

Classroom Technology Guide

Rittman Schools



Classroom Technology Guide

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SECTION ONE:

Classroom

Overview

SECTION ONE:

CLASSROOM OVERVIEW

What is Unique about the Classrooms?

Your classroom features fully-integrated technology systems including: teacher workstations, sound reinforcement/enhancement systems, ceiling-mounted projectors for video and other presentations, local DVD/VHS players, digital display phones, paging systems and interactive whiteboards.

Each of these systems works seamlessly to enhance classroom instruction, increase student attention and learning while at the same time reducing teacher fatigue. Teachers should view the classroom as being equipped with tools to enhance the current style of instruction. The cutting-edge classroom technology will not change HOW you teach the students; it will change HOW EFFECTIVELY you teach the students.

Advantages within the new classroom learning environment:

- Student motivation is heightened. Having the opportunity to use new technology is exciting and motivating for students.
- Increased student achievement as shown in numerous research studies.
- Significant improvement in achievement for “at-risk” and special needs students.
- Enhanced teacher instruction
- Reduced teacher fatigue

The purpose of this manual is to introduce you to each of the technology components within the classrooms and to guide you through the basic operation of these systems.

SECTION TWO:

NEC

NP M-300X Projectors

SECTION TWO: NEC NP M300X Projector

This section introduces you to the NP M300X Projector and describes key features, controls, and operation.

Introduction

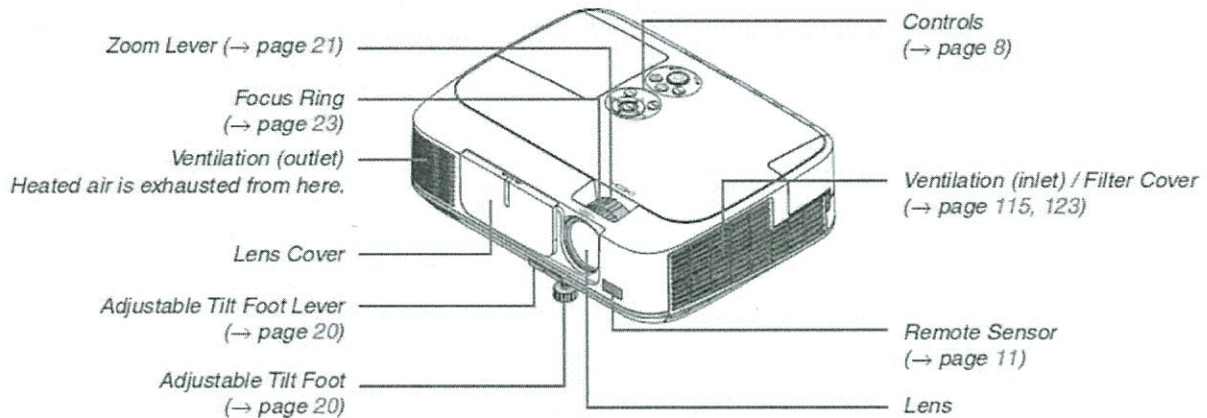
Video projectors that produce an enhanced display have replaced the old-fashioned TV sets typically found in classroom. These projectors will display a crisp, large screen display from the teacher's PC, DVD/VHS player, or from the school's media display system (live video, bulletin board, cable TV stations, etc.).

An NEC NP M300X Projector has been ceiling mounted in each classroom. Instead of straining to see a picture on a TV screen, students view images on a six-foot wide image area that can be easily viewed from anywhere in the room.

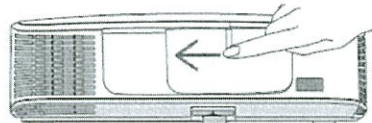
The projectors have been connected with all input sources, and the projectors have been adjusted individually according to the layout / lighting in each room. You should not need to make additional adjustments or configuration changes to the projector.

Part Names of the Projector

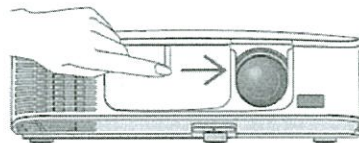
Front/Top



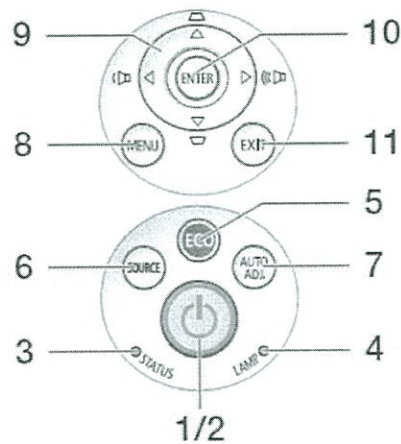
Slide the lens cover to the left to uncover the lens.



To cover the lens, slide the lens cover to the right.

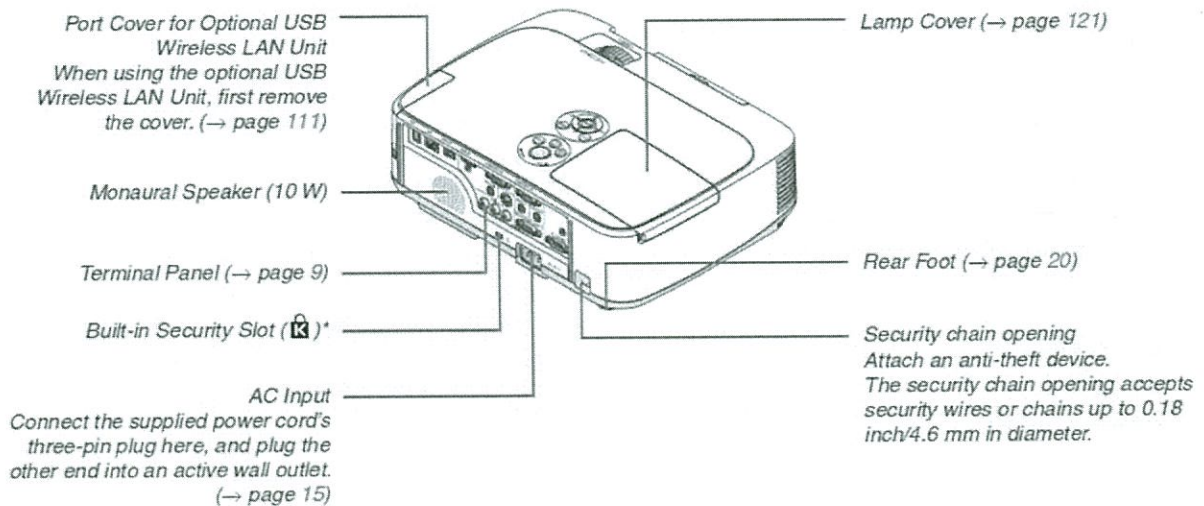


Top Features

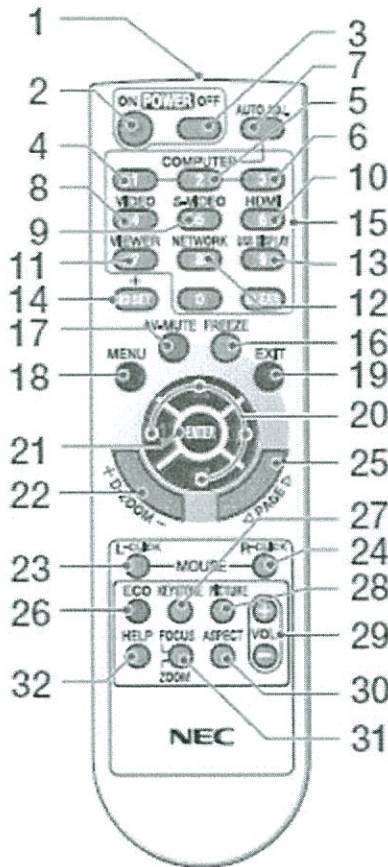


1. (POWER) Button (→ page 16, 27)
2. POWER Indicator (→ page 15, 16, 27, 127)
3. STATUS Indicator (→ page 127)
4. LAMP Indicator (→ page 120, 127)
5. ECO Button (→ page 30)
6. SOURCE Button (→ page 18)
7. AUTO ADJ. Button (→ page 26)
8. MENU Button (→ page 69)
9. / Volume Buttons / Keystone Buttons
 (→ page 24, 26)
10. ENTER Button (→ page 69)
11. EXIT Button (→ page 69)

Rear



Part Names of the Remote Control



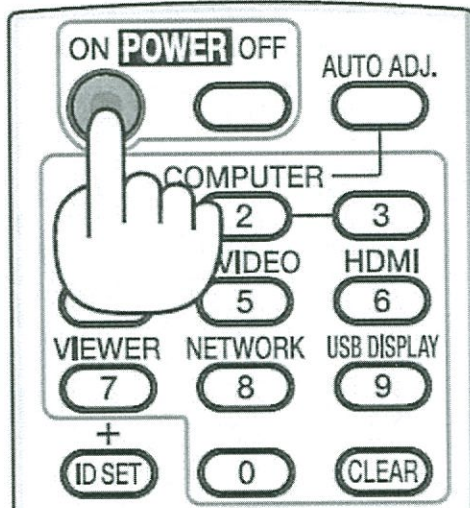
1. Infrared Transmitter
(→ page 11)
2. POWER ON Button
(→ page 16)
3. POWER OFF Button
(→ page 27)
- 4, 5, 6. COMPUTER 1/2/3 Button
(→ page 18)
(COMPUTER 3 button is not available.)
7. AUTO ADJ. Button
(→ page 26)
8. VIDEO Button
(→ page 18)
9. S-VIDEO Button
(→ page 18)
10. HDMI Button (→ page 18)

