Owner's Manual For The

LUMINANCE

Digital Surround Processor &
Five Channel 600 watt Amplifier

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Thank you for selecting a Legacy Electronics product. This handcrafted instrument will provide you with many years of listening enjoyment. Please take a few moments to read this brief manual to insure maximum benefit from your electronic system.

LIMITED ONE-YEAR WARRANTY

Legacy Audio extends to the original owner coverage of defects in materials and workmanship for a period of One year from date of purchase.

This warranty does not include a) damage in shipment, b) damage caused by accidental or intentional misuse or abuse, c) units not registered with Legacy Audio, d) damage resulting from unauthorized modifications or repairs. Liability is limited to the repair or replacement, at our option, of any defective component and shall not include damage due to short circuits, property and/or consequential damages which may result from the failure of this product.

If this product should ever require servicing; simply call 1-800-283-4644 for immediate assistance.

CUSTOMER RECORD

MODEL NO. _____

SERIAL NO. _____

DATE OF PURCHASE ____ / _____ / _____

OWNER _____

STREET ADDRESS _____
_____

CITY _____

STATE _____

ZIP _____

Your new LUMINANCE surround system will brighten your home theater experience. This two-piece system affords the great sound of separates at the price of a receiver.

LUMINANCE is packed with performance. Features like Dolby Digital and dts surround decoding extract the most from your DVDs. A built-in calibration tone for setup and a special DSP mode that will let you listen to your stereo recordings in rich surround are just a sampling of what LUMINANCE has to offer.

LUMINANCE is very easy to use. The scanning AUTO-LINK feature locks onto the most recent source while linking the video input to the audio input. Watching a DVD is as simple as pressing play. A dedicated remote and on-screen menu make setup a snap.

LUMINANCE is versatile. Hosting up to eight audio sources; four digital (3 coaxial, 1 Toslink) and four analog inputs, LUMINANCE switches four S-video or component video signals while including an A/V tape monitor loop.

LUMINANCE is powerful. The class A/B amplifier boasts a 600 watt power supply delivering 120 watts into each of five channels @ 4 ohms (80 watts x 5 @ 8ohms). The amplifier is remotely triggered on/off via the processor.

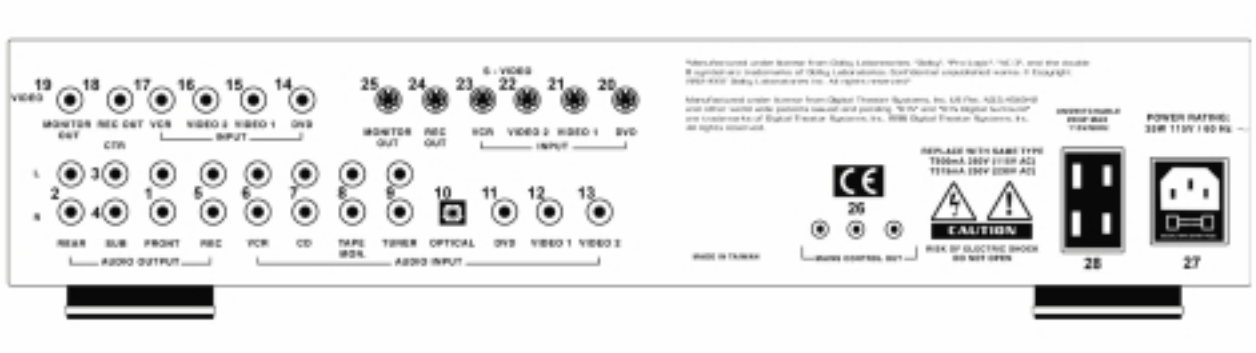
BEFORE YOU BEGIN

1. Make sure you have received your remote and power cord for your LUMINANCE Pre-Amp or LUMINANCE Amplifier.

2. Ensure that you have enough speaker wire and A/V cables to connect all of your equipment properly.

3. Fill Out Your Warranty Card For Mailing.

4. Review Connections Sections



REAR PANEL CONNECTION: PREAMP

1. FRONT L and R AUDIO OUTPUT jacks
Analog signal pre-output of Front Left and Right channels. It can connect to a power amplifier's L and R input jacks.

2. REAR L and R AUDIO OUTPUT jacks
Analog signal pre-output of Rear Left and Right channels. It can connect to a power amplifier's L and R input jacks.

3. CENTER AUDIO OUTPUT jack
Analog signal pre-output of center channel. It can connect to a power amplifier's input jack for Center channel.

4. SUBWOOFER AUDIO OUTPUT jack
Analog signal pre-output of subwoofer channel. It can connect to a power amplifier's input jack for Subwoofer channel or a self-powered subwoofer.

5. VCR RECORD L and R AUDIO OUTPUT jacks
Analog signal record output for VCR recording. It can connect to a VCR’s record inputs.

6. VCR AUDIO L and R INPUT jacks
Analog signal left and right channels input. It can connect to a VCR’s audio outputs.

7.CD AUDIO L and R INPUT jacks
Analog signal left and right channels input. It can connect to CD player audio outputs.

REAR PANEL CONNECTION: PREAMP (cont.)

