

C 725BEE Stereo Receiver



> POSITIONING

The NAD C 725BEE is in a category of one; unique in both performance and capability. Most receivers available today are digital surround sound AV Receivers. While these are appropriate for Home Theatre use, with very few exceptions they cannot match the performance of a good stereo amp when driving stereo speakers. The C 725BEE, by contrast, is an analogue design based entirely on our award winning C 325BEE Integrated Amplifier. **By combining all the most desirable features in a one box solution, we can offer the performance of separate high end components and the convenience of a receiver.** All this performance and convenience comes at a far more affordable price than separate components would cost.

> FEATURES



- 50W x 2 Continuous Power into 8 ohms
- 102W, 148W, 205W, IHF Dynamic power into 8, 4 and 2 ohms, respectively
- PowerDrive™
- AM/FM Tuner with 40 station presets
- RDS data service for FM
- Controls and Plays DAB (Band III and Band L) with Optional DB 1 Module (230V Version Only)
- Multisource Zone 2 with independent line level output
- Speaker A and B switching
- SR 8 System Remote control
- ZR 5 Zone Remote
- Front Panel MP Input for attaching portable MP3 Players
- Data port for use with optional NAD dock for iPod
- Headphones socket
- Relay Input Switching
- Toroidal Power transformer
- 7 Line inputs
- All discrete circuitry utilizing Class A gain modules
- Short signal path from input to output
- All sockets Gold plated
- Tone controls defeat switch
- Main-amp input & pre-amp output
- Subwoofer Output
- Soft Clipping™
- IR In & Out
- 12 volt trigger output
- RS-232 serial interface connects to advanced control and automation systems
- <1 watt Standby Consumption

> DETAILS

Performance

This is a true BEE (Bjorn Erik Edvardsen) design with all his latest developments including: PowerDrive, Distortion Canceling Circuit, BEE Clamp and an all new and more highly refined circuit layout. Based on a high current toroidal transformer – the same type found on our own high end Masters Series – the C 725BEE can provide a healthy, ultra low distortion 50 watts of continuous power.

But more importantly, on a short term dynamic basis (which is the way music reproduction demands the power to be delivered) the C 725BEE can provide as much as 200 watts depending on the characteristics of the loudspeaker being driven. If, for any reason, more power is asked for than the C 725BEE can provide the exclusive Soft Clipping circuit prevents the harsh grating sound of hard clipping distortion.

continued>



> DETAILS

This ultra low noise and distortion fountain of power, gives music an effortless unforced quality. The smallest details in your recordings now emerge. The timbre of each instrument and rhythm of the entire ensemble is now clearly revealed. This all adds up to a level of refinement that makes your music come to life!

Imagine a big 3 dimensional sound stage with each instrument clearly defined in its own space. It is now so easy to hear all the details in your music that 'listener fatigue' is a thing of the past.

The highly sensitive FM tuner offers audio performance that is as good or better than any FM broadcast ensuring the best possible sound quality for FM stations. RDS is also supported giving text information about the station and songs being played depending on the data sent by the FM station. AM is also supported with the best possible quality from this older but still popular broadcast technology.

All input switching is accomplished using sealed reed relays. While these cost more than the usual CMOS type switch used by lesser receivers, the very low resistance of the relay keeps noise at the lowest possible levels. Precision audio grade capacitors are used in all critical circuit locations adding both performance and reliability.

Features

In addition to the seven high level inputs on the rear panel there is a front panel mini-jack for quick and easy hook up of a portable music player.

Additional convenience features include an IR remote commander, connections for a second set of speakers, and a highly informative 2 line vacuum fluorescent display. Audiophile features like multi-way speaker binding posts and gold plated input sockets all add to the performance and reliability of this fine instrument. There is even an output for adding a powered subwoofer!

For those areas that support DAB broadcasts, the C 725BEE is equipped with a special socket on the rear panel that accepts NAD's optional DB 1 DAB module which adds DAB reception. Just plug it in and the C 725BEE operating software recognizes the DB 1 module and makes a seamless integration.

Custom Installation

There is a line level Zone 2 output with independent source selection allowing you to add an amplifier in another location and listen to all your sources connected to the C 725BEE.

A separate remote commander is included to control the C 725BEE from the remote location using independent IR codes. The IR input and output sockets on the rear panel make it easy to attach any of the many IR repeaters on the market today. The C 725BEE also sports an RS-232 port and is certified compatible with Crestron, AMX and Savant system controllers. The inclusion of 12V trigger output gives additional flexibility and compatibility for custom installations.

