

Thank you for choosing the Stello AI 320 from April Music.

The AI 320 is one of the finest integrated amplifiers available on the market today. It will give the true meaning to the reproduction of recorded music with high fidelity and musicality.

Although the natural reproduction of recorded music is not only an elegant way to describe our product, it is a feeling that captures your full attention from the very first moment you experience the Stello integrated amplifier. You can feel the subtlety and nuances of the inner details, the lightness of touch within the music which you can only feel at the concert hall.

The AI 320 delivers 140Watts per channel and will power with an extreme ease most of the loudspeaker systems designed for home audio applications, even those that are very demanding. Your amazement will also be triggered by an extremely quick transient response where every small micro dynamic signal is distinctively there!

We designed the AI 320 with some very interesting features

- The PREAMPLIFIER OUTPUT, for example, allows the use of an independent external amplifier to be coupled with the preamplifier section of the AI 320.
- The BYPASS input is also prepared to support AI 320 as a main power amplifier when used with a surround processor.
- The CS3310-based volume control is a very high-end volume control logic which is not usual with products in such an affordable price range. A 120 steps volume control allows the user to set the volume with an extreme accuracy.
- The Remote Control Unit has been designed to operate both Stello products, the AI 320 and CDA320. It is machined in a solid block of aluminum.

CAUTION

AI 320 INTEGRATED AMPLIFIER

- The AI 320 is designed to operate at the following voltages; 100, 117, 220, 230(240)V. The chart below provides the necessary information for the line voltage if needed.

Note: this work must be accomplished by a qualified technician only.

- The AI 320 'Mains' power switch is located on the rear panel. The 'STANDBY' switch is located on the front panel. During a normal daily operation use only the 'STANDBY' switch leaving the Mains switch in the 'On' position. The amount of current draw in the standby mode is very small while the internal circuitry is maintained at an optimal operating temperature. It is, however, recommended to turn the Mains switch 'Off' or unplug the AC power lead when you plan to leave the house for a prolonged period of time.
- It is important to maintain proper ventilation around the AI 320. Do not put other devices over the AI 320. Improper heat dissipation from and around the AI 320 could cause overheating related problems.
- Do not open the chassis without prior authorization from the manufacturer or from a certified Stello agent. Do not open the chassis unless you are qualified to do so. Unauthorized repair or tempering of any type will void the manufacturer's warranty.

VIEW FROM INSIDE

230/240V	220V	117V	100V						100V	117V	220V	230/240V
Brown	Blue	Brown	Blue	▶	□	□	◀	White	Red	Red	Red	Red
Yellow	Yellow	None	None	▶	□	□	◀	None	None	White	White	White
Blue	rown	Blue	Brown	▶	□	□	◀	Yellow	Yellow	Grey	Grey	Grey
None	None	White	Red	▶	□	□	◀	Grey	Grey	None	None	None
					□	□						

Preamplifier Section

The modular design of the AI 320 makes upgrade and service maintenance a mere formality. This single feature alone is your long term insurance against built in obsolescence. The volume control stage is done domain to preserve the quality and integrity of the sound signal using Cirrus Logic CS3310 integrated circuit.

The following featured circuits and devices are used in the preamplifier section of AI 320. All channels are dual monaural and individual modules are used for left and right channels respectively.

- Mixed design with two pairs of junction FET (J-FET) and two pairs of bipolar transistors on the input differential circuit.
- Class A push-pull output stage.
- Individual and separated Power Supply Section.

Power Amplifier Section

The AI 320 is using four bipolar power transistors for each channel of the power amplifier section. The main circuit is designed to preserve and maintain the maximum quality of sound reproduction and integral musicality. A variety of support circuitries are provided to preserve the integrity of the signal and the genuine playback from the sources used.

- Junction FET inputs.
- Proprietary feed-back circuit on the power transistors for an improved base extension and control.
- Push-pull designed parallel output circuit with SANKEN package type MT-200 power transistors.

