide

NASA: LANGLEY RESEARCH CENTER (LARC)
BUILDING: 2102 --- ROOM: 210

CRQ: 221203 -- DATE: NOVEMBER 2014



To better serve you, THE CUSTOMER, we periodically improve and update our products. As a result of these improvements and updates, what is seen in documentation may differ slightly from our actual product.

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INTRODUCTION

1. GENERAL INFORMATION FOR THE CONFERENCE ROOM.

A. Voice (audio) dial-in number

1. 757-864-9594

B. NASA Teleconferencing Center (“NTC”) Help Desk: (877) 857-6272

1. All ISDN and IP numbers can be routed via the NTC Help Desk.
2. Call the NTC Help Desk, if you need additional instructions on how to use your integrated smart conference room.
 - a) Example: How to control individual audio levels, play a DVD, etc.

C. Trouble Ticket: (877) 677-2123

1. Call this number if there is a general problem with the system such as a damaged microphone, faulty display, video codec lockup, etc.

D. Recording Telephone and ViTS calls

1. Know the government rules for recording telephone and ViTS calls.
2. See NASA’s policy directive, NPD 2530.1G, entitled Monitoring or Recording of Telephone or Other Conversations. The link is:
http://nodis3.gsfc.nasa.gov/displayDir.cfm?Internal_ID=N_PD_2530_001G_&page_name=main&search_term=2530%2E1g
3. See the document “Recording Telephone Conversations.” The link is:
<http://www.fcc.gov/guides/recording-telephone-conversations>

(no images)

NOTE

All NASA IT Devices, attached to a NASA network, are subject to the requirement of being scanned; at a minimum, monthly, with approved vulnerability scanning tool(s). All IT devices attached to a NASA network are required to be made available, unless otherwise previously coordinated if not available for the required monthly scan. Scheduled monthly scanning will be reported through the NISN Remedy Activity scheduling system. Any questions regarding scanning activities can be addressed to Montie Roehm at 256-544-0589.

REFERENCES

NASA NITR 2810-24

Memorandum from Jerry Davis, Deputy CIO Office, Scanning and Vulnerability Elimination or Mitigation, February 2009

Unites 3000-4652 System Vulnerability Scanning

Note Written by: Montie Roehm in collaboration with Donna Karns.

INTRODUCTION

2. TOUCH PANEL OVERVIEW

A. Home Page

1. See (Figure 2-1).
2. Comprises the buttons for the conference modes that are controlled by the touch panel.
 - a) Multimedia & Voice Conference.
3. The Home Page includes a “Shut Down” button.
 - a) After the conference has concluded, always shut down to return the equipment to standby, initialize audio levels, disconnect voice calls, etc.

B. Main Page

1. See Figure 2-2.
2. Home: Press this button to return to the home page to change conference modes or shut down the system.
3. Audio: This audio is for adjusting the room speaker volume up or down.
4. Menu Bar: The vertical scroll bar contains buttons used to select different device controls from the touch panel.
5. Sources: The horizontal scroll bar contains the sources viewed on the displays and touch panel control area.
6. Control Area: This area is where the user will initiate video calls, voice calls, change TV Tuner channels, and control audio levels, etc.



Figure 2-1 Home Page



Figure 2-2 Main Page (User Interface Example)

INTRODUCTION

3. FUNDAMENTALS OF USING THE AMX TOUCH PANEL.

- A. Select **MULTIMEDIA & VOICE CONFERENCE** from the Home Page (Figure 3-1).
- B. Select the **DISPLAY/DESTINATION** you wish to use by pressing the display icon.
 1. The selected display will be highlighted in yellow.
- C. Press a **SOURCE**.
 1. The sources are highlighted yellow at the bottom of the Main Page.
 - a) Some sources, i.e., Computer Interface, may require additional selections; follow the on screen prompts.
 2. If a source was previously selected, the source will be highlighted in yellow at the bottom of the Main Page.
 3. Use the control area to make changes.
 4. Use the Menu Bar to select a feature to make necessary configurations, such as audio levels, changing TV Tuner channels, or video recording layouts.
- D. Press the **HOME BUTTON** (🏠) on the Main Page to return to the Home Page to switch conference modes.
- E. Always shut down the system after use.
 1. Shut down from the Home Page.
 - a) Press Shut Down.
 - b) The Shut Down Confirmation page will appear.
 - c) Press Shut Down.
 2. Shut down from the Menu Bar.
 - a) View the Menu Bar.
 - b) Press Shut Down.
 - c) The Shut Down Confirmation page will appear.
 - d) Press Shut Down.





Figure 3-1 Home Page

4. GENERAL INFORMATION FOR THE CONFERENCE ROOM CONTROL SYSTEM.

A. Step-by-step Instructions

1. The following step-by-step instructions may include examples

B. AMX Touch Panel (“touch panel”)

1. The touch panel includes a virtual image of the conference room displays and table configuration (Figure 4-1).
2. Press a display image to “power on” the display.
3. Press/hold a display image to “power off” the display.
4. The touch panel can be used with a USB wired or wireless mouse.
5. Dark gray buttons or  indicate features that are not available.
6. The  button will close the page.
 - a) This action does not disconnect the video call or voice call.

C. AMX Touch Panel display buttons (Figure 4-1)

1. White/gray display button.
 - a) The display is powered off and is in standby.
2. Blue display.
 - a) The display is powered on or a source is routed to a monitor.
3. Blue display button with a yellow frame indicates the display is selected and a new source can be routed to the display.
4. Gold Star (on blue display in the upper right corner).
 - a) All displays (or destinations) with the gold star are displaying the same source, which is being routed to the display(s).
5. Press and hold the display icon for eight (8) seconds to turn the display “off.”

