Product Description

Noise transducers are complex and sophisticated devices that enable precision measurements of sound. This instrument has a durable construction and will last for several years of normal use when operated correctly. Please read this manual carefully and do not lose it.

Technical parameters

Measurement range: Range: 30~130dB.

Output: 485 output

Accuracy (23±5° C):

Frequency weighting in accordance with IEC 61672 type 2, calibrated with an input signal of 94dB (31.5Hz - 8kHz).

Frequency range: 31.5Hz to 8kHz.

Time response: Fast response: T = 200ms.

The time response simulates the time response of the human ear.

Calibrator: B&K (Bruel & kjaer), Multifunction Sound Calibrator, type 4226.

Microphone: Condenser microphone.

Microphone size: 0.5 inch.

Range Selection: 30~130dB

Maximum output impedance: 200 ohms.

Power Supply: DC 12V

Power Loss: DC 12V: ≈ 20mW

Packaging: ABS plastic

Operating temperature: -15-50° C (5-122° F).

Operating humidity: <80% relative humidity.

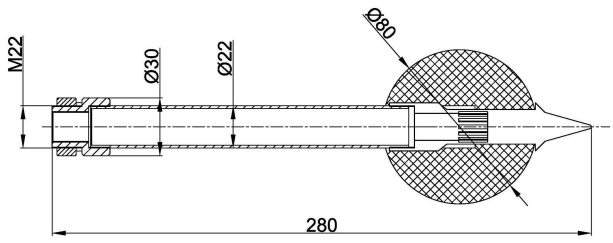
Wiring method

(1) If equipped with our collector, directly use the sensor cable to connect the sensor to the corresponding interface on the collector. cable to connect the sensor to the corresponding interface on the collector.

(2) If the transmitter is purchased separately, the wiring sequence of the matching wires of the transmitter are as follows for:

Thread Colour	output signal		
			Communication Type
Red			Power Positive
Black (Green)			Power Ground
Yellow			A+/TX
Blue			B-/RX

Structural dimensions



MODBUS-RTU communication protocols

I. Serial Port Format

Data bits 8 bits

Stop bit 1 or 2 bits

Check digit None

Baud rate 9600 Two communication intervals of at least 1000ms or more

Second, the communication format

[1] Write device address

Send: 00 10 Adress CRC (5 bytes)

Return: 00 10 CRC (4 bytes)

Explanation:

1. The address bit of the read/write address command must be 00.

2. Adress is 1 byte, the range is 0-255.

Example:

Send 00 10 01 BD C0

Return 00 10 00 7C

[2] Read device address

Send: 00 20 CRC (4 bytes)

Return: 00 20 Adress CRC (5 bytes)

Explanation: Adress is 1 byte, the range is 0-255.

Example:

Send 00 20 00 68

Return: 00 20 01 A9 C0

[3] Read real-time data

Send: Adress 03 00 00 00 00 01 XX XX

Explanation: As shown in the figure below:

coding	Function Definition	remark
Adress	Station number (address)	
03	Function Code	
00 00	Starting address	
00 01	Read Points	
XX XX	CRC check code, front low and back high	

Return：Adress 03 02 XX XX YY YY

instructions：

coding	Function Definition	remark
Adress	Station number (address)	
03	Function code	
02	Read unit byte	
XX XX	Noise data (front high, back low)	hexadecimal system
YY YY	CRC check code	

Steps to calculate the CRC code:

1、Preset the 16-bit register as hexadecimal FFFF (i.e. all 1s). Call this register as CRC register;

2, put the first 8-bit data and the low bit of the

16-bit CRC register in an iso or, put the result in the CRC register;

3, shift the contents of the register one bit to the right (towards the low bit), fill the highest bit with 0, and check the lowest bit;

4, if the lowest bit is 0: repeat step 3 (shift again)

If the lowest bit is 1: the CRC register is iso-orthogonal to the polynomial A001 (1010 0000 0000 0001);

5. Repeat steps 3 and 4 until it is shifted right 8 times so that the entire 8-bit data is all processed;

6, repeating steps 2 to 5 for the next 8-bit data processing;

7, the final CRC register obtained is the CRC code;

8、When putting the CRC result into the information frame, the high and low bits will be exchanged, with the low bit coming first.

Instructions for use

Wire the sensor as described in the Wiring Methods and switch on the power and collector switch to acquire the measurement point noise.

Caveat

1、Please check whether the package is intact, and check whether the product model is the same as the Please check whether the package is in good condition, and check whether the product model is consistent with the selected model;

2、Do not carry electricity wiring, wiring is completed to check for errors before power;

3、Don't change the welded components or wires when using the product. devices or wires when using the product has been welded at the factory;

4, the sensor is a precision device, the user in the use of please do not self Sensors are precision devices, users should not disassemble, use sharp objects or corrosive liquids to touch the sensor surface of the sensor to avoid damage to the product;

5、Please keep the calibration certificate and certificate of conformity, and return with the product when maintenance.

trouble clearing

1、When analogue output, the display meter indicates that the value is 0 or not within the range. The collector may not be able to acquire information correctly due to wiring problems. Please check if the wiring is correct and firm;

2、If it is not the above reason, please contact the manufacturer.

Contact us

Pre-sales consultation: +8618073152920

After-sales service: +8615367865107

Postcode: 421000

Email：sales@niubol.com

Website: http://www.niubol.com

Address: Room 102, District D, Houhu Industrial Park, Yuelu District, Changsha City, Hunan Province, China