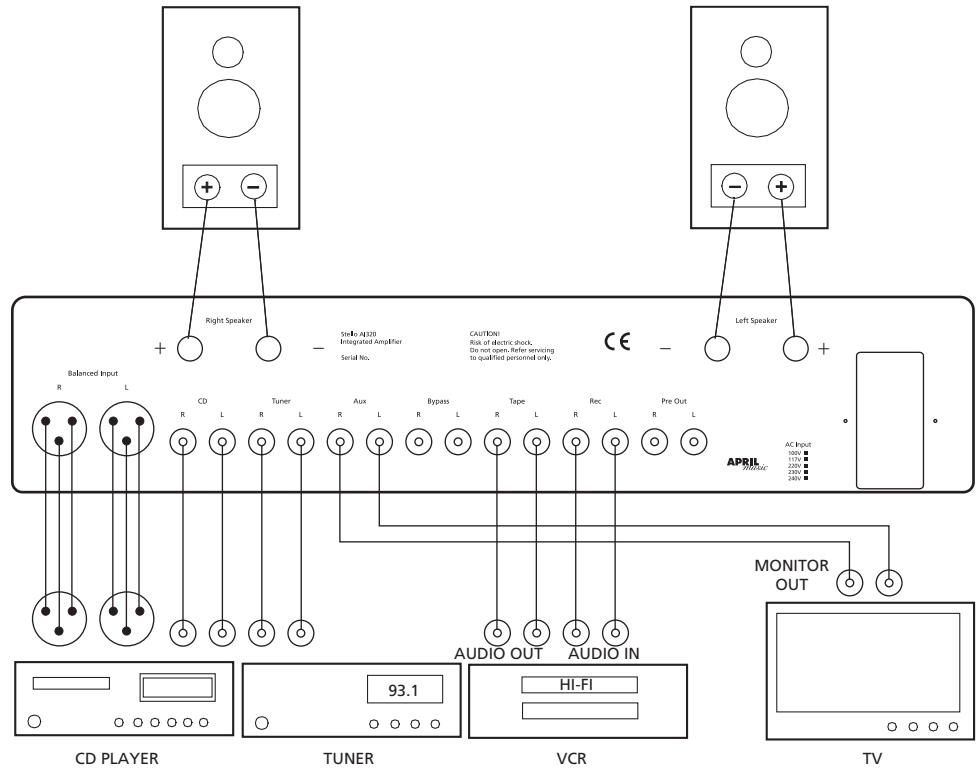
Main Signal Path

The main signal path uses exclusively discrete components for an optimal performance. The use of OP Amps is strictly prohibited at this level.

DC Coupled Signal Path***Preamp Output for Bi-amping or Sub-woofer Application******BYPASS Function input for Surround Processor Connection
(Activated as a 2 Channel Power Amp)***

1. AI 320 Integrated Amplifier

General Connection



The AI 320 is equipped with five 'Unbalanced' inputs (RCA) and one 'Balanced' input (XLR). For optimal results we recommend to use of the 'Balanced' connection whenever the source component is equipped with a 'Balanced' output.

BAL-IN

Connection for 'Balanced' audio cables between the AI 320 and the sources material (for example, the CDA320 CD player)

TUNER

Connection for tuners for FM/AM broadcasting station

AUX

Connection from Video or TV outputs

TAPE IN

Connection from a cassette tape deck output for playback

TAPE OUT

Connection from cassette tape deck input for recording

AI 320 INTEGRATED AMPLIFIER

BYPASS

This input is used for a multi-channel surround processor. Connection from the main left and right outputs of the surround processor to this input. This function is activated when pressing the BYPASS button on the remote control handset or directly on the front panel.

The AI 320 is then working as a fixed input power amplifier.

PRE OUT

This is for preamplifier output. This output of the AI 320 can be used for bi-amplification or for a sub-woofer application (Refer to chapter 2 for details).

