PSD330
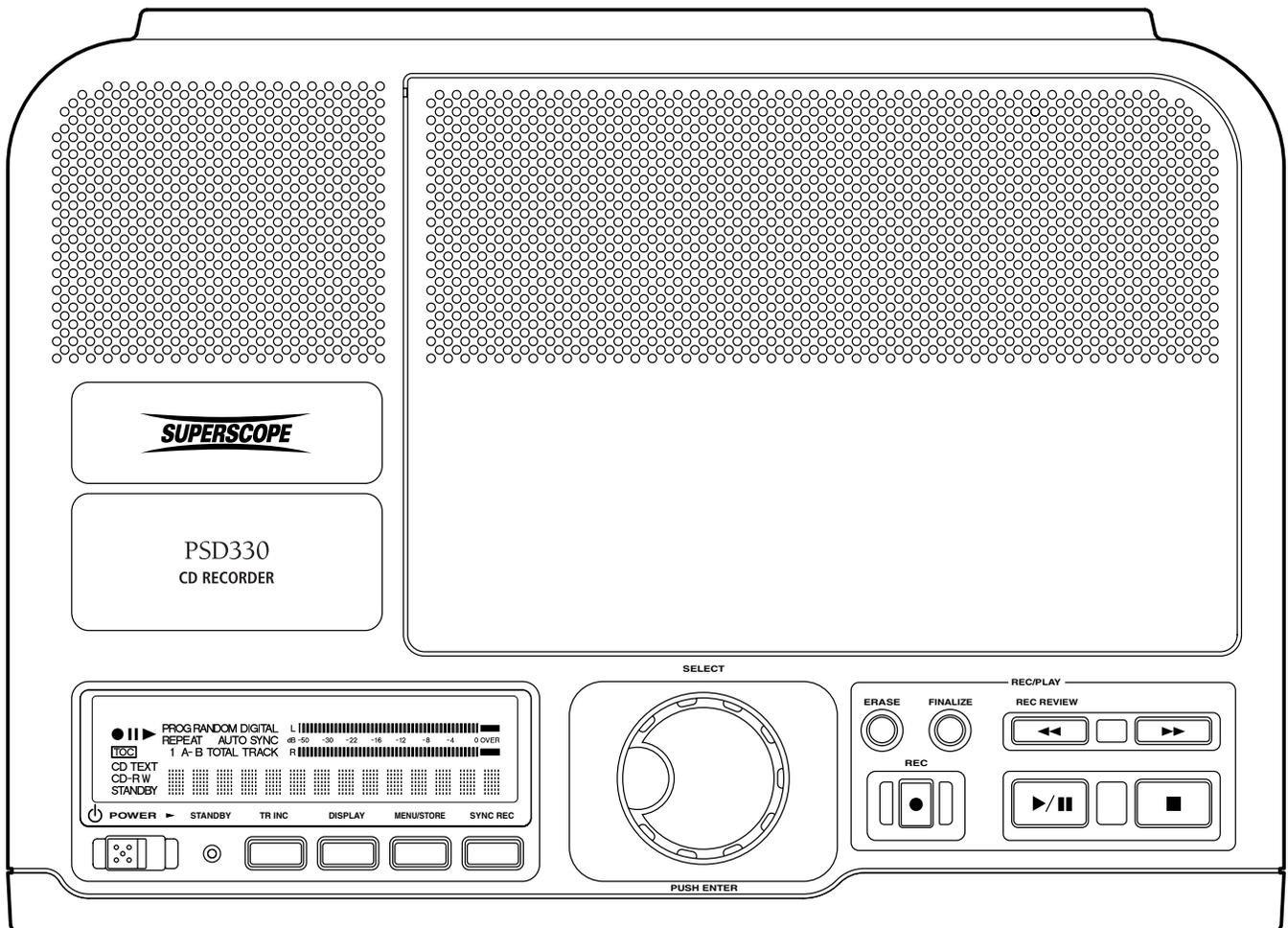
CD Recorder

OWNERS MANUAL

CLASS 1 LASER PRODUCT
LASER DE CLASSE 1
LUOKAN 1 LASERLAITE
KALSS 1 LASERAPPARAT

SUPERSCOPE ®

www.superscopetechnologies.com
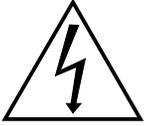
Important Safety Instructions

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR EVITER LES CHOC ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV (Cable-TV) system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determeined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la Classe B conforme à la norme NMB-003.
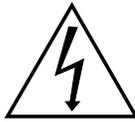
LASER SAFETY

This unit employs lasers. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Clean only with dry cloth.
6. Do not use this apparatus near water.
7. To ventilate the unit, do not install it in a rack or bookshelf, and note the following: Do not insert objects beneath the unit. Do not block ventilation slots at the top of the unit. Do not place anything about 1 meter above the top panel. Make a space of about 8" (20 cm) around the unit.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Additional Safety Information!
- This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- When the switch is in the OFF position, the apparatus isn't completely switched-off from the MAINS.

Table of Contents

Specifications

General

System .... Compact Disc Digital Audio (CD-DA)
Number of channels .... 2 (stereo)
Applicable discs .... CD, CD-R, CD-RW
Power requirements .... AC 120V60 Hz, 18W
Dimensions (maximum)
     Width .... 12 inches (296 mm)
     Height .... 4 inches (92 mm)
     Depth .... 9 inches (222 mm)
     Weight .... 6.2 pounds (2.8 Kg)

Audio

ADC 24 Bit Resolution 64x Oversampling
DAC 24 Bit Resolution
Overall frequency response .... 20Hz - 20kHz

CD-R drive output

Playback S/N 100dB
Playback Dynamic Range 99dB
Playback Total Harmonic Distortion 0.004%
Output Voltage/Impedance (Line Output) ... 2.2V/500Ω

MIC/LINE analog input

LINE level
     S/N 85dB
     THD 0.02%
     Input Sensitivity/Impedance 450mV/4.5K
MIC level
     S/N 70dB
     THD 0.08%
     Input Sensitivity/Impedance 2.6mV/4.1K

AUX analog input

     S/N 85dB
     THD 0.01%
     Input Sensitivity/Impedance 500mV/33K

Digital Input

     Sample rate 32kHz/44.1kHz/48kHz

Digital Output

     Output Level/Impedance 0.5Vp-p/75Ω

Headphone Output (10% THD)

     Level/Impedance 50mW/32Ω

Speaker Output (10% THD)

     Level/Impedance 2.0W/8Ω

Recording Features

- Direct recording to CD-R (write once) or CD-RW (rewritable) discs
- Built-in microphone preamplifiers
- Built-in condenser microphone
- Automatic Rec Level Control for "worry free" recording
- Record-Review which allows immediate playback of the last track recorded
- Minute-Track Recording
- One-Touch Recording

Recommended Media

The PSD330 will record on computer CD-R or CD-RW data discs as well as "Music CD-R" discs. We do not recommend using generic discs with the PSD330. If possible, choose brand name discs and test any brand before buying in bulk. The only way to know if a disc is a good match for your recorder is to record and finalize a disc, then play the disc in a separate CD player.

