QUICK START MANUAL

90008

ReVibe Anura™

self-powered monitoring system for vibrating screens

Introduction

Thank you for purchasing the ReVibe Anura™ self-powered monitoring system for vibrating screens.
ReVibe Anura™ is a self-powered fit-and-forget industrial monitoring system designed to monitor the movement of a vibrating screen through wireless sensor nodes. The system transmits data wirelessly to cloud services or persists data locally. Where it can be accessed by the user to understand the status of vibrating screens, and enabling predictive maintenance and ensuring operational excellence.

System parts

The ReVibe Anura™ self-powered monitoring system for vibrating screens contains the following parts:

Name:	Part no:	Amount:	Notes:
Anura™ Base hub	10070	1	
Anura™ Transceiver	10064	2	
Anura™ Harvesting sensor	10067	4	
RJ45 - Neutrik EtherCON cable 10m	10069	1	
RJ45 - Neutrik EtherCON cable 30m	10072	1	
Anti slip mounting guide	20332	4	
RAM Strap Hose Clamp	40006	2	
RAM Double socket arm	40007	2	
RAM Ball adapter with AMPS Plate	40008	2	

(Note: An ethernet cable (not included) is required to connect the base hub to your network solution.)

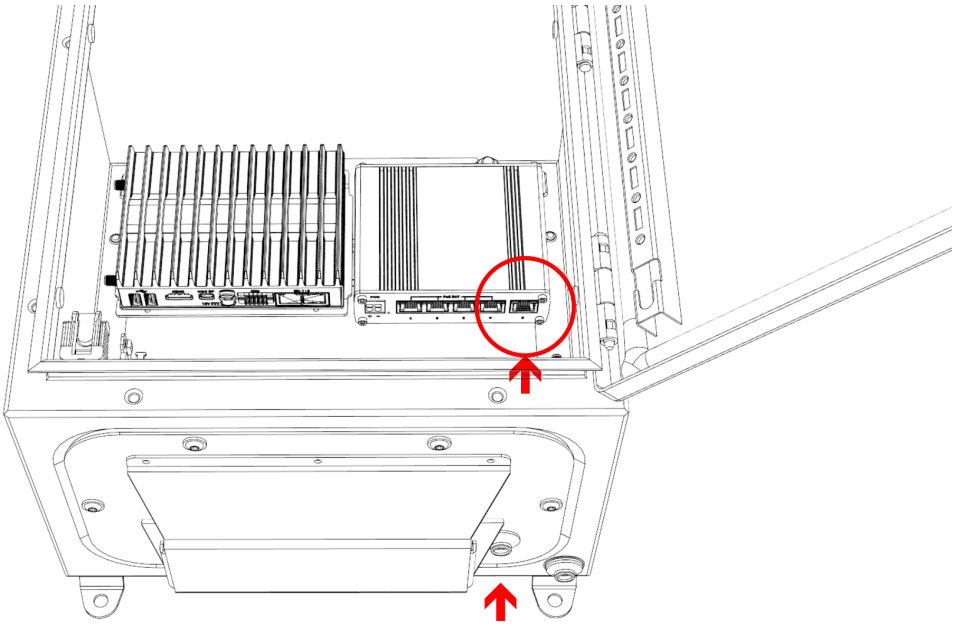
Quick start guide

1. Install the Base Hub

Mount the base hub vertically, ensuring cables exit from the bottom. Follow local electrical codes for safe installation. Supply power to the base hub from a standard wall outlet.

2. Connect to Network

Use an ethernet cable (not included) to connect port 5 on the Teltonika TSW101 (mounted in the base hub) to a DHCP-enabled router or modem. Thread the ethernet cable through the pre-drilled hole on the base hub and secure it with the provided grommet to ensure IP65* rating.



*IP65 classification indicates the level of protection against dust and water ingress. It signifies that the equipment is dust-tight and protected against low-pressure water jets from any direction.