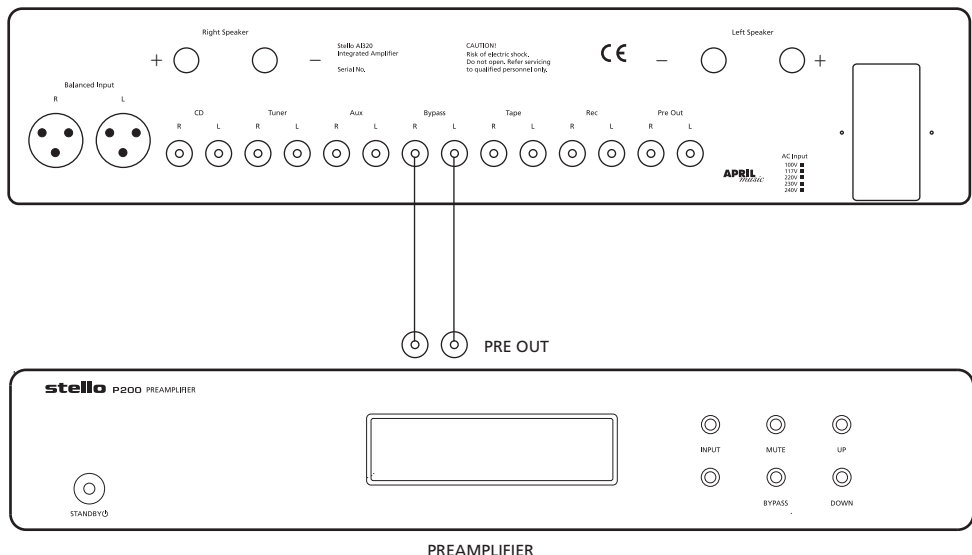
SPEAKER OUTPUTS

Connection for the loudspeaker cables between the amplifiers and loudspeaker system. The loudspeaker cables should be connected to prevent any contact between the plus (+) and minus (-). The plus (+) and minus (-) of the amplifier should respectively connect to the plus (+) and the minus (-) of the loudspeaker system. If there is a suggested flow direction for the cable, you should follow the recommendations from the cable manufacturer.

BYPASS

The AI 320 used as a Power Amplifier

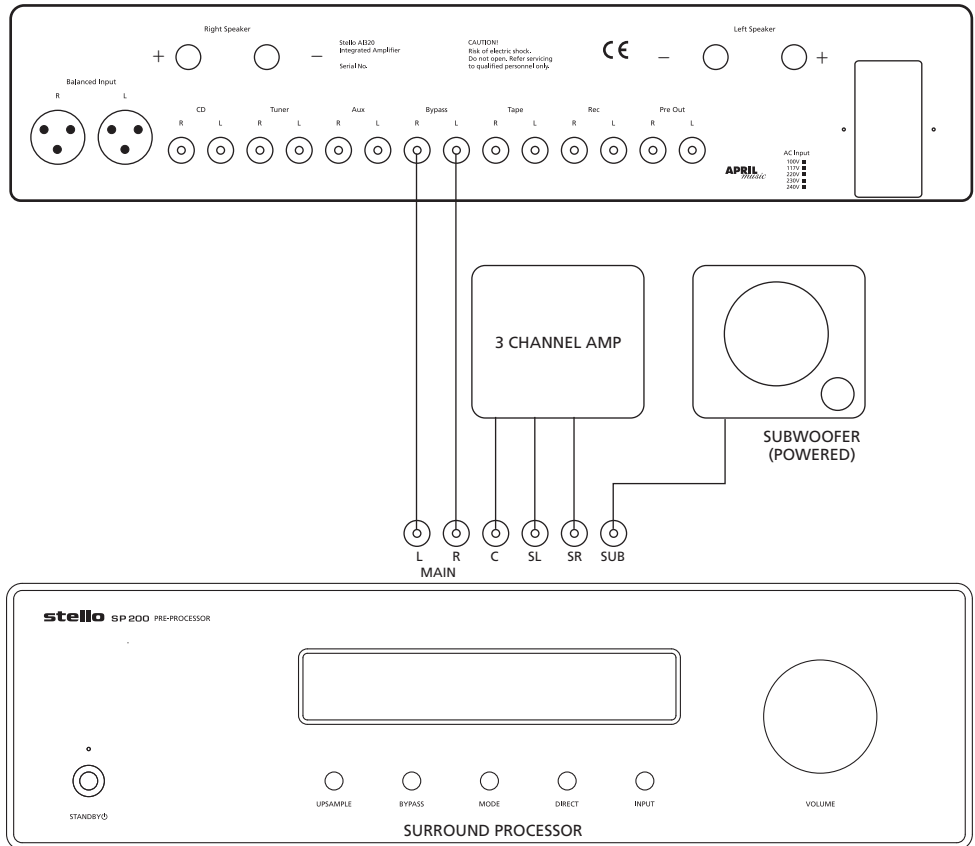
- The AI 320 can be activated as a pure power amplifier by pressing the BYPASS button from the remote control handset or directly from the front panel. In this mode an external preamplifier, transistor or tube, will be required.
- To return to normal integrated amplifier mode, just press the BYPASS button again.