8. TAPE AUDIO L and R INPUT jacks
Analog signal left and right channels input. It can connect to TAPE audio outputs.

9. TUNER AUDIO L and R INPUT jacks
Analog signal left and right channels input. It can connect to Tuner audio outputs.

10. OPTICAL DIGITAL AUDIO INPUT jack
Optical Digital Audio input. It can connect to a MD's or a DVD's Optical Digital Audio output.

11. DVD COAXIAL DIGITAL AUDIO INPUT jack
Coaxial Digital Audio input. It can connect to a A/V source coaxial digital audio output such as DVD player.

12. VIDEO 1 COAXIAL DIGITAL AUDIO INPUT jack
Coaxial Digital Audio input. It can connect to a A/V source coaxial digital audio output such as DVD player.

13. VIDEO 2 COAXIAL DIGITAL AUDIO INPUT jack
Coaxial Digital Audio input. It can connect to a A/V source coaxial digital audio output such as DVD player.

14. DVD COMPOSITE VIDEO INPUT jack
Composite video signal input. It can connect to a A/V source video output such as DVD player

15. VIDEO 1 COMPOSITE VIDEO INPUT jack
Composite video signal input. It can connect to a A/V source video output such as DVD player

16. VIDEO 2 COMPOSITE VIDEO INPUT jack
Composite video signal input. It can connect to a A/V source video output such as DVD player

17. VCR COMPOSITE VIDEO INPUT jack
Composite video signal input. It can connect to a VCR's composite video output

REAR PANEL CONNECTION: PREAMP (cont.)

18. VCR COMPOSITE VIDEO RECORD OUTPUT jack
Composite video signal output. It can connect to a VCR's composite video record input

19. MONITOR COMPOSITE VIDEO OUTPUT jack
Composite video output. It can connect to a TV's composite video input. This video output will equip On Screen Display function.

20. DVD S-VIDEO VIDEO INPUT jack
S-VIDEO video signal input. It can connect to a A/V source S-VIDEO video output such as DVD player

21. VIDEO 1 S-VIDEO VIDEO INPUT jack
S-VIDEO video signal input. It can connect to a A/V source S-VIDEO video output such as DVD player

22. VIDEO 2 S-VIDEO VIDEO INPUT jack
S-VIDEO video signal input. It can connect to a A/V source S-VIDEO video output such as DVD player

23. VCR S-VIDEO INPUT jack
S-VIDEO video signal input. It can connect to a VCR's S-VIDEO video output

24. VCR S-VIDEO VIDEO RECORD OUTPUT jack
S-VIDEO video signal output. It can connect to a VCR's S-VIDEO video record input

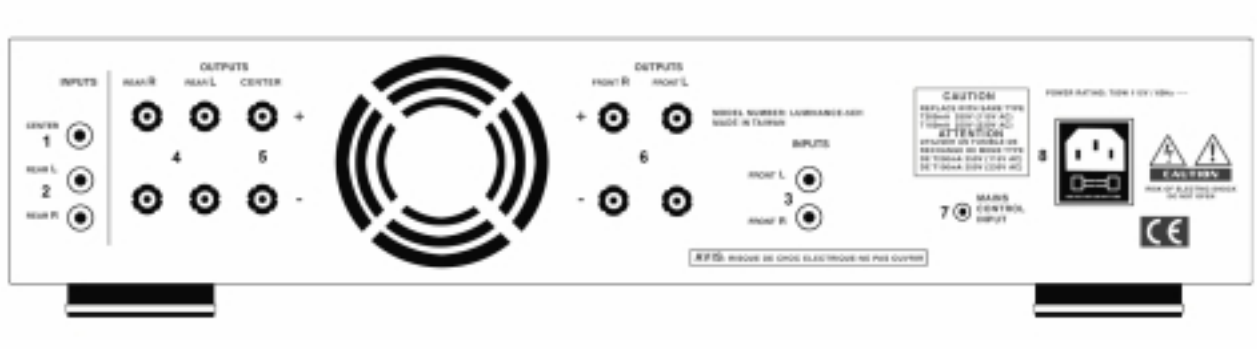
25. MONITOR S-VIDEO VIDEO OUTPUT jack
S-VIDEO video signal output. It can connect to a S-VIDEO video input of TV
This S-VIDEO video output will not equip On Screen Display function.

REAR PANEL CONNECTION: PREAMP (cont.)

26. MAINS CONTROL OUTPUT jacks
This is a DC voltage output and it is equipped to turn ON/OFF a LUMINANCE power amplifier that is equipped DC voltage control input jack.

27. POWER CORD INPUT and FUSE HOLDER

28. UNSWITCHED COMPONET POWER OUTLETS



REAR PANEL CONNECTION: AMPLIFIER

1. CENTER INPUT
Connect the input jack to the Center Channel Audio Pre-output of Digital surround Pre-amplifier.

2. REAR INPUT (L & R)
Connect each input jack (L & R) to the Rear (Surround) Audio Pre-output of Digital surround Pre-amplifier.

