



User manual

MID-HIGH FREQUENCY

VOLUME VELOCITY SOURCE

MHVVS

Microflown Technologies
Tivolilaan 205
6824 BV Arnhem
The Netherlands

Phone : +31 880 010 811
Fax : +31 880 010 810
Mail : info@microflown.com
Web : www.microflown.com

MID HIGH FREQUENCY VOLUME VELOCITY SOURCE

Extended frequency range and performance

Direct volume velocity measurement

Highly accurate equipment is indispensable for noise, vibration and harshness (NVH) engineers in order to accurately characterize their product performance and noise imprint. The Mid-High frequency volume velocity source is an omnidirectional noise source based on a well-defined excitation.

It is characterized by a Microflown sensor installed at the tip of the nozzle. The direct measurement of particle velocity delivers the accurate volume velocity information of the noise source.

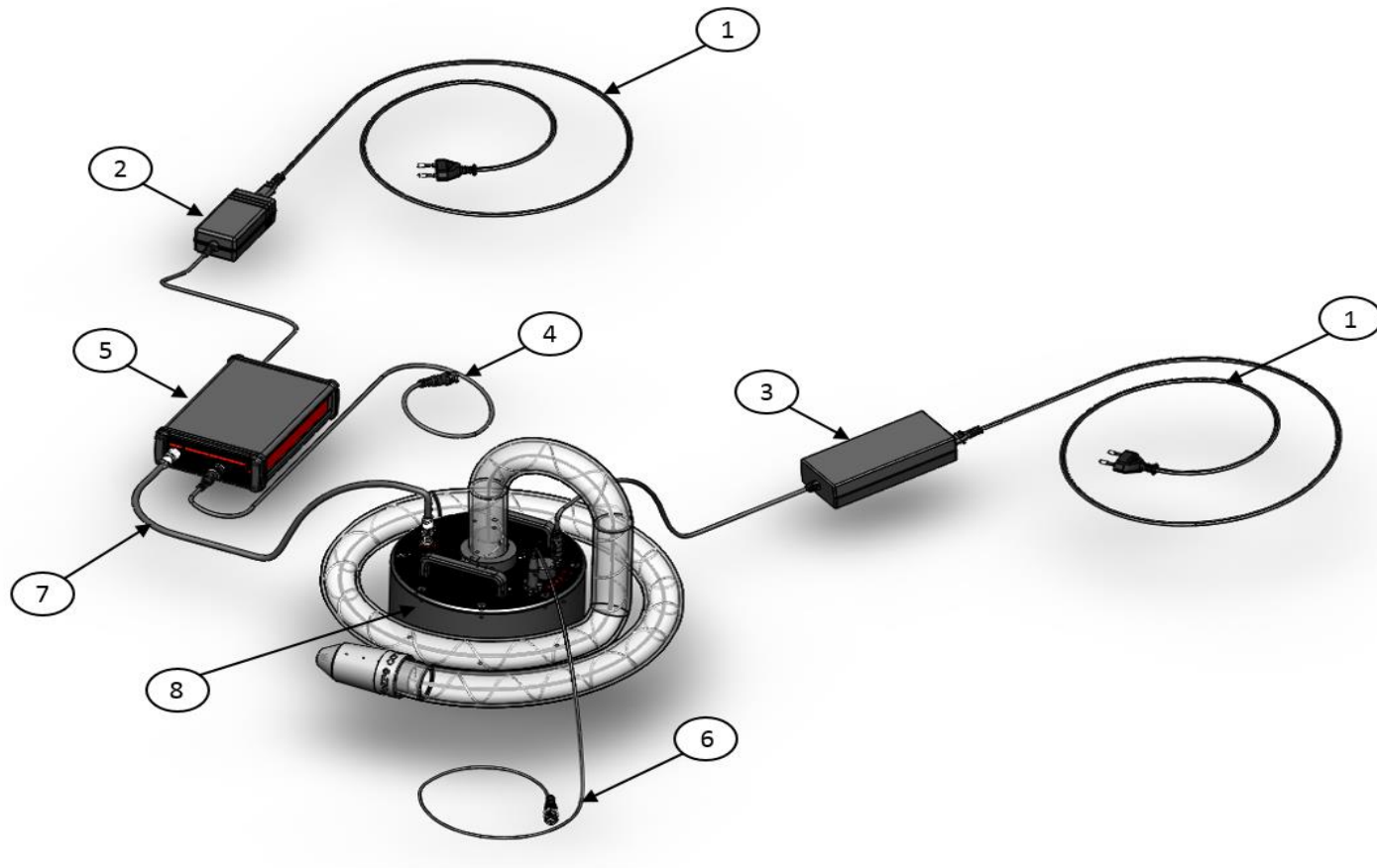
Microflown Technologies' Mid High Frequency Volume Velocity Source is designed to provide a