11. VIEWER Button (→ page 18, 60)
12. NETWORK Button (→ page 18)
13. USB DISPLAY Button (→ page 18)
14. ID SET Button
(→ page 86)
15. Numeric Keypad Button/CLEAR Button
(→ page 86)
16. FREEZE Button
(→ page 29)
17. AV-MUTE Button
(→ page 29)
18. MENU Button
(→ page 69)
19. EXIT Button (→ page 69)
20. ▲▼◀▶ Button (→ page 69)
21. ENTER Button (→ page 69)
22. D-ZOOM (+)(-) Button
(→ page 29)
23. MOUSE L-CLICK Button*
(→ page 41)
24. MOUSE R-CLICK Button*
(→ page 41)
25. PAGE ▽/△ Button*
(→ page 41)
26. ECO Button (→ page 30)
27. KEYSTONE Button
(→ page 25)
28. PICTURE Button
(→ page 74, 76)
29. VOL. (+)(-) Button
(→ page 26)
30. ASPECT Button
(→ page 79)
31. FOCUS/ZOOM Button
The ZOOM button works on the short-throw models only. The FOCUS button does not work on this series of projectors.
32. HELP Button
(→ page 94)

* The PAGE ▽/△, ▲▼◀▶, MOUSE L-CLICK and MOUSE R-CLICK buttons work only when a USB cable is connected with your computer..

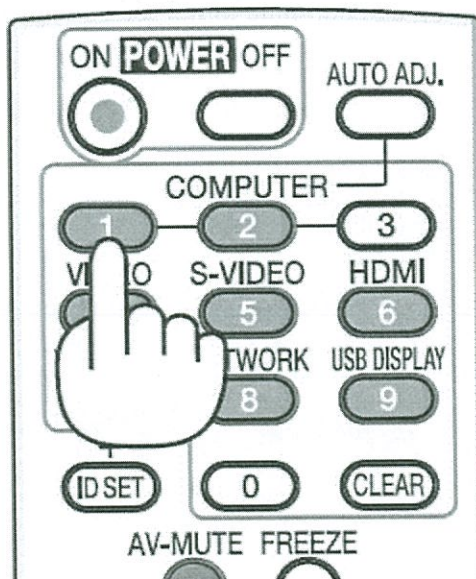
Turning On the Projector

- Press the POWER ON button on the remote control for a minimum of 2 seconds.
- Allow approximately 30 – 45 seconds for the projector to begin projecting.



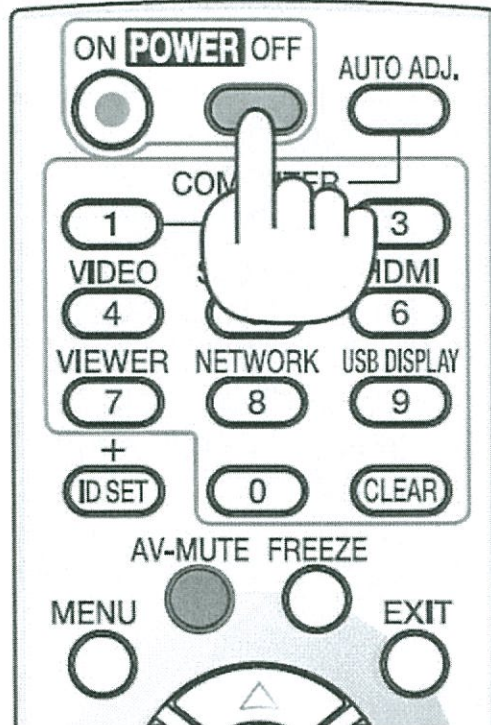
Selecting an Input Source

- COMPUTER 1 – This is the default source for the projector.

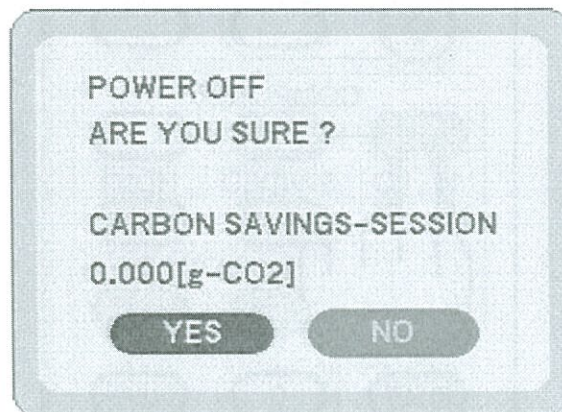


Turning Off the Projector

- Press the POWER OFF button on the remote control.

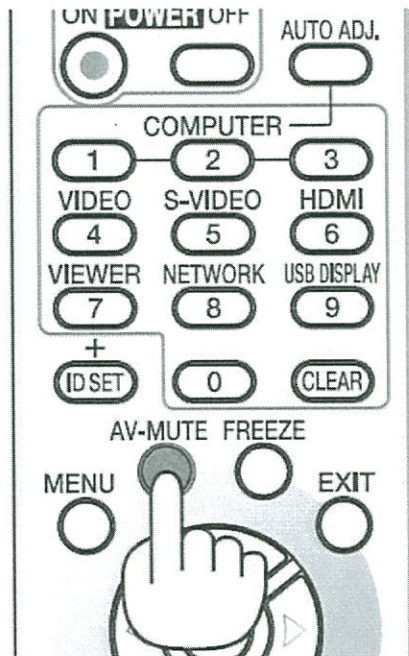


- The “Power Off / Are you sure?” message will appear. Press the POWER OFF button again. (NOTE: Cooling fans will continue to run for 90 seconds).

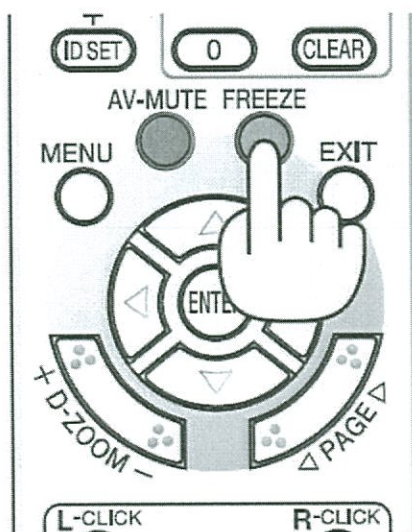


Convenient Features

- Turning Off the Image – Press the AV-MUTE button to turn off the image for a short period of time. Press again to restore the image. (NOTE: does not affect sound).



- Freezing a Picture – Press the FREEZE button to freeze a picture. Press again to resume motion. (NOTE: This does not act as a PAUSE button for videos).



Enlarging a Picture

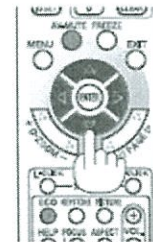
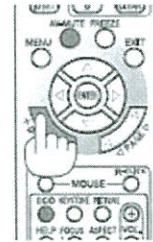
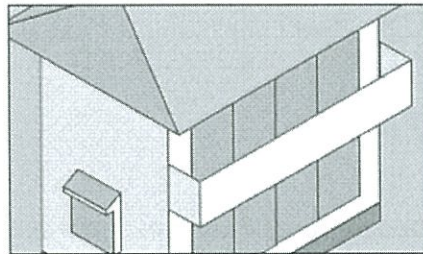
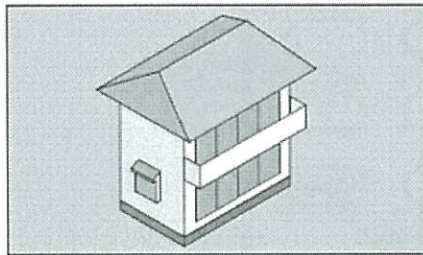
- You can enlarge the area you want by up to 400%.

NOTE: The maximum magnification may be less than four times depending on the signal.

To do so:

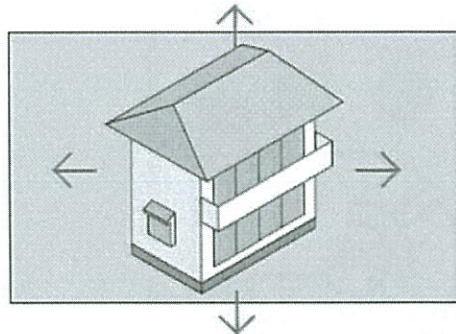
1. Press the D-ZOOM (+) button to magnify the picture.

To move the magnified image, use the ▲, ▼, ◀ or ▶ button.



2. Press the ▲▼◀▶ button.

The area of the magnified image will be moved

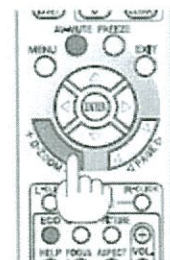


3. Press the D-ZOOM (-) button.

Each time the D-ZOOM (-) button is pressed, the image is reduced.