D. Shut down the system from the Home Page or the menu bar.

1. The shut-down process takes approximately one (1) minute, not including the two and a half (2.5) minutes for a projector to cool down.
2. The instructional steps found in this manual assume that the control system has been properly shut down by pressing the “Shut Down” button (Figure 4-2) on the Home Page, after each use.
3. Shutting down the system after use is the best way to maintain the longevity of the hardware (i.e. projector bulbs).
4. The hardware components are in standby (the physical switches are not turned off). If the physical switch is switched off, the control system cannot control the hardware.

E. System Reboot from the Information menu.

1. Rebooting the control system takes approximately four (4) minutes.
2. Rebooting the control system will reboot the central controller, touch panel, and the video codec (as long as the central controller can control the devices).
3. System reboot is available, because the video codecs have a history of requiring a reboot and sometimes a power cycle.
4. System Reboot.
 - a) Menu Bar.
 - b) Information.
 - c) Press the SYSTEM REBOOT button.
 - d) See Figure 4-3.

F. Hardware Manuals

1. For additional information, please read the manuals for the individual hardware components.
2. See the room operator or gateway personnel to obtain the manuals.
3. Manuals for hardware can usually be found on the Internet.

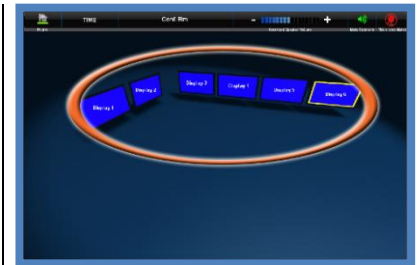


Figure 4-1 Display Buttons



Figure 4-2 Shut Down

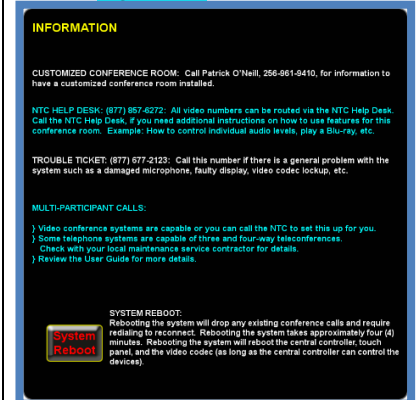


Figure 4-3 System Reboot

INTRODUCTION

G. Display

1. Display refers to a monitor, projector, or flat panel display (Figure 4-4).
2. Various displays may require a cool-down or warm-up cycle following a power off or power on action.
 - a) Example: Most projectors require a one (1) minute warm up and two and a half (2.5) minute cool down cycle.
 - b) All sources may not be available for all displays because of hardware limitations.

H. Page

1. This references an electronic image which may replace or partially cover another electronic image on the touch panel.

I. Room PC, Booth Computer, MAC, and room computer all relate to the customer's computer choice.

1. The computer is provided by the customer and is usually permanently connected in most conference rooms.
2. Not all conference rooms include a room computer.

J. Video Codec Graphics / Presentation

1. This allows the Room Computer, Document Camera, Laptop, and MAC presentations to be transmitted in a video call.

K. Computer Interface Connections

1. HDMI cables (Figure 4-5) are used to connect room computers, laptops, MACs, document camera, Apple TV, etc. for presentations.

L. Floor Box Connections

1. Touch Panel connections are labeled.
2. Computer Interface Connections are labeled.

M. Projector Screen

1. Some projector screens can be raised and lowered manually. In most conference rooms, the screens will automatically lower when the projector is powered on and raised with the projector is powered off.

N. Configuration/Maintenance (password protected area)

1. The Maintenance Options page is only available to installation and support personnel.
2. This page is password protected.

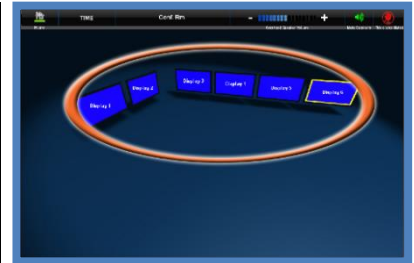


Figure 4-4 Display Buttons



Figure 4-5 HDMI

5. ROOM FEATURES

A. Voice Conference & Multimedia

1. Used to call other telephone numbers with the intention of conducting a voice conference.
2. Used to view video, computer graphics, or other content onto a display.
3. Used during a video conference to transmit video, computer graphics, or other content to the far-site.

B. Voice Call (Audio Add-On)

1. During a voice conference or video conference a participant can be added to the conference via telephone.

C. Audio Levels

1. This console gives the room operator the ability to control the sound levels of the room for the following if installed in the conference room: Video Call Receive, Voice Call Receive, Touch Panel, and TV Tuner(s), etc.

D. Microphone Control.

1. This allows the operator to mute and unmute microphones for conference room participants.
2. LAV microphone (if installed): Used and controlled by the presenter in most instances and cannot be controlled by the AMX touch panel.

E. TV Tuner

1. Used to watch television channels available via the connected local cable.

F. Video Recorder

1. Used to record conferences, computer presentations, or other video and audio onto a USB or SD card).

G. Multi-View (Multi-graphic Processor)

1. Used to view multiple sources simultaneously on one Display in a variety of configurations.

H. LED Sign

1. If the Record sign is not being used to display Recording, the LED sign can be customized with personal messages or preset messages, such as "In-Conference" or "Please mute your mic when finished speaking."
 - a) The personal messages will change to "Recording" when the device is recording.
2. There are two LED signs in the room:
 - a) Both LED signs update with the same information.

(no images)

INTRODUCTION

6. CONFERENCING TERMS.

(no images)

A. AUX

1. This is an abbreviation for auxiliary (additional).

B. CODEC

1. Coder/Decoder: a device responsible for sending audio and video to a far-site in a conference call and receiving audio/video from the far-site.

C. FM

1. Abbreviation for Full Motion.

D. Full Motion

1. FM is the video that you are transmitting or receiving in the context of a video call.
 - a) Example: By default FM RX (Full Motion Receive) is viewed on the primary right display.