The most important factor in choosing CD-R or CD-RW media is the speed rating. Different formulations of media may require a different "write strategy" at certain speeds. It's possible that writing slowly to "high-speed" media will produce poor results. Since the PSD330 records in real time (1X), it is best to avoid CDs that are rated for "high-speed", for example, 52X or 56X.
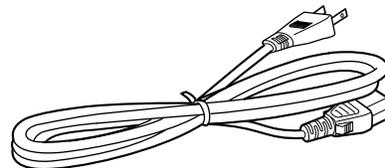*Blank CD-R and CD-RW discs rated 1X are available for purchase directly from Superscope at http://www.superscopetechnologies.com.*

Please visit our Web store or contact us toll free at 866-371-4773.
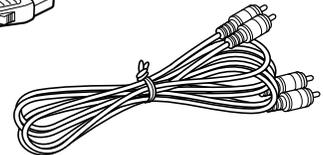
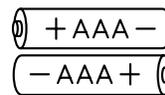# Package Contents
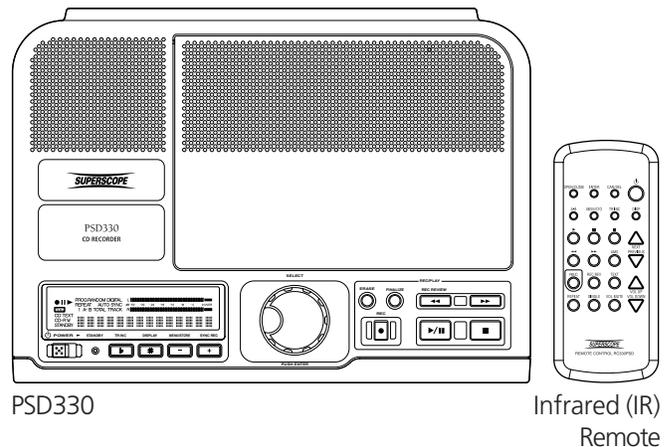
PSD330

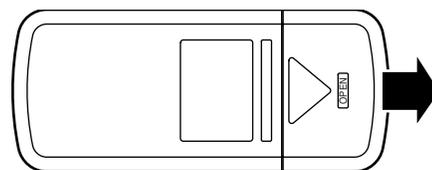Infrared (IR) Remote
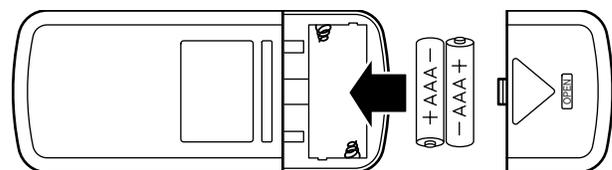

AC Power Cord

RCA Patch Cables

AAA batteries (2)

Installing Remote Batteries

Press and lift at arrow to open the remote control battery compartment.
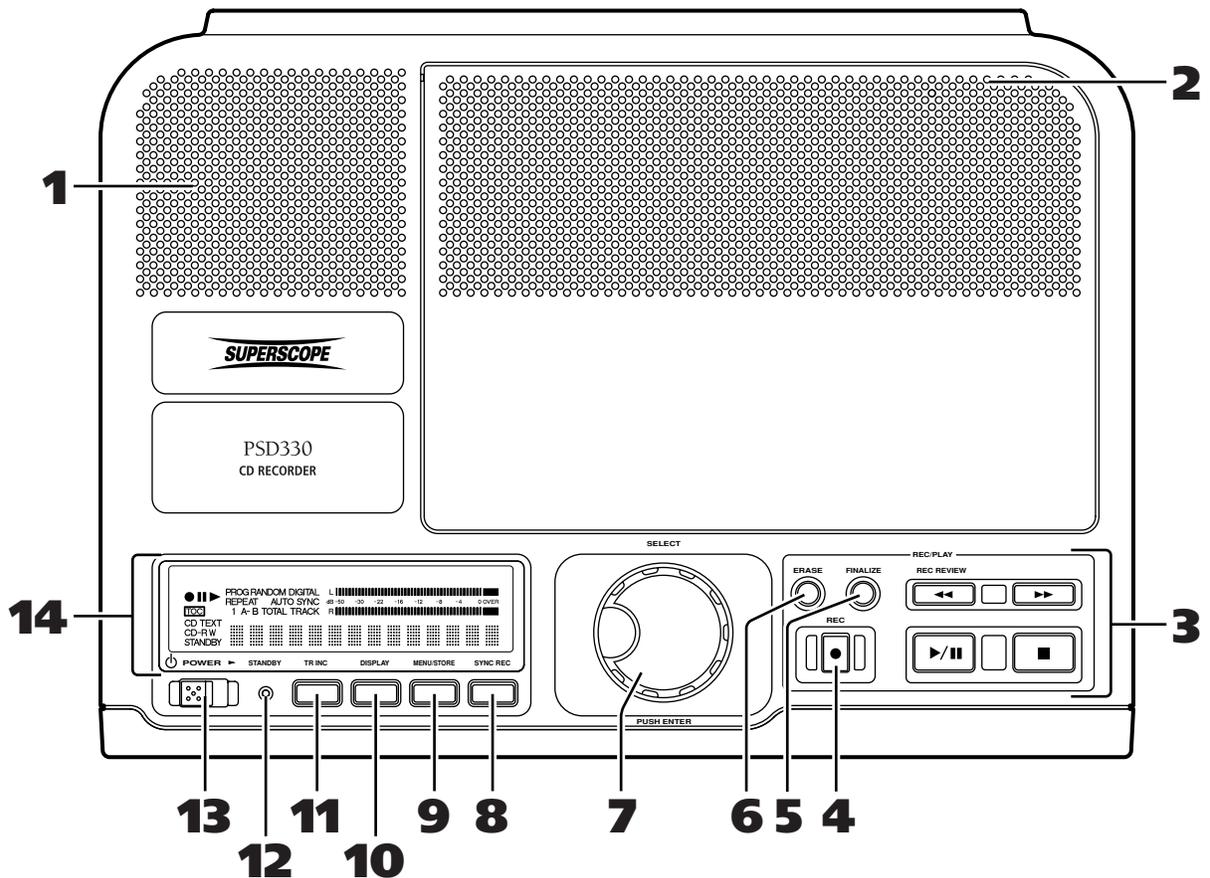

Install two AAA batteries then replace compartment cover.

When disposing of used batteries, please comply with governmental and environmental regulations.

Features

Top of Unit

1 Speaker
2 Internal Microphone
3 CD Recorder Controls
4 Record Button
5 Finalize Button
6 Erase Button
7 Select Jog Wheel
8 SYNC REC Button
9 MENU/STORE Button
10 Display Button
11 TR INC Button
12 Standby Light
13 Standby Power Button
14 Display

[1]   Internal Speaker
By using the internal speaker, the PSD330 CD Recorder can be monitored without connecting to external amplification.

[2]   Built-In Microphone (MIC)
Internal condenser microphone.

[3]   Play controls
A. FAST BACKWARD SEARCH and **RECORD REVIEW** button. Hold down to go backwards within an audio track.
Note: Use the SELECT jog wheel to change tracks.
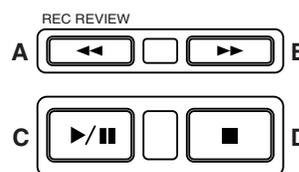
The FAST BACKWARD SEARCH button (A) also controls the RECORD REVIEW feature. Press this button while recording, or after the recording has been stopped, and the unit will stop and play back the last track recorded.

B. FAST FORWARD search button. Hold down to advance within an audio track.
C. PLAY/PAUSE button
D. STOP button

[4] RECORD (REC) button/ light

Press this button to enter Record Pause mode. In Record Pause mode, press this button to begin recording. When the One Touch Recording feature is ON (see Menus pg. 19), press this button to bypass Record Pause mode and begin recording after 3 seconds. Also used when finalizing a CD. (see pg. 16)

[5] FINALIZE button / light

Press this button to enter CD-R Finalize mode (pg. 16).

[6] ERASE button / light

Use to enter Erase mode (CD-RW only) (pg. 16).

[7] SELECT jog wheel

This is the master control for the PSD330. For most functions, scroll through choices with the SELECT jog wheel, then press the wheel to accept your choice.
- In Play mode, turn to select a track.
- When recording, turn to adjust recording level.
- After the MENU/STORE button is pressed, turn the SELECT jog wheel to scroll through menu selections and make adjustments.

[8] SYNC RECORD ON/OFF button

Press this button to enter Sync Record mode (see pg.16). Turn the SELECT jog wheel to view Sync Record options and press ENTER to confirm selection. A blank CD-R or CD-RW disc must be placed in the disc drive to make this feature active.

[9] MENU/STORE button

Press this button to enter Menu mode. Menu selections and changes are made using the SELECT jog wheel. Turn the SELECT jog wheel to scroll through options. Press the SELECT jog wheel to select an option. Press the MENU/STORE button to store changes and exit Menu mode. (For a complete list of menu selections see pg. 19).

[10] DISPLAY (DISP) button

Press the DISPLAY button once to display the remaining play time for the current track. The display reads "TRACK."

Press the button a second time to display the remaining play time for the entire CD. The display reads "TOTAL TRACK." Press the DISPLAY button again to return to the default display showing elapsed track time.

[11] TRACK INCREMENT (TR INC) button

During recording press this button to manually create a new track. RECOMMENDED: When using this feature, set AUTO TRACK to OFF (See pg. 20).