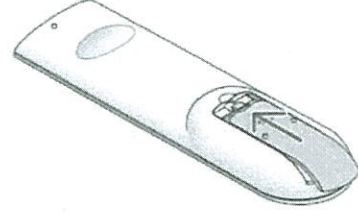
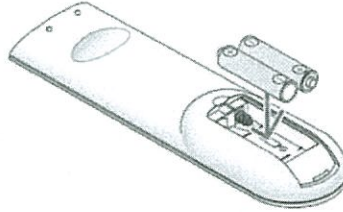
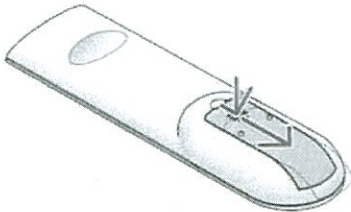
NOTE:

- The image will be enlarged or reduced at the center of the screen.
- Displaying the menu will cancel the current magnification.



Battery Installation

- 1** Press firmly and slide the battery cover off.
- 2** Install new batteries (AAA). Ensure that you have the batteries' polarity (+/-) aligned correctly.
- 3** Slip the cover back over the batteries until it snaps into place. Do not mix different types of batteries or new and old batteries.



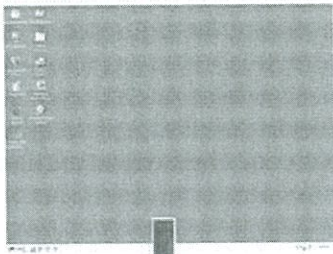
Auto Adjustment Feature

Optimizing a computer image automatically. (COMPUTER1/COMPUTER2)

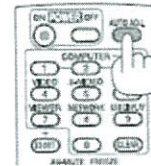
Press the AUTO ADJ. button to optimize a computer image automatically.

This adjustment may be necessary when you connect your computer for the first time.

[Poor picture]



[Normal picture]



NOTE:

Some signals may take time to display or may not be displayed correctly.

- If the Auto Adjust operation cannot optimize the computer signal, try to adjust [HORIZONTAL], [VERTICAL], [CLOCK], and [PHASE] manually. (→ page 77, 78)
-

Replacing the Projector Bulb

After your lamp has been operating for 5000 hours (up to 6000 hours: ECO mode) or longer, the “Lamp” indicator in Cabinet will blink red and the message will appear. Even though the lamp may still be working, replace it at 5000 hours (Up to 6000 hours: ECO mode) to maintain optimal projector performance.

CAUTION

- **DO NOT TOUCH THE LAMP** immediately after it has been used. It will be extremely hot. Turn the projector off, wait 90 seconds, turn off the main power switch, and then disconnect the power cable. Allow at least one hour for the lamp to cool before handling.
- **DO NOT REMOVE ANY SCREWS** except the lamp cover screw and two lamp case screws. You could receive an electric shock.
- Do not break the glass on the lamp housing.
- Keep fingerprints off the glass surface on the lamp housing. Leaving fingerprints in the glass surface might cause an unwanted shadow and poor picture quality.
- The projector will turn off and go into stand-by mode after 5000 hours (up to 6000 hours: ECO mode) of service. If this happens, be sure to replace the lamp. If you continue to use the lamp after 5000 hours (up to 6000 hours: ECO mode) of use, the lamp bulb may shatter, and pieces of glass may be scattered in the lamp housing. Do not touch them as the pieces of glass may cause injury. If this happens, contact your NEC dealer for lamp replacement.

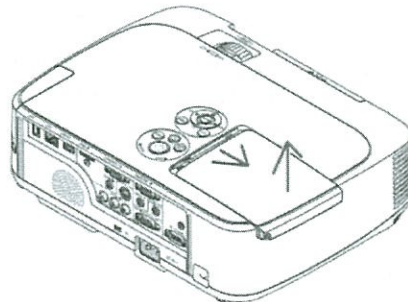
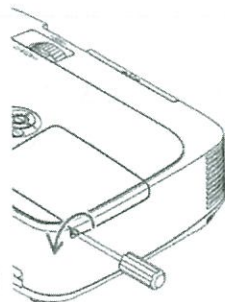
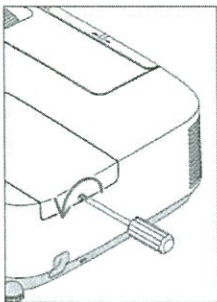
To replace the lamp:

Optional lamp and tools needed for replacement:

- Replacement Lamp NP15LP
- Phillips screwdriver or equivalent

1. Remove the lamp cover.

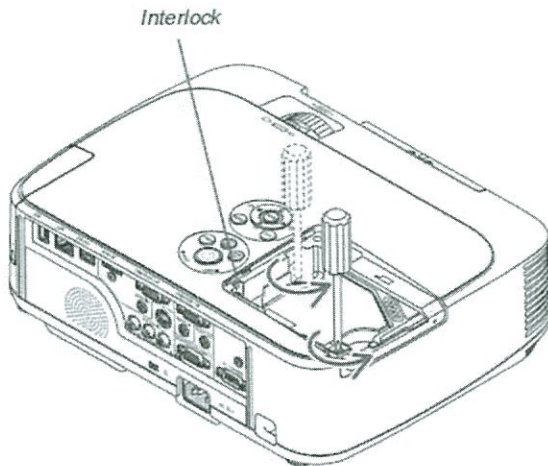
- (1) Loosen the lamp cover screw
 - The lamp cover screw is not removable.
- (2) Push and slide the lamp cover off.



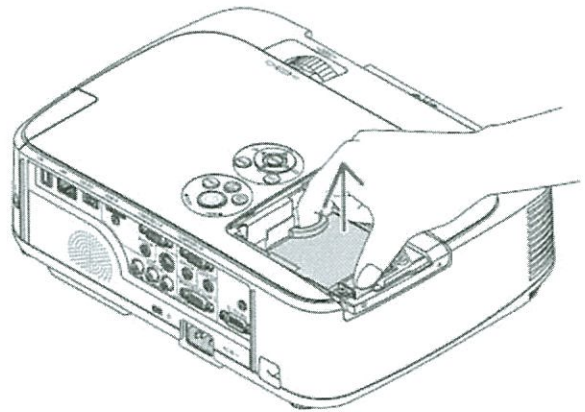
(M420X/M420XV/M350XS/
M300XS/M260XS/M300WS/
M260WS)

2. Remove the lamp housing.

- (1) Loosen the two screws securing the lamp housing until the phillips screwdriver goes into a freewheeling condition.
 - The two screws are not removable.
 - There is an interlock on this case to prevent the risk of electrical shock. Do not attempt to circumvent this interlock.
- (2) Remove the lamp housing by holding it.

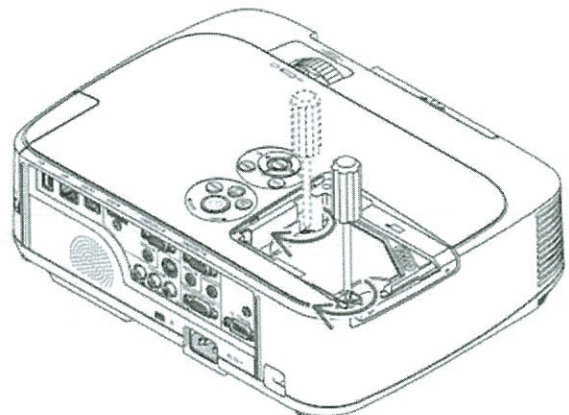
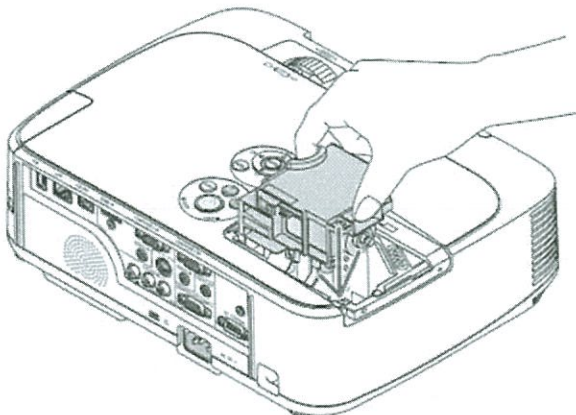


CAUTION:
Make sure that the lamp housing is cool enough to before removing it.



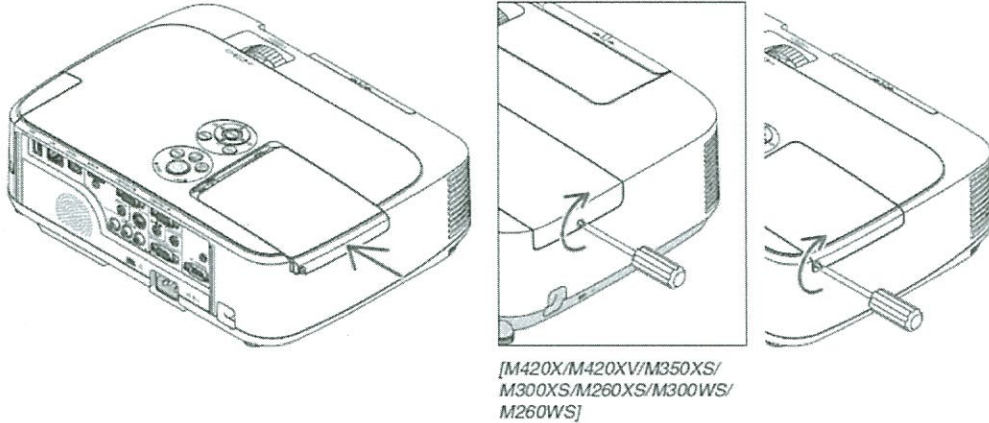
3. Install a new lamp housing.