E. Full Motion Transmit / Video Transmit

1. This is the video stream transmitted to the far-site in a conference call.

F. Full Motion Receive / Video Receive

1. This is the video stream received by the near-site in a conference call.

G. END

1. This button disconnects the call.

H. CALL

1. Press this button to establish a call.

I. HDTV Tuners

1. Abbreviation for high definition television.

J. Phone (Audio Add-On) / Voice Call / Phone Call

1. This simply means "telephone." A telephone call can be made from Video Conference or Voice Conference.

K. Polycom or LifeSize

1. This is the brand name of the codec (video conference unit) that is most commonly installed in CSO/NICS conference rooms.

L. RX

1. Abbreviation for receive or received.

M. TX

1. Abbreviation for transmit, transmission, or transmitted.

N. Graphics (Presentation)

1. High resolution graphics streaming.
2. A graphic is the content (i.e., images, video) that can be transmitted via the following:
 - a) Document cameras, room PC, computers, Apple computers, etc., connected to an HDMI input cable.

O. ViTS

1. Video Teleconferencing Services.

P. VoIP

1. Voice over IP (Internet Protocol).

Q. VoTS

1. Voice Teleconferencing Services.

INSTRUCTIONS

7. HOW TO SHUT DOWN AFTER A CONFERENCE.

A. After Video Recording,

1. Remove the media, i.e. USB drive.
2. Remove the files from the USB drive, if necessary.

B. Press the **HOME BUTTON** () to return to the Home Page.

1. The Home Page (Figure 7-1) will appear.

C. Press **SHUT DOWN**.

1. View System Shut Down Confirmation page (Figure 7-2).
 - a) Message: "Reminder: Please remove all recording and playback media. Pressing "Shut Down" will power down all devices and displays in the room, disconnect calls, etc. Would you like to continue?"
 - (1) This will power off the displays, disconnect voice and video calls, initialize audio levels to default, etc.

D. Press **SHUT DOWN**.

1. View System Shut Down page (Figure 7-3).
 - a) Message: "The system is now in the process of initializing default levels and commanding the devices to enter standby mode. The process will be complete in a few seconds. Now might be a good time to clean the touch panel screen."
2. The system starts the shutdown process.
3. All audio and video calls will be dropped.
4. The system shut down process is complete when the touch panel LCD turns off.

E. The touch panel includes a motion detector.

- a) If the touch panel motion detector senses motion, the LCD may turn on again.
- b) After motion is no longer detected, the touch panel LCD will turn off a few minutes later according to the setup.

F. Press **CANCEL**, if you do not wish to shut down the system.

1. This will return you to the Home Page.

NOTE

IT IS VERY IMPORTANT THAT THE SYSTEM IS SHUT DOWN AFTER EVERY CONFERENCE

Or

AT THE END OF THE DAY, WHEN THE CONFERENCES ARE COMPLETE.

UPLOAD ALL VIDEO RECORDINGS FROM THE NCAST RECORDER OR THE FILES WILL BE DELETED DURING THE SYSTEM SHUT DOWN.



Figure 7-1 Home Page



Figure 7-2 System Shut Down Confirmation

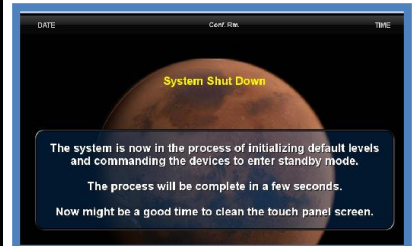


Figure 7-3 System Shut Down Message

INSTRUCTIONS

8. **HOW TO CONTROL OVERHEAD SPEAKER VOLUME LEVELS.**
 - A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
 - B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The Main Page will appear.
 - C. **View the Main Page.**
 - D. Press “-” or “+.”
 1. See **Figure 8-1**.
 2. This will lower or raise the overhead room speaker volume.
 3. Pressing “Mute Speakers” will mute all room speakers (**Figure 8-2**).

NOTE

Best practice: Control audio levels for the individual device.

Pressing Audio Levels (on the Menu Bar) will allow additional volume control for the individual hardware devices, etc. Press “-” or “+” to adjust the volume. If the options are grayed out, that option cannot be used in that particular mode.

Using Overhead Speakers Volume will affect all audio in the room for ALL devices.



Figure 8-1 Speakers Volume

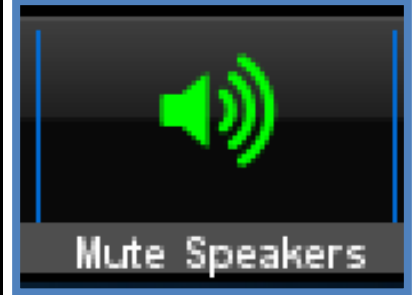
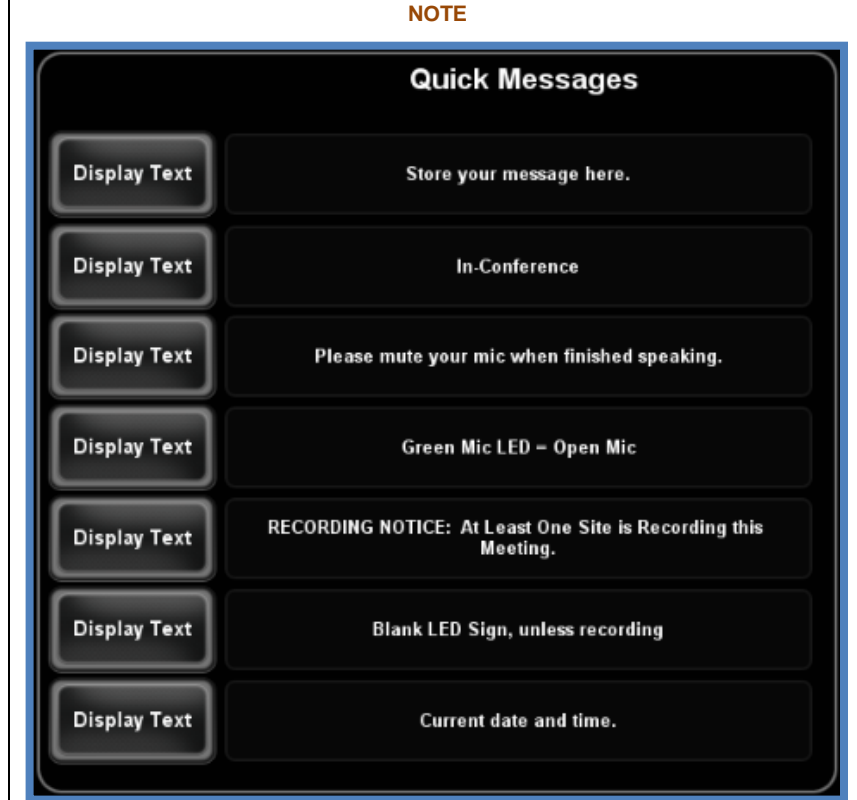


