CORE SERIES

# CORE 6

4-input, 6-output car DSP amplifier

The CORE 6 is a compact 4-input, 6-output car DSP amplifier that brings precise digital signal processing and 4 × 30 W of built-in power to a factory audio system. It is the simplest way to upgrade passive OEM speakers and add an external subwoofer, without replacing the head unit.

| DSP IN / OUT | POWER @ 4 OHM | POWER @ 2 OHM | SNR |
|---|---|---|---|
| 4 / 6 | 4 × 30 W | 4 × 51 W | 102 dB |

## DSP AND PROCESSING

| | |
|---|---|
| DSP inputs / outputs | 4 / 6 |
| DSP processor | WONDOM proprietary DSP IC (W7) |
| ADC | ES7210 × 1 |
| DAC | CJC4344H × 3 (2-channel) |
| Audio resolution | 24-bit |
| Max sampling rate | 96 kHz |
| PC tuning | Supports 6 channels |
| Equaliser | 31-band |
| Audio decoding | MP3 / FLAC / WAV |

## INPUTS AND OUTPUTS

| | |
|---|---|
| Inputs | USB, high-level input |
| High-level input | 4-channel |
| AUX input | 2-channel |
| USB flash drive | Supported |
| Bluetooth | Bluetooth 5.4 (JL AC6951C8) |
| High-level output | 4-channel |
| RCA output | 6-channel |

## AMPLIFIER

| | |
|---|---|
| Amplifier | TDA7851 Class AB × 1 |
| Amplifier class | Class AB |
| Output power @ 4 ohm | 4 × 30 W |
| Output power @ 2 ohm | 4 × 51 W |
| Power notes | 120 W stated total; 4 ohm |
| 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 | 172 × 117 × 43 mm |
| W-ILM load management | Integrated across model range |