- (1) Insert a new lamp housing until the lamp housing is plugged into the socket.
- (2) Push the top center of the lamp housing to secure it.
- (3) Secure it in place with the two screws.
 - Be sure to tighten the screws.



4. Reattach the lamp cover.

- (1) Slide the lamp cover back until it snaps into place.
- (2) Tighten the screw to secure the lamp cover.
 - Be sure to tighten the screw.



This completes the lamp replacement.
Go on to the filter replacement.

*NOTE: When you continue to use the projector for another 100 hours after the lamp has reached the end of its life, the projector cannot turn on and the menu is not displayed.
If this happens, press the HELP button on the remote control for 10 seconds to reset the lamp clock back to zero.
When the lamp time clock is reset to zero, the LAMP indicator goes out.*

Maintenance – Cleaning and Replacing the Filter

The air-filter sponge keeps dust and dirt from getting inside the projector and should be frequently cleaned. If the filter is dirty or clogged, your projector may overheat.

*NOTE: The message for filter cleaning will be displayed for one minute after the projector is turned on or off. When the message is displayed, clean the filters. The time to clean the filters is set to [OFF] at time of shipment.
To cancel the message, press any button on the projector cabinet or the remote control.*

The two-layer filter on the projector improves cooling and dust-proof capabilities compared with the conventional models.

The outsides (intake side) of the first and second layer filters remove dust.

To clean the filter, detach the filter unit and the filter cover.

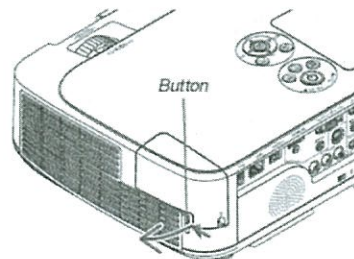
Filter removal procedure is different depending on the model.

⚠ CAUTION

- Before cleaning the filters, turn off the projector, disconnect the power cord and then allow the cabinet to cool. Failure to do so can result in electric shock or burn injuries.

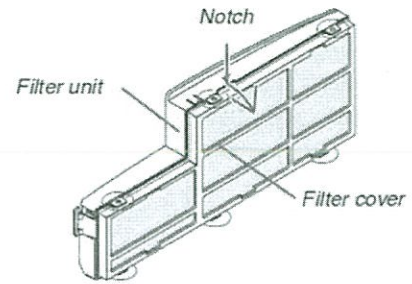
[M350X/M300X/M260X/M230X/M300W/M260W]

1. Push the button to release the filter unit and pull it out.



2. Remove the filter cover.

The filter cover is fixed at six separate mounting points.
Bow the filter cover by pushing the notch slightly until it releases.

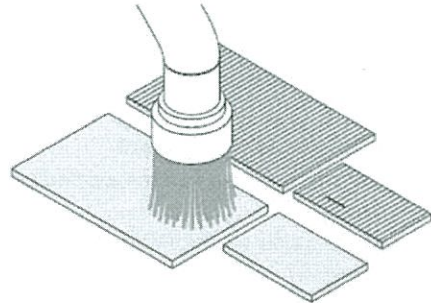


3. Remove the four filters and use a vacuum cleaner to vacuum all the dust inside.

Get rid of dust in the accordion filter

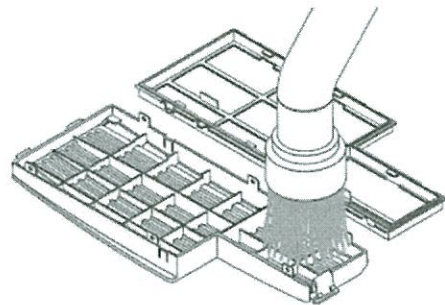
NOTE:

- Whenever you vacuum the filter, use the soft brush attachment to vacuum. This is to avoid damage to the filter.
- Do not wash the filter with water. Doing so can result in filter clogging.



4. Remove dust from the filter unit and the filter cover.

Clean both outside and inside.

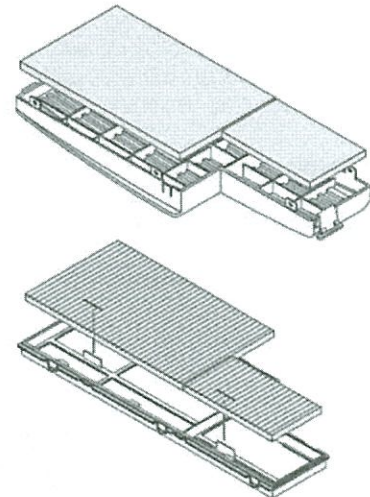


5. Attach the four filters to the filter unit and the filter cover.

Filter unit: Attach two hard honeycomb filters (large and small) to the filter unit.

Filter cover: Attach two soft accordion filters (large and small) to the filter cover.

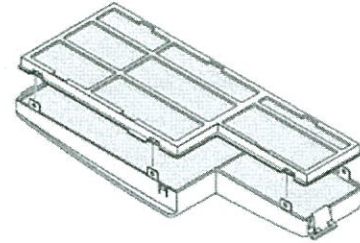
The accordion filter has slits on it. Align these slits with the protrusions of the filter cover.



6. Attach the filter cover back to the filter unit

Align the filter unit with the filter cover and push the six protrusions into place.

- Make sure all six mounting points are aligned properly.



7. Put the filter unit back to the projector cabinet.

Insert two catches of the tip of the filter unit into the groove of the cabinet, and push the button to close the filter unit.

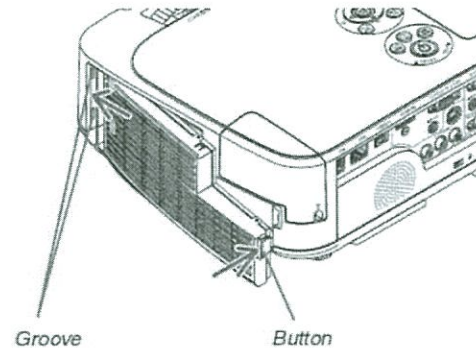
- Push the filter unit until it clicks into place.

8. Clear the filter usage hours.

Plug the power cord into the wall outlet, and then turn on the projector.

From the menu, select [RESET] → [CLEAR FILTER HOURS].
(→ page 97)

The interval time to clean the filters is set to [OFF] at time of shipment. When using the projector as it is, you do not clear the filter usage



To replace the filters:

Filter removal procedure is different depending on the model. Follow the procedure suitable for your model.

Four filters are packaged with the replacement lamp.

Honeycomb filter (coarse mesh): Large and small sizes (attached to the filter unit)

Accordion filter (fine mesh): Large and small sizes (attached to the filter cover)

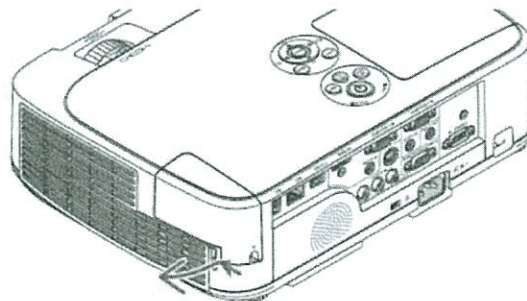
NOTE:

- Replace all four filters at the same time.
- Before replacing the filters, wipe off dust and dirt from the projector cabinet.
- The projector is precision equipment. Keep out dust and dirt during filter replacement.
- Do not wash the filters with soap and water. Soap and water will damage the filter membrane.
- Put filters into place. Incorrect attachment of a filter may cause dust and dirt to get into the inside of the projector.

Before replacing the filters, replace the lamp. (→ page 120)

[M350X/M300X/M260X/M230X/M300W/M260W]

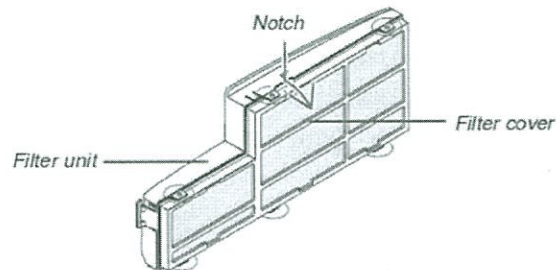
1. Push the catch to release the filter unit and pull it out.



2. Detach the filter cover from the filter unit.

The filter cover is fixed at six separate mounting points.

Bow the filter cover by pushing it slightly until it releases.