Figure 8-2 Mute Speakers

INSTRUCTIONS

9. **HOW TO VIEW THE QUICK MESSAGES ON THE LED SIGN.**
- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
 - B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 - 1. The Main Page will appear.
 - C. View the Main Page.
 - D. Press **LED SIGN** on the Menu Bar.
 - 1. The LED Sign: Messages page ([Figure 9-1](#)) will appear.
 - E. Press **DISPLAY TEXT**, to the left of the message.
 - 1. The message will appear on the LED sign.

NOTE



[Figure 9-1](#) LED Sign: Messages

INSTRUCTIONS

10. HOW TO SAVE/STORE CURRENT TEXT MESSAGE ON THE LED SIGN.

- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The Main Page will appear.
- C. View the Main Page.
- D. Press **LED SIGN** on the Menu Bar.
 1. The LED Sign: Messages page (Figure 10-1) will appear.
- E. Press **EDIT/CUSTOM MESSAGE**.
 1. The LED Sign Control Keyboard (Figure 10-2) will appear on the left.
- F. Press **LETTERS/NUMBERS** on the virtual keyboard (Step 1).
- G. Press **RED TEXT**, **GREEN TEXT**, or **ORANGE TEXT** (Step 2).
- H. Press **SCROLL TEXT**, **FIXED TEXT**, or **FLASH TEXT** (Step 3).
- I. Press **SAVE MESSAGE** (Step 4).
- J. Press **SAVE / UPDATE** (Step 5).
 1. The text will appear in the text box entitled "Current Message" and it will appear in the first slot on the right under "Quick Messages."
 2. The message will appear on the LED sign.
- K. Press **X** button on the keyboard to close the keyboard.

NOTE

The current date/time is the default state for the LED sign. To return to default state press LED SIGN, under the menu bar, press "DISPLAY TEXT: Current date and time," and close the keyboard.

Be sure to close the keyboard to update the date and time on the LED sign.



Figure 10-1 LED Sign: Messages



Figure 10-2 LED Sign Control Keyboard

INSTRUCTIONS

11. **HOW TO SEND A TEMPORARY MESSAGE TO THE LED SIGN.**
- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
 - B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 - 1. The Main Page will appear.
 - C. View the Main Page.
 - D. Press **LED SIGN** on the Menu Bar.
 - 1. The LED Sign: Messages page (Figure 11-1) will appear.
 - E. Press **EDIT/CUSTOM MESSAGE**.
 - 1. The LED Sign Control Keyboard (Figure 11-2) will appear on the left.
 - F. Press **LETTERS/NUMBERS** on the virtual keyboard (Step 1).
 - G. Press **RED TEXT**, **GREEN TEXT**, or **ORANGE TEXT** (Step 2).
 - H. Press **SCROLL TEXT**, **FIXED TEXT**, or **FLASH TEXT** (Step 3).
 - I. Press **TEMPORARY MESSAGE** (Step 4).
 - J. Press **SAVE / UPDATE** (Step 5).
 - 1. The message will appear on the LED sign.
 - K. Press **X** button on the keyboard to close the keyboard.

NOTE

The current date/time is the default state for the LED sign. To return to default state press **LED SIGN**, under the menu bar, press “**DISPLAY TEXT: Current date and time,**” and close the keyboard.

Be sure to close the keyboard to update the date and time on the LED sign.



Figure 11-1 LED Sign: Messages



Figure 11-2 LED Sign Control Keyboard

INSTRUCTIONS

12. HOW TO VIEW A TV TUNER CHANNEL.

- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The Main Page will appear.
- C. View the Main Page.
- D. Press the **DISPLAY IMAGE ICON** of your choice.
 1. The display will power on, if it was off.
 2. The sources are highlighted at the bottom of the Main Page.
- E. View the Sources.
- F. Press a **TV TUNER**.
 1. The TV Tuner: Keypad (**Figure 12-1**) will appear.
- G. Press **MUTED**.
 1. This button is a toggle button. If you press the button again, it will mute the audio.
 2. This will allow you to hear the audio when the TV Tuner is on a channel with audio.
- H. Press **"-"** or **"+"** to adjust the volume.
- I. **Select Channels.**
 1. Press up/down arrows on the keypad to select different channels.
 2. Type the number on the keypad and press "Enter" to select another channel.
 3. Favorites
 - a) Press Favorites and a list of set channels will appear for quick selections.
 - b) See **Figure 12-2**.
 - c) Custom #1 and #2 are set during the initial installation of the conference room.
 - (1) To change a custom channel, select desired channel and press/hold a custom button for approximately eight (8) seconds. The new channel selection is now available.
 4. Options
 - a) TV Tuner remote controls.
 - b) See **Figure 12-3**.