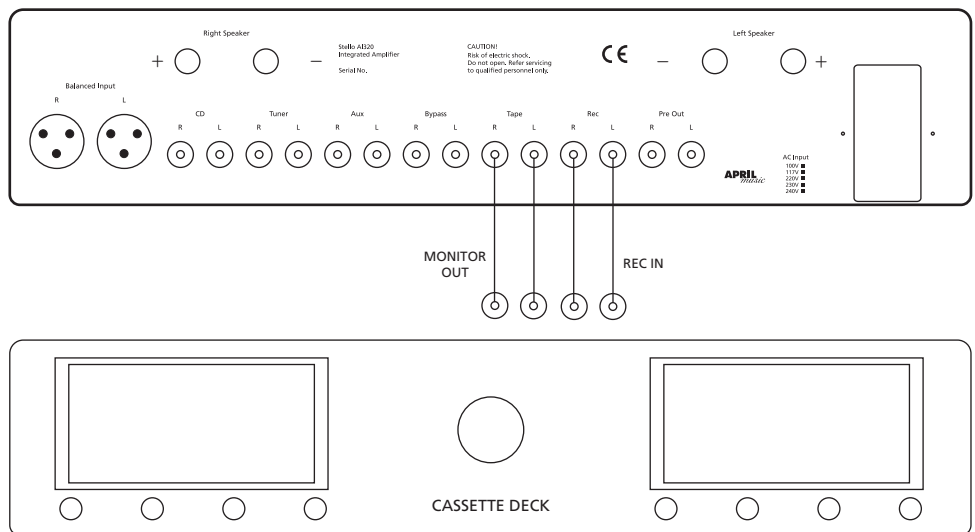
AI 320 INTEGRATED AMPLIFIER

Surround Processor Connection

- To make this connection configuration possible the surround processor should have its own volume control.
- The volume control should be done at the surround processor side.