3. Replace the four (4) filters

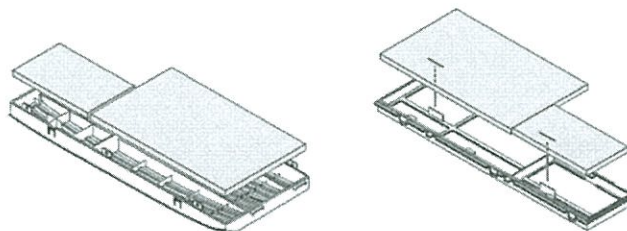
1. Remove the filter, and then clean the filter unit and the filter cover.

2. Attach new filters.

Filter unit: Attach two honeycomb filters (coarse mesh) to the filter unit.

Filter cover: Attach two accordion filters (fine mesh) to the filter cover.

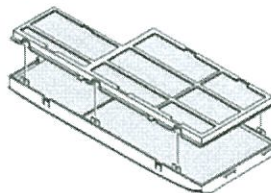
The accordion filter has slits on it. Align these slits with the protrusions of the filter cover.



4. Attach the filter cover back to the filter unit

Align the filter unit with the filter cover and push the protrusions into place.

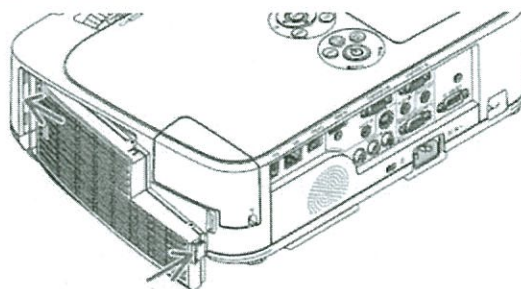
• Make sure all six mounting points are aligned properly.



5. Put the filter unit back to the projector cabinet.

Insert two catches of the tip of the filter unit into the groove of the cabinet.

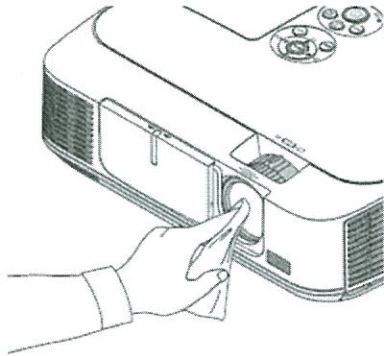
Push the filter unit until it clicks into place.



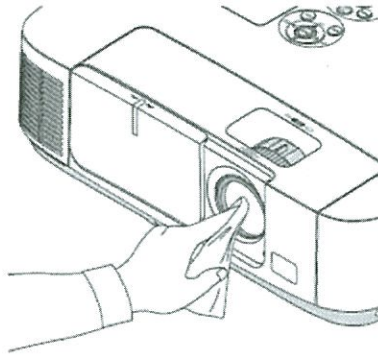
Maintenance – Cleaning the Lens and Cabinet

- Turn off the projector before cleaning.
- The projector has a plastic lens. Use a commercially available plastic lens cleaner.
- Do not scratch or mar the lens surface as a plastic lens is easily scratched.
- Never use alcohol or glass lens cleaner as doing so will cause damage to the plastic lens surface.

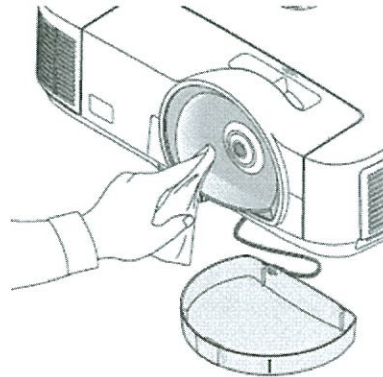
[M350X/M300X/M260X/M230X/
M300W/M260W]



[M420X/M420XV]



[M350XS/M300XS/M260XS/
M300WS/M260WS]



Turn off the projector, and unplug the projector before cleaning.

- Use a dry soft cloth to wipe dust off the cabinet.
If heavily soiled, use a mild detergent.
- Never use strong detergents or solvents such as alcohol or thinner.
- When cleaning the ventilation slits or the speaker using a vacuum cleaner, do not force the brush of the vacuum cleaner into the slits of the cabinet.



Vacuum the dust off the ventilation slits.

- Clogged ventilation slits may cause a rise in the internal temperature of the projector, resulting in malfunction.
- Do not scratch or hit the cabinet with your fingers or any hard objects
- Contact your dealer for cleaning the inside of the projector.

NOTE: Do not apply volatile agent such as insecticide on the cabinet, the lens, or the screen. Do not leave a rubber or vinyl product in prolonged contact with it. Otherwise the surface finish will be deteriorated or the coating may be stripped off.

SECTION THREE:

LIGHTSPEED

CAT 855

AMPLIFICATION

SYSTEM

SECTION THREE: LIGHTSPEED CAT 855

CLASSROOM AMPLIFICATION SYSTEM

This section introduces you to the LightSpeed Classroom Sound Amplification System and describes key features, controls and operation.

What is a Classroom Amplification System and How Does It Work?

The basic purpose of a Classroom Amplification System is to amplify the teacher's voice evenly throughout the classroom so everyone student can hear every work every time. The teacher wears a wireless microphone, which transmits an infrared light to a receiver/amplifier unit. The voice is then played through loudspeakers for the entire class to hear. This amplified voice overcomes background noise, poor room acoustics and mild hearing loss to make it easier for students to understand and concentrate on what the teacher is saying.

How Will It Help Your Students?

Multiple research studies have been conducted in recent years, and all agree that Classroom Amplification Systems are proven and powerful tools that provide all children with a much-improved opportunity to learn.

- Students are rich in auditory designed neural tissue. However, this tissue needs stimulation in order to grow and develop.
- Learning is about brain access, with subsequent brain growth and development, a student's ability to learn centers on how well his or her brain receives the incoming signal or information from the teacher.
- For spoken instruction to be worthwhile, students must hear and listen to the words.
- 30% of average elementary (K – 6) populations fail a 15dB-screening test. Most of these students have this mild hearing loss due to otitis media (infections) and middle ear fluid.
- The majority of these children go undetected since they usually pass a routine screening of 25dB. (This level has traditionally been through to be adequate for normal classroom learning).
- 75% of these students with mild hearing loss have academic deficiencies by the 6th grade.

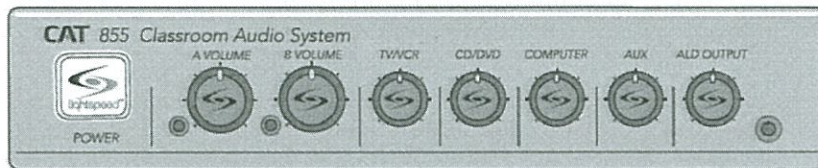
How Will It Make the Classroom Instruction More Effective?

As much as Classroom Amplification Systems have been proven to help the students, they also benefit teachers. Teachers are able to speak into the microphone using very soft, conversational tones and still be heard clearly by all the children. This results in a reduction of classroom stress, few behavioral problems, and overall better classroom management. Additionally, teacher absenteeism due to voice and throat illness is eliminated almost entirely.

LIGHTSPEED Infrared Classroom Amplification System Components

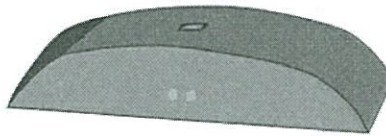
Each classroom is equipped with:

- Infrared (IR) Wireless Microphone for the teacher
- Infrared (IR) Wireless Microphone for the students
- Ceiling Speakers, evenly distributed throughout the room
- 360 degree infrared sensors and an infrared receiver / amplifier

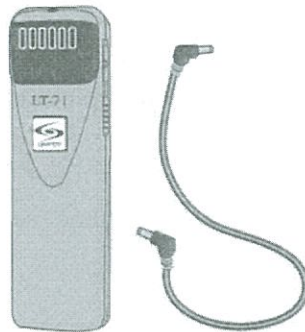


CAT 855 Amplifier

ISR Infrared
Sensor/Receiver
and Cable

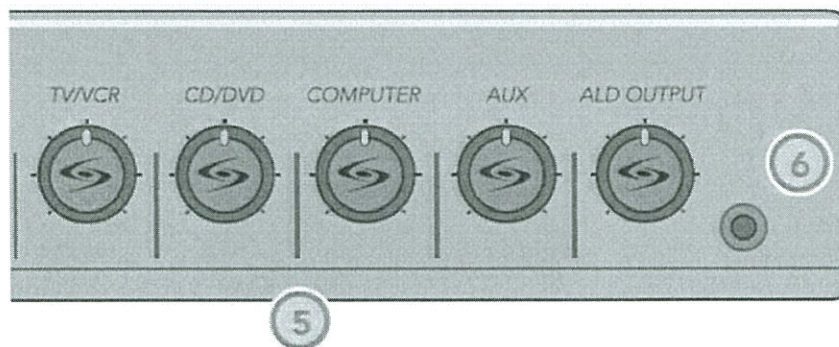
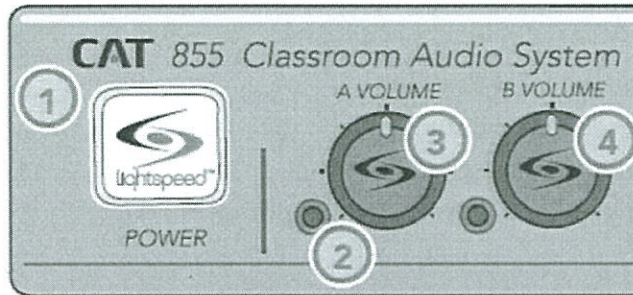