NOTE

The remaining displays can be selected to view the same TV Tuner or a different TV Tuner, if installed.

The TV Tuners have the capability to display high definition, if a high definition signal is supplied via the cable provider.

Touch panel video hardware has an approximate one second delay.

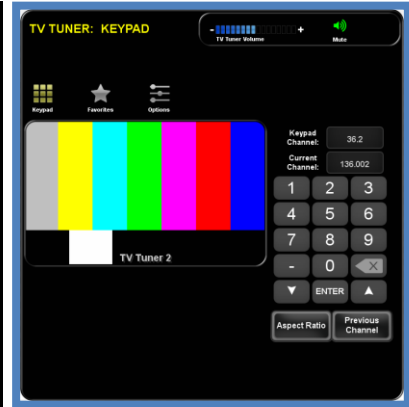


Figure 12-1 TV Tuner: Keypad



Figure 12-2 TV Tuner: Favorites



Figure 12-3 Options

INSTRUCTIONS

13. HOW TO VIEW A COMPUTER OR LAPTOP IMAGE AND ENABLE AUDIO CONNECTED TO AN HDMI OR VGA CABLE.

- A. Attach the HDMI or VGA cable to the computer (Figure 13-1).**
- Use the HDMI cable or VGA cable, but not both cables at one time.
 - See Figure 13-1 and Figure 13-2.
 - Attach the HDMI Cable; or
 - Attach the VGA Cable.
 - The VGA cable has two components: the larger 15-pin VGA plug is connected to a thinner audio plug.
 - Attach the longest audio cable to the laptop.
 - Attach the VGA cable to the laptop.
 - See Figure 13-2.
- B. Power on the laptop, if it is not powered on.**
- Log in as normal.
- C. TOUCH the touch panel to activate it, if the touch panel is asleep.**
- D. Press VIDEO CONFERENCE or MULTIMEDIA & VOICE CONFERENCE.**
- The Main Page will appear.
- E. View the Main Page.**
- F. Press the DISPLAY IMAGE ICON of your choice.**
- The display will power on, if it was off.
 - The sources are highlighted at the bottom of the Main Page.
- G. View the Sources.**
- H. Press COMPUTER INTERFACE.**
- I. Press an INPUT (for example).**
- The selection should match the location of the connected laptop/computer.
- J. Duplicate or extend the laptop screen.**
- Press the Windows key + "P."
 - Select Duplicate or Extend.
- K. Adjust the volume on the laptop.**
- The volume and mute is controlled by the Laptop.
 - If additional volume is required, use the "-" or "+" on the Overhead Speakers Volume buttons on the touch panel.
- L. Control presentations from the laptop, not the touch panel.**
- Example: PowerPoint paging up and down must be done on the laptop.

NOTE

The instructions for a MAC will not be identical to Windows Operating System, which means it may be necessary to consult your manufacturer's laptop manual for more information on keyboard commands for laptop computers.

The Extron website may provide information regarding your specific computer. Click here: [Extron](#) for the website.

~~~~~

When connecting cables from the computer to the HDMI cable on the table, it is very important to pay attention to the labeling on the cables.

- HDMI cable connects to the Computer.
- The HDMI cable connects to a device under the table.
- The device connects to the floor box.

If any of the cables are connected incorrectly, video routing will appear to not work correctly. Check the above instructions, if necessary, to make corrections and view accurate video.

~~~~~

Display Port and Mini-Display Port to HDMI adapters were provided during the initial installation.



Figure 13-1 HDMI



Figure 13-2 Audio Cable

INSTRUCTIONS

14. HOW TO RECORD VIDEO AND AUDIO TO THE NCAST.

- A. **Insert USB drive into the NCast Recorder.**
 1. The USB drive must be inserted to begin the recording session.
- B. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- C. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The Main Page will appear.
- D. **View the table microphone(s).**
 1. Be sure to turn on the microphone(s).
 - a) Push the microphone “Push” button, if it is off.
 - b) The LED will turn bright green.
 2. Microphone Remote Control is also available from the touch panel.
- E. Press **VOICE CALL** to establish a call, if you need to add one or more participants to the meeting.
 1. See Section 16 How to initiate a voice (telephone) only call.
- F. Press **RECORDING** under the Menu Bar.
 1. The Recording: Video (Figure 14-1) page will appear.
 2. Allow a few moments for configuration.
- G. Press a **LAYOUT** (Step 1: Select Layout).
 1. One Person icon – selected by default.
 2. One Person icon plus content (if available).
 3. One Person icon plus content – full view (if available).
- H. Press a **WINDOW** (Step 2: Select Window).
 1. Depending on the layout options, there may be more than one window.
- I. Press **TV Tuner** or any other source.
 1. The source preview image will appear under 2. Select Window.
- J. Press **RECORD**.
 1. Record; Records non-stop
 - a) Records audio and video.
 2. Record Pause; Records, Pauses, and continues to Record.
 - a) Press the Record Pause button as necessary.
 3. As the video is recorded, sources can be changed by selecting a new source.
- K. Press **PAUSE** or **STOP**.
 1. PAUSE; Press Pause to Continue.
 2. STOP; Ends the recording session.
- L. Press **STOP**.
 1. The files need to be moved to the USB device.
- M. Press **UPLOAD ALL RECORDINGS**.
 1. All videos recorded on the NCast will be prepared for upload to the USB.
 2. This process may be time consuming, if the files are large.
 3. Status: Last Transfer Complete.
- N. Remove **USB** from the NCast Recorder.



Figure 14-1 Recording: Video



Figure 14-2 Warning

NOTE

Once recording has begun a 60 minute count down timer starts counting. If the recorder is still recording when the time expires, the system will automatically stop the recording, create a new file, and continue video recording.

