Changing an RTU number / Slave Address

DEVICE_ID / REMOTE_TERMINAL_UNIT (RTU) / SLAVE_ID:

> Each sensor on a single multi-drop bus line must have a unique DEVICE_ID / RTU / SLAVE_ID:
> By Default the DEVICE_ID / RTU / SLAVE_ID is the **LAST 2 DIGITS OF THE SENSORS SERIAL NUMBER**
> The serial number (and therefore, the RTU number) can be found on the side of the TriVibe on the white label.

INDEXING:

> Note that **the listed registers** below are considered **0-Indexed (the first value starts at 0)**
> **Some Modbus masters will need to shift all the values up by one** value if their master recognized the first Modbus value at 1 (known as 1-indexed).

BEFORE YOU ATTEMPT THIS PROCEDURE:

> Please isolate a single sensor to the master on a serial bus in order to avoid confusion or changing a sensor that you don't intend to change.
> If you have more than one sensor with the same RTU on a bus this procedure will NOT work.
> We recommend that you permanently mark the sensor that you change on the physical sensor so that there is no confusion about changed slave addresses when future programmers try to access a device.

Process to Change:

1. Unlock Configuration Registers
   Write 45555 to System Control Register 40001

2. Assign new RTU by writing to the related Configuration Register
   Write new RTU number to Configuration Register 40367

3. Save to NVM and lock all Configuration Registers
   Write 45556 to System Control Register 40001

4. Check the status
   Read System Status Register 40002 to check the remote command is executed without problems.
   A response of 1 means it was completed.

5. Restart the sensor
   Write 1 to System Control Register 40001
   (After the sensor reboots the RTU Number will be updated and you will communicate with the NEW RTU number)

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