3. FRONT INPUT (L & R)
Connect each input jack (L & R) to the Front Audio Pre-output of Digital surround Pre-amplifier.

4. REAR SURROUND SPEAKER (L & R) OUTPUT
Connect each speaker to RED (+) and BLACK (-) terminals.

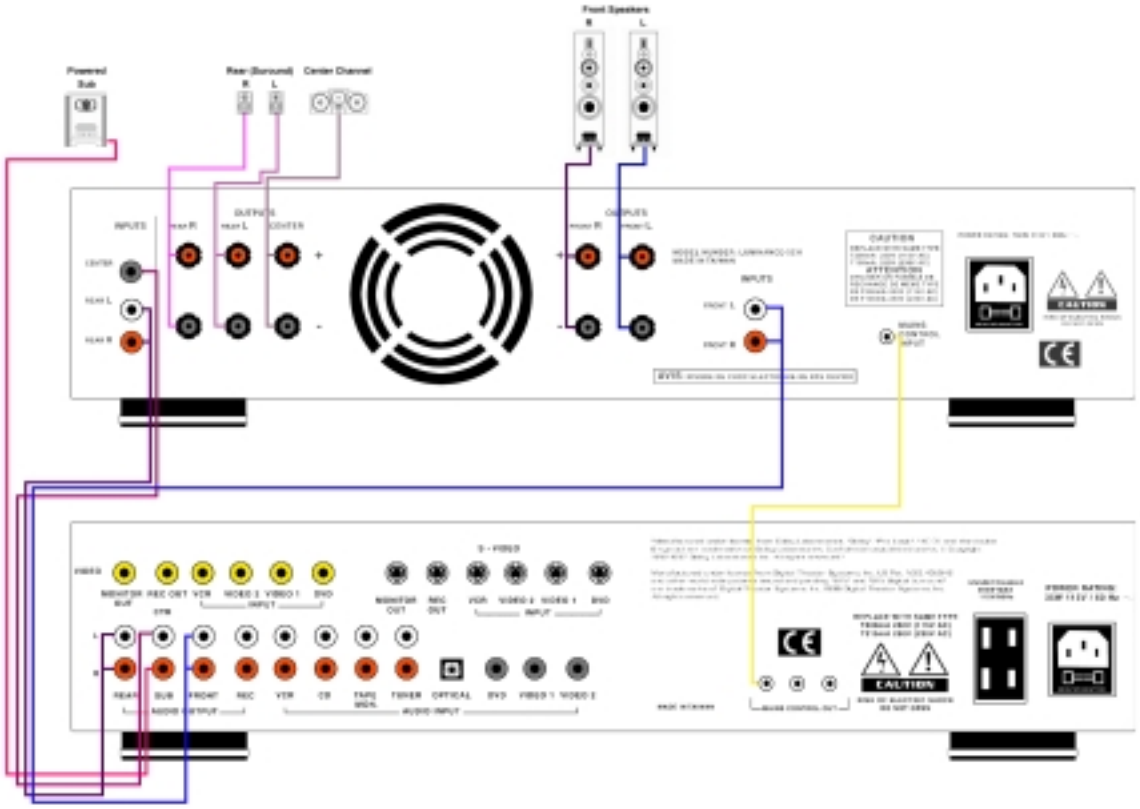
5. CENTER CHANNEL SPEAKER OUTPUT
Connect the speaker to RED (+) and BLACK (-) terminals.

6. FRONT SPEAKER (L & R) OUTPUT
Connect each speaker to RED (+) and BLACK (-) terminals.

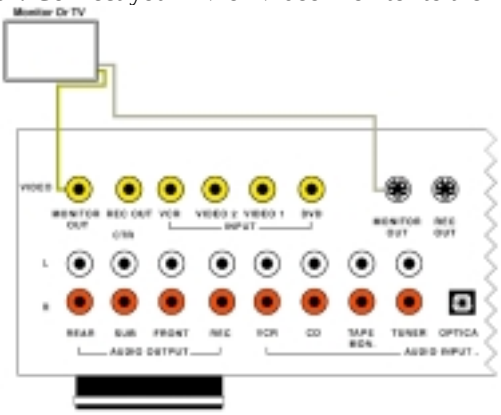
7.MAINS CONTROL INPUT
This input jack provides auto power ON/OFF control from the LUMINANCE digital surround pre-amplifier.

8. POWER CORD INPUT and FUSE HOLDER

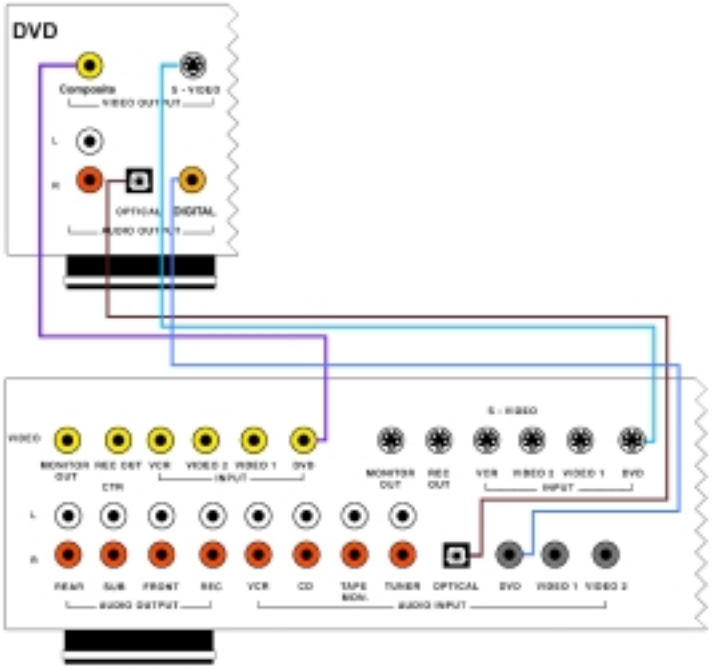
1. **AMP/Speakers:** Connect your LUMINANCE preamp speaker channel outputs to your Amplifiers matching inputs, also connect the mains control out on the preamp to the mains control input on the amplifier. Then connect your Speakers to the coresponding outputs on your amplifier. The Sub out should plug directly into your powered subwoofer