To override this feature while recording, press CANCEL. Cancelling this feature, could potentially create very large files.

To increase the record time for an additional 60 minutes, press the RECORD button while recording.

NOTE

To begin a new recording session, follow the instructions from G. Press a **LAYOUT** (Step 1: Select Layout) to M. Press **UPLOAD ALL RECORDINGS**.

After uploading the videos successfully, the videos will be erased automatically. **UPLOAD ALL VIDEO RECORDINGS FROM THE NCAST RECORDER OR THE FILES WILL BE DELETED DURING THE SYSTEM SHUT DOWN.**

NCAST WARNING MESSAGE: If you see “Warning: Check Recorder Power and Communication,” verify the NCast Recorder power status. The NCast LED should be blue and output video in the preview window, if powered on. If not powered on, press the power button to power on the NCast. Return to the touch panel and press “**?** INFORMATION” and select SYSTEM REBOOT. The system reboot time will allow the NCast to boot up and communicate with the control system. See Figure 14-2.

INSTRUCTIONS

15. HOW TO ACCEPT AN INCOMING VOICE CALL.

- A. Incoming Voice Call page (Figure 15-1) will appear, when activated by an inbound telephone call.
- B. Press **ANSWER** to start the Voice Conference.
 1. The call will be answered.
 2. The Main Page and VOICE CALL: KEYPAD page (Figure 15-2) will appear.
 3. Activate the microphone.
- C. Press **END** to end the voice call, when the conference is finished.

NOTE

Enable Ringer: Allows the sound of a telephone ringer to be heard in the conference room.

Disable Ringer (5 minutes): Disables the sound of an incoming telephone for five minutes.

Disable Ringer (6 hours): Disables the sound of an incoming telephone for six hours.

Disabling the ringer does not answer or disconnect the incoming telephone call.

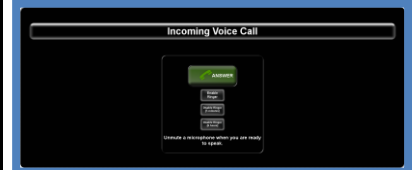


Figure 15-1 Incoming Voice Call



Figure 15-2 Voice Call: Keypad

INSTRUCTIONS

16. HOW TO INITIATE A VOICE (TELEPHONE) ONLY CALL.

- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The Main Page will appear.
- C. **View the Main Page.**
- D. **Activate the microphone(s).**
- E. Press **VOICE CALL**.
 1. The Voice Call: Keypad page (**Figure 16-1**) will appear.
 2. The END button should be illuminated, which confirms an audio-only phone call is not in progress.
 - a) If the END button is not highlighted in cyan, press END to properly disconnect from the previous call.
- F. Press the **NUMBERS** on the keypad to dial the telephone number, which will appear in the text box.
 1. Press the correction key to correct dialing mistakes.
 2. If a pause is necessary, use the “, Pause” button.
 - a) i.e., enter 9,5555555 and press Call. The system will dial 9 pause 3 seconds and then dial the telephone number.
 3. Directory (**Figure 16-2**) options are available.
 - a) Press Directory.
 - b) The Voice Conference: Directory page will appear.
 - c) Select the number to the left of the desired programmed telephone number.
 - d) Press CALL.
- G. Press **CALL**.
 1. The call is active, if the CALL button border is cyan.
- H. Press **“-”** or **“+”** to adjust the volume.
- I. Press **RECEIVE** to unmute or mute the inbound telephone audio.
 1. Example: If there is unwanted telephone audio in the background, the audio can be muted so that no one can hear the unwanted background noise. The telephone participant can listen, but will not be heard.
- J. Press **TRANSMIT** to unmute or mute the outbound telephone audio.
 1. This mutes the audio that is sent to the telephone call, which means the connected telephone participant will not be able to hear the conversation.
 2. The microphones are not muted, only the telephone audio transmission is muted.
- K. Press **END** to disconnect the call.
 1. The button border will change to cyan to signify the call has ended.



Figure 16-1 Voice Call: Keypad

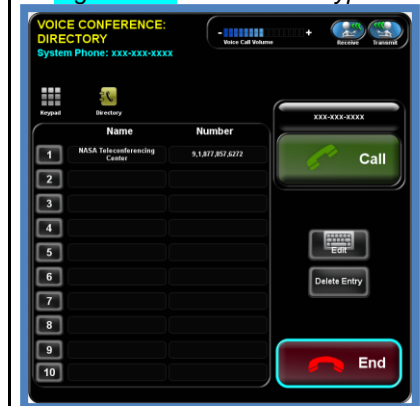


Figure 16-2 Voice Conference: Directory

INSTRUCTIONS

17. HOW TO INITIATE A MULTIPLE PARTY VOICE CONFERENCE.

- A. Activate the microphone(s).
- B. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- C. Press **MULTIMEDIA & VOICE CONFERENCE**.
- D. View the Main Page.
- E. Press **VOICE CALL** on the Menu Bar.
 1. The Voice Call: Keypad page will appear (Figure 17-1).
 2. The CALL button should not be illuminated, which confirms an audio-only phone call is not in progress.
 3. Press END, if necessary, to properly disconnect from the previous call.
- F. Use the **KEYPAD NUMBERS** to enter the telephone number, which will appear in the text box.
 1. Press the correction key to correct dialing mistakes.
- G. Press **CALL**.
 1. Wait for the party to answer.
- H. **Check with your local telephone maintenance contractor for details regarding the exact steps needed to connect multiple parties.**
 1. Example: Ask for the sequence required for using "Flash," "#," and "1," when dialing the phone number to add another participant.
 2. Example instructions are for Johnson Space Center.
 - a) View and perform the following steps on the touch panel.
 - (1) Press Voice Call and Hang Up (Disconnect) from any calls.
 - (2) Press Call (connect).
 - (3) Press *67 on the touch panel.
 - (4) Listen for the dial tone.
 - (5) Dial the first telephone number.
 - (6) Press Flash.
 - (7) Listen for the dial tone.
 - (8) Dial the second telephone number.
 - (9) Press Flash.
 - (a) This method can be used for up to six phone numbers.
- I. Press **END** to disconnect the call.



