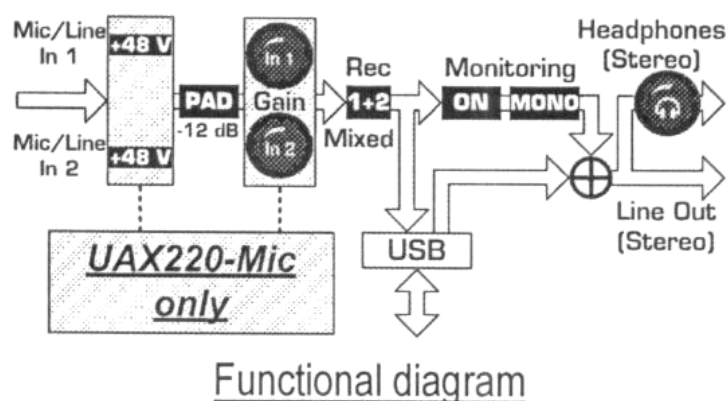


## OPERATIONAL DESCRIPTION

### 1.1. UAX220v2 & UAX220-MIC description

| Specifications                                 |                                                                                                                          | UAX220-Mic |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------|
| <b>CONFIGURATION</b>                           |                                                                                                                          |            |
| Bus/Format                                     | USB1.1 (compatible with USB2.0 ports) - Compliant with the USB Audio specification                                       |            |
| Size                                           | 144 mm X 87 mm X 34 mm<br>Integrated USB cable: 1.5 m - Integrated audio cable: 0.75 m                                   |            |
| Operating: temp / humidity (non-condensing)    | 0°C / +50°C • 5% / 90%                                                                                                   |            |
| Storage : temp / humidity (non-condensing)     | -5°C / +70°C • 0% / 95%                                                                                                  |            |
| <b>INPUTS/OUTPUTS</b>                          |                                                                                                                          |            |
| Analog inputs (mono)                           | 2 balanced mic/line                                                                                                      |            |
| Switchable 48V phantom power on each input     | Yes, max current draw: 2*5 mA                                                                                            |            |
| Input gain                                     | From 0 to 50 dB, two individual knobs                                                                                    |            |
| Maximum input level/impedance                  | Switchable between +22 dBu and +10dBu / >10 kOhms                                                                        |            |
| Recording modes                                | Dual mono tracks or single stereo track<br>Both inputs mixed to one mono track ("1+2" mode)<br>Playback loop-back        |            |
| Analog outputs (mono)                          | 2 servo-balanced line                                                                                                    |            |
| Maximum output level/impedance                 | +10 dBu / < 100 Ohms                                                                                                     |            |
| Headphones output (stereo)                     | Dedicated output stage with level adjustment knob                                                                        |            |
| Maximum output power/minimum load              | 2*40 mW / 32 Ohms                                                                                                        |            |
| A/D and D/A converters resolution              | 24-bit / 96 kHz                                                                                                          |            |
| Sampling frequencies available                 | 32 kHz, 44.1 kHz, 48 kHz                                                                                                 |            |
| Audio formats supported                        | PCM 8, 16, and 24 bits, full duplex                                                                                      |            |
| Audio operating mode                           | Either set by application or user-selectable fixed resolution                                                            |            |
| Monitoring                                     | Direct input echo through DSP (no latency)<br>Mixed with playback to line and headphone outputs                          |            |
| Monitoring control                             | On/off and mono/stereo                                                                                                   |            |
| <b>AUDIO PERFORMANCE MEASURED AT FS=48 KHZ</b> |                                                                                                                          |            |
| Frequency response (In + Out)                  | 20 Hz-20 kHz: $\pm 0.2$ dB                                                                                               |            |
| Channel phase difference                       | 20 Hz-20 kHz: $0.2^\circ / 2^\circ$                                                                                      |            |
| Dynamic range (A-weighted)                     | Analog input : > 104 dBA<br>Analog output : > 104 dBA                                                                    |            |
| THD + noise, ref 1 kHz at -1 dBfs              | Analog input: <-97 dB<br>Analog output: <-97 dB                                                                          |            |
| Mic inputs E.I.N. (G=+50 dB)                   | < -125 dBu                                                                                                               |            |
| Crosstalk (In + Out)                           | ref 1 kHz at 10 dBu: <-110 dB<br>ref 15 kHz at 10 dBu: <-95 dB                                                           |            |
| <b>CONNECTORS</b>                              |                                                                                                                          |            |
| Audio connectors                               | Two Neutrik™ female XLR, two Neutrik™ male XLR and one Neutrik™ jack with lock                                           |            |
| USB connector                                  | Standard A-type, cable attached to the box                                                                               |            |
| <b>ENVIRONMENTS</b>                            |                                                                                                                          |            |
| Operating system supported                     | Windows XP, Mac OS X, Linux                                                                                              |            |
| Management                                     | Depending on the host operating system's implementation of the USB Audio specification:<br>DirectSound, Core Audio, ALSA |            |
| Additional management                          | Digigram np SDK through Virtual PCX - Third-party ASIO driver                                                            |            |

The UAX220v2 has no microphone inputs (compared to the UAX220-MIC), without the switchable 48V phantom power on each input (as shown on the following functional diagram).



### 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:

| Trade Mark – Model Number<br>(Serial number)       | FCC ID       | Description                         | Cable description                                            |
|----------------------------------------------------|--------------|-------------------------------------|--------------------------------------------------------------|
| <b>UAX220-MIC *</b><br>(sn : 2595.00000001)        | IGTUAX220MIC | Professional USB<br>Audio Interface | I/O cable Ref: SC171900201-03<br>(USB and audio lines)       |
| DELL, Model: SMM01<br>(sn: CNBX11J)                | DoC          | Personal computer                   | Power cord unshielded.<br>All other cable shielded.          |
| Hewlett Packard pn:D2846<br>(sn: JP74001000)       | DoC          | Monitor                             | Power cord unshielded.<br>Video cable shielded with ferrites |
| Hewlett Packard pn:C3751B<br>(sn: LZA62831217)     | DZL211029    | Mouse                               | PS2 cable (1.5m)                                             |
| Hewlett Packard pn:C4734-60111<br>(sn: M990814763) | GYUR38K      | Keyboard                            | PS2 cable (1.2m)                                             |
| Hewlett Packard DESKJET 895cxi<br>(sn: MY9761915S) | none         | Parallel printer                    | Power cord unshielded.<br>All other cable shielded.          |
| Hewlett Packard HP48GX<br>(sn: ID83802369)         | none         | Serial calculator                   | Serial cable shielded                                        |
| DIGIGRAM - Audio Load Box<br>(sn: none)            | none         | Load box                            | Earth wire (1.5m)                                            |
| SENNHEISER - HD 433<br>(sn: none)                  | none         | Headset                             | Audio cable (2m)                                             |

\*: Equipment under test.

### 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 on May 22nd and July 28th, 2006.

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 July 14, 2005 (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.