[12] STANDBY light

STANDBY light is lit when power is switched OFF by the Standby POWER switch on the unit or remote.

[13] Standby POWER switch

Slide the Standby POWER switch to the right to turn power ON or OFF. The MASTER POWER button on rear of unit must be ON (the red STANDBY light must be lit).

[14] Display

1. ● **Record indicator -** Lit when recording.
2. ‖ **Pause indicator -** Lit when recording or when playback has been paused.
3. ▶ **Play indicator -** Lit during recording or playback.

Front of Unit
(controls and connections)
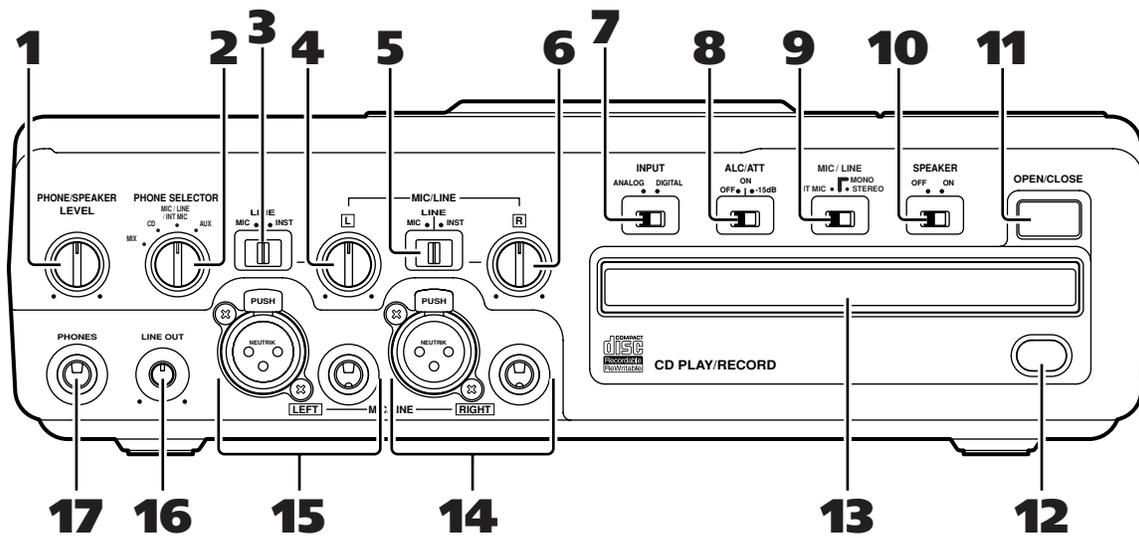
[1] PHONE/SPEAKER LEVEL control
Turn this knob to adjust the volume level of the built-in speaker or headphones.

[2] PHONE SELECTOR knob
Select the audio source for the PHONE jack and INTERNAL SPEAKER by turning this knob to one of the following four settings:
MIX - Audio from the entire system including CD playback, MIC/LINE/INST inputs, Internal Mic, and AUX input jacks.
CD - CD playback audio only.
MIC/LINE/INT MIC - Audio being input via the MIC/LINE/INST jacks and the Internal Mic.
AUX - Audio being input via the AUX IN jack.

[3] LEFT LINE/MIC/ INSTRUMENT (INST) switch
Switch to LINE for a line level input, MIC for a microphone level input or INST for an instrument level input.

Note: Audio from the front inputs can be mixed with audio from the stereo AUX input on the rear panel.

[4] Left level control
Turn this knob to adjust the Left Input signal level.

[5] RIGHT LINE/ MIC/ INSTRUMENT (INST) switch
Switch to LINE for a line level input, MIC for a microphone level input or INST for an instrument level input.

Note: Audio from the front inputs can be mixed with audio from the stereo AUX input on the rear panel.

[6] Right level control
Turn this knob to adjust the Right Input signal level.

[7] INPUT ANALOG/DIGITAL switch
Select between analog or digital external input.

[8] ALC/ATT switch
Record level limiter or MIC/LINE/INST attenuator.
ON - Limits any analog input signal greater than -6 dB. Record Level is inactive when ALC is on.
OFF - Set level using left and right MIC/LINE/INST (or INT MIC) level controls. Levels in excess of 0 dB may be recorded and may result in distorted recordings.
-15dB - Reduces right and left MIC levels by -15dB. Does not effect the internal mic.

[9] MIC/LINE (INT MIC/MONO/STEREO) switch
Determines how the signal from the MIC/LINE/INST (or INT MIC) inputs are recorded.
INT MIC - Internal Mic is selected as the input source. Use the RIGHT and LEFT level control knobs to adjust the Internal Mic level applied to each channel of the recording.

MONO - Left and right signals from the AUX inputs are sent to the left and right channels of the recording. MIC/LINE/INST inputs are mixed together and then sent to both channels of the recording.

STEREO - Left and right signals from the MIC/LINE/INST inputs and/or AUX inputs are sent to the left and right channels of the recording.

[10] SPEAKER OFF/ON switch

Turns the built-in speaker ON or OFF.

[11] OPEN/CLOSE switch

Press to OPEN the disc drive. Press again to CLOSE the disc drive.

[12] Remote control sensor

Sensor for the supplied wireless remote control.

[13] Disc drive

Used for recording CD-R and CD-RW discs. The disc drive can also play back CD, CD-R and CD-RW discs.
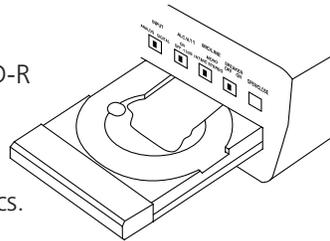
[14] Right XLR or 1/4" input jack

Plug in a microphone, musical instrument or line level audio source here to provide audio to the right stereo channel.

[15] Left XLR or 1/4" input jack

Plug in a microphone, musical instrument or line level audio source here to provide audio to the left stereo channel.

[16] LINE OUT level control

Turn this knob to adjust the output level of the LINE OUT (VARI) jacks.

[17] PHONES jack

Plug in stereo headphones here. Adjust headphone volume with the PHONE/SPEAKER level control.

Back of Unit
(rear panel connections)

[1] LINE OUT VARIABLE (VARI) jacks
Sound from the disc drive is output as L-R line levels to an external recorder, amplifier, or powered speakers.

The LINE OUT (VARI) signal can be adjusted by the LINE OUT level control (pg. 8 [16]).

[2] LINE OUT (FIXED) jacks
Sound from the disc drive is output as L-R line levels to an external recorder, amplifier, or powered speakers. When the PSD 330 is not recording, the LINE OUT jacks will output the signal from the selected input(s).
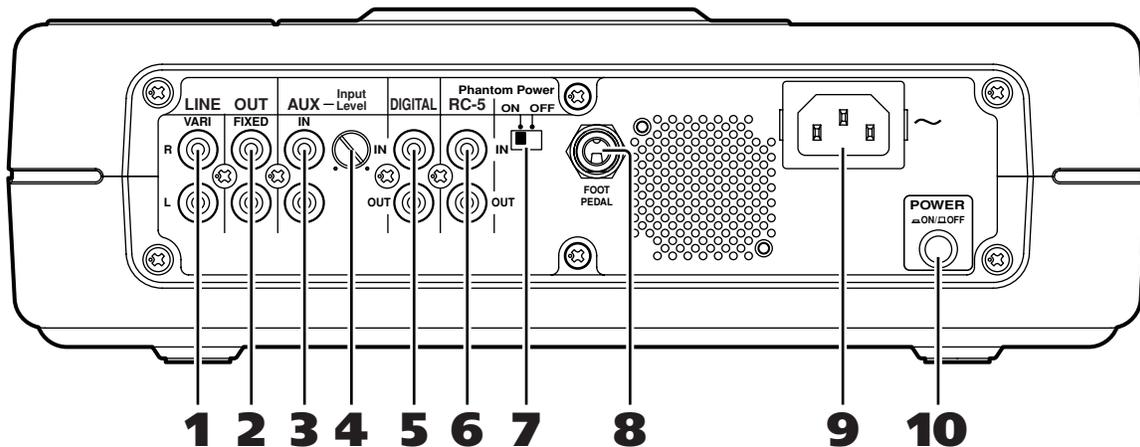
[3] AUX IN jacks
Use this stereo RCA connection for recording onto the disc drive from an external audio source such as a cassette deck. Audio from the AUX IN can be mixed with audio from the front panel inputs and the internal microphone.