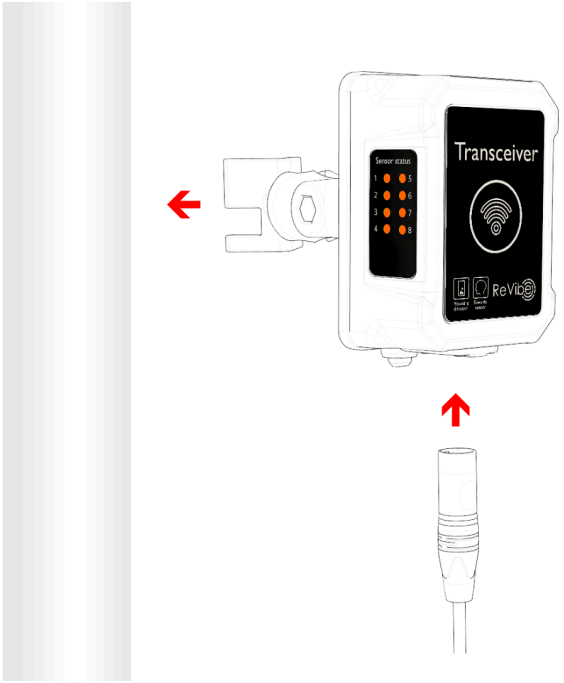
3. Mount the Transceiver(s)

Use the included RAM mounts to secure the transceiver(s) in desired locations.

Line of sight to the sensor nodes greatly improves reception.

4. Connect Transceiver(s)

Use the provided RJ45 to Neutrik etherCON cables to connect the transceiver(s) to the available PoE ports on the base hub. Eight orange LEDs on the transceiver indicate power and readiness on startup.

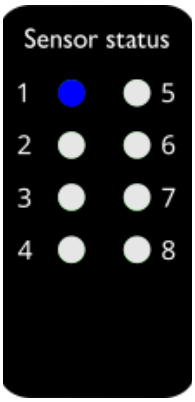


Transceiver with RAM mount installed, fixate the RAM mount to a structure (eg. pole or railing) Connect the Neutrik etherCON to the connector situated in the bottom of the transceiver.

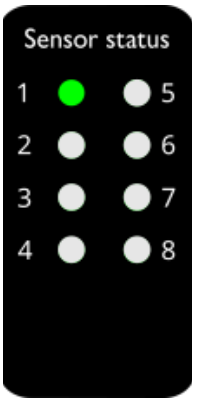
5. Connection Indication Transceiver(s)

a. A blue LED on the transceiver indicates it's connecting to a sensor node.
b. A solid green LED means the connection is established.
c. A blinking green LED indicates data is transmitted from the sensor node.

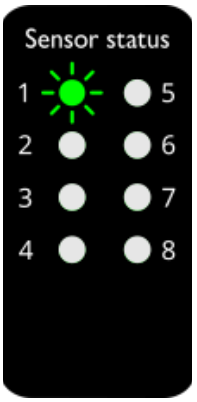
a.



b.

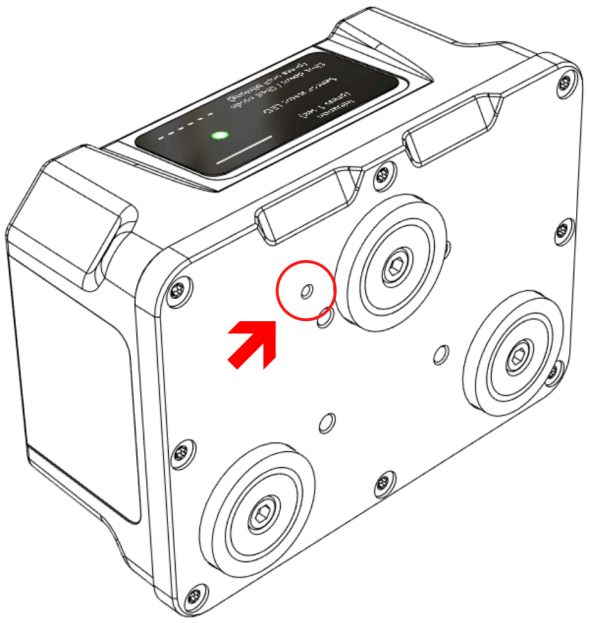


c.



