



# A4900 Vibrio M

## pocket guide



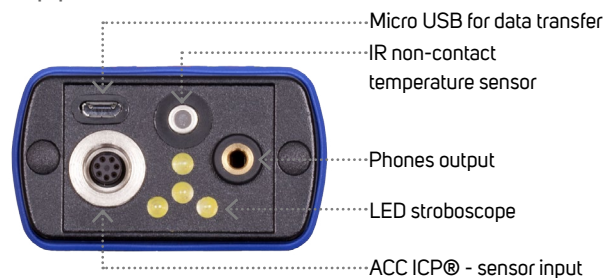
# A4900 Vibrio M

## pocket guide

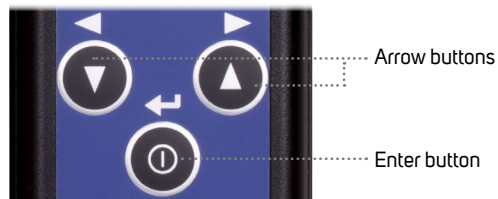
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## Basic Information

### Top panel



### Buttons



### Batteries



To open the battery lid  
**push the hinge**  
 from the back

## Switch ON/OFF



Press the Enter button to switch on the device



Firmware version  
 Serial number  
 Filters  
 Sensor sensitivity

Press and hold the Enter button to switch off the device

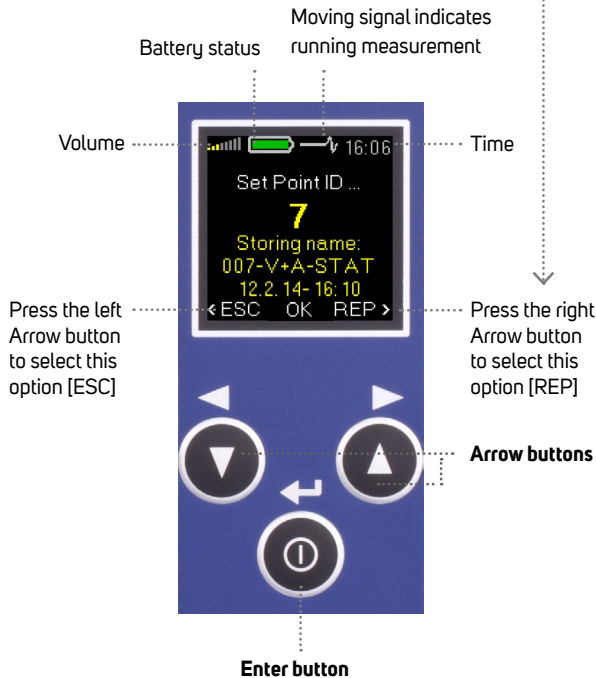
# Basic control

## Arrow buttons

- > switch between the measurement modes
- > select the right or left item from the menu at the bottom
- > move between items (up/down) in menu

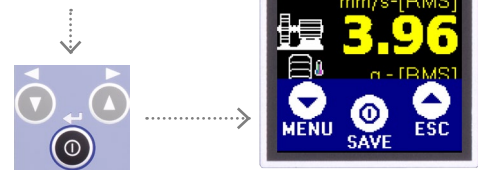
## Enter button

- > switches the instrument on/off
- > confirms the selection
- > selects the middle item from the menu at the bottom
- > opens the Basic menu

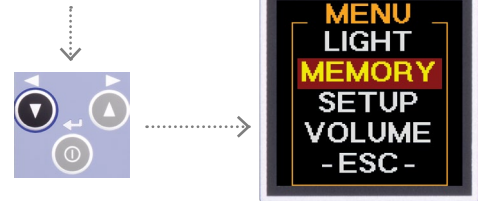


# Basic menu

1. To open the Menu press the Enter button (on any measurement screen)




2. Then press the left Arrow button to open the Menu



3. You can select the following items from the menu:

- > **Light**  
to switch on the torch or the stroboscope (see page 11)
- > **Memory**  
for route measurement (see page 12 - 13)
- > **Setup**  
setup of speed, alarms, units, time, etc. (see page 14)
- > **Volume**  
for headphones volume setup (see page 15)
- > **-Esc-**  
back to the measurement screen

# Measurement screens

 Use the arrow buttons to move between the measurement screens

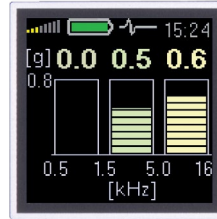
## Overall values - RMS



RMS vibration values:  
10 - 1000 Hz in mm/s (ips)  
0.5 - 16 kHz in g

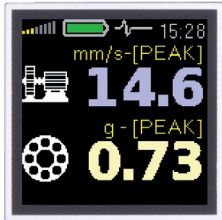
Automatic speed detection  
(the speed can also be set manually)

