



*HR series of PCX sound cards*

# Digigram PCX1222HR and PCX1221HR

Multichannel sound cards  
for high-end live-assist applications

The PCX1222HR and PCX1221HR join the PCX882HR and PCX881HR in Digigram's new High Resolution series, which sets a new standard for the broadcast industry. Inspired by the widely deployed PCX822v2 sound card, the PCX1222HR and PCX1221HR take mission-critical live-assist systems from four to six stereo outputs in a short-length PCI format.

## Key features

- First PCX sound cards with 2 inputs and 12 outputs:  
PCX1222HR: analog and digital I/Os  
PCX1221HR: digital I/Os
- Short-length PCI format  
(only 175 mm/6.875 inches long)
- 24-bit/192 kHz converters
- 66 MHz/64-bit PCI interface
- Extremely powerful DSP
- Comprehensive set of drivers:  
Digigram np, WDM DirectSound, Wave, ASIO
- Hardware sample rate converter for recording of a digital signal with a sample frequency different of the internal clock
- Companion board connector for Digigram or custom add-on cards
- Optional breakout box

## PCX1222HR

## PCX1221HR

<b>Configuration</b>		
Bus/Format	64-bit/66 Mhz Universal PCI, PCI and PCI-X compatible, master mode	
Digital signal processor & RAM	Motorola 56321 at 240 MHz 512 kWords	
Size	175 mm x 99 mm	
Operating: temp / humidity (non-condensing)	0°C/+50°C * • 5%/90%	
Storage: temp / humidity (non-condensing)	-5°C/+70°C • 0%/95%	
<b>Inputs</b>		
Balanced analog line inputs (mono)	2	—
Digital inputs (stereo)	1 AES/EBU with hw Sample Rate Converter, 1:3 to 3:1, up to 96 kHz	
Maximum input level/impedance	+24 dBu >100 kΩ	—
Programmable input gain	analog and digital	digital
Other inputs	AES/EBU Sync (up to 192 kHz), Word clock (up to 96 kHz), LTC, Video	
AES11 synchronization	Yes	
<b>Outputs</b>		
Servo-balanced analog line outputs (mono)	12	—
Digital outputs (stereo)	6 AES/EBU, up to 192 kHz	
Maximum output level/impedance	+24 dBu / low impedance	—
Programmable output gain	analog and digital	digital
Additional outputs	Word clock	
<b>Connectors</b>		
Internal connectors	Inter-board Sync and Companion Board Link	
Board connector	62-pin SUB-D	
Digigram accessories available	Breakout cable or 2-RU Breakout Box	
<b>Audio specifications</b>		
Sampling frequencies available	Programmable from 8 to 192 kHz	
A/D and D/A converter resolution	24 bits	
Supported audio formats	MPEG, PCM (8, 16, 24 bits)	
<b>Audio performance measured at Fs=48 kHz</b>		
Frequency response (record + play)	20 Hz -20 kHz: 0/-0,4 dB	—
Dynamic range (A-weighted)	Analog In: >104 dB	—
THD + noise 1 kHz at -1 dBfs	Analog Out: >110 dB	—
	Analog In: <-96 dB	—
	Analog Out: <-98 dB	—
Channel phase difference: 20/20kHz	0.2° / 2°	—
Crosstalk (Analog in or out)	1 kHz at 22 dBu: <-100 dB	—
	15 kHz at 22 dBu: <-90 dB	—
<b>Development environments</b>		
Management	np SDK, Wave, ASIO (PCM only), DirectSound (PCM only)	

\* With two cards installed next to each other, the host computer must be suitably aerated.



## Networking Your Sound

**Digigram (www.digigram.com) digital audio solutions** are key to the success of public address and pro sound installations, as well as broadcast and media production companies worldwide. We develop innovative networked audio devices, computer sound cards, and audio management software.

**Digigram Powered solutions** are installed in thousands of radio and television stations; corporate and commercial sound installations; and audio recording and video post-production facilities around the globe.

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