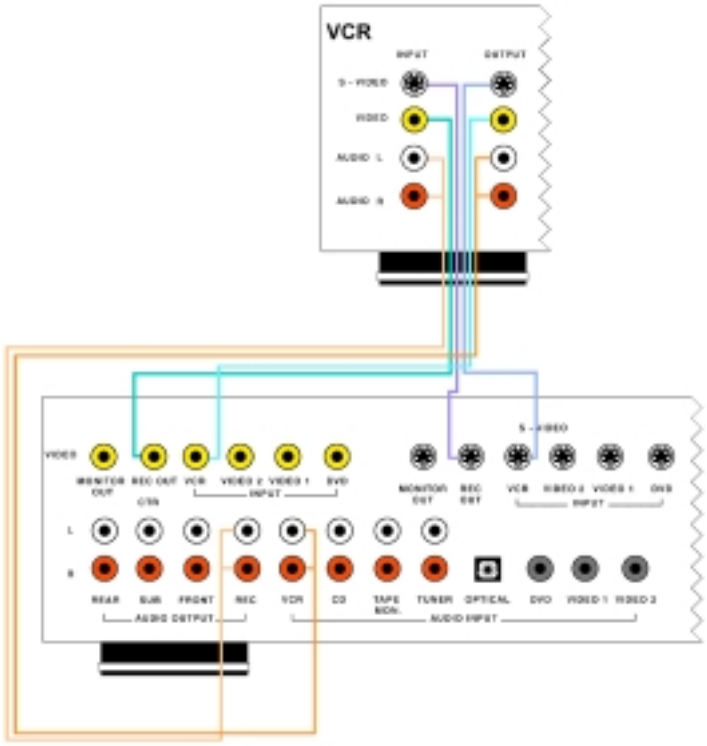
2. **TV/Monitor:** Connect your TV or Video Monitor to the Monitor Outputs.



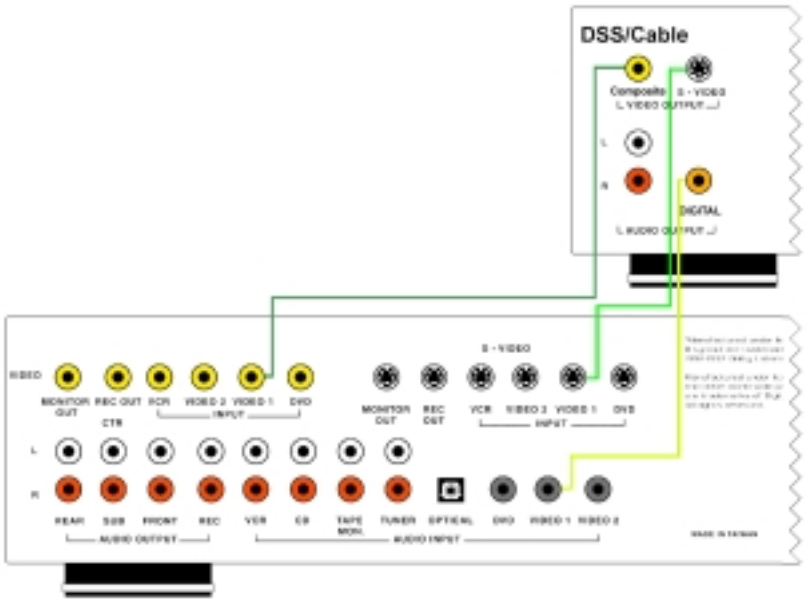
3. **DVD:** Connect your DVD player to the DVD input. If your DVD has S-Video or Digital Coaxial you should by all means use them for the best quality sound and picture.



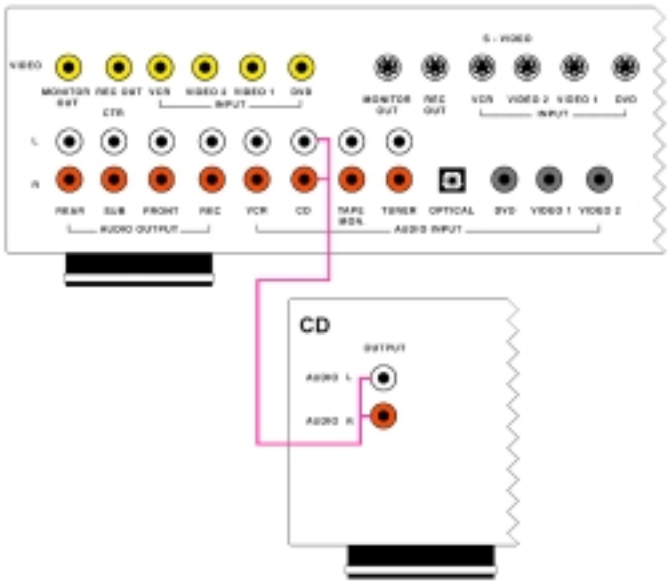
4. **VCR**: Connect your VCR to the VCR inputs.