Cassette tape recorder connection



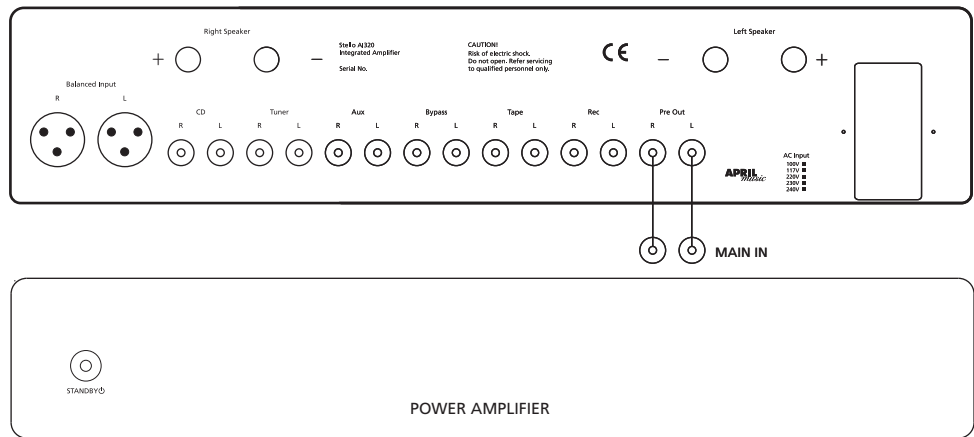
AI 320 INTEGRATED AMPLIFIER

2. Using the AI 320 as a Preamplifier

Connection to an external power amplifier

Disconnect the loudspeaker cables from the AI 320 or press 'SPK OFF' button on the remote control handset.

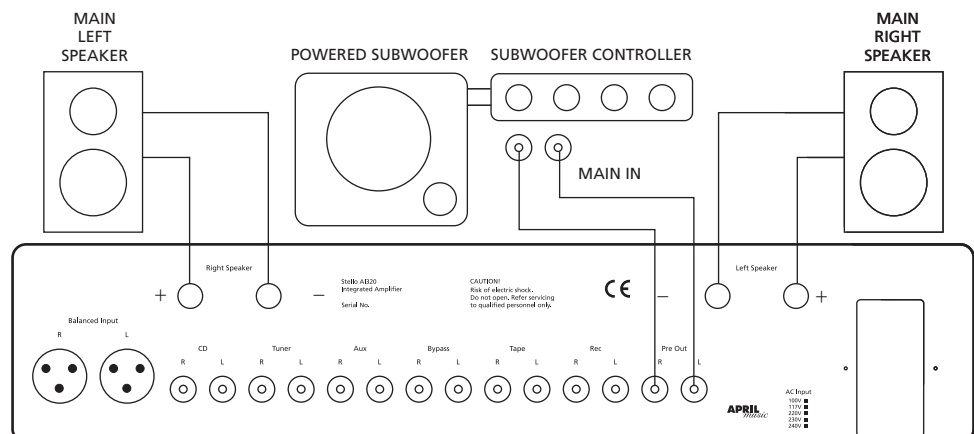
Connect the PRE OUT of the AI 320 to the MAIN IN of the external power amplifier.



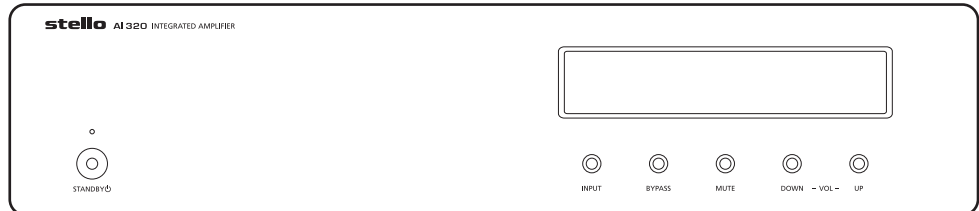
Using a self power Subwoofer system

This option will be useful when using a small or medium size loudspeaker system as the main loudspeakers and using the PRE OUT to connect to a self powered subwoofer for an improved bass extension.

- Install an interconnect cable between the PRE OUT of the AI 320 and the MAIN IN of the subwoofer controller/amplifier.
- The following functions, volume, cut-off frequency, phase, etc. should be calibrated directly on the subwoofer controller/amplifier panel. Please refer to subwoofer manual for operation.



1. Front panel functions



STANDBY

Turning 'on' the 'Mains' power switch located on the rear panel will activate the amplifier to display APRIL MUSIC STELLO AI 320. Moments later the display will change to the default position showing 'CD 00.0'.

