


OPERATIONAL DESCRIPTION

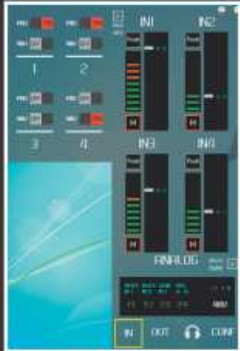
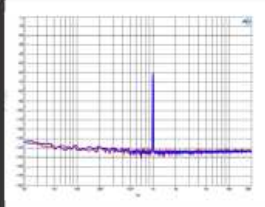

1.1. EUT description



When the first take will be your only take, the Digigram CANCELED gives you everything you need.

Built on a long tradition of no-compromise sound cards, offering no less than 2x500 MIPS dual-core processing power finely crafted and embedded into an ultra-robust yet stylish casing, Digigram CANCELED 442-Mic and CANCELED 222-Mic are the tools that serious reporters and on-the-go audio professionals have been waiting for.

- Simultaneous analog & AES I/Os in a compact form factor
- Excellent MIC preamp (55dB gain, max sensitivity -60 dBu, typical -105 dB THD+N and -128 dB EIN)
- Professional analog headroom of +25 dBu
- Guaranteed low latency (<4 mS) on both Windows™ and Mac OS™ platforms
- Ergonomically advanced user interface for quick setup and efficient monitoring on both Windows™ and Mac OS™ platforms
- Innovative hardware controls with LED-lighted touch panel
- Neutrik™ XLR connectivity and break-out cables

more details at www.digigram.com/cancel

digigram

CONFIGURATION

Bus/Format	USB 2.0 / Compliant with the USB 2.0 Audio specification
Size	254 mm x 96 mm x 36 mm
Operating : temp / Humidity	0°C to +50°C / 0 % to 90 % (non condensing)

OVERALL AUDIO

A/D and D/A converters	24-bit / frequency : 32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 192 kHz
Audio formats supported	PCM 8, 16, 20, and 24 bits, full duplex
Latency	3.4 mS Analog-to-PC or PC-to-Analog (Windows 7 / 64 bits) 3.8 mS Analog-to-MAC or MAC-to-Analog (Mac OS X 10.6.8)
ADAT / S-PDIF	24-bit/192kHz ADAT*
Channel phase diff. (A/D and D/A)	± 0.2° (20 Hz - 20 kHz)

INPUTS

Analog inputs (mono)	2 (222-Mic) or 4 (442-Mic) balanced Mic/Line inputs
Digital inputs (stereo)	1 (222-Mic) or 2 (442-Mic), AES/EBU (AES3-2003) compliant
Switchable 48V phantom power	7 mA Max on each input**
Analog input gain	From 0 to 55 dB by 1 dB steps, switchable Pad 30.0 dB
Input sensitivity	0 dBfs adjustable from -30 dBu to +25 dBu (Line) and -60 dBu to -5 dBu (Mic)
Maximum input level/impedance	Line: +25 dBu / >3.5 kOhms; Mic: -5 dBu / >2 kOhms
Frequency response (A/D Input)	at 48 kHz : 20 Hz–20 kHz +0/-0.5 dB at 96 kHz : 20 Hz–40 kHz +0/-0.6 dB at 192 kHz : 20 Hz–80 kHz +0/-2.0 dB
S/N Analog input, typical	S/N: 108 dB unweighted and 111dBA @48 kHz
THD+N Analog input, typical	-105 dB unweighted and -107 dBA / 20 Hz-20 kHz, @48 to 192 kHz ref 1 kHz at -3 dBfs
Mic inputs E.I.N., typical	-128 dB / Zsource = 40 Ohms; Pad Off; gain 55 dB

OUTPUTS

Analog outputs (mono)	2 (222-Mic) or 4 (442-Mic) balanced Line outputs
Digital outputs (stereo)	1 (222-Mic) or 2 (442-Mic) outputs, AES/EBU (AES3-2003) compliant
Maximum analog level/impedance	at 48 kHz: +10 dBu / 2x33 Ohms
Frequency response	at 48 kHz: 10 Hz–20 kHz +0/-0.1 dB at 96 kHz: 10 Hz–40 kHz +0/-0.3 dB at 192 kHz: 10 Hz–80 kHz +0/-1.3 dB
S/N Analog output, typical	111 dB unweighted @48 kHz
THD+N Analog output, typical	-98 dB unweighted / 20 Hz-24 kHz @48 kHz to 192 kHz, ref 1 kHz at -3 dBfs
Headphones output (stereo)	Dedicated output stage, >10 mW from 32 to 600 Ohms 10Hz-20 kHz +0.1 dB; Dynamic range : 93 dB @32 Ohms, typical

