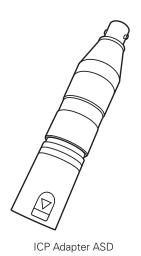


ICP Adapter ASD

for XL2 Analyzer



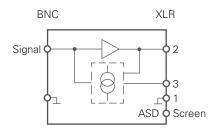
The ICP Adapter connects to the XL2 and generates ICP power supply for accelerometers and other custom sensors. The adapter offers an electronic data sheet, which stores the sensitivity and individual serial number of the connected sensor.

Application

Vibration measurements

Electronic Data Sheet

The Automated Sensor Detection (ASD) of the XL2 Analyzer automatically reads the electronic data sheet of this adapter, i.e. the adapter model, the sensor serial number and calibration data. This promotes faster setup and ensures accurate measurements. The information of the electronic data sheet is documented in every XL2 measurement report.



Block Diagram ICP Adapter ASD

Specifications

Output / Input	XLR / BNC
Power Supply for Sensors	• ICP [®] • 4 mA +/- 0.02 mA
Power Supply from XL2	48 V Phantom Power
Maximum Input Level	8.84 V (146.9 dB @ Sensitivity = 20 mV/Pa)
Residual Noise typical	• LA = 2.5 μV • LZ = 3.5 μV
THD @ 1 kHz, 1Vrms	< 80 dB
Frequency Range	2.1 Hz - 300 kHz
DC Offset Voltage	12 +/- 2 VDC
NTi Audio #	600 010 223

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Prior First Use

ASD Adapter S/N Editor ASD Adapter S/N Writer Read from ASD Adapter CS000 Serial number: 123456 Write S/N to Adapter Close

XL2 Projector Serial Number Setting

Serial Number Setting

Store the serial number of your connected sensor in the electronic data sheet of the adapter.

- Connect the XL2 to the computer and start the XL2 Projector software V2.6 or higher. You will see the XL2 screen live on the PC monitor. The latest XL2 Projector software is available for download at http://my.nti-audio.com/support/xl2.
- Press F4 on the keyboard to open the ASD Adapter S/N Writer.
- Click Read from ASD Adapter.

- Enter the sensor serial number.
- Click Write S/N to Adapter.

In case you use multiple custom sensors, then we suggest utilizing an individual adapter for each sensor. This saves time and simplifies your operation.

(1) (2) Calibrite XLR 👼) 4 ASD 16:49

Sensitivity: CSOOO USER: User Calibration at 114.0dB RUN

1.00 V/Pa 2015-12-17 16:49

LZF: -13.8 dB

(3)

(4)

ASD Data: SNo. 123456 NTi Audio CS000 Factory Sens. User Sens DEL 1.00 V/Pa : 2015-12-17 16:49 4.92 V/Pa

User Calibration

Set the sensitivity according to the sensor specifications:

- Connect the adapter to the XL2.
- Power on the XL2 and select **Calibrte** in the main menu. The ASD indication 2 will be shown. In case ASD is not shown, then select the measurement function **SLMeter** shortly and afterwards Calibrte again. The XL2 reads the sensor data at start up and change of measurement function.
- Select Sensitivity 1) with the rotary wheel 0.
- Press enter @ and adjust the sensitivity with the rotary wheel 🕲 in 0.1 mV/Pa steps. The setting range is 1 μV/Pa - 9.99 V/Pa.
- Confirm with enter @.
- The configuration is completed. The serial number 3 and sensitivity 4 are stored in the electronic data sheet.

Calculate Sensitivity mV/Pa for Accelerometer

Sensitivity in mV/Pa = Sensitivity in mV/g * 0.00511 The accelerometer data sheet lists the sensitivity. For example 100 mV/g converts into 511 μV/Pa for precise vibration measurements with the XL2 Analyzer.



Keep User Calibration

The XL2 deletes the user calibration at the serial number setting. Thus always set the serial number first and the user calibration afterwards.



Dispose the instrument in accordance with the legal environmental regulations in the country.