quasi-flat response on a wide frequency range 300 – 12000 Hz (\pm 2dB) with a high excitation level (96 dB at 1m SPL).

The embedded amplifier allows choosing between 7 variable amplification stages to ensure unparalleled accuracy and measurement repeatability.

All in all, the new Mid High Volume Velocity Source is a perfect tool for transfer path analysis measurements, airborne source quantification, component vibroacoustic behavior characterization, airborne source quantification and pass by noise simulation.

CONTENTS OF THE BOX



- | | | |
|---|---------------------------------|---|
| 1 | 2 x
Power
cable |  |
| 2 | MFPA
Power
adaptor |  |
| 3 | VVS
Power
adaptor |  |
| 4 | BNC-BNC
cable |  |
| 5 | MFPA
- VVS sensor |  |
| 6 | 2 m- Min
XLR to
BNC cable |  |
| 7 | 2.5 m-
Lemo to
Lemo cable |  |
| 8 | Volume
Velocity
Source |  |

CONNECTIONS

1

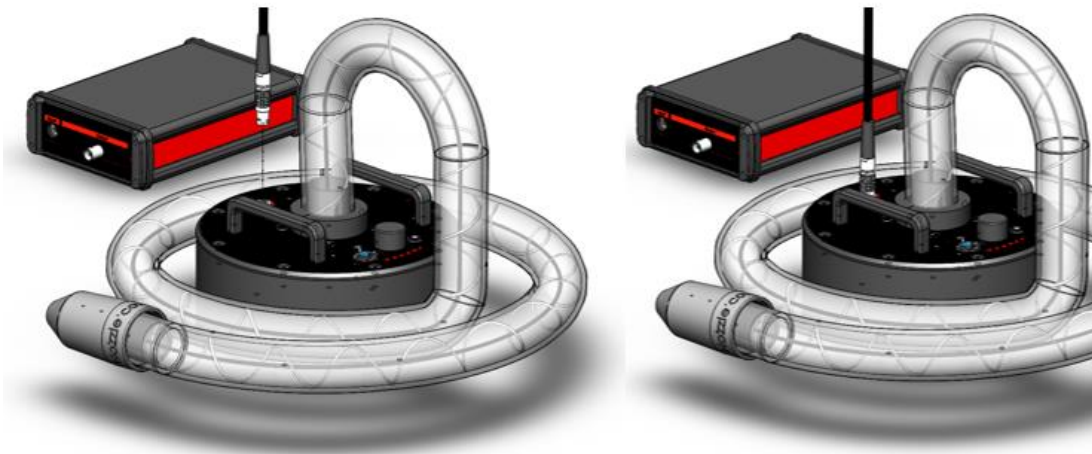


Figure 1. Connect Lemo - Lemo cable to the VVS connection labeled as "Output"