[4] AUX IN level control
Turn to adjust the input signal level of the AUX IN.

[5] DIGITAL IN and OUT jacks
Plug in RCA coaxial cables here to connect to the input and/or output of an external digital unit. Use DIGITAL IN for recording onto the CD-R drive from an external digital audio source. Use DIGITAL OUT for going to an external digital device.

[6] REMOTE RC-5 IN and OUT jacks
Plug in RCA coaxial cables here to connect to the input or output of an RC-5 remote control system.

For more information on the RC-5 system, please contact Superscope Technologies.

[7] Phantom Power ON/OFF switch
Switch ON to apply 48V phantom power to XLR mic inputs. Switch OFF if the microphones being used do not require 48V phantom power.

[8] FOOT PEDAL jack
An optional foot pedal provides Play/Pause or Record/Pause control for the disc drive. The foot pedal also may be used to toggle between Play and Rewind. To toggle between Play and Rewind, first turn on the Recall function (see Menus, pg. 19). The FT200 Foot Pedal is available from Superscope Technologies Inc.
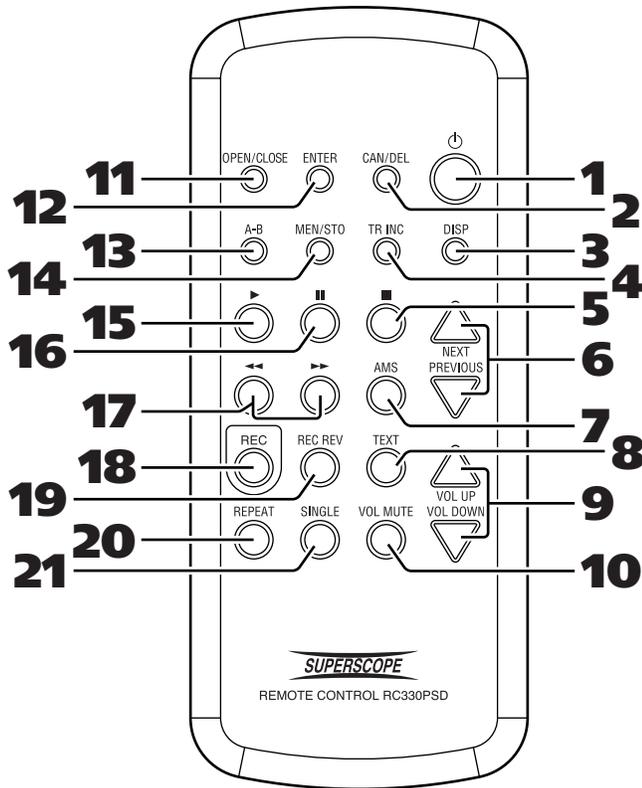
[9] Power plug
Plug one end of the supplied power cord in here and the other end into an AC outlet.

[10] MASTER Power switch
Press to turn power ON (in position). Press again to turn power OFF (out position).

To retain certain settings in memory, leave this switch ON and turn power ON and OFF with the Standby POWER slide switch on the top of the unit.

Remote Control

OPEN/CLOSE ENTER CAN/DEL ⏻

11
12
A-B MEN/STO TR INC DISP

13
14
▶ ❚❚ ■

15
16
◀◀ ▶▶ AMS NEXT PREVIOUS

17
REC REC REV TEXT VOL UP VOL DOWN

18
19
REPEAT SINGLE VOL MUTE

20
21

1
2
3
4
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9
10

SUPERSCOPE
REMOTE CONTROL RC330PSD

[1] Standby POWER button
Press this button to turn power ON or OFF. The MASTER POWER button on the rear of the unit must be ON (the red STANDBY light must be lit).

[2] CANCEL/DELETE (CAN/DEL) button
Press this button to cancel menu changes or to return to a higher level in the menu. When entering CD text, use this button to delete text.

[3] DISPLAY (DISP) button
Press the DISPLAY button once to display the remaining play time for the current track. The display reads "TRACK".
Press the button a second time to display the remaining play time for the entire CD. The display reads "TOTAL TRACK." Press the DISPLAY button again to return to the display showing elapsed track time.

[4] TRACK INCREMENT (TR INC) button
During recording, press this button to manually increment a new track. RECOMMENDED: When using this feature, set AUTO TRACK to OFF (See pgs. 15 and 20).

[5] STOP button
Press this button to stop playback or recording.

[6] NEXT/PREVIOUS buttons
Press these buttons to select the next or previous track. In Menu mode, press these buttons to change menu items.

[7] AUTOMATIC MUSIC SEARCH (AMS) Button
Press this button to play the first 10 seconds of each track. Press PLAY to exit AMS mode and continue playback of the selected track.

[8] TEXT button
Press this button to activate scrolling of CD Text in the display. When a CD with text is first read the text is automatically displayed and scrolled.

[9] VOLUME UP/DOWN
Press these buttons to control the volume of the audio sent to the LINE OUT (VARI) jacks.

[10] VOLUME MUTE (VOL MUTE)
Press to mute the audio to the LINE OUT (VARI) jacks. This does not affect the built-in speaker or headphones.

[11] OPEN/CLOSE button
Press this button to OPEN the disc tray. Press again to CLOSE the disc tray.

[12] ENTER button
Press this button to accept the selected item in the Menu mode.

[13] A-B LOOP (A-B) button
While a CD is playing, press this button once to set the beginning of the segment you want to repeat (A point). Press this button a second time when playback reaches the end of the segment you want to repeat (B point). Playback will automatically start again from the A point when the B point is reached. Pressing the A-B button again will set the A point for the next loop that you create.

[14] MENU/STORE (MEN/STO) button

Press this button to enter Menu mode. Menu selections and changes are made using the NEXT/PREVIOUS button. Press the ENTER button to select an option. Press the MEN/STO button to store changes and exit Menu mode. (For a complete list of menu selections , see pgs. 19-21).

[15] PLAY button

Press this button to start playback.

[16] PAUSE button

Press this button to pause playback or recording.

[17] ◄◄ / ►► button

Press these buttons to search forward or backward within an audio track.

[18] RECORD (REC) button

Press this button to enter Record Pause mode. Press it to start recording when the unit is in Record Pause mode. Also used when finalizing.

[19] RECORD REVIEW button

Press this button while recording, or after the recording has been stopped, and the unit will stop and play back the last track recorded.

[20] REPEAT button

There are two Repeat modes: **Track** or **Entire CD**.

Track Repeat - Press the REPEAT button once to repeat only the track being played. The display reads "REPEAT 1."
Entire CD Repeat - Press the REPEAT button twice to repeat the entire CD. The display reads "REPEAT."
Exit Repeat mode - Press REPEAT a third time.

[21] SINGLE TRACK PLAY (SINGLE) button

Press the SINGLE button to toggle Single Track Play ON or OFF.

While in Single Track Play and when a track is selected with the SELECT jog wheel, the track does not automatically start playing. Instead, it is paused and cued up at the beginning of the audio and the PLAY/PAUSE button of the top flashes.

Press the PLAY button to begin playback.

When the track is finished, the PSD330 will automatically pause, cued to music, at the beginning of the next track.

Set Up

Powering Up

1. Check that the AC power cord fits securely in the power cord jack on the back panel.
2. Make sure the back panel MASTER POWER switch is ON. The STANDBY light should now be ON. Slide the STANDBY POWER switch to the right. Upon power up, this light will dim and the display will come on.

TIP: **If you are switching power ON/OFF via the Remote or if you wish to retain certain settings in memory when powering off, leave the back panel MASTER POWER switch ON.**

Setting Up Speakers
Headphones or Built-In Speaker

When using the built-in speaker, place the SPEAKER switch in the ON position. Place the SPEAKER switch in the OFF position when using headphones or when connecting to powered speakers or other sound equipment. Adjust volume of the head-phones or speaker by using the PHONE/SPEAKER level knob.
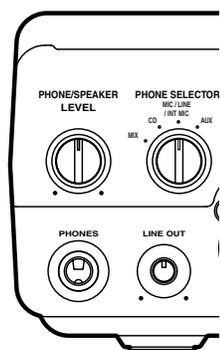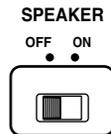
The PHONE SELECTOR knob determines which audio path will be amplified/monitored through the headphones and built-in speaker. It does not affect audio being recorded. Use it to monitor one of the following:

- MIX (total system monitoring),
- CD playback
- MIC/LINE/INST inputs or Int Mic
- AUX inputs.