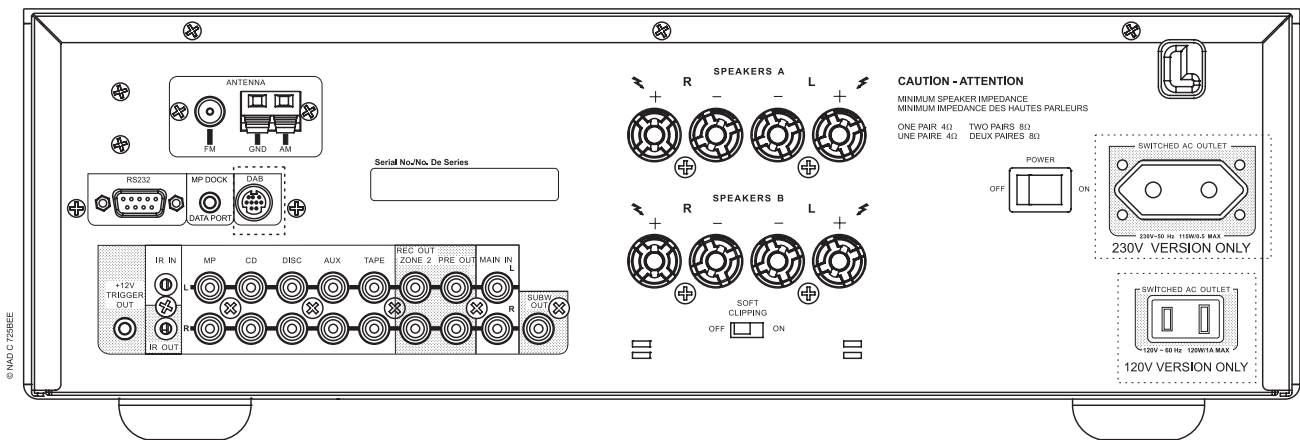
Green Features

NAD has responded quickly and responsibly to the new awareness of environmental damage caused by human activity. The C 725BEE is manufactured without the heavy metals that have been identified as harmful to the environment and manufacturing processes meet the latest stringent international standards. Power consumption during standby mode is less than 1 watt and PowerDrive technology improves amplifier efficiency during playback.

Value

As mentioned at the outset there is no other product on the market today that offers the combination of performance, convenience and flexibility provided by the C 725BEE. To amass a separate component system that matches the overall performance of the C 725BEE would cost considerably more and would still lack the convenience of an all-in-one receiver.

> REAR LINE DRAWING



> SPECIFICATIONS

PREAMPLIFIER SECTION

LINE LEVEL INPUTS (MP, CD, DISC, AUX, TAPE)

Input impedance (R and C)	22k Ω + 100pF
Input sensitivity	250mV (ref. rated power)
Maximum input signal	6V
Signal / Noise ratio A-weighted	95dB
Signal / Noise ratio pre-amp out, A-weighted	107dB
Frequency response	< \pm 0.3dB (20Hz - 20kHz, Tone defeat ON) < \pm 0.3dB (20Hz - 20kHz, Tone defeat OFF)
THD + Noise, SMPTE IM	< 0.01% at 5V out

LINE LEVEL OUTPUTS

Output impedance	
Pre-out	80 Ω
Record Out	Z+ 1k Ω
Maximum output level	
Pre-out	11V
Record Out	11V

TONE CONTROLS

Treble	\pm 5dB at 10kHz
Bass	\pm 8dB at 100Hz

TRIGGER OUT

Output resistance	75 Ω
Output current	150mA
Output voltage	12 \pm 1V

POWER AMPLIFIER SECTION

Continuous output power into 8 Ω	2x50W (17dBW)
Rated distortion (THD 20Hz - 20kHz)	0.02%
Clipping power (maximum continuous power per channel 4 Ω and 8 Ω)	61W
IHF Dynamic headroom	8 Ω +3.1dB 4 Ω +4.7dB
IHF dynamic power (maximum short term power per channel)	8 Ω 102W(20.0dBW) 4 Ω 148W (21.7dBW) 2 Ω 205W (23.1dBW)
Damping factor (ref. 8 Ω , 1kHz)	>110
Input impedance (R & C)	20k Ω + 1nF
Input sensitivity (rated output into 8 Ω)	730mV
Voltage gain	28.7dB
Frequency response 20Hz - 20kHz	\pm 0.2dB
Signal/noise ratio, A-weighted	102dB
THD + Noise	<0.02%
SMPTE IM4	<0.02%
IHF IM5	<0.01%
Headphone output impedance	220 Ω

LINE LEVEL OUTPUTS

FM BAND

Tuning Range	87.5MHz - 108.5MHz (50kHz steps)
Usable Sensitivity (98 MHz)	12dB μ
Signal/Noise Ratio (60dB μ IHF-WTD Mono)	65dB
(60dB μ IHF-WTD Stereo)	60dB
Frequency Response	\pm 1.5dB (20Hz - 15kHz, 60dB μ)
Channel Separation (60dB μ)	30Hz 30dB 1kHz 35dB 10kHz 30dB
Capture Ratio (40dB μ)	3dB
AM Suppression	50dB (60dB μ , 100% Mod. FM, 30% Mod. AM)
Image Rejection (119.4MHz)	70dB
I.F. Rejection (10.7MHz)	70dB
Pilot Suppression (60dB μ)	60dB
Total Harmonic Distortion	Mono 0.5% Stereo 0.8%
Auto Search	15 - 25dB μ
RDS Decode Sensitivity	\leq 30dB μ

AM SECTION

Tuning Range	530kHz - 1710kHz (10kHz steps, 120V version) 531kHz- 1602kHz (9kHz steps, 230V version)
Usable Sensitivity	50dB μ (999/1000 kHz)
S/N Ratio	45dB (5mV in)
Total Harmonic Distortion	3% (5mV in)
IF Rejection (450 kHz)	40dB
Image Rejection (F+2xIF)	28dB
Selectivity	20dB
Frequency response	\pm 6dB (100 - 2.3kHz, 5mV)

PHYSICAL SPECIFICATIONS

Dimensions (W x H x D)	Net	435 x 133 x 350mm 17 1/8" x 5 1/4" x 13 3/4"
	Gross*	435 x 149 x 396mm 17 1/8" x 5 3/4" x 15 5/8"
Net Weight		20.72 lbs (9.4 kg)
Shipping Weight		24.25 lbs (11 kg)

* Gross dimensions include volume knob / speaker terminals / connectors / feet. Note: Installers should allow a minimum clearance of 2- 4 inches for wire/cable management.



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