# NORSONIC REMOTE INSTRUMENT MONITOR



"Peace of mind – I know that my unattended measurement is going well"

The Remote Instrument Monitor is a 4G wireless interface for the Norsonic sound level meters \*.

The Remote Instrument Monitor automatically informs you of the status of your Norsonic instruments during noise monitoring applications.

Warning messages are sent if the instrument is no longer in 'running' state, if battery power is low, if the instrument memory is low.

The **Remote Instrument Monitor** can also automatically change the audio recording trigger levels on the Nor140 and Nor139 up to 3 times a day.

ex. a different audio trigger level for the day/evening/night periods.

#### **Checks done:**

- Measurement running
- Free memory
- Battery power

**Change** audio recording trigger levels up to 3 times a day

START and STOP a measurement with an SMS text message

## **Examples of messages sent by the Remote Instrument Monitor**

The connected Norsonic sound level meter is not running.

Nor140\_sn\_5482: ALARM, instrument is not responding or not running

Van remote.instrument.monitor@gmail.com aan info@norsonic.be

instrument status= NOT RUNNING

internal battery voltage= 0.00 V external voltage= 12.14 V free memory= 1806 MB (1GB = 1024MB) low power mode status = 0 (1=active; 0=not active)

The free memory of the connected Norsonic sound level meter is below 25MB.

Nor140\_sn\_5482 : ALARM, instrument memory is below 25MB

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Van remote.instrument.monitor@gmail.com aan info@norsonic.be

free memory= 2 MB (1GB = 1024MB)

External power is below 10V.

Nor140\_sn\_5482 : ALARM, external power supply is below 10V



Van remote.instrument.monitor@gmail.com

external voltage= 9.90

Daily sound level meter status message each morning at 7:00:

Nor140\_sn\_5482 :: daily instrument status report



Van remote.instrument.monitor@gmail.com aan info@norsonic.be

instrument status= RUNNING

internal battery voltage= 0.00 V external voltage= 12.15 V free memory= 1807 MB (1GB = 1024MB) low power mode status = 1 (1=active; 0=not active)

LAeq measurement result of the connected Norsonic sound level meter.

Nor140\_sn\_5482 : LAeq measurement result



Van remote.instrument.monitor@gmail.com aan info@norsonic.be

LAeq,T=41.5 dB(A)

The connected Norsonic sound level meter is running.

Nor140\_sn\_5482 : instrument is now up and measurement is running

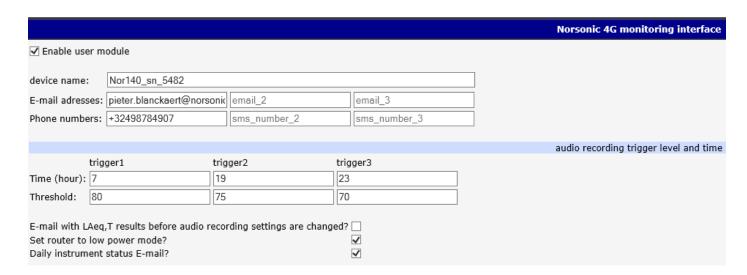


Van remote.instrument.monitor@gmail.co

instrument status=RUNNING

internal battery voltage= 0.00 V external voltage= 11.92 V free memory= 1806 MB (1GB = 1024MB) low power mode status = 0 (1=active; 0=not active)

### **Remote Instrument Monitor: webinterface**



### Additional features that have also been implemented:

- the end measurement result of the LAeq,T can be sent to a contact person (ex. day/evening/night period LAeq)
- automatic daily status report (instrument running status, battery voltage reading, available free memory)
- start & stop of the Norsonic sound level meter via SMS
- ask for a Remote Instrument Monitor status report via SMS
- remote connection to the instrument with NorXfer and NorVirtual
- an optional module can be added that allows real-time remote listening to the microphone signal

The **Remote Instrument Monitor** can be set to operate in a low-power mode where it only wakes up 1 x each hour to perform a status assessment.

The low power mode only increases the power consumption by +/- 15% compared to running just the Norsonic sound level meter. This is a good solution for battery powered monitoring points to keep the power consumption at a minimum.

The **Remote Instrument Monitor** can also run continuously. It will then perform a status assessment every minute.



<sup>\*</sup> Nor140, Nor139 and Nor118