2

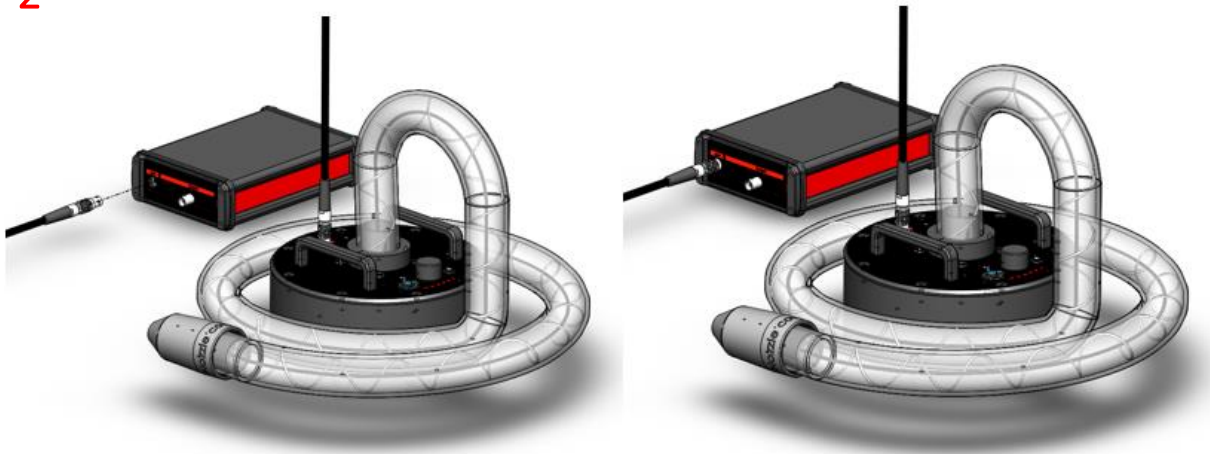


Figure 2. Connect the Lemo - Lemo cable to MFA connection labeled as "Input"