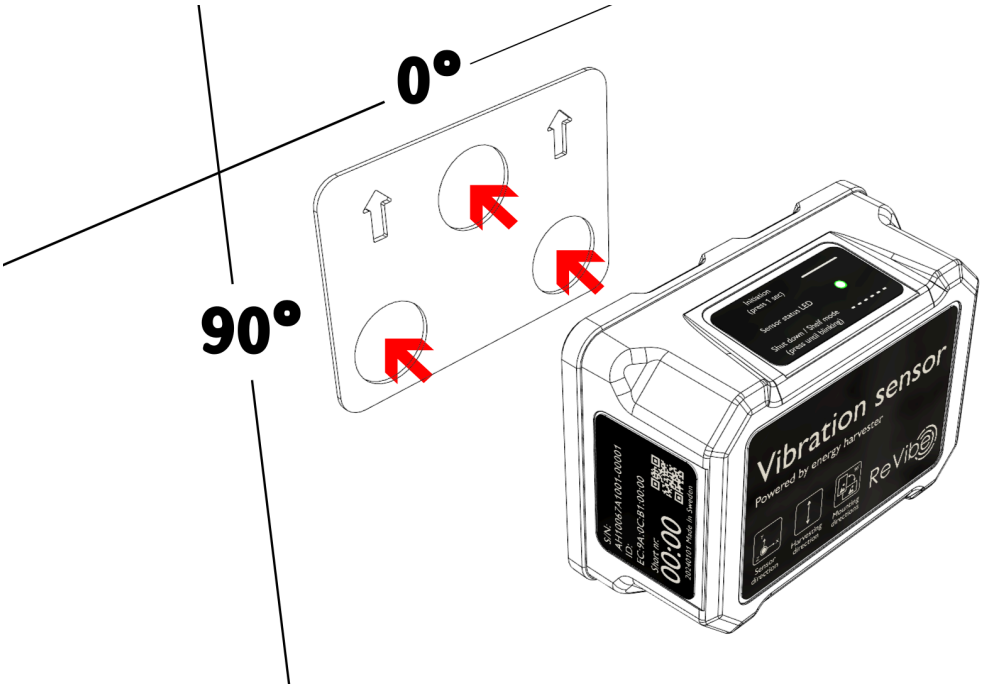
6. Activate Sensor Nodes

Locate the hole closest to the sole top magnet on the sensor node. Use a thin blunt tool (like a ball point pen) to press and hold the button in the hole until a green LED lights up. This indicates the sensor node is activated. To turn off the sensor node, press and hold the button and release when a red LED blinks.



7. Install the Sensor Node

Install the sensor node leveled on the vibrating screen utilizing the anti-slip mats on the areas of the screen that is to be monitored. (Tip: use a spirit level to ensure 0° installation)



8. Charge and status of the sensor node

The sensor node contains an energy harvester and a rechargeable power cell. The sensor comes delivered in a charged state. Maximum charge is 4.2V and the sensor will operate until the discharged state of 2.6V is reached. When discharge is reached the sensor node will turn off in order to protect the battery cell.

When the sensor node is installed on a vibrating screen that is moving within specified frequency and amplitude, the harvester will charge the battery cell until 4.2V is reached.

9. Data Collection

a. When the vibrating screen is operational, sensor nodes will send vibration data based on user settings. Data will be delivered to the chosen end-point.
b. The system continuously transmits health data (Temperature, Battery voltage, Harvesting voltage, RSSI) even when the screen is non operational.

Contact

Support:

Please feel free to reach out if you need any assistance or further clarification.
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Safety

Before you install or operate the system, you must read the safety information. There is a risk of user injury or damage to the system if the instructions in this manual are not followed.

Warning! Risk of personal injury if instructions are not followed.
Caution! Risk of material damage if instructions are not followed.

Note: General information or advice on optimal use of the system.

Warning! The EUT must only be used by trained persons.

Warning! Do not keep or use flammable or non-flammable liquids near the system. Risk of fire.

Warning! Follow the instructions in this manual when you EUT or move the EUT. Risk of injury to the persons or damage to the system.

Warning! Do not use the instrument near sources of strong electromagnetic radiation (e.g. unshielded intentional RF sources), as these can interfere with the operation of the instrument.

Warning! Do not connect faulty equipment to the system. Risk of electrical shock and damage to the system.

Warning! Connect all cables correctly when you install the system. Risk of electrical shock.

Warning! To disconnect power, unplug either end of the power cable. Place the EUT so that the plug can be easily separated from the wall socket