

7. Specifications

With two DCX2496 units you can even realize today's most popular surround format: 5.1. In addition to the speaker cabinets and power amps for active speakers as in the simplified illustration shown here, all you need is a surround decoder to play back pre-produced 5.1 material such as DVDs, or a mixing console with six outputs (e.g. stereo out plus four subgroups). In the latter case, you can create highly sophisticated surround mixes even without a special surround sound decoder.

The preset "5.1 FRONT" has been optimized for the L-C-R front speakers with 2 speaker ways each (see also chapter 5.3). The three signals required "Front-Left, Front-Center, Front-Right" are routed via the three inputs (A, B, C) to the first DCX2496.

On the second DCX2496, the preset "5.1 REAR" should be used as a starting point. It supplies the two rear surround speakers (also 2-way systems) plus the monophonic sub-bass channel ("LFE" = "Low Frequency Enhanced") with the input signals "Rear-Left, Rear-Right and Sub-bass", using connectors in A, B, C. The sixth output of the second ULTRADRIVE PRO is not used in this application, but is left available for additional effects or as a mono delay line.

This scenario does not apply to the DCX2496LE.

Analog Inputs (A, B, C)

Type	electronically balanced
Connector	XLR
Max. input level	+22 dBu
Input impedance	approx. 35 kΩ @ 1 kHz
Crosstalk	-72 dB @ 0 dBu

Digital Input (A) - DCX2496

Connector	XLR
Format	S/PDIF or AES/EBU
Input level	0.3 to 10 Vpp
Input impedance	approx. 110 Ω
Sampling frequency	32 to 96 kHz
Special feature	Sample Rate Converter

Microphone Input (C) - DCX2496

Type	electronically balanced
Connector	XLR
Max. input level	-23 dBu
Input impedance	approx. 670 Ω @ 1 kHz
Phantom supply	+15 V

Analog Outputs (1, 2, 3, 4, 5, 6)

Type	electronically balanced
Connector	XLR
Max. output level	+22 dBu
Output impedance	approx. 100 Ω @ 1 kHz
Crosstalk	-100 dB @ 10 dBu

System Data

Sampling frequency	96 kHz
Signal delay	< 1 ms Analog input to analog output
Frequency response	10 Hz to 45 kHz (-3 dB) typ.
Dynamic range	112 dB
THD+N Ratio	0.007% @ 0 dBu 0.004% @ 10 dBu

Converters

A/D Converter C55381	
Resolution	24-Bit Delta-Sigma
Oversampling	64x
Dynamic range	120 dB typ.

D/A Converter AK4393

Resolution	24-Bit Delta-Sigma
Oversampling	64x
Dynamic range	120 dB typ.

Serial Interface (DCX2496)

RS-232	
Type	9-pin sub-D connector
Transmission type	115200 bauds, 8 data bits, 1 stop bit, no parity

RS-485 (2x)

Type	RJ-45 connector
Transmission type	38400 bauds, 8 data bits, 1 stop bit, no parity

Power Supply

Mains Voltage	
USA/Canada	120 V~, 60 Hz
Europe/U.K./Australia	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
General export model	100 - 240 V~, 50 - 60 Hz
Power consumption	approx. 12 W
Fuse	100 to 240 V~: 1 A H
Mains connector	Standard IEC receptacle

Dimensions/Weight

Dimensions: (H x D x W)	
	45 x 483 x 208 mm (1.75 x 19 x 8.1")
Weight	approx. 2 kg (4.4 lbs)
Shipping Weight	approx. 3.2 kg (7 lbs)