LT-71 LightMic
and Charger
Cable



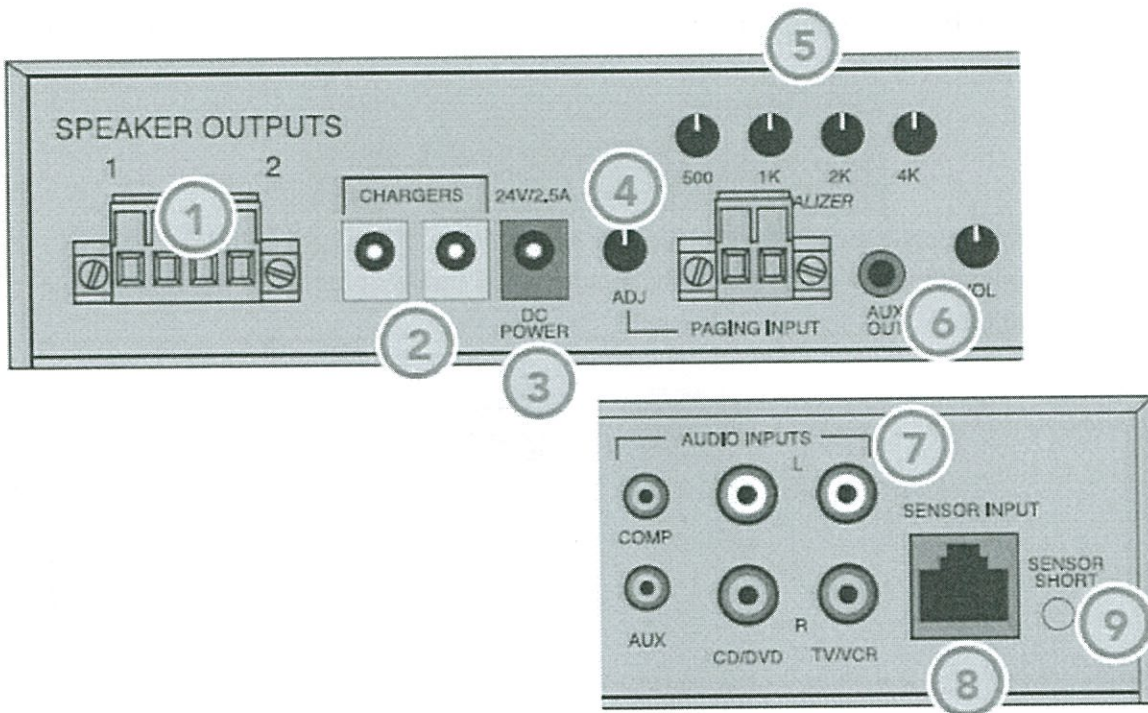
The teacher is outfitted with 2 microphones that transmit an infrared signal to a receiver in the classroom. This eliminates sound drop-off by evenly delivering amplified sound quality to the entire classroom through the ceiling speakers. With infrared signaling technology, there is no interference from microphone signals in other classrooms, a common problem with FM-based amplification systems (i.e. it is not possible for Mrs. Smith's lesson multiplication to be accidentally broadcast into Mrs. Jones' room down the hall). The LightSpeed Classroom Amplification System also distributes amplified sound from other sources in each room, such as the DVD / VHS player and the teacher's computer.

Front Panel Controls



1. **POWER Switch / POWER Indicator:** Press this button to turn the CAT 855 ON (pushed in) or OFF. When the POWER is switched on, the blue LED indicator will light.
2. **Audio Indicators:** These lights flash red when audio (voice) from the microphone is detected.
3. **A Volume:** Controls the volume of the teacher microphone (set to channel A). Rotating the knob clockwise increases the volume level.
4. **B Volume:** Controls the volume of the student or second teacher microphone (set to channel B). Rotating the knob clockwise increases the volume level.
5. **Audio Input Volumes:** Control the volume of the audio coming from the media source (computer, TV/VCR, CD/DVD, etc.) connected to the corresponding input in the rear panel. Rotating the knobs clockwise increases the volume levels.
6. **ALD Output and Volume:** This jack sends audio to external equipment such as an assistive listening device (Personal FM System) or recording device. Use the volume control to set the optimum signal level for the device.

Rear Panel Controls



1. **Speaker Outputs (1 – 6):** This connector is used to connect the CAT 855 to the loudspeakers.
2. **Chargers:** These jacks can be used to charge the microphones.
3. **DC Power:** The power cord (24V/2.5A) connects to this jack.
4. **Paging Input and ADJ:** Connection for optional PageFirst sensor.
5. **Equalizer:** Setup during initial installation.
6. **AUX Out and Vol:** This jack sends audio to an external device (i.e. assistive listening FM systems) or a recording device. Volume control for this jack is located next to the input.

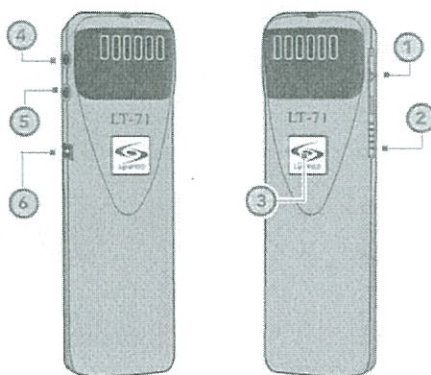
***Buttons 5, 7 – 9 are setup during installation

Operating the LightSpeed Infrared Classroom Amplification System

1. Turn on the Power button for the main unit, which is located on the left side of the front panel. The blue LED power light on the POWER switch will light when the main unit is turned on.



2. Turn on the Power switch for the Teacher Microphone. The Light in the LightSpeed Logo (pointed out by number 3 in the picture below) glows blue when the LightMic is powered on.



3. Place the Teacher Microphone cord around your neck and adjust the length so the top of the Microphone rests on the collar bone (approximately 6 inches from your mouth). Relax and speak at a comfortable level. Remember, you do not have to project your voice.
4. At the end of the day, plug the charging cable into the Teacher Microphone. The unit should charge overnight (8 to 12 hours). The LED light on the front of the Teacher Microphone glows green when the cable is connected and charging correctly. The light goes out when fully charged. The NiMH rechargeable battery will hold a charge for a full day of normal classroom use.

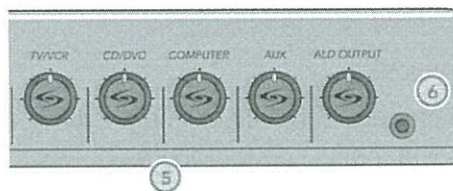
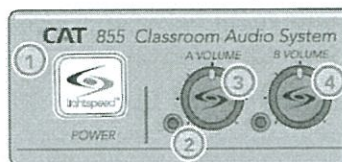
IMPORTANT NOTE: It is best to leave the Teacher Microphone charging until used, since the batteries slowly lose their charge when not in use. **HOWEVER, do not leave the Teacher Microphone plugged into the charger for more than 10 days as it will significantly shorten the life of the rechargeable battery.** With proper care, NiMH batteries will provide service for at least one year. If battery or charging problems occur, contact LightSpeed service at 800-732-8999.

IMPORTANT NOTE: Do NOT attempt to charge alkaline batteries – they can overheat and expand or explode, creating a hazard and damage the Microphone.

**** ONLY USE BATTERIES PROVIDED BY THE MANUFACTURER!**

Main Unit (Receiver / Amplifier) Settings

- Make sure both microphone volume controls (A VOLUME and B VOLUME) and Input volume controls are turned all the way down (fully counter-clockwise) when setting volume for the first use. Once volume is set, it should not need adjusting.



Teacher Microphone Settings

- Channel Select Switch (CH A/B): This switch allows for selection between Channel A or B. If you are using a single microphone / transmitter for your system, we recommend using Channel A.
- MONITOR your amplified voice from time to time to make sure it is not too loud.
- To adjust the volume of your amplified voice, turn “A VOLUME” clockwise. Continue to speak at a normal level and slowly increase the volume until the sound level is adequate for the room.

IMPORTANT NOTE: Feedback or “squealing” may occur if the volume is set too high, reducing the loudness of the speakers with the volume control usually eliminates feedback.

Operating Two Microphone / Transmitters Simultaneously

The LightSpeed Classroom Amplification System has two independent receivers Channel A and B. This makes it possible to operate two microphones simultaneously. You may wish to do this in a team teaching situation or when using a student microphone. Follow the instructions below to add a second microphone:

1. Set each microphone to separate channels. For example if you are using two Teacher Microphones, set one to Channel A and the other to Channel B.
2. When simultaneously operating two microphones, both indicator lights will glow. (The IR 1 indicator to the left of the “A VOLUME” knob is for the microphone operating on Channel A; the IR 2 indicator to the left of the “B VOLUME” knob is for the microphone operating on Channel B).