## Frequency bands



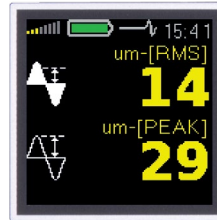
RMS vibration values:  
0.5 - 1.5 kHz in g  
1.5 - 5 kHz in g  
5 - 16 kHz in g

## Overall values - PEAK



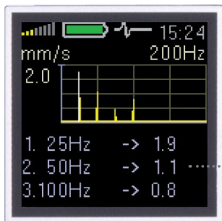
Peak vibration values (0-P):  
10 - 1000 Hz in mm/s (ips)  
0.5 - 16 kHz in g

## Displacement



Overall RMS and Peak displacement:  
2 - 100 Hz in  $\mu\text{m}$  (mils)  
(see page 14 for setup)

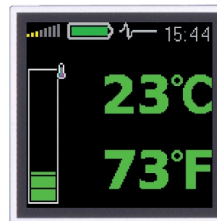
## Spectrum



FFT analysis of vibrations:  
1 - 200 Hz in mm/s (ips) RMS

Displays the 3 top peaks found

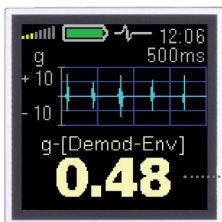
## Temperature



Temperature in degrees Celsius and Fahrenheit:

- less than 30°C (86°F)
- 30 - 45°C (86 - 113°F)
- 45 - 60°C (113 - 140°F)
- 60 - 75°C (140 - 167°F)
- more than 75°C (167°F)

## Time signal



Time signal:  
0.5 - 16 kHz in g

Demod-Envelope value

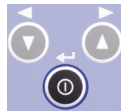
## FASIT (Fault Source Identification Tool)



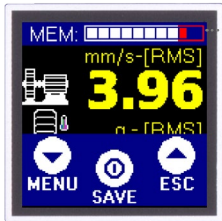
- Temperature
- Unbalance
- Looseness
- Misalignment
- Other failure
- Bearing condition
- Overall machine condition

# Saving data from measurement screen

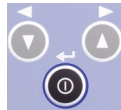
(\*available for the Vibrio M only)



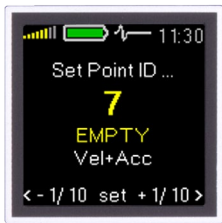
Press the Enter button on any measurement screen



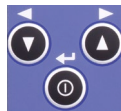
Used memory



Press the Enter button [SAVE]



Select the Point ID (1-250) with the Arrow buttons



Press the Enter button [set] to confirm



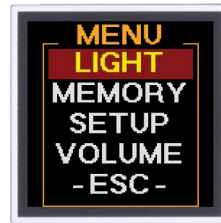
[REP] go back to the Point ID setting

[ESC] go back to the measurement



Press the Enter button [OK] to save the data

# Light



## Torch



The instrument can be used as a torch in this mode

Press any button to switch off the Torch mode

## Strobo



If the speed is found, the stroboscope frequency is set automatically

The frequency can be adjusted with the Arrow buttons



To adjust the tuning step, press the Enter button to get the Strobo menu

# Memory - Route measurement

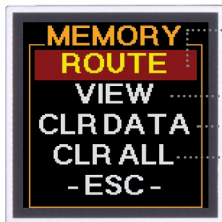
(\*available for the Vibrio M only)

## 1. Data transfer



Firstly the route must be loaded to the device from the DDS software

## 2. Route



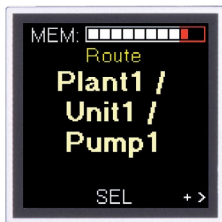
Go to MENU/MEMORY/ROUTE (see page 7)

View off-route readings

Delete all readings

Delete all readings and route structure

## 3. Machine selection

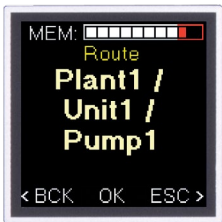


Use the Arrow buttons to switch between the machines in route



Press the Enter button [SEL] to confirm the selection

## 4. Machine confirmation



[BCK] go back to Machine selection [ESC] from the route



Press the Enter button [OK] to confirm the selection

## 5. Point selection

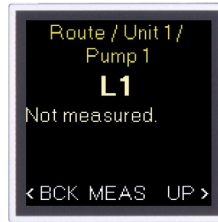


Use the Arrow buttons to switch between the points in route



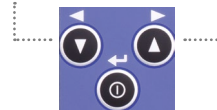
Press the Enter button [SEL] to confirm the selection

