CORE SERIES

CORE 12

12-input, 12-output car DSP amplifier

The CORE 12 is a 12-input, 12-output car DSP amplifier for active multi-way and audiophile systems. Seven CSC3601 amplifier devices deliver 10 × 60 W + 2 × 80 W at 4 ohm, enough to run a fully active three-way front stage and rear speakers from a single unit.

DSP IN / OUT	POWER @ 4 OHM	POWER @ 2 OHM	SNR
12 / 12	10 × 60 W + 2 × 80 W	10 × 100 W + 2 × 150 W	102 dB

DSP AND PROCESSING

DSP inputs / outputs	12 / 12
DSP processor	WONDOM proprietary DSP IC (W7)
ADC	ES7210 × 3
DAC	CJC4344H × 6 (2-channel)
Audio resolution	24-bit
Max sampling rate	192 kHz
PC tuning	Supports 12 channels
Equaliser	31-band
Audio decoding	MP3 / FLAC / WAV

INPUTS AND OUTPUTS

Inputs	USB, high-level input, Optical, Coaxial
High-level input	12-channel
AUX input	2-channel
Optical / coaxial	Optical and coaxial
USB flash drive	Supported
Bluetooth	Bluetooth 6.0 (JL7031C8 (Dual Core))
High-level output	12-channel
RCA output	12-channel

AMPLIFIER

Amplifier	CSC3601 × 7
Amplifier class	Class D
Output power @ 4 ohm	10 × 60 W + 2 × 80 W
Output power @ 2 ohm	10 × 100 W + 2 × 150 W
Power notes	760 W stated total; 4 ohm. Five CSC3601 devices provide 10 × 60 W; two remaining devices are bridged for 2 × 80 W.
Load impedance	2 ohm / 4 ohm

AUDIO PERFORMANCE

Signal-to-noise ratio	102 dB (typ.)
THD+N	0.009% (typ.)
Dynamic range	> 102 dB
Channel separation	> 90 dB
Frequency response	20 Hz – 36 kHz
Signal input range	0.05 – 10 Vrms

POWER, ENVIRONMENT AND SIZE

Operating voltage	10 – 16 V
Standby current	< 1 mA
Standby power	< 0.1 W
Operating temperature	-40 °C to 80 °C
Dimensions	227 × 171 × 45 mm
W-ILM load management	Integrated across model range