- The source selection is accomplished by pressing the INPUT button.
- The volume level is controlled by pressing the VOL UP and VOL DOWN buttons.
- To turn off the unit press the STANDBY button. This will switch the amplifier mode to standby. While in standby a small amount of current flows through the amplifier circuitry to maintain an optimal operating temperature. In the standby mode the last settings, source and volume level, are memorized. When pressing the STANDBY button again the display will show the previous source and volume level settings.

INPUT

- The initial Power-On mode showing on the display is 'CD 00.0'. (For example, selected input 'CD' volume level 00.0)
- INPUT button selection loop
CD → TUNER → AUX → TAPE → BAL_IN

BYPASS

Refer to 'BYPASS' in the chapter 'Connection'

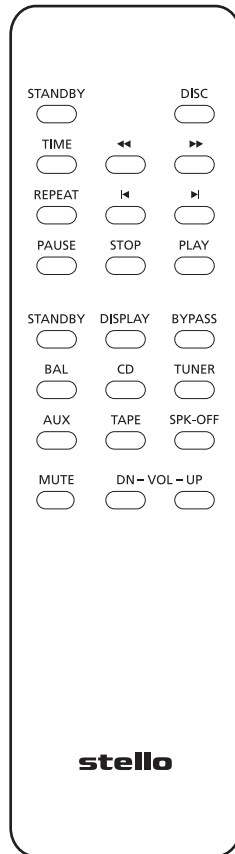
MUTE

- Press the MUTE button once to temporarily turn off the music. The display will show 'MUTE' and no signal will come out from the amplifier.
- To resume play press the MUTE button again or the VOL UP or VOL DOWN button

VOL UP / VOL DOWN

- The volume control ranges from 0 to 60 in increments of 0.5 for a total of 120 steps.
- Press the VOL UP or VOL DOWN button to set the volume level.

2. Remote Control Handset



Remote control Handset

- The remote control handset can control both the Stello CDA320 CD player and AI 320 integrated amplifier.
- CD Players using the RC-5 code like the Stello CDA320 can be controlled by this remote control unit.

Battery Replacement Procedure

- Using the supplied Allen Key Wrench, remove the back cover on the remote control handset.
- Install two triple A size batteries following proper polarity.
- Test the remote control handset for proper operation.
- Install the back cover.

Note: It is strongly recommended to use Alkaline batteries for an extended operation of the remote control handset but more important to prevent any chemical leakage.

SPECIFICATIONS

AI 320 INTEGRATED AMPLIFIER

INPUT SENSITIVITY: 0.56 140W / 8 Ohms

SIGNAL TO NOISE: 10-20 kHz, -100dB

THD: 0.005%, at 30W, 8Ohms

FREQUENCY RESPONSE: 10- 35kHz, +-3dB

POWER OUTPUT: 140W/CH at 8 Ohms

MAXIMUM POWER CONSUMPTION: 500 WATTS

SIGNAL OUTPUTS: 1 RCA/REC Output

1 PREAMP Output

SIGNAL INPUTS: 4 RCA/Unbalanced

1 XLR/Balanced

1 RCA/Bypass

Front Panel/Remote Controller Switches

STANDBY

INPUT, TUNER, AUX, TAPE, Balanced Input

BYPASS

MUTE

KSOFF

VOLUME UP/DOWN (120 Steps)

DISPLAY/ 4 Step Brightness Control

POWER REQUIREMENTS : 100/17/220/230V(240V), 50 or 60HZ

DIMENSION: 435 (W) X 105 (H) X 415 (D) mm

WEIGHT: 16 Kg

★ All specifications are subject to improvement without further notice

Warranty Period	2 years
Date of Purchase	
Authorized Stello Dealer	
Telephone	
Serial No.	
Authorized Stello Service Center	