## 6. Point confirmation



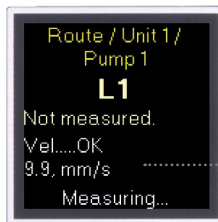
[BCK] go back to Point selection

[UP] go back to Machine selection



Press the Enter button [MEAS] to start measuring

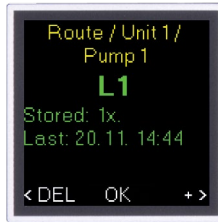
## 7. Taking the measurement



**i** If the temperature is defined in the route, this measurement is taken first

Measurement progress can be seen on the screen

## 8. Saving the measurement



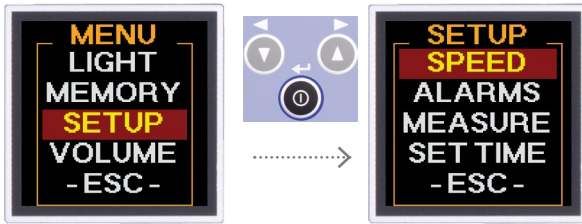
[DEL] delete the measurement

[+] save and move to the next point



[OK] save the measurement

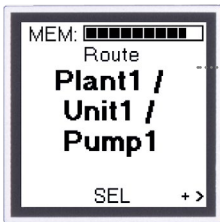
# Setup



- Speed
  - Auto
  - Manual
  - Off
- Alarms
  - Adash (speed is required)
  - R13 (rigid, group 1 and 3)
  - F13 (flexible, group 1 and 3)
  - R24 (rigid, group 2 and 4)
  - F24 (flexible, group 2 and 4)

ISO 10 816
- Measure
  - Units
    - Metric
    - Imperial
  - Disp.val
    - RMS/O-P
    - RMS/P-P
    - O-P/P-P

Displacement
  - RTE mode
    - Normal (black background)
    - Inverse (available for route only)
- Set time ..... Setup of time and date

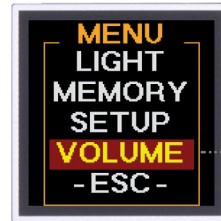


Example of the route screen when the Inverse option is used

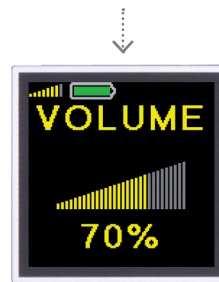
# Volume



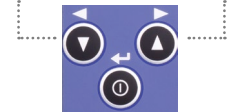
Connect phones to the output (3.5mm jack)



Select the Volume option from the menu



Adjust the phones volume with the Arrow buttons

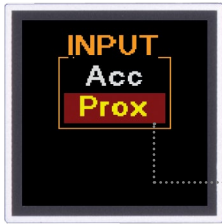


Confirm with the Enter button



# Proximity option

(\*available for the Vibrio MP only)



**i** The A4900 Vibrio MP needs to be connected to a proximity sensor for proximity measurement!  
(The default sensor sensitivity is set to 7.87 mV/ $\mu$ m, 200 mV/mil)

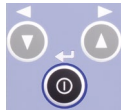
When the device is switched on, select Prox for proximity option



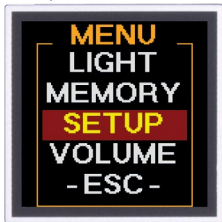
Select Metric or Imperial units



Press the Enter button for the Menu



Off route data can be saved to the memory (the route cannot be performed with the proximity measurements)



# Proximity measurements

(\*available for the Vibrio MP only)

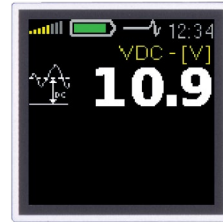
## Speed



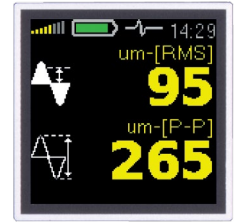
**i** Use the arrow keys to move between the measurement screens

Speed can be detected automatically or set manually

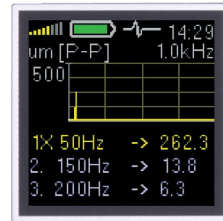
## DC part of signal



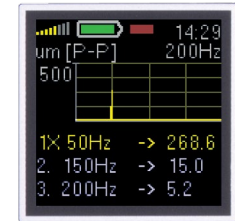
## Displacement 1 - 1000 Hz



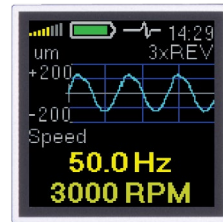
## Spectrum 1 kHz or 2.5 kHz



## Spectrum 200 Hz



## Time signal 1 - 1000 Hz



**Notes:**

**Notes:**



**Master the language of your machinery.**

**Adash, spol. s r.o.**

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