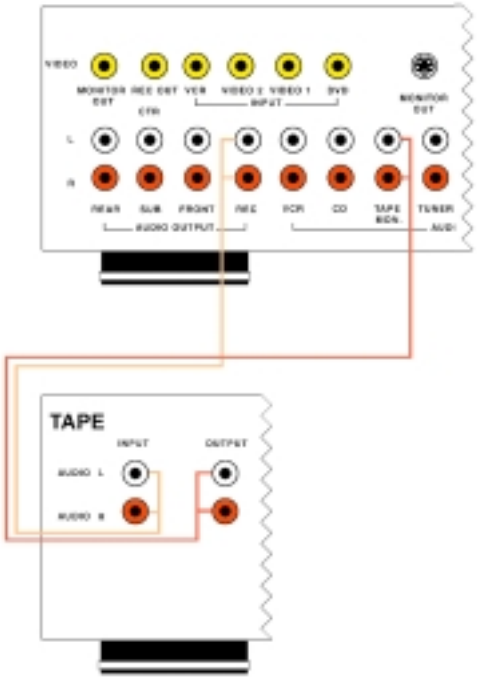
5. **DSS/Cable:** Conect your DSS/Cable Box to the Video 1 inputs.



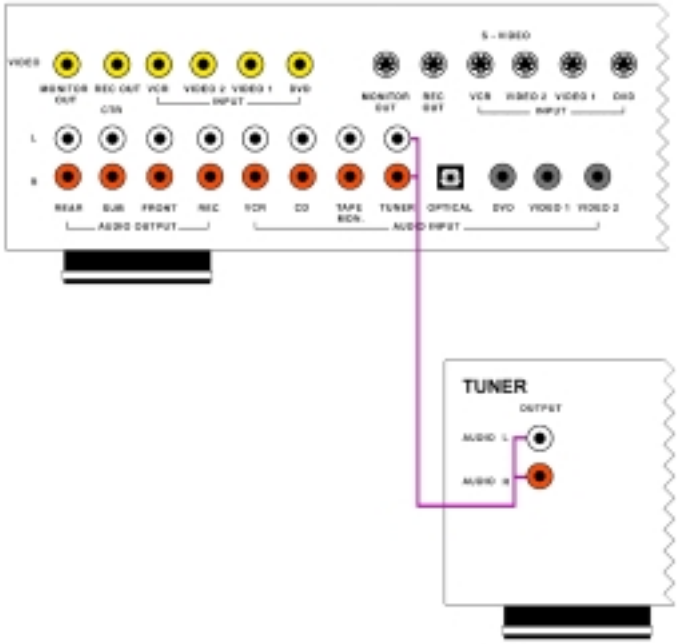
6. **CD Player:** Conect your CD Player to the CD inputs.