Operating the Infrared (IR) Wireless Student Microphone

1. The procedure for operating the student microphone is identical to the procedure for operating the Infrared (IR) Wireless Teacher Microphone. Please refer to this section of the manual for further instructions.
2. **NOTE – The Student Microphone must be set to a separate channel. For example, if you are using both the Teacher and the Student Microphones simultaneously, set one to Channel A and the other to Channel B.**

Tips on Using Classroom Amplification

- Speak in a natural voice.
- Avoid wearing jewelry that may rub or bump against the microphone.
- Turn the Teacher Microphone off during private conversations with a student, parent or other classroom visitor.

Troubleshooting Guide

- **Battery Check**
 - Confirm batteries are charged each night. With proper charging, batteries will last about one school year.
 - Transmitters are charged via a jumper cable from the back of the main unit or through a cradle. Make sure plugs are secured and in the proper jacks.
 - Confirm the green charging light (located on the front of the Microphone) is on while charging.
 - Ensure the Microphone is turned off while charging.
- **Hearing Static or Buzzing**
 - If using two Infrared (IR) Wireless Microphones, check that they are not set to the same channel. If so, select a different channel for one of the microphones.
- **Low Volume**
 - Check the volume levels on the Main Unit and adjust to the recommended settings.
 - Check that speaker zones are turned on and volume level on each of the speakers (on back panel) and adjust as necessary.

- **Sound Fades In and Out (Drop Out)**
 - Test the Teacher Microphone with full charged batteries. LED light on front of the Microphone will glow bright red.

- **No Sound From Speaker**
 - Confirm the Teacher Microphone and the Main Unit are turned on and have matching channels. Check both the A VOLUME and B VOLUME to ensure they are set correctly.
 - Turn the Teacher Microphone on and confirm that the corresponding red IR light (located on the front panel of the Main Unit) is lighting up. When speaking into the Teacher Microphone, the green AF light will flash / flutter with your voice volume.
 - Confirm that the batteries in the Microphone are fully charged. When they are, the red indicator will glow steadily.

SECTION FOUR:

TOSHIBA

DR570

DVD Player

SECTION FOUR: TOSHIBA DR570

DVD Player/Recorder

This section introduces you to the Toshiba DR570 DVD Player/Recorder and describes key features, controls and operation.

Introduction

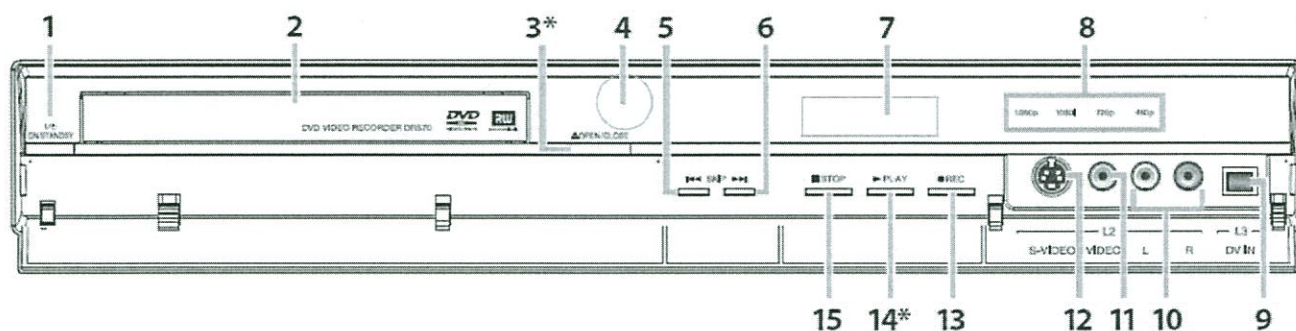
Video content is an integral part of classroom instruction, revolutionizing and enhancing the way classroom instruction can be delivered.

Each classroom in your school is equipped with a permanently mounted DVD player/recorder. This allows teachers to have complete control over the time of day video is delivered to the students.

The integrated technology design allows you to play DVDs and have them projected onto the classroom's large viewing surface. The audio from the DVDs will be evenly distributed throughout the classroom via the Lightspeed Classroom Amplification System. The integration of these systems improves the audio and video quality, greatly enhancing the viewing experience for your students.

The DVD Player will also play music CDs.

Front Panel



(*) The unit can also be turned on by pressing these buttons.

1. I/⏻ ON/STANDBY button

- Press to turn on the unit, or to turn the unit into the standby mode. (To completely shut down the unit, you must unplug the AC power cord.)
- If timer programmings have been set, press to set the unit to timer-standby mode.

2. Disc tray

- Place a disc when the disc tray is opened.

3. ▲ OPEN/CLOSE button*

- Press to open or close the disc tray.

4. Infrared sensor window

- Receive signals from your remote control so that you can control the unit from a distance.

5. SKIP ◀◀ button

- During playback, press once midway through a chapter or track to go back to the beginning of the current chapter or track. When pressed twice in quick succession, playback will start from the preceding chapter or track.
- During playback, press and hold for 1.5 seconds to fast reverse.
- When playback is paused, press to play back reverse step by step.
- When playback is paused, press and hold for 1.5 seconds to slow reverse.

6. SKIP ▶▶ button

- During playback, press to skip to the next chapter or track.
- During playback, press and hold for 1.5 seconds to fast forward.

- When playback is paused, press to play back advance step by step.

- When playback is paused, press and hold for 1.5 seconds to slow forward.

7. Display

- Refer to "FRONT PANEL DISPLAY GUIDE" on page 17.

8. HDMI indicator

- Lights up and indicates the HDMI video resolution when HDMI output is on.

9. DV IN jack (L3)

- Use to connect the DV output of external device with a DV cable.

10. AUDIO input jacks (L2)

- Use to connect external device with an RCA audio cable.

11. VIDEO input jack (L2)

- Use to connect external device with an RCA video cable.

12. S-VIDEO input jack (L2)

- Use to connect the S-video output of external device with an S-video cable.

13. ● REC button

- Press once to start a recording. Press repeatedly to start one-touch timer recording.

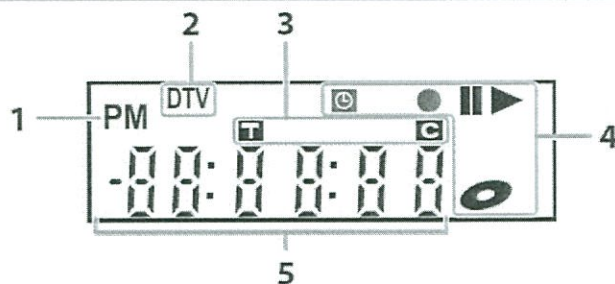
14. ▶ PLAY button*

- Press to start or resume playback.

15. ■ STOP button

- Press to stop playback or recording.

Front Panel Display



1. PM

: Appears in the afternoon with the clock display.

2. DTV

: Appears when the channel is in DTV mode.

3. Title/Track and chapter mark

T : Appears when indicating a title/track number.

C : Appears when indicating a chapter number.

4. Current status of the unit

⏸ : Appears when playback is paused.

▶ : Appears when playing back a disc.

⌚ : Appears when the timer programming or OTR has been set and is proceeding.

: Flashes when all timer recordings have been finished.

● : Appears during recording process.
: Flashes when a recording pauses.




◉ : Appears when a disc is in this unit.

5. Displays the following

- Elapsed playback time
- Current title / chapter / track / file number
- Recording time / remaining time
- Clock
- Channel number
- Remaining time for one-touch timer recording
- Selected HDMI video resolution

Controls


















(*) The unit can also be turned on by pressing these buttons.

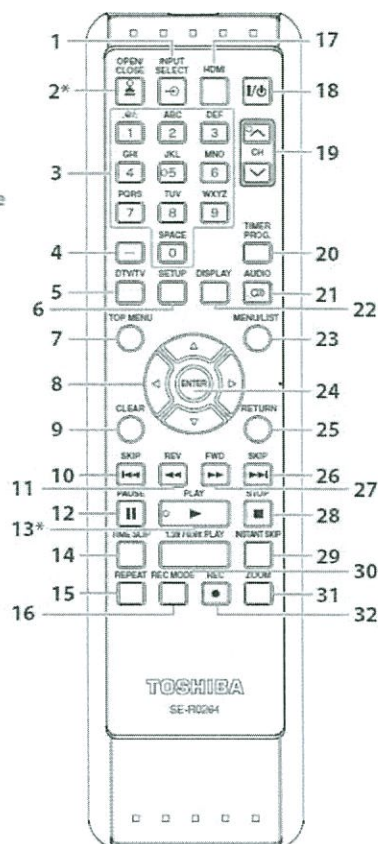
- 1. INPUT SELECT  button**
 - Press to select the appropriate input.
- 2. OPEN/CLOSE  button***
 - Press to open or close the disc tray.
- 3. Number/Character buttons**
 - Press to select channel numbers.
 - Press to select a title/chapter/track/file on display.
 - Press to enter values for the settings in the main menu.
 - Press to enter title names.
- 4. Confirm () button**

Analog mode:

 - Press to confirm the channel selection made by [the Number buttons].