TIP: **Typically, you will want to leave the PHONE SELECTOR knob set on MIX as this setting allows you to hear the entire system.**

External Speakers

Connect external powered speakers to the rear panel RCA line outputs, making sure the Left channel line output is securely attached to the speaker's Left input and the Right channel line output is securely attached to the speaker's Right input. (see Figure A.)

Or, similarly connect the L-R channel line outputs to the L-R auxiliary or line inputs of a stereo amplifier that is attached to speakers.
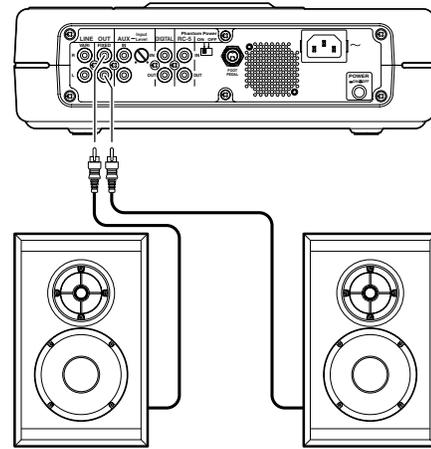
Fig A. - Powered Speaker Set Up

TIP: **Remember that the LINE OUT level control on the front panel will control the volume for external speakers connected to the variable LINE OUT (VARI) jacks.**

Setting Up Instruments, Mics and other Sound Sources

The PSD330 is designed to work with microphones, instruments, and line level sources (e.g., mixers, external preamps). See the following diagrams for the setup that suits your application:
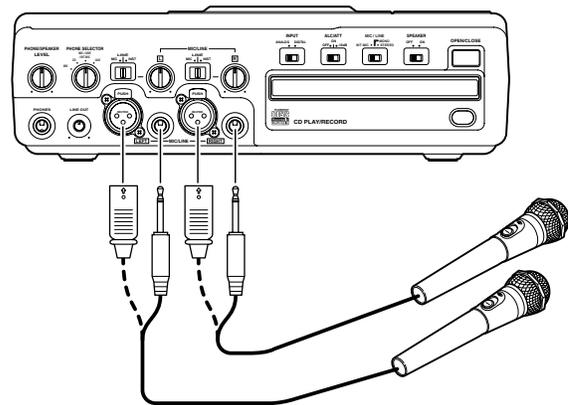
Microphones

1. Set both front panel LINE/MIC/INST input switches to MIC.
2. Plug microphones into either the XLR or 1/4″ front panel inputs, depending on your mic type.
3. For condenser microphones that use batteries, make sure the mic's batteries are fresh. When using microphones that require +48V phantom power, connect mics to the XLR inputs and make sure that the phantom power switch on the rear panel is ON.
4. See Setting Levels sidebar (pg. 13).

Internal Microphone

1. Set the MIC/LINE (INT MIC/MONO/STEREO) switch to "INT MIC."
2. When "INT MIC" is selected, both the left level control and the right level controls are active. Adjust both left and right level controls to determine how much signal is sent to either channel.
3. When using the INTERNAL MIC, it is recommended that the SPEAKER switch be turned OFF. If you need to monitor the incoming sound, use headphones. Using headphones avoids feedback--the nasty squeal that is heard when the mic picks up sound from the speaker and amplifies it, creating a feedback loop. To make sure the INTERNAL MIC does not pick up the sound of any buttons being pressed, turn on One Touch Recording (see pg. 19) or use the remote control to start and stop recording.
4. See Setting Levels sidebar on this page.

Instruments

1. Select an input channel, Left or Right and set that channels LINE/MIC/INST switch to "INST."
2. Plug an instrument into the 1/4" front panel input of the selected channel.
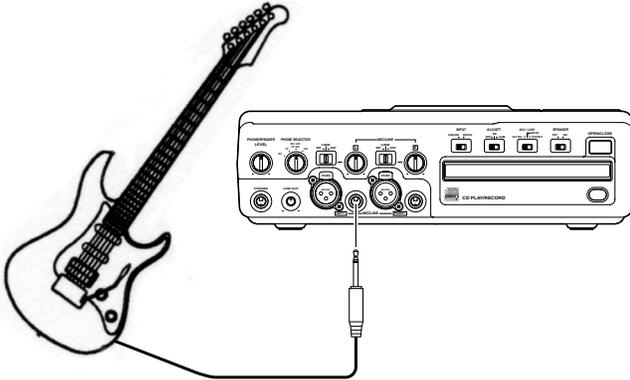
3. See Setting Levels sidebar on this page.

Line Level Sources

1. When using stereo line level equipment, set both LINE/MIC/INST switches to "LINE."
2. Connect the Left and Right outputs of your line level source to Left and Right 1/4" or XLR inputs on the front panel.
   Note : Line level equipment can be connected to the front panel Right and Left inputs ... OR ... to the rear panel RCA AUX inputs. When connecting an auxiliary source into the rear panel AUX inputs, you can adjust the signal input level using the AUX IN control on the rear panel. Use the front panel inputs for individual control of Right and Left input levels.
3. See Setting Levels sidebar on this page.

Stereo Preamp

OR
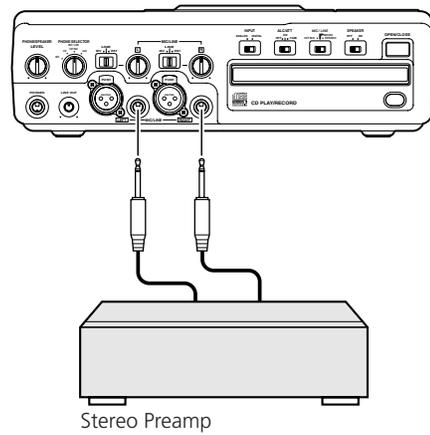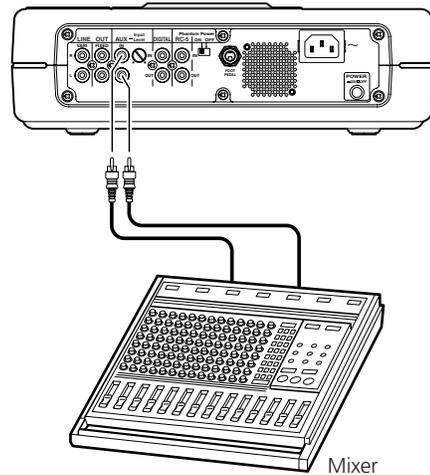
Mixer

Setting Levels

Levels should be set in Record Pause mode. To enter Record Pause mode, the One Touch Recording feature needs to be set for OFF in the menu (see pg. 19).

With One Touch Recording OFF, press the RECORD button once to enter Record Pause mode. As you sing or play your instrument, turn the L and R input-level control knobs clockwise while watching the VU meters.

When your performance is at its loudest, the VU meter should read close to 0 dB without going into the red zone. If the meter consistantly bounces into the red, adjust the level control knob counterclockwise to reduce the level. If your mics have higher than normal output, try switching the ALC/ATT switch to -15dB. Peaking at 0 dB will provide the greatest dynamic range while avoiding distortion.

L							
dB-50	-30	-22	-16	-12	-8	-4	0 **OVER**
R							

Recording

Making a Live Recording

We realize that the primary reasons you purchased a PSD330 is to record live to CD. That's why we've made the recording process as direct as possible. It shouldn't take long from the time you open the box to the time you record your first CD. Just follow these simple steps:

1. **Insert a disc.** The PSD330 can record onto blank or unfinalized CD-R (write once), or CD-RW (rewritable) discs.

2. **Connect your equipment**. See pages 12-13 for setting up microphones, instruments and line level sources.

