

### Electronic Volume Control IC for Car Audio Systems

High performance car sound field enhancement!

Memory audio player connection/With rear seat entertainment function

"iPod playback" "Front/rear independent music source playback"

**Best suited for High-performance entertainment model car interiors!**

Connect and play memory audio players!

LV3323PM

Independent front and rear music playback!

LV3319PM

In addition to AM/FM radio and CD, MD, and DVD playback, memory audio players like the iPod can be connected and played.

Accommodates the need for multi-channel inputs

Conventional product: 4 channels  
→ Increased to: 6 channels!

6 inputs

(5-channel stereo + 1-channel differential)  
(3-channel stereo + 3-channel differential)

- Low power consumption (uses BiCMOS process)
- Multi-channel inputs
- Minimal number of externally connected components
- Suitable for automobile use, high quality



### SANYO's Unique Pop-noise Reduction Technology

Not available from other companies:  
Pop-noise countermeasure circuit

Realizes substantial noise reduction

Development of

SANYO's Original  
New Zero Cross Circuit

- Integrated zero cross timer circuit



- Timer time can be set by software
- Zero cross automatic detection

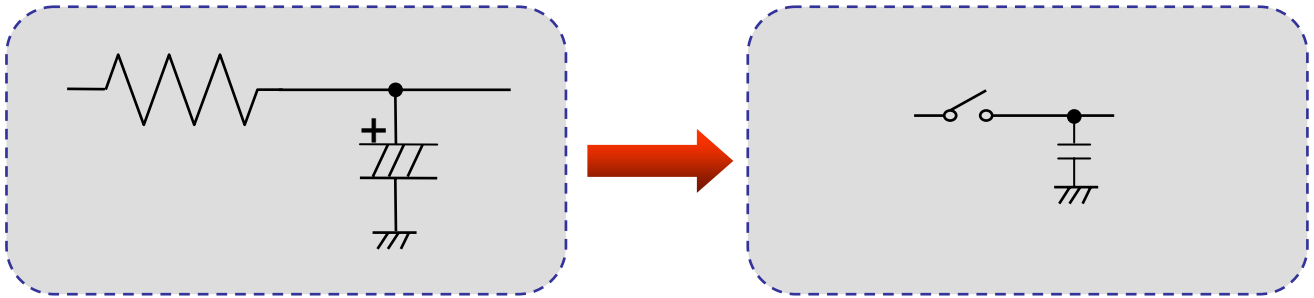
By detecting the zero cross, click/pop noise can substantially be reduced.



SCF Technology Suitable for Board Mounting

SCF (Switched Capacitor Filter)

This technology reduces size by replacing large resistors and capacitors, which are used for filters, with a transistor switch. This technology allows the filter to be embedded in the IC.



Product Specifications

Product Name	LV3319PM	LV3323PM
Application	Navigation systems with a rear-seat entertainment system	Car stereos that support memory audio systems
Input Selector	6 inputs (5-channel stereo + 1-channel differential)	6 inputs (3-channel stereo + 3-channel differential)
Navi Input	Stereo/Mono switching capability With volume function	Not available
Input Gain	0 to 18dB (in 1dB increments)	
Mute	External mute, soft mute control	
Volume	+10dB to -79dB (in 1dB increments), -∞, zero cross control	
Bass	GAIN: -14dB to +14dB (in 1dB increments), fO: 70/100/120Hz, Q: 1.0, 1.2, Soft step control	
Middle	Gain: -14dB to +14dB (in 1dB increments), fO: 700/1k/1.2kHz, Q: 1.0, 1.2, Soft step control	
Treble	Gain: -14dB to +14dB (in 1dB increments), fO: 7k/10k/12kHz, Q: 1.0, 1.2, Soft step control	
Fader	0 dB to -79dB (in 1dB increments), -∞, zero cross control	