Digital mode:

 - Press to confirm the major / minor channel selection made by [the Number buttons].
- 5. DTV/TV button**
 - Press to switch between digital TV (DTV) mode and analog TV (TV) mode.
- 6. SETUP button**
 - Press to display the main menu.
 - During DVD playback, press and hold for more than 3 seconds to switch the progressive scanning mode to the interlace mode. (Though  appears, the output mode switches to the interlace and  will be displayed on the front panel display briefly.)
- 7. TOP MENU button**
 - Press to display the title list.
- 8. Cursor  /  /  /  buttons**
 - Press to select items or settings.
- 9. CLEAR button**
 - Press to clear the password once entered, to cancel the programming for CD, to clear the selecting marker number in the display menu, etc.
- 10. SKIP  button**
 - During playback, press to return to the beginning of the current chapter, track or file.
 - During playback, press twice in quick succession to skip to the previous chapter or track.
 - When playback is in pause, press repeatedly to reverse the playback step by step.
- 11. REV  button**
 - During playback, press to fast reverse playback.
 - When playback is in pause, press to slow reverse playback.
- 12. PAUSE  button**
 - Press to pause playback or recording.
- 13. PLAY  button***
 - Press to start playback or resume playback.
- 14. TIME SLIP button**
 - Press once to start recording the TV program you are watching. Press again to watch the content being recorded from the beginning while recording continues. (VR mode DVD-RW with the recording mode of LP, EP or SLP only)
- 15. REPEAT button**
 - Press to display the repeat menu.
- 16. REC MODE button**
 - Press to switch the recording mode.
- 17. HDMI button**
 - Press to set the HDMI video resolution.
- 18. I/O ON/STANDBY button**
 - Press to turn on the unit, or to turn the unit into the standby mode. (To completely shut down the unit, you must unplug the AC power cord).
 - If timer programmings have been set, press to set the unit to timer-standby mode.
- 19. CH  /  buttons**
 - Press to change the channel up and down.
- 20. TIMER PROG. button**
 - Press to display the timer programming list.
- 21. AUDIO  button**
 - Press to switch the audio language for digital TV.
 - Press to display the audio menu during playback.
- 22. DISPLAY button**
 - Press to display the display menu on or off.
- 23. MENU/LIST button**
 - Press to display the disc menu. To change original and playlist on the TV screen.
- 24. ENTER button**
 - Press to confirm or select menu items.
- 25. RETURN button**
 - Press to return to the previous displayed menu screen.
- 26. SKIP  button**
 - During playback, press to skip to the next chapter, track or file.
 - When playback is in pause, press repeatedly to forward the playback step by step.
- 27. FWD  button**
 - During playback, press to fast forward playback.
 - When playback is in pause, press to slow forward playback.
- 28. STOP  button**
 - Press to stop playback or recording.
 - Press to exit from the title list.
- 29. INSTANT SKIP button**
 - During playback, press to skip 30 seconds.
- 30. 1.3x/0.8x PLAY button**
 - During playback, press to play back in a slightly faster/slower speed while keeping the sound output.
- 31. ZOOM button**
 - During playback, press to enlarge the picture on the TV screen.
- 32. REC  button**
 - Press once to start a recording.
 - Press repeatedly to start the one-touch timer recording.



Operating the DVD Player/Recorder

- Press the POWER button on the front of the DVD player OR on the remote control.

To Play a DVD

- Select the Video source on the projector remote control
- Open tray
- Insert disc
- Close tray
- Press PLAY on the front of player OR on the remote control
- When finished, open tray and remove disc

DVD Formatting

- Turn POWER on (Press button on player OR use remote control)
- Press SETUP
- Use the Up/Down Arrows to select DVD MENU, then press ENTER
- Use the Up/Down Arrows to select FORMAT, then press ENTER
- Use the Up/Down Arrows to select FORMAT MODE, then press ENTER
- Use the Up/Down Arrows to select VIDEO MODE or VR MODE, then press ENTER
- Press SETUP to exit
- Insert a Brand-new disc to begin formatting
- This disc is now recordable

DVD Finishing

- To play this DVD in another DVD player press SETUP
- Use the Up/Down Arrows to select GENERAL SETTING, then press ENTER
- Use the Up/Down Arrows to select RECORDING, then press ENTER
- Use the Up/Down Arrows to select AUTO FINALIZE, then press ENTER
- Choose either DISC FULL or END OF TIMER REC using the Up/Down Arrows, then press enter
- Press SETUP to exit

****NOTE** Please keep Copyright laws in mind when recording.**

SECTION FIVE:

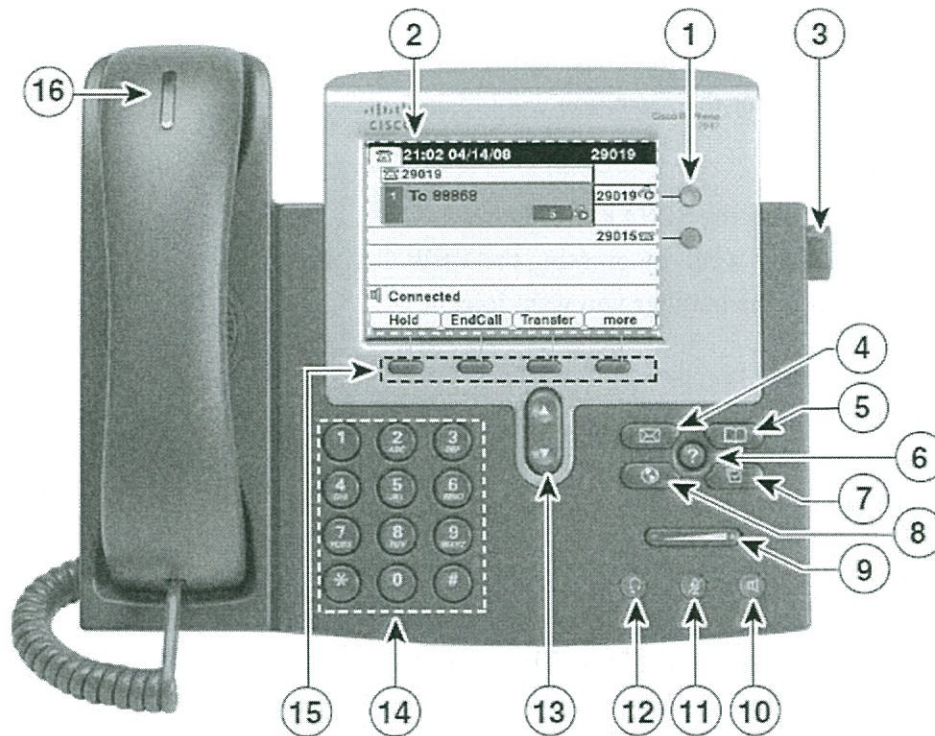
CISCO

7942G

Classroom Phones

SECTION FIVE: CISCO 7942G Classroom Phones

Phone Basics



1. Programmable Buttons – (typically phone lines or speed dials)
2. Phone Screen – Shows call features
3. Footstand Button – Allows you to adjust the angle of the phone base
4. Messages Button – Autodials your voicemail
5. Directories Button – Opens/closes the Directories menu, use to access call logs & directories
6. Help Button – Activates the help menu
7. Settings Button – Opens/closes the Settings menu, use to change contrast & ring settings
8. Services Button – Open/closes the Services menu
9. Volume Button – Controls the handset, headset, speakerphone & ringer volumes
10. Speaker Button – Toggles speakerphone on or off (lit when in use)
11. Mute Button – Toggles the microphone on or off (lit when mute is active)
12. Headset Button – Toggles headset on or off (lit when in use)
13. Navigation Button – Enables you to scroll through menus & call logs
14. Keypad – Enables you to dial numbers, enter letters & choose menu items
15. Softkey Buttons – Activate softkey options (change based on activity)
16. Handset Light Strip – Indicates an incoming call or new voicemail message.

Feature Guide

To Make an Inside Call (room-to-room)

- Lift handset or press the SPEAKER button
- (You can also begin a call by pressing the NEW CALL softkey)
- Dial the extension for the room you want to call

To Make an Outside Call

- Lift handset or press the SPEAKER button
- (You can also begin a call by pressing the NEW CALL softkey)
- Dial “9” and then the number you want to call

To End a Call

- Hang up the handset or press the END CALL softkey
- If you are using the headset, press the HEADSET button or the END CALL softkey
- If you are using speakerphone, press the SPEAKER button or the END CALL softkey

To Place a Call on Hold

- While your call is active, press the HOLD softkey
- To resume the call, press the RESUME softkey

To Transfer a Call

- While your call is active, press the TRANSFER softkey (this places the call on hold)
- Dial the extension you want to transfer the call to
- You can stay on the line to talk to the person before completing the transfer, to complete the transfer, press the TRANSFER button and then hang up
- You can also transfer the call without talking to the recipient by simply pressing the TRANSFER button right after dialing the extension

To Conference Call multiple parties

- From a connected call, press the CONFERENCE softkey
- Enter the third party’s phone number
- Once the call connects, press CONFERENCE again to join all phone lines together

To Use Do-Not-Disturb (DND) Mode

- To activate DND, press the DND button
- To deactivate DND, press the DND button again
- (NOTE: This will stop calls from ringing into the classroom but it will not stop phone paging).

***PLEASE NOTE* in the event of an emergency, you must dial 9-911**