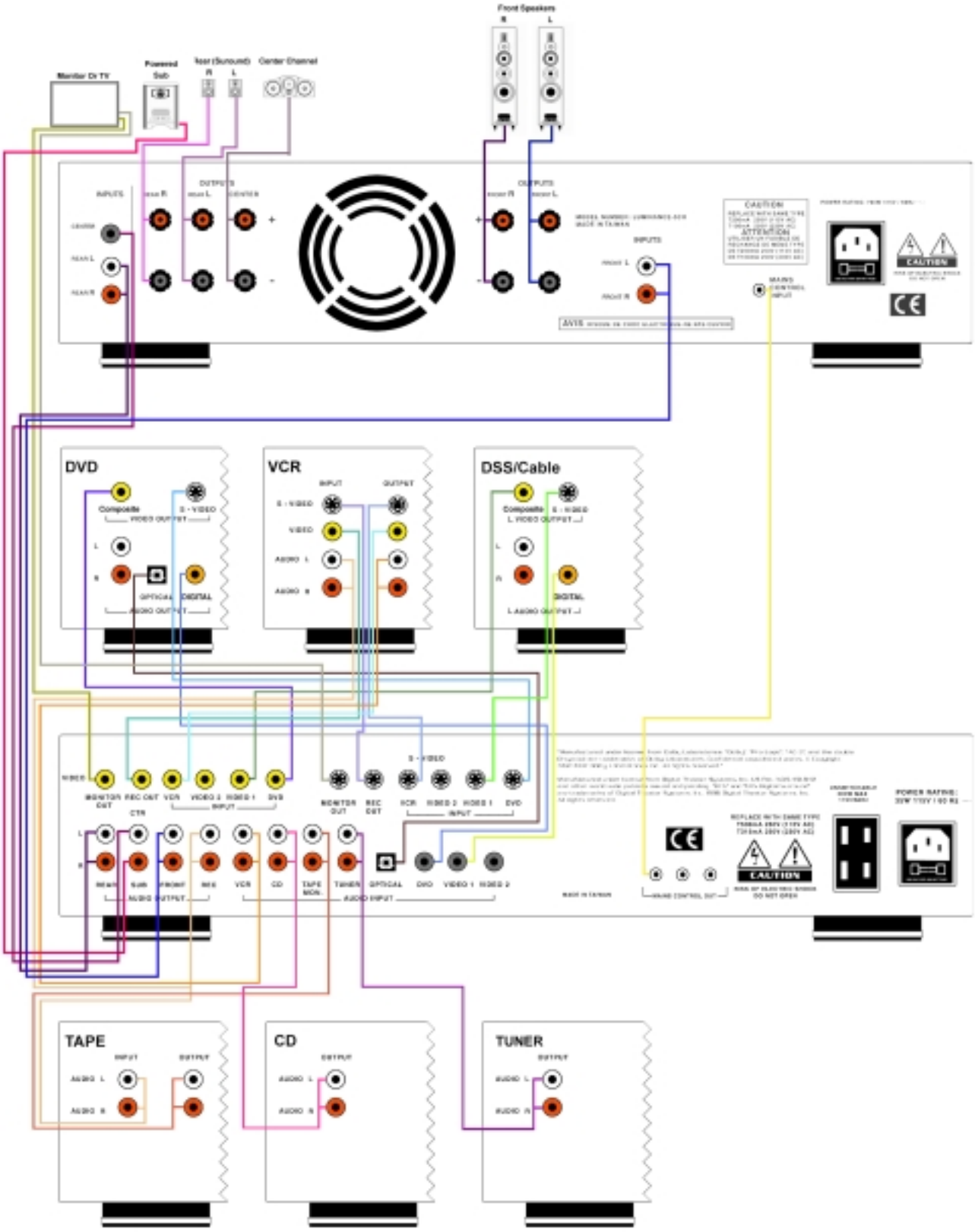


7. **Tape Deck:** Connect your Tape Deck to the Tape inputs. The REC Output is Shared With the VCR you will need a interconnect splitter to connect to both the TAPE and VCR REC Inputs.



8. **TUNER:** Connect your Tuner to the Tuner input.




Front Speakers
R
L
Monitor Or TV
Powered Sub
Rear (Surround)
R
L
Center Channel
DVD
Composite
S - VIDEO
VIDEO OUTPUT
L
R
OPTICAL
DIGITAL
AUDIO OUTPUT
VCR
INPUT
OUTPUT
S - VIDEO
VIDEO
AUDIO L
AUDIO R
DSS/Cable
Composite
S - VIDEO
L VIDEO OUTPUT
L
R
DIGITAL
L AUDIO OUTPUT
MONITOR OUT
REC OUT
CTR
VCR
VIDEO 2
VIDEO 1
DVD
INPUT
S - VIDEO
MONITOR OUT
REC OUT
VCR
VIDEO 2
VIDEO 1
DVD
INPUT
MAIN
SUB
FRONT
MIC
VCR
CD
TAPE MON
TUNER
OPTICAL
DVD
VIDEO 1
VIDEO 2
AUDIO OUTPUT
AUDIO INPUT
CAUTION
TAPE
INPUT
OUTPUT
AUDIO L
AUDIO R
CD
OUTPUT
AUDIO L
AUDIO R
TUNER
OUTPUT
AUDIO L
AUDIO R

A. POWER STANDBY/ON

Press this button to turn ON or STANDBY this Pre-Amplifier.

ON:

When turned ON, power is supplied and the unit becomes operational and the STANDBY indicator in the center of this button will be OFF.

STANDBY:

When set to STANDBY the main power is cut-off and the unit is no longer fully operational except for the micro controller. The STANDBY indicator lights during standby.

NOTE: When the LUMINANCE Amp is connected to the preamp via the mains control the indicator in the center of its button will be lit when the unit is on and off when the unit is in standby mode.

B. REAR CHANNEL DELAY TIME UP/DOWN

These UP/DOWN buttons are used to adjust the delay time of the REAR channels to get optimum Sound balance. The delay time in milliseconds is indicated on the display window. The adjustable time delay ranges are:
Dolby Digital mode: 0ms to 15ms in 1ms steps
Pro ***L***ogic mode: 15ms to 30ms in 1ms steps

NOTE: The rear channel delay time setting is for Dolby Digital and Pro Logic mode only. These 2 buttons will not be used for “dts” and DSP surround mode.

C. CENTER CHANNEL DELAY TIME UP/DOWN

These UP/DOWN buttons are used to adjust the delay time of the CENTRE channel to get optimum sound balance when you play it in Dolby Digital surround mode only. The delay time in milliseconds is indicated on the display window. The adjustable range is 0ms to 5ms on 1ms/step.

NOTE: The center channel delay time setting is for Dolby Digital mode only. These 2 buttons will not be used for Dolby Pro Logic, “dts” and DSP surround mode.

D. TEST TONE

This is the TEST TONE button and it enables you to adjust the volume level of each channel to get optimum sound balance. The setup procedure is:

1. Press TEST TONE button to switch ON this function then the indicator on the center of TEST TONE button will light-up, the test tone will be produced at Front Left channel and the channel indicator LED of the Front Left channel will blink.