Figure 17-1 Voice Call: Keypad

NOTE

Some systems are capable of three-way and four-way teleconferences. Check with your local telephone maintenance service contractor for details. The above instructions are typical and may work on your system.

Using the Voice Call page, perform the same sequence to add multiple calls as you would for your standard phone.

This feature is not supported at all sites.

Utilization of a "Meet Me" number is recommended. You will need an Instant Meeting subscription. Visit <https://www.mymeetings.com/custom/site/nasa/index.jsp>. Fill out the Instant Meeting Subscription. After you do this the NTC will e-mail you with your information. Once you receive your login information, you will log back into the web site and setup your meeting (meet me number).

From the touch panel you would dial the Meet Me Number (telephone number) and the other parties would also dial the same Meet Me Number from their site. Be sure to open your microphone on the table, when you make the call.

INSTRUCTIONS

18. HOW TO EDIT AND SAVE A DIRECTORY ENTRY (VOICE CONFERENCE).

- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The MAIN PAGE will appear.
 2. The VOICE CALL: KEYPAD page (Figure 18-1) will appear.
- C. Press **DIRECTORY**.
 1. The VOICE CONFERENCE: DIRECTORY page (Figure 18-2) will appear.
- D. Press any **PRESET button 1-10**.
- E. Press **EDIT**, below the CALL button.
 1. The VOICE CALL: KEYBOARD page (Figure 18-3) will appear.
- F. Press **EDIT** (Step 1) to the left of the Name text box, to edit the name.
- G. Type the new name (Step 2), using the touch panel virtual keyboard.
- H. Press **SAVE** (Step 3).
- I. Press **EDIT** (Step 4) to the left of the Phone Number text box, to edit the phone number.
- J. Type the new phone number (Step 5).
- K. Press **SAVE** (Step 6).
- L. Press **X** on the keyboard to close the keyboard.



Figure 18-1 Voice Call: Keypad

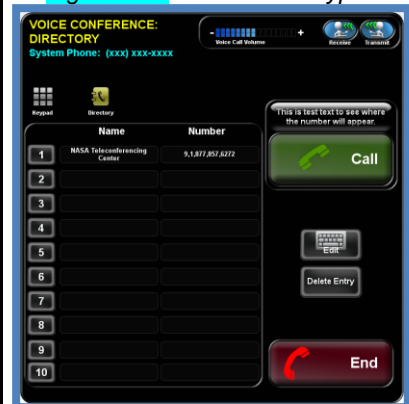


Figure 18-2 Voice Conference: Directory

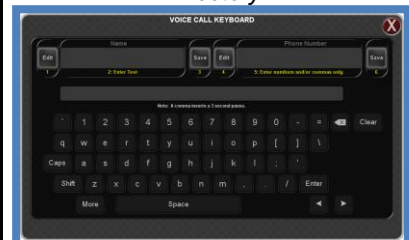


Figure 18-3 Voice Call Keyboard

INSTRUCTIONS

19. **HOW TO DELETE A SPEED DIAL PRESET (VOICE CONFERENCE).**
- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
 - B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 - 1. The MAIN PAGE will appear.
 - 2. The VOICE CALL: KEYPAD page (Figure 19-1) will appear.
 - C. Press **DIRECTORY**.
 - 1. The VOICE CONFERENCE: DIRECTORY page (Figure 19-2) will appear.
 - D. Select **PRESET button 1-10**.
 - E. Press **DELETE ENTRY**.
 - F. Press **DELETE ENTRY**.
 - 1. Returns to the VOICE CONFERENCE: DIRECTORY page.



Figure 19-1 Voice Call: Keypad



Figure 19-2 Voice Conference: Directory

INSTRUCTIONS

20. HOW TO USE MULTI-VIEW (MULTI-GRAPHIC PROCESSOR).

- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- B. Press **MULTIMEDIA & VOICE CONFERENCE**.
 1. The MAIN PAGE will appear.
- C. Press **MULTI-VIEW 2**, for example, on the Menu Bar.
 1. The Multi-View page (Figure 20-1) will appear.
- D. Press any **LAYOUT** (1: Select a Layout).
 1. Figure 20-2 Layout
- E. Press any **WINDOW** (2: Select a Window).
 1. Figure 20-3 Window
- F. Press a **SOURCE** (Computer Interface, TV Tuner, etc.).
 1. Selecting COMPUTER INTERFACE will require an additional selection of an input, etc.
- G. Repeat E and F for each available window.
- H. Press a **DISPLAY**.
 1. The display will power on, if it was off.
- I. Press **MULTI-VIEW 2**, for example, on the sources scroll bar.
 1. This Multi-View source should be the same Multi-View button selected on the Menu Bar.
 2. Meeting participants will be able to see what is routed to the display.

NOTE

Multi-View Labels: This is a toggle button. Labels refer to the text on each window viewable on the display. The label indicates the source visible on each window.

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If the user wants to see the Multi-view video on the displays, first press a Display and then press the Multi-View source. Each Multi-View layout can be configured in the same manner.