3. **Set the INPUT switch to "ANALOG."** This switch is located above the disc drive. The INPUT switch tells the PSD330 what type of signal it will be recording. Microphones, instruments, and most mixers are analog sources. Don't let this switch confuse you. Even though you are making a digital CD recording, input sources are typically analog. The only time you would set this switch to DIGITAL, is if you were recording from the rear panel digital input. (see sidebar pg.15)

4. **Press the RECORD button.** The first time you press RECORD, the PSD330 enters 'Record Pause Mode.' In this mode, you will be able to adjust the overall record level by turning the SELECT jog wheel control. This level is adjustable from -78 dB to +6dB. After a moment, the display will now prompt you to 'Push Rec Key.' But, you may want to first adjust your record levels. See step 5.

   REC
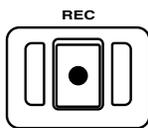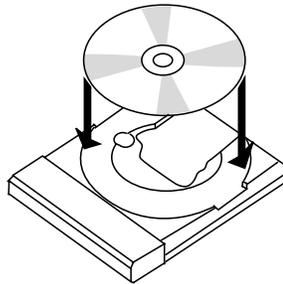
   One Touch Rec: Select One Touch Recording in order to bypass Record Pause mode. In One Touch Recording mode, the PSD330 will automatically begin recording 3 seconds after the RECORD button is pressed once.

5. **Set your record levels**. While monitoring record levels, we recommend using headphones. This helps to eliminate feedback. (See Setting Levels sidebar, pg.13) for advice on how to set up the PSD330 to record optimal levels.)

●‖ L ▮▮▮▮ -30 -22 -16 -12 -8 -4 0 0OVER
          dB-50
          R

CD-RW PUSH REC KEY
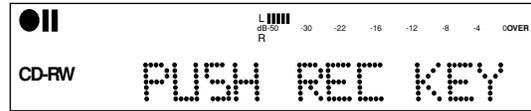
6. **Press RECORD again.** You are now recording. The level meters should respond to your Input signals (mics, instruments, etc.) and the counter should display the total elapsed time for the track you are recording. The red dot and triangular "PLAY" icon in the display indicate that a recording is in progress.

● ▶ L ▮▮▮▮▮▮▮▮ ▮▮▮▮ -16 -12 -8 -4 0
TRACK dB-50 -30 -22
        R ▮▮▮▮▮▮▮▮ ▮▮

CD-RW 1   1:37
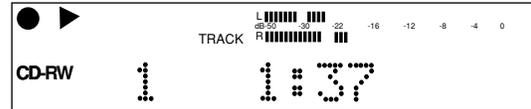
Press STOP to end the recording or press the REC REVIEW button on the unit or remote to listen back to the most recent track recorded. (See PLAY Controls pg. 5, [3].)

REC REVIEW
◀◀

This CD will play back in the disc drive. To play back this CD in other standard CD players, proceed to HOW TO FINALIZE (pg. 16).

NOTE: For standard stereo recording, make sure the MIC/LINE (INT MIC/MONO/STEREO) switch is set for STEREO. This ensures that the left input is recorded to the left channel and the right input is recorded to the right channel.

When recording one microphone or one instrument, make sure the MIC/LINE (INT MIC/MONO/STEREO) switch is set for MONO. This ensures that a single input is recorded to both the Left and Right channels.

For MIC/LINE (INT MIC/MONO/STEREO) switch operation. (See pg. 7, [9]).

Playing a CD

When you close the disc tray, after a moment the display will show the total number of tracks and total playing time on the CD.

          L -30 -22 -16 -12 -8 -4 0
          dB-50
TOTAL TRACK R

CD 19   60:36
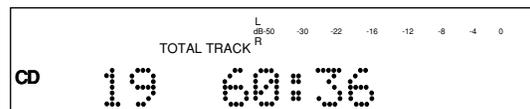
In Play mode, change tracks by turning the SELECT jog wheel.

Track Increments

Creating New Tracks Manually

Every time you press STOP or PAUSE during the recording process, you will create a new track. To create new tracks during recording, press the TR INC button on the top panel or the IR remote. You can create up to 99 tracks on a CD-R or CD-RW disc.

Auto Track Mode

When copying prerecorded material from external sources, tracks can be set automatically by using AUTO TRACK Mode. From Record Pause mode, press the MENU/STORE button and select "AUTO TRACK." Change the AUTO TRACK status to ON by turning the SELECT jog wheel. Press it to accept the change. Press the MENU/STORE button to exit and proceed with recording. The unit will then increment tracks when audio falls below a threshold of silence (-40dB) for a minimum of three seconds.

Minute Track Mode

MINUTE TRACK will automatically create a seamless, inaudible track increment every minute during recording. That means each track is one minute long, offering a quick and convenient way to locate a particular time in a recording. For example, Track 10 is ten minutes into the recording, and Track 17 is 17 minutes into the recording.

To access this mode from Record Pause mode, press the MENU/STORE button, then select "AutoTrack." Select "MIN" and press ENTER.
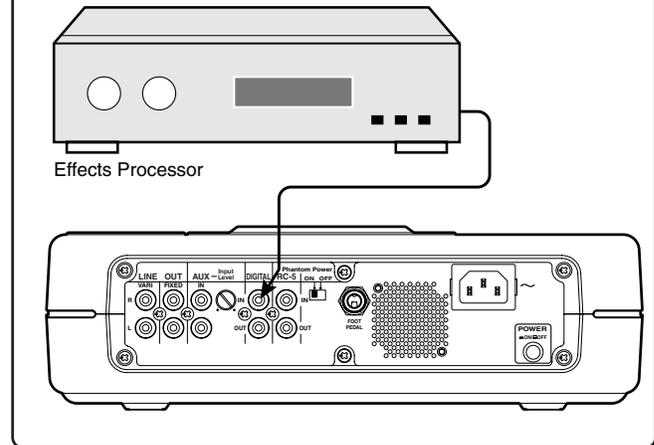
Copying from an External Source

To access the SYNC RECORD modes, press the SYNC REC button on the top panel of the PSD330. Use the SELECT jog wheel to select either SYNC RECORD or SYNC RECORD + FINAL. Press ENTER to confirm selection.

SYNC RECORD

This REC mode is used to automatically start the recording process from an outside digital or analog source including DAT, minidisc, cassette tape or LP for example. When this mode is selected, the PSD330 will display "PUSH REC KEY" as normal. When the RECORD button is pressed, the PSD330 will search for an input signal, either analog or digital depending on how the Input switch is set (see pg. 6, [8]). When an input is detected, the recording will begin and the display counter will start to increment.

SYNC RECORD+FINAL

SYNC RECORD+FINAL mode operates in the same manner as SYNC RECORD mode except that the disc will automatically be finalized at the end of the recording session. The finalization takes approximately 2 minutes. Before using this mode, change the AUTO STOP feature to ON (see Menus, pg. 20).

How to Finalize a Disc

The PSD330 will play finalized or unfinalized CD-R and CD-RW discs.
However, for recorded discs to play on other CD players, a disc must first be finalized.

To finalize a disc once you have stopped recording onto it, press the FINALIZE button.

"FINALIZE" is displayed for a couple of seconds.
Then "PUSH REC KEY" is displayed.

CD-RW FINALIZE

CD-RW NOT POSSIBLE

CD-RW PUSH REC KEY

CD-RW FINAL. 2:08
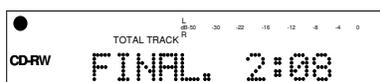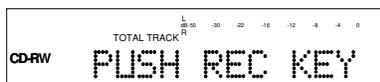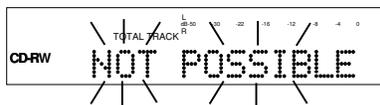
Note: If the disc is blank or has already been finalized, "NOT POSSIBLE" will flash three times.

CD 19 60:37
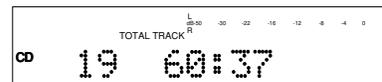
Now press the RECORD button.
Finalizing counts down for about 2 minutes and automatically stops.

When done, the display shows the number of tracks and their total playing time (example shown). Note: Once a CD-R or CD-RW disc is finalized, the CD-R or CD-RW icon in the display will be replaced with the CD icon.

Once a CD-R disc is finalized it cannot be unfinalized or recorded on further.

How to Unfinalize a CD-RW disc

The CD-RW (rewritable) format provides a way to unfinalize a disc, erase the last track, or erase an entire disc.