CONNECTORS

Audio connectors	One XLR female for left input channel Sub-D 25 pts (222-Mic) or 44 pts (442-Mic) for all analog and digital I/Os 6.35mm jack for stereo headphone output MIDI I/O available* on both 25 pts and 44 pts Sub-D connectors 6 (222-Mic) and 12 (442-Mic) Neutrik® XLR breakout cable included
USB connector	Standard, includes two A-type on PC side, one mini-B USB on card side

ENVIRONMENTS

Operating system supported	Windows Seven 32 and 64 bits, Windows XP, Mac OS X, Linux*
Management	Depending on the host operating system's implementation of the USB Audio 2.0 specification : DirectSound, Core Audio, WASAPI Digigram np SDK through Virtual PCX Third-party ASIO driver

(*) Available by Software upgrade during roadmap development (2012)

(**) 2 USB slots may be necessary on certain hosts

more details at www.digigram.com/cancun

1.2. Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

1.3. Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system are:

- Internal max frequencies: 500MHz

CANCUN222-MIC OEM / CANCUN222-MIC END USER / CANCUN442-MIC OEM / CANCUN442-MIC END USER are same electronic, but CANCUN442-MIC END USER use more cables and more input and output. Then during test we have used only CANCUN442-MIC END USER, worst case.

- **Power supply:**

USB: 5Vdc

- **Inputs/outputs:**

CANCUN442

1 x audio output
1x USB MiniB type

Subd44 :

- 4 x analog output
- 4 x analog input
- 2 x digital output
- 2 x digital input

Optical:

- 1 x output
- 1 x Input

CANCUN222

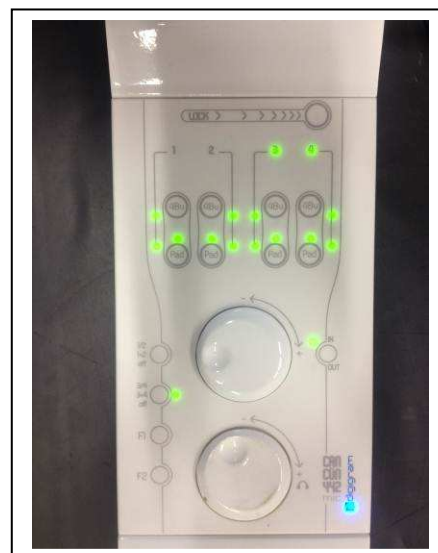
1 x audio output
1 x USB MiniB type

Subd44 :

- 2 x analog output
- 2 x analog input
- 1 x digital output
- 1 x digital input

Optical:

- 1 x output
- 1 x Input



- **Cables:**

CANCUN 442 with cable SC210400201-01

- 1 x Adaptor SubD44 to 12 x AUDIO XLR shielded length:0,25 m (specified by customer <3m)
- 12 x Audio XLR extension cords, shielded, length: 1 m (specified by customer <3m)
- 1 x XLR extension cords, shielded, length: 1 m (specified by customer <3m)
- 1 x USB cable: 1 m (specified by customer <3m)
- 1 x Audio cable shielded length:3m

CANCUN 222 with cable SC210400101-01

- 1 x Adaptor SubD44 to 6 x AUDIO XLR shielded length:0,25 m (specified by customer <3m)
- 6 x Audio XLR extension cords, shielded, length: 1 m (specified by customer <3m)
- 1 x XLR extension cords, shielded, length: 1 m (specified by customer <3m)
- 1 x USB cable: 1 m (specified by customer <3m)
- 1 x Audio cable shielded length:3m

- **Auxiliaries equipment used during test:**

- | | | |
|----------------------------------|-------------------------------|--------------------|
| - Laptop Toshiba satellite Pro | Model number: PSA65E-01L00XFR | Sn: X4085777Q |
| - AC/DC power supply: LITEON | Model number: PA-1121-04 | Sn: F4IB0436133291 |
| - Audio Load Box (DIGIGRAM Tool) | | Sn: None |
| - Headphone SENNHEISER HD 433 | | Sn: None |

1.4. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2003, FCC Part 15 Subpart B.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.5. Test facility

Tests have been performed from February 3rd to 13th, 2012

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-2003 in a letter dated March 25th, 2008 (registration number 94821). This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-1633 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.