3

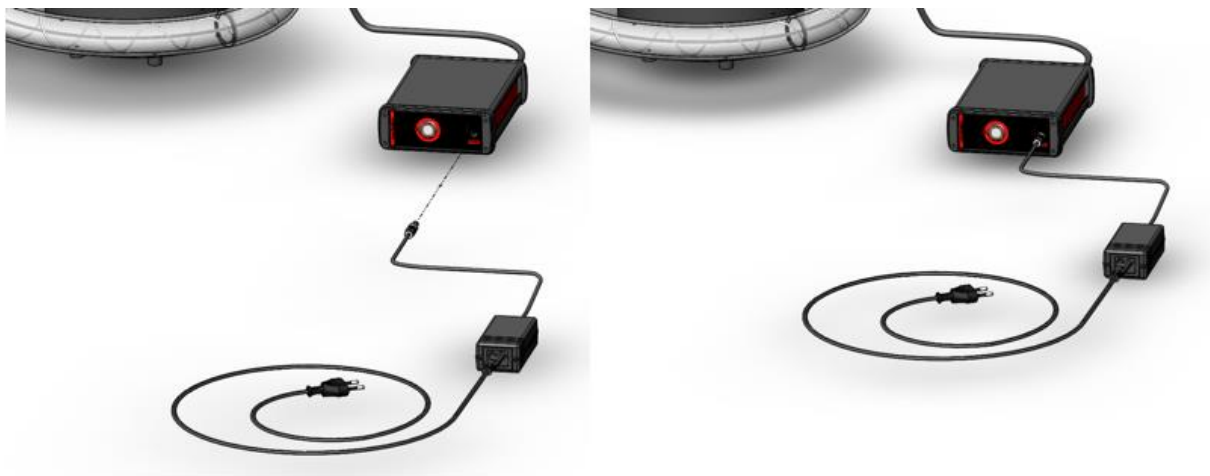


Figure 3. Power the MFA

4

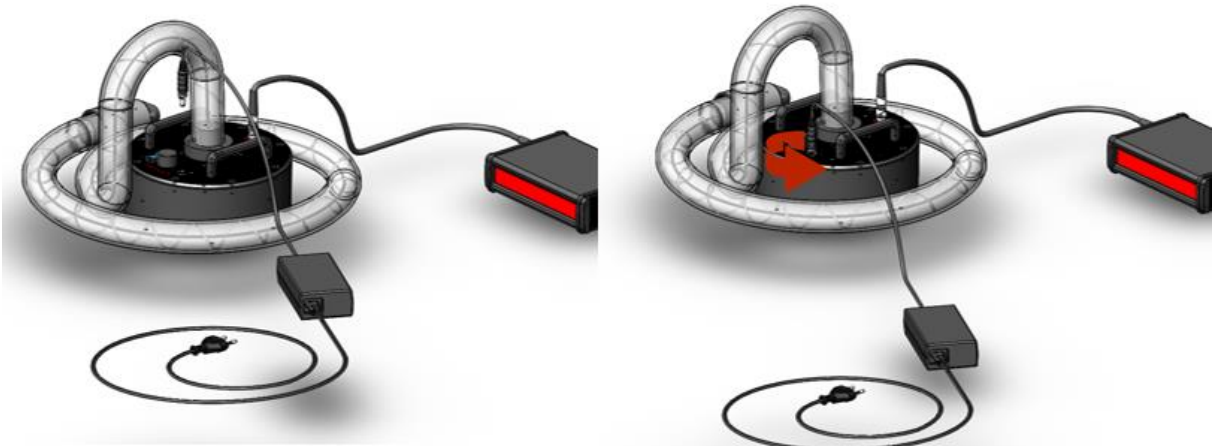


Figure 4. Power the VVS

5

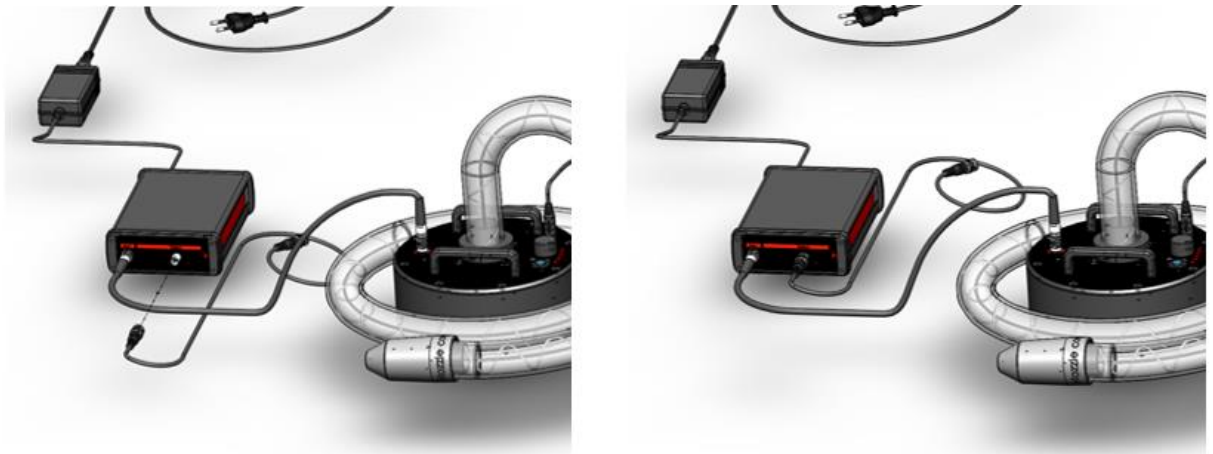


Figure 5. Connect the BNC - BNC cable to MFPA output labeled as "U". The other end of this cable can be connected to any frontend with BNC input

