

# XCA SERIES

## DIGITAL SPEAKER PROCESSOR

### FEATURES

- 96K Hz sampling frequency, 32-bit DSP processor, 24-bit A/D and D/A converter.
- 6 models available: 2 ins/4 outs, 2 ins/6 outs, 2 ins/8 outs, 3 ins/6 outs, 4 ins/6 outs, 4 ins/8 outs.
- USB and RS485 connectors are present for PC connection. 250 units can be connected together via RS485 and it can be controlled remotely as far as 1500 meters.
- Convenient use of function buttons on either front panel or the included software interface displays.
- 30 user-program parameters can be stored into the device.
- Safety/security lock buttons provide peace of mind against unwanted changes from unauthorized users or unwanted set-up changes.
- 6 independent parametric EQ of input and output. The gain range is  $\pm 20$  dB. The EQ of output channel has two slopes: Lo-shelf and Hi-shelf.
- 4  $2 \times 2$  LCD blue back-light display present. 6 LED display an exact digital level meter (and mute and edit status of input/output).
- Every input and output has compensation-delay, phase control and mute settings, delay function offer a maximum of 1000ms.
- Adjustable gain & limiter of output channel; Just choose the input signal and copy all the parameters from one channel to another channel with joint debugging.

### SPECIFICATION

MODEL	XCA24	XCA26	XCA28	XCA36	XCA46	XCA48
Input channel jacks	2 CHs, Female XLR	2 CHs, Female XLR	2 CHs, Female XLR	3 CHs, Female XLR	4 CHs, Female XLR	4 CHs, Female XLR
Output channel jacks	4 CHs, Male XLR	6 CHs, Male XLR	8 CHs, Male XLR	6 CHs, Male XLR	6 CHs, Male XLR	8 CHs, Male XLR
Input impedance	Balanced: 20KΩ					
Output impedance	Balanced: 100Ω					
PC port	1 USB (front panel), 2 RS485 RJ45 (back panel).					
CMRR	>78dB(1KHz)					
Input range	≤+25dBu					
Frequency response	20Hz-20KHz(-0.5dB).					
S/N R	>118dB					
THD	<0.01% output=0dBu/1KHz.					
Crosstalk of channels	>88dB(1KHz).					
Functions of input channels						
Input mute	Mute with each input & output channel.					
Input delay	Each input channel has a separate delay control, adjustable range of 0-1000ms, less than 10ms, step away from the 21us; 10ms-20ms, step away from the 84us; greater than 20ms, step away from the 0.5ms					
Input polarity	In-phase(+/+) or reversed phase(+/-).					
Input EQ	Each input channel of 6 parametric EQ, adjusting the parameters in the Parameter: center frequency: 20Hz-20KHz, a total of 239 frequency bandwidth: 0.05oct-3oct, Step away from the 0.05oct gain: -20dB-+20dB, step away from the 0.1dB					
Input gain	Input gain range: -80dB~+12dB, step@0.2db.					
Input compression	Threshold: -40dBu~+20dBu, step away from the 0.5dBu; the compression ratio: 1.0:1~20:1 is less than 2.0:1, step 0.1 is greater than 2.0:1, step 0.5; response time: 0.3mS~200mS, Less than 1mS, step away from the 0.1mS is greater than 1mS, step away from the 1mS release time step for 1mS: 50mS~5000mS					
Functions of output channels						
Output mute	Each channel has independent mute control.					
Output selection	Each input channel can be selected to each output channel.					
Output gain	Range: -80db~+12db, step: 0.2db.					
Output delay	Each input channel has a separate delay control, adjustable range of 0-1000ms, less than 10ms, step away from the 21us; 10ms-20ms, step away from the 84us; greater than 20ms, step away from the 0.5ms					
Output polarity	Same phase (+/+) or reversed Phase (+/-).					
Crossover	Each output channel can be independently set as LPF or HPF. These parameters can be adjusted. Filter type: Linkwitz-Riley; Bessel; Butterworth. The crossover frequency: 20Hz~20KHz, Slope: 12db/oct; 18db/oct; 24db/oct; 30db/oct; 36db/oct; 42db/oct; 48db/oct.					
Output Extension	Threshold: -40dBu~+20dBu, step away from the 0.5dBu; expansion ratio: 1:1.0~1:20 is less than 1:20, step 0.1 is greater than 1:20, step 0.5; response time: 50mS~500mS, Step away from the 1mS release time: 0.3mS~200mS is less than 1mS, step away from the 0.1mS is greater than 1mS, step away from the 1mS					
Compression	Limiter present for each output channel. These parameters are adjustable: Threshold value: -40db~+20db; step:0.5db. Attack time: 0.3mS~200mS. 0.1mS step@0.3~1mS;1ms step @1mS~100ms. Release time: Release time can be set to 50ms ~ 5000ms.					
Limiter	Threshold: -40dBu~+20dBu, step away from the 0.5dBu; the compression ratio: 1.0:1~20:1 is less than 2.0:1, step 0.1 is greater than 2.0:1, step 0.5; response time: 0.3mS~200mS, Less than 1mS, step away from the 0.1mS is greater than 1mS, step away from the 1mS release time step for 1mS: 50mS~5000mS					
Output EQ	Each output channel has a 6-band EQ: 3 modes: Lo-shelf/Hi-shelf/parameter. A: Lo-shelf: Slop: 6dB/12db; Frequency: 20Hz~20kHz; Gain: -20db~20db; B: Hi-Shelf: Slop: 6db/12db; frequency: 20Hz~20kHz; gain: -20db~20db; C: Parameters: frequency: 20Hz~20KHz, bandwidth: 0.05oct~3oct; Step: 0.05oct; Gain: -20db~+20db, Step 0.1db.					
Processor	96KHz sampling frequency, 32-bit floating-point DSP.					
Display	2 x 24 LCD, 8-LED for input/output level. Mute and editing functions can be displayed.					
Power	≤25W					
Power supply	AC110V/220V 50/60Hz					
Product dimension (W×D×H)	482×228×44mm					
Net weight	4.1kg					
Shipping Dimension (W×D×H)	1PC: 555X325X98mm/0.0177m³ 6PCS: 569X339X612mm/0.1180m³					
Gross weight	1PC: 5 (kg) 6PCS: 31.5 (kg)					