2. Press the master VOLUME UP or DOWN to get your preference sound level.

3. Press the LEVEL + or - button to get your preference sound level for the FRONT LEFT channel.

4. Press the CHANNEL button to select the next channel for TEST TONE level adjustment

5. Repeat steps 3 and 4 to complete TEST TONE and sound balance adjustment for each channel. The adjustment sequence will be:

   FRONT LEFT ---- CENTER ---- FRONT RIGHT---- REAR LEFT ---- REAR RIGHT ---- SUB-W

6. Press the TEST button again to switch OFF TEST TONE function when you have finished the TEST TONE level adjustments for each channel.

E. SPEAKER MODE SET-UP FOR FRONT, CENTER, REAR and SUBWOOFER

1. Press SPEAKER SET button first then you will see the indicator in the center of this button will light up.

2. Press buttons FRONT, CENT, REAR and SUB.W to set the speaker size that you are going to use it. LUMINANCE will produce suitable signal output to match the size and number of speakers in your system.

3. Press SPEAKER SET button again to disable this function when you finished your speaker mode setting.

    - **LARGE (RED indicator):**
    Suitable setting for speakers that can comfortably reproduce frequencies below 120Hz
    - **SMALL (GREEN indicator):**
    Suitable setting for speakers that cannot comfortably reproduce frequencies below 120Hz
    - **OFF (OFF indicator)**:
    Set to OFF when no speaker is connected

FRONT: LARGE <<--->> SMALL cyclic
Set the FRONT L and R speakers size.
CENT: LARGE -->> SMALL -->> OFF cyclic
Set the CENT speaker LARGE or SMALL or OFF.
REAR: LARGE -->> SMALL -->> OFF cyclic
Set the REAR L and R speakers LARGE or SMALL or OFF.
SUBWOOFER: ON <<--->> OFF cyclic
Set the SUBWOOFER speaker ON or OFF.

F. CHANNEL and LEVEL +, -

Press the CHANNEL button sequentially to select either the Front Left, Center, Front Right, Rear Right, Rear Left or subwoofer channel to adjust that channel's output level. Press LEVEL + or - to adjust each channel output level by 1dB/steps across the adjustable range of -10dB to +10dB. The level you set will be indicated in the display window.

NOTE: The LUMINANCE will memorize the CHANNEL LEVEL, the SPEAKER MODE, Rear and Cent Delay Time and Surround Mode that you have set for different input source.

G. MASTER VOLUME

Press VOLUME UP or DOWN button to increase or decrease all of the 6 channels output sound level settings in 1dB steps from -80dB to 0dB.

H. SURROUND MODE

Press this button sequentially to set the SURROUND MODE to Digital Surround, PRO LOGIC or STEREO.

Digital Surround:

This mode is available when you select the digital sources DVD, Video 1, Video 2, or Optical as the listen source with INPUT SOURCE select button and the program that you are playing has to be Dolby Digital or “dts” encoded signal.

Pro LOGIC:

You can select this surround mode for analog or digital sources when the source is not Dolby Digital or “dts” encoded.

STEREO:

It is SURROUND OFF when you select this mode and only front left and right channels have output.

I. INPUT SOURCE

Press this button sequentially to select one of eight audio input sources DVD, Video 1, Video 2, Optical, VCR, CD, TAPE or Tuner. The indicator will point to the input source that you selected. DVD, Video 1, and Video 2 are coaxial Digital Inputs. Optical is an Optical (TOSLINK) Digital Input. VCR, TUNER, TAPE and CD are Stereo analog Inputs. Only DVD, Video 1, Video 2, and VCR have the match video input in the eight audio input sources.

NOTE: LUMINANCE can automatically detect the input source that you are playing. You can press INPUT SOURCE button to select the source you want if the auto detected source is not the source that you want to play.

J. DYNAMIC RANGE

Press this button to select Dynamic Range Compression ON or OFF when the instruction for dynamic range compression of a Dolby Digital source's original signal has been specified.
ON: The indicator LED above this button will illuminate.
OFF: The indicator LED above this button will turn off

NOTE: Dynamic Range ON/OFF setting is for Dolby Digital mode only. This button will not be used for Dolby Pro Logic, “dts” and DSP surround mode.

DISPLAY AND INDICATORS

1. Two and a half Digits Display

a. MASTER VOLUME:
The MASTER VOLUME shows the attenuation level of all channels from -80 dB to 0 dB by 1dB/step in this display.

b. CHANNEL LEVEL:
It shows the adjustable CHANNEL LEVEL range from +10dB to -10dB for the channel that you are adjusting in this display. The display will go back to showing the Master Volume Level 5 seconds after you set the channel level.

c. DELAY TIME FOR REAR AND CENT CHANNEL
It will show the DELAY TIME of rear or center channel in milliseconds when you are adjusting the rear or center channel delay time. It shows the adjustable delay time range from 0 to 5ms for the center channel or 0 to 15ms for the rear channel when it is set in Dolby Digital mode. The delay time range of rear channel can be 0 to 30ms when the surround mode set into Pro Logic mode. The display will go back to showing the Master Volume Level 5 seconds after you set the delay time.