1. Push STOP on the disc drive.
2. Push ERASE three times. "UNFINALIZE" is displayed for three seconds, then "PUSH ENTER" is displayed.
3. Push the SELECT jog wheel. The timer counts down as the disc is unfinalized. When the display shows the number of tracks and their total playing time, the disc has been unfinalized but not erased.

How to Erase a CD-RW

You can only erase CD-RW discs. You can erase one or more tracks from the end of the CD-RW disc, or you can erase the entire disc. If finalized, erasing a track or the disc automatically unfinalizes the disc.

• **To erase the last track** of a disc, press the ERASE button **once**. "ERASE TRACK" is displayed. After two or three seconds, the display will read "PUSH ENTER". When you push the SELECT jog wheel, the last track will be erased.

• **To erase the entire disc**, press the ERASE button **twice** in succession. "ERASE DISC" is displayed. After two to three seconds, the display will read "PUSH ENTER." When you push the SELECT jog wheel, the entire disc will be erased.

Troubleshooting

General

No power

Check that the POWER switch on the back of the PSD330 is in the ON position. Check that the power cord is securely plugged in. If the STANDBY light is lit, slide the POWER switch to the right.

Recording

Mics plugged in, no levels on the VU meters

1) Check the LINE/MIC/INST switches. These switches should be set for "MIC."
2) Check that the LEVEL control knobs are turned up.
3) If you are using a condenser mic, make sure the required power is provided, either by Phantom Power supply or batteries. Check your mic manufacturer's recommendations. If Phantom Power is required, switch the Phantom Power switch on the back panel to ON.
4) Make sure the MIC/LINE (INT MIC/MONO/STEREO) switch is set for MONO or STEREO. Setting this switch for INT MIC will override the XLR and 1/4" inputs.

"Squealing" sound when recording with internal or external mics

You've created a feedback loop. Switch the SPEAKER switch on the front panel to OFF.

Only recording to one channel

Find the front panel switch labeled MIC/LINE (INT MIC/ MONO/STEREO). Chances are this switch is set for STEREO. If you want your mic or instrument to record to both channels equally, move this switch to the MONO position.

The display reads "NOT POSSIBLE"

Check if the display also reads CD rather than CD-R or CD-RW. If the disc in the disc drive has been finalized or is not a CD-R/RW, the PSD330 will flash "NOT POSSIBLE" instead of entering record mode.

The display reads "NO SIGNAL"

Find the ANALOG/DIGITAL INPUT switch on the front panel. Chances are this switch is set for DIGITAL. This means the PSD330 is searching for a signal from the digital input and not finding one. Move this switch to the ANALOG position if you are recording a microphone, instrument, or line level source. If you are recording a digital signal, check the connection to the digital input on the back panel and confirm that the digital source equipment is functioning properly.

Distortion when playing back recordings

If distortion has been recorded to a CD, the PSD330 has no means of removing that distortion. When you place the unit in Record Pause mode, turn the SELECT jog wheel to adjust the Record level. If the record level was set too high, reduce the level to remove distortion on future recordings. See Setting Levels sidebar, pg.13 for how to record proper levels without distortion.

The unit flashes "REC ERROR"

It is possible that the recording was interrupted as a result of transport failure caused by shock or a bad sector on a disc. Replace the disc and try placing the unit on a piece of foam. This is a simple and effective way to prevent large sound pressure levels or room vibrations from disrupting the recording process.

Buy accessories and compact discs direct from Superscope at http://www.superscopetechnologies.com.

About CD Text

CD Text Display

CD text, when present, provides text information such as the CD title, artist, track titles, and track artists.

When a disc is inserted in the disc drive, the PSD330 automatically detects if a disc has text information and displays the CD title. The PSD330 can display 14 characters, if the text information is longer than that the text automatically scrolls from right to left.

Creating CD Text

Before finalization of a CD you can enter text information. Only the CD title and track titles can be entered.

With your disc in the disc drive and stopped:
1) Press the MENU/STORE button.
2) Turn the SELECT jog wheel until the display reads "TEXT EDIT."
3) Press the SELECT jog wheel to select. The display reads "CD TITLE."

```
┌─────────────────────────────┐
│          CD Title           │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│     Title of each track     │◄──┐
└─────────────────────────────┘   │
              └───────────────────┘
```
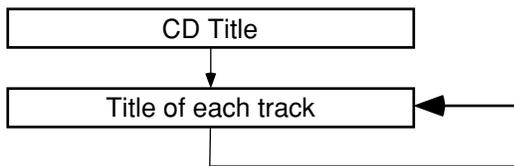
4) Turn the SELECT jog wheel to choose between editing CD TITLE or CD TRACK TITLE. Press to make your selection.
5) The first character of the title is flashing. Turn the SELECT jog wheel to select the character. Or from the remote with CDR selected, press alphanumeric keys to select each character.
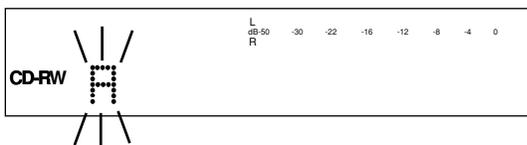
The SELECT jog wheel control presents the following characters in order:

After the final character is entered, press the MENU/STORE button.

NOTE: All CD TEXT entries are in short term memory until the CD is finalized. You can play, pause and stop, but if you turn off power, or open the disc drive your editing will be lost.

How to Erase CD Text

The TEXT ERASE menu item lets you delete CD TEXT that has been entered, prior to finalizing.

With your disc in the disc drive and stopped:
1) Press the MENU/STORE button.
2) Turn the SELECT jog wheel so "TEXT ERASE" is displayed.
3) Press the SELECT jog wheel to confirm the selection. The display reads "ALL TEXT." Now turn the SELECT jog wheel to choose between erasing CD TITLE or CD TRACK TITLE.
4) Press the SELECT jog wheel to confirm the selection. "ERASE?" is displayed briefly, then "PUSH ENTER" Is displayed.
5) Press the SELECT jog wheel to erase the selected text.

Menus

When you press the MENU/STORE button, the display will show options that change depending on whether the PSD330 is playing, recording, or stopped.

◆ Turn the SELECT JOG WHEEL to scroll through menu options.

◆ Press the SELECT JOG WHEEL to select a menu option and press the MENU/ STORE button to save settings.

The following charts will guide you through the menu options.

PLAY MENU

MENU/STORE button

PRESS

☐ = Display

SCROLL   SCROLL

| ONE TOUCH REC | → | MIC EQUALIZER | → | RECALL |

Turning on the ONE TOUCH feature bypasses the Record/Pause mode.

1) **Select** ONE TOUCH REC
2) **Display reads**: ONE TOUCH OFF
3) **Turn jog wheel** to select ONE TOUCH ON
4) **Press** ENTER or MENU/STORE to confirm
5) **Press** MENU/STORE to exit Menu.

Press the RECORD button. Recording will begin automatically after 3 seconds.

When Recall is on, an optional footpedal may be used to toggle between Play and Rewind mode.

When Recall is off, the footpedal will toggle between Play and Pause mode.

Use the **Mic Equalizer** to adjust the level of high, mid and low frequencies for the Mic/Line inputs.

1) Select MIC EQUALIZER.
2) Display reads: MIC/LINE Lch (left channel).
3) To adjust the left channel MIC EQ, press ENTER
                           OR
To adjust the right channel MIC EQ, turn the jog wheel clockwise. Display reads: MIC/LINE Rch (right channel). Press ENTER.

4) Turn the jog wheel to select HIGH, MID or LOW. Press ENTER.
5) Turn the jog wheel to adjust +/-10 dB.
6) Press MENU/STORE to exit Menu.

RECORD MENU

MENU/STORE button

PRESS

```
┌──────────┐        SCROLL      ┌──────────┐        SCROLL      ┌──────────┐
│   AUTO   │ ─────────────────▶ │   AUTO   │ ─────────────────▶ │   MIC    │
│  TRACK   │                    │   STOP   │                    │EQUALIZER │
└──────────┘                    └──────────┘                    └──────────┘
```

Turn **Auto Track** on when you want the PSD330 to automatically increment tracks during recording .

Turn Auto Track off when you want to manually increment tracks.

Turn Auto Track to MIN to automatically increment one track per minute.

Turn **Auto Stop** on when you want the PSD330 to automatically stop recording after detecting a period of silence (20 seconds for analog sources, 4 seconds for digital sources).