6

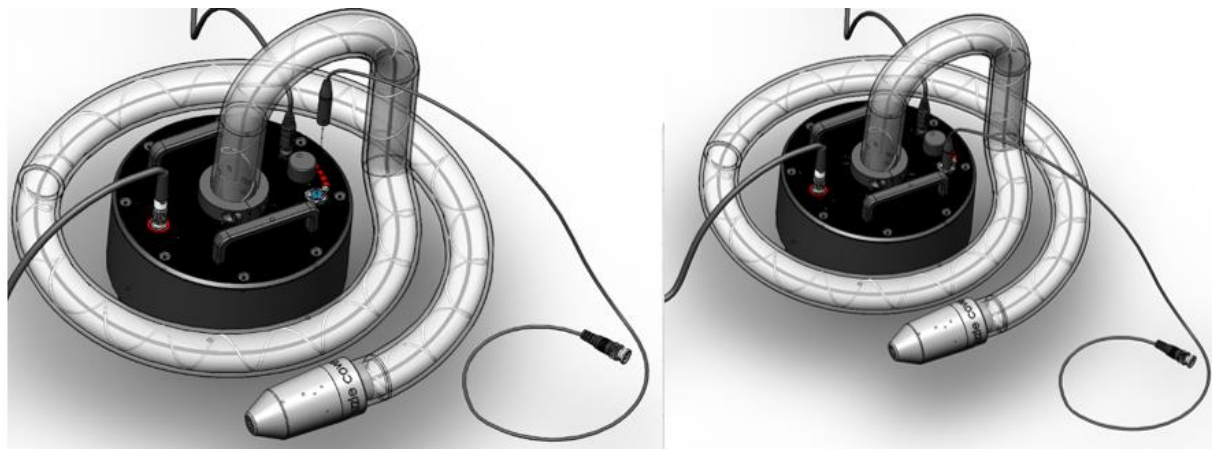


Figure 6. Connect the XLR end of the BNC- XLR cable to the VVS connection labeled as "Line in".

SAFETY, MAINTENANCE AND SUPPORT

SAFETY

- The monopole signal is amplified internally. Care must be taken to not connect the monopole to any other amplifier as it might cause damage to the driver.



- Do not submerge the electronics in water as this will lead to permanent damage.
- Only use the cables supplied with the kit. Any modifications to these cables or the use of cables of a different brand or type may result in permanent damage to the probe or the rest of the electronics.
- The velocity sensor must be powered via a Microflown™ MFPA. Do not power the sensor with any other device as this might cause permanent damage to the system.
- Exposure to dust/dirt particles could damage the Microflown™ sensor. Install the monopole nozzle cover immediately after usage.

MAINTENANCE

The Microflown™ particle velocity sensor needs recalibration every two years. The calibration due date is displayed in the calibration report. Contact our support team before the expiration date to calibrate your source on time.

TECHNICAL SUPPORT

For any problems or queries about your equipment, please contact Microflown™ Technologies Customer service:

- Mail: cs@microflown.com
- Skype: cs.microflown
- Telephone: +31(0) 88 001 08 11 Monday to Friday, from 9:00 to 17:00 (UTC+1).

WARRANTY INFORMATION

WARRANTY AND REPLACEMENT

During the first two years (24 months), the seller offers a warranty on all their products, except for trading items and third party manufactured items. The seller warrants that all products will be free from defects in material and workmanship for this period of two years. During this two year period, the seller will repair or replace defect products free of charge. Products damaged by accident, abuse, misuse, natural disaster or by any unauthorized disassembly, repair or modification are not covered by this warranty. The incurred transportation costs of returning the products to seller will be borne by the buyer. The logistical cost for returning the products back to the buyer will be borne by the seller. Several products come with a “VOID if seal is broken” sticker. The warranty is void at all times when this sticker is broken.

GRACE PERIOD (YEAR 3 AND 4)

During the third and fourth year, the seller offers a grace period. In the grace period, the products purchased at an earlier date can be replaced by completely new state of the art products of the same scope of the original purchase. This applies only for the products known as standard probes and signal conditioners. In the first year of the grace period, (year 3) customers have an option to replace their products for 25 % of the actual ex works end-user price. The full freight and packaging charges apply.

In the second year of the grace period, (year4) customers have an option to replace their products for 50 % of the actual ex works end-user price. The full freight and packaging charges apply.

The new products are accompanied by a new warranty. Both the two years warranty and grace period become applicable again from the date of invoice.

REPAIRS OUTSIDE WARRANTY POLICY

Replaced/repared parts come with a six month warranty under the same conditions as the two year warranty.

Direct Volume Velocity Quantification