2. CHANNELS INDICATOR (6 DUAL COLOR LEDs)

Normally these 6 dual color LEDs will indicate how many channels are encoded in the program that you are playing.

a. Digital Source 3/2/. 1:
All 6 LEDs will light in YELLOW

b. Digital Source 3/2:
5 LEDs will light in YELLOW and SUB. W. LED will be OFF.

c. Digital Source 3/1:
L.F. and CENT and R.F. LEDs will light in YELLOW
L.S. and R.S. LEDs will light in GREEN to indicate the REAR channels are MONO and the SUB.W
LED will be OFF.

d. Digital Source 3/0:
L.F. and CENT and R.F, LEDs will light in YELLOW.
L.S. and R.S. and SUB.W LEDs will be OFF.

e. Digital Source 2/2:
L.F. and R.F. and L.S. and R.S. LEDs will light in YELLOW.
CENT and SUB.W LEDs will be OFF.

f. Digital Source 2/1:
L.F. and R.F. LEDs will light in YELLOW.
L.S. and R.S. LEDs will light in GREEN to indicate the REAR channels are MONO. CENT and
SUB.W LED will be OFF.

g. Digital and Analog Source 2/0:
L.F. and R.F. LEDs will light in YELLOW.
L.S. and R.S. and CENT and SUB.W LEDs will be OFF.

h. Digital and Analog Source 1/0:
CENT LED will light in YELLOW and the others LEDs will be OFF.

NOTE: "When a 2-channel surround-encoded Dolby Digital source is present, the L.F. and R.F. LEDs will light in YELLOW, the CENT and SUB.W LEDs will be OFF, and the L.S. and R.S. LEDs will light in GREEN to indicate a mono surround channel."
When a 2/0 surround-encoded Dolby Digital source is present and Pro Logic is set to auto-detect, the unit will automatically use Pro Logic mode playback**.**

3. SPEAKER MODE

These 6 LEDs will show the SPEAKERS MODE when you are setting it.

a. FRONT SPEAKERS
LARGE light RED
SMALL light GREEN

b. REAR SPEAKERS
LARGE light RED
SMALL light GREEN
OFF light off

c. CENT SPEAKER:
LARGE light RED
SMALL light GREEN
OFF light off

d. SUBWOOFER SPEAKER
ON light RED
OFF light off

NOTE: It will go back to showing how many channels encoded in the program 5 seconds after you have finished the speakers mode setting.

4. CHANNELS LEVEL SETTING

The channel LED will blink when you are setting the CHANNEL LEVEL. It will back to show how many channels in program 5 seconds after you finish the channels level setting.

5. AUDIO PROGRAM ENCODED INDICATORS

a. Dolby Digital Indicator

This Blue LED will light up when the program during playback is encoded with the ***Dolby Digital*** format.

b. ”dts” Indicator

This Blue LED will light up when the program during playback is “dts” digital format.

c. PCM Indicator

This Blue LED will light up when the program during playback is PCM digital format.

6. MUTE

Sound will be muted and the 2 and 1/2 digits display will blink when the MUTE button is pressed on the remote control unit. Press the MUTE button again to disable the MUTE function.

If you wish to clean your LUMINANCE, use a diluted ammonia based window cleaner. Do not use any abrasive cleaners or chemical solvents. Take care not to damage the faceplate, since the faceplate is a medium hardness plastic and can be scratched by the careless use of tools during the installation.

The LUMINANCE may overheat and the finish may fade if exposed to direct sunlight or intense heat sources for prolonged periods.

Save your box and packing material; they may be necessary for moving or shipping the unit for servicing by the factory.

LUMINANCE Preamp

Analog Audio Input Level/Impedance
VCR, TUNER, TAPE and CD……200Mv/22K OHM
Digital Audio Input Level/Impedance
DVD, VIDEO 1, VIDEO 2, and Optical…… 0.5Vp-p/75 OHM
Video Input Level/Impedance
DVD, VIDEO 1, and VIDEO 2……1Vp-p/75OHM
Video Output Level/Impedance
VCR RECORD OUTPUT and MONITOR OUTPUT……1Vp-p/75 OHM
Audio Frequency Response @ 20Hz to 20KHz
Analog Inputs. …….. +0, -3dB
Digital Inputs. …….. +0, -3dB
Total Harmonic Distortion @1KHz
Analog Inputs……0.04%
Digital Inputs……0.02%
Signal to Noise Ratio @ 1Vrms Output Level
Analog Inputs……... 90dB
Digital Inputs…… 90dB
Power Consumption
115V60Hz ……... 35W
230V50Hz…… 35W

LUMINANCE Amplifier

Rated Power Output (20Hz -- 20KHz)…… 80Wrms at 6 OHM
Total Harmonic Distortion..... 0.05%
Inter Modulation Distortion..... 0.02%
Damping Factor..... >150
Frequency Response (20Hz - 20KHz)…….. +0.5, -1.0dB
Power Bandwidth (THD=0.1%)..... 10Hz --- 50KHz
Input Sensitivity..... 1.0Vrms
Channel Separation (1KHz)..... 60dB
Signal to Noise Ratio (A-weighted)..... 100dB
Dimensions
420 W x 75 H x 356 D in mm
16.5 W x 3.0 H x 14.0 D in inches
Weight:
Net Weight..... 7.1Kg/15.7Lbs
Shipping Weight..... 8.4Kg/18.5Lbs
Power Consumption (Full power output):
115V60Hz..... 700W
230V50Hz..... 700W