Use the **Mic Equalizer** to adjust the level of high, mid and low frequencies for the Mic/Line inputs.

1) Select MIC EQUALIZER.
2) Display reads: MIC/LINE Lch (left channel).
3) To adjust the left channel MIC EQ, press ENTER
                    OR
To adjust the right channel MIC EQ, turn the jog wheel clockwise. Display reads: MIC/LINE Rch (right channel). Press ENTER.

4) Turn the jog wheel to select HIGH, MID or LOW. Press ENTER.
5) Turn the jog wheel to adjust +/-10 dB.
6) Press MENU/STORE to exit Menu.

STOP MENU

MENU/STORE button

[—]

PRESS

Note: Text options will only appear in the display if a recordable CD-R or CD-RW disc is in the drive.

SCROLL   SCROLL   SCROLL   SCROLL   SCROLL

| ONE TOUCH REC | → | TEXT EDIT | → | TEXT ERASE | → | TEXT VIEW | → | MIC EQUALIZER | → | RECALL |

Edit Text allows you to add CD title and track titles to your recordings. (see pg. 18).

Before you finalize a disc, use **Text View** to review the CD text that has been entered.

When **Recall** is on, an optional footpedal may be used to toggle between Play and Rewind mode.

When Recall is off, the footpedal will toggle between Play and Pause mode.

Turning on the ONE TOUCH feature bypasses the Record/Pause mode.

1) Select ONE TOUCH REC.
2) Display reads: ONE TOUCH OFF.
3) Turn jog wheel to select ONE TOUCH ON.
4) Press ENTER or MENU/STORE to confirm.
5) Press MENU/STORE to exit Menu.

Press the RECORD button. Recording will begin automatically after 3 seconds.

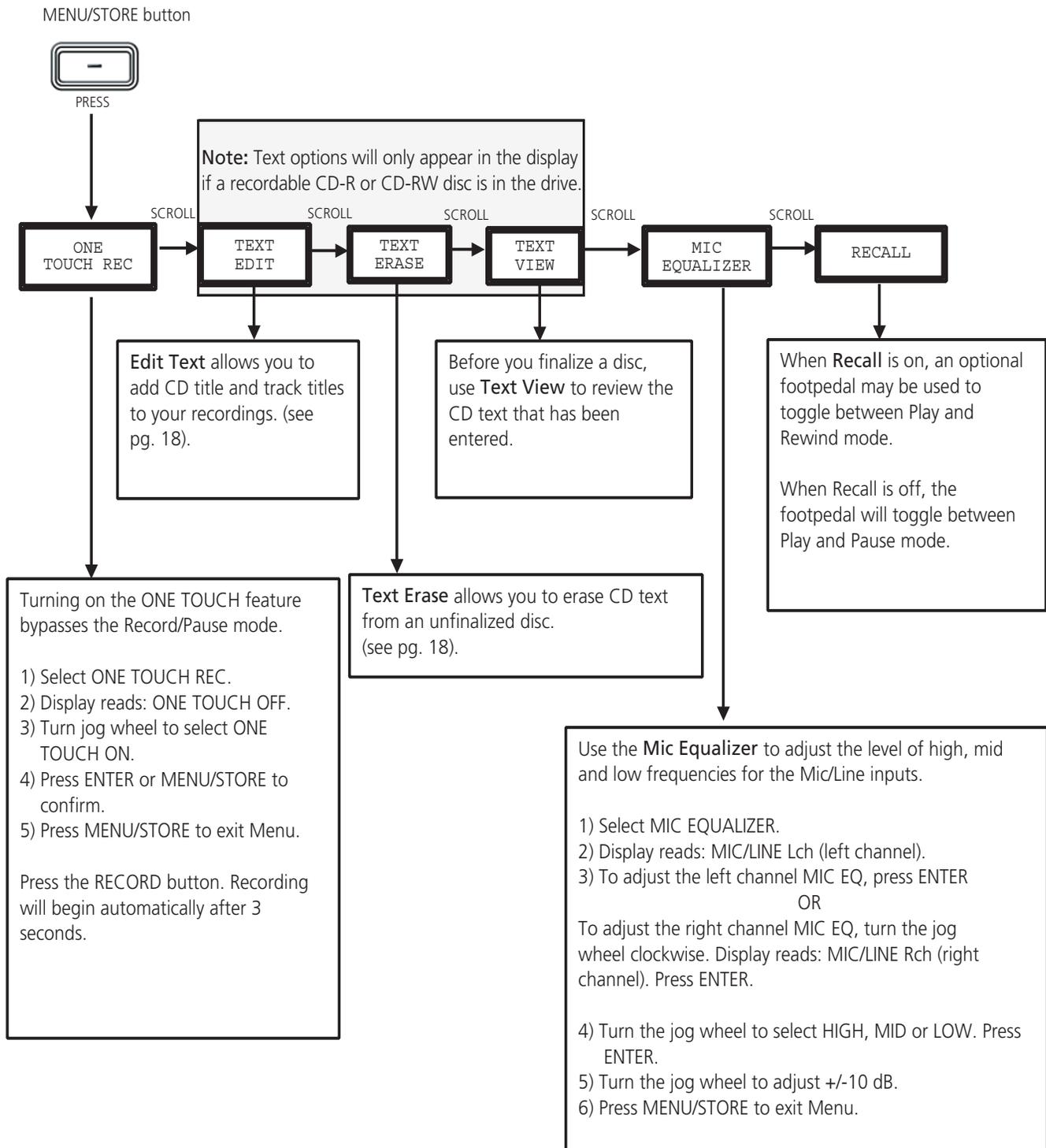**Text Erase** allows you to erase CD text from an unfinalized disc. (see pg. 18).

Use the **Mic Equalizer** to adjust the level of high, mid and low frequencies for the Mic/Line inputs.

1) Select MIC EQUALIZER.
2) Display reads: MIC/LINE Lch (left channel).
3) To adjust the left channel MIC EQ, press ENTER
                OR
To adjust the right channel MIC EQ, turn the jog wheel clockwise. Display reads: MIC/LINE Rch (right channel). Press ENTER.

4) Turn the jog wheel to select HIGH, MID or LOW. Press ENTER.
5) Turn the jog wheel to adjust +/-10 dB.
6) Press MENU/STORE to exit Menu.

Warranty

One Year Limited Warranty:
Your Superscope PSD330 is warranted against manufacturer defects in material and workmanship for one year parts and labor.

Non-transferable warranty:

This warranty may be enforced only by the original purchaser.

The following are not covered under warranty:
1. Damage, deterioration, malfunction or failure to meet performance specifications resulting from:
   - accident, acts of nature, misuse, abuse, neglect or unauthorized product modification.
   - improper installation, removal or maintenance, or failure to follow supplied instructions.
   - repair or attempted repair by a non-Superscope authorized agent.
   - any shipment (claims must be presented to the carrier).
   - any cause other than a defect of manufacturing.
2. Cleaning, check-ups with no fault found.
3. Any product on which the serial number has be defaced, modified or removed.
4. Accessories, including but not limited to, cables and adaptors.
5. Product purchased outside of the United States, its possessions or territories.

The following are covered under warranty:

All labor and material expenses for items covered by the warranty.

To obtain service:

1. If your unit needs service contact Superscope at (630) 232-8900 Ext. 396. A service representative will advise you of how to obtain service. Please do not return the unit directly to Superscope Technologies, unless specified by our service representative.
2. You must pay any shipping charges if it is necessary to ship the product for service. If the necessary repairs are covered by the warranty, we will pay return shipping charges to your location anywhere in the United States.
3. Whenever warranty service is required, you must present the original dated sales receipt, or other proof of purchase.

Limitation of implied warranties

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

Exclusion of damages

Liability for any defective product is limited to repair or replacement of the product at Superscope's option. Superscope shall not be liable for damage to other products caused by any defects in Superscope products, damages based on inconvenience or loss of use of the product, or any other damages, whether incidental, consequential, or otherwise.

Some States do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

How State law relates to the warranty

This warranty gives you specific legal rights, and you may have other rights which may vary from State to State.

This warranty is enforceable only in the United States and its possessions or territories.

LASER SAFETY

This unit employs lasers. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

CAUTION

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURE OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION.EXPOSURE.