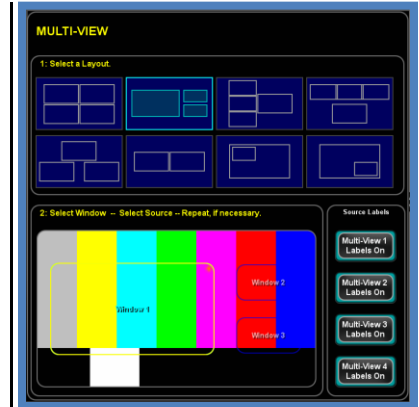


Figure 20-1 Multi-View

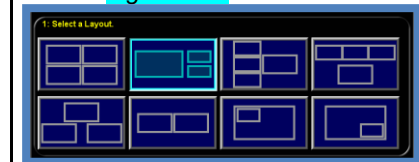


Figure 20-2 Layout

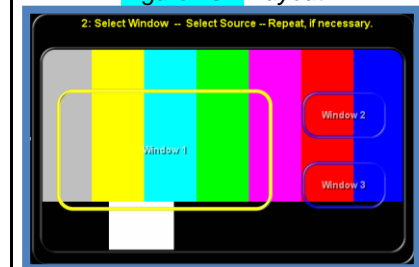


Figure 20-3 Window

## INSTRUCTIONS

### 21. HOW TO USE MICROPHONE CONTROL.

- A. **TOUCH** the touch panel to activate it, if the touch panel is asleep.
- B. Press **MULTIMEDIA & VOICE CONFERENCE**.
  1. The MAIN PAGE will appear.
  2. The VOICE CALL: KEYPAD page will appear.
- C. Press **MICROPHONES** on the Menu Bar.
  1. The Microphones (Figure 21-1) page will appear.
- D. Press any **MIC # MUTED** or **MIC # UNMUTED** button in the control area of the touch panel.
  1. Pressing the unmute button allows the connected party to hear audio detected by that microphone.
  2. Pressing the mute button prevents the connected party from hearing audio detected that microphone.
  3. A green LED on the physical microphone, means the microphone is open and unmuted.
  4. All table microphones can be muted simultaneously when the Mute Mics button is pressed.
    - a) See Figure 21-3.
  5. Status:
    - a) Green: Mic is open/unmuted and transmitting audio.
    - b) Red: Mic is muted and it is not transmitting audio.
    - c) See Figure 21-2.

#### NOTE

If a Lavalier (LAV) microphone, is part of this conference room it cannot be controlled by the touch panel. There is a hard switch located on the LAV microphone used to mute or unmute the microphone.

**Unmuted Mic:** The connected party can hear audio.

**Muted Mic:** The connected party cannot hear audio.

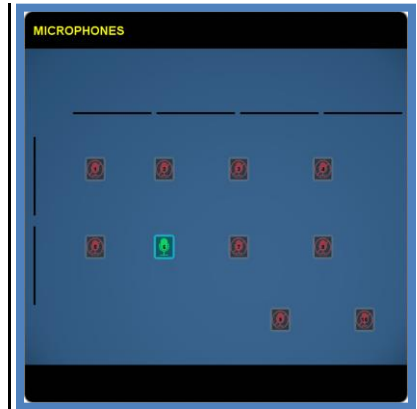


Figure 21-1 Microphones

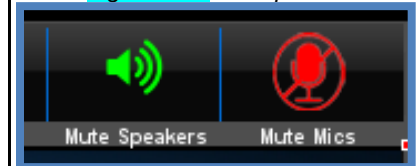


Figure 21-2 Mute Mics

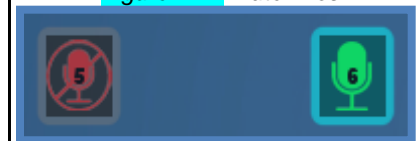



Figure 21-3 Microphone Status

## INSTRUCTIONS

### 22. HOW TO SET THE DATE AND TIME ON THE TOUCH PANEL.

- A. **TOUCH** the touch panel to activate it.
- B. Press the **DATE** or **TIME**.
  - 1. See **Figure 22-1**
  - 2. The Time & Date Settings page (**Figure 22-2**) will appear.
- C. Press the arrow buttons for each desired change.
  - 1. The new information is visible below the item.
- D. Press **SET TIME**.
- E. Press .

#### NOTE

It may take approximately one (1) minute before the LED sign will display the time.



Figure 22-1 Home Page (Example)

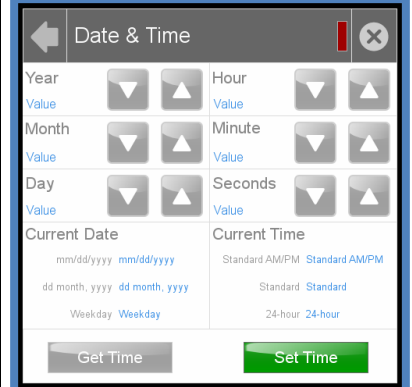


Figure 22-2 Date & Time

23. **SHUT DOWN SIGN.**

- A. See Section 7 HOW TO SHUT DOWN AFTER A CONFERENCE for more information on shutting down the system.
- B. Print this page and post it as a reminder to shut down the conference room system.



## INFORMATION

**CUSTOMIZED CONFERENCE ROOM:** Call Patrick O'Neill, 256-961-9410, for information to have a customized conference room installed.

**NTC HELP DESK: (877) 857-6272:** All video numbers can be routed via the NTC Help Desk. Call the NTC Help Desk, if you need additional instructions on how to use features for this conference room. Example: How to control individual audio levels, play a Blu-ray, etc.

**TROUBLE TICKET: (877) 677-2123:** Call this number if there is a general problem with the system such as a damaged microphone, faulty display, video codec lockup, etc.

### MULTI-PARTICIPANT CALLS:

- } Video conference systems are capable or you can call the NTC to set this up for you.
- } Some telephone systems are capable of three and four-way teleconferences.  
Check with your local maintenance service contractor for details.
- } Review the User Guide for more details.



### SYSTEM REBOOT:

Rebooting the system will drop any existing conference calls and require redialing to reconnect. Rebooting the system takes approximately four (4) minutes. Rebooting the system will reboot the central controller, touch panel, and the video codec (as long as the central controller can control the devices).

*The Last Page!*