

INFORMATION SHEET

Aquadopp Gen 2 Information Letter

1. Introduction

This information letter provides a brief introduction to your Aquadopp Gen 2 instrument. It is intended to:

- Familiarize you with the contents of the package.
- Explain the purpose of each included item.
- Direct you to the relevant documentation, software, and online resources.
- Guide you through bringing the instrument online and performing a basic function test.



Figure 1. Overview of the different Aquadopp Gen 2 models.

2. Package Content

This section provides a detailed overview of the content of the Aquadopp Gen 2 standard package, which is shown on Fig. 2. Additional items, such as batteries, may also be included depending on your order configuration. These items will be listed on the shipping box contents list.



Figure 2. Overview of the Aquadopp Gen 2 case content.

2.1 Aquadopp Gen 2 Instrument

The figures below identify the main parts of the instrument.

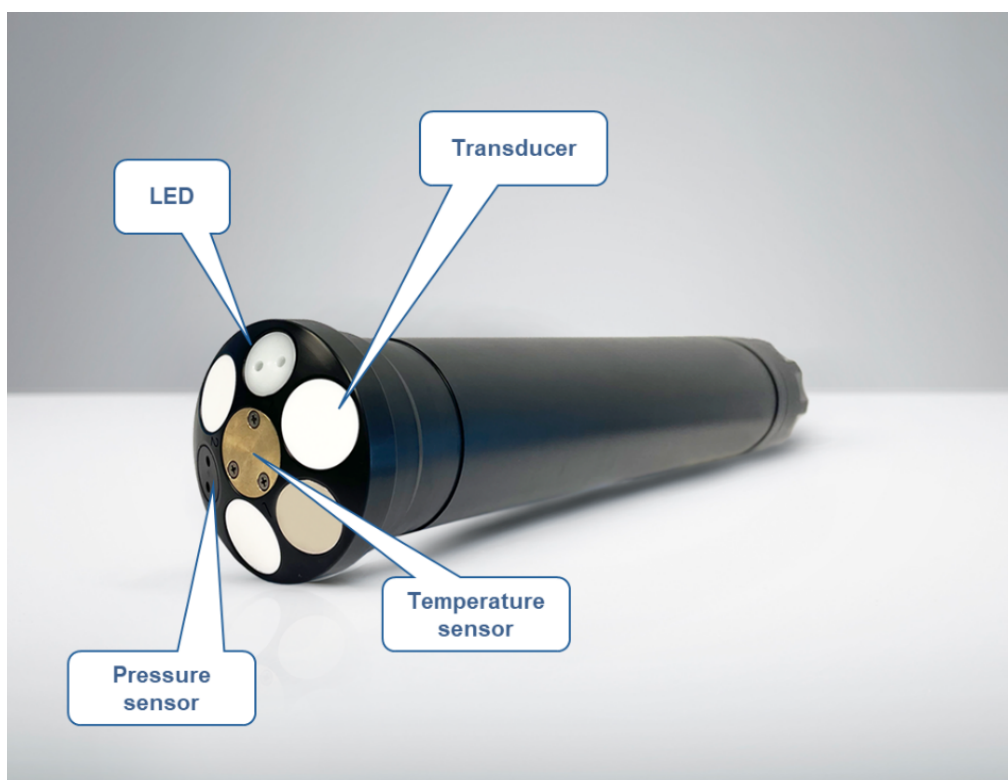


Figure 3. Front-view Aquadopp Profiler Gen 2 1MHz S1VP.



Figure 4. Rear-view Aquadopp Gen 2.

Note: Your instrument may differ slightly depending on its configuration and transducer frequency. Please refer to the product page for your specific model for an exact description.

2.2 Accessories



Figure 5. Overview of the Aquadopp Gen 2 accessories.

Power and Communication Cable

The supplied cable provides both power and serial communication to the instrument. The serial cable delivered with the Aquadopp Gen 2 can be used both for RS232 and RS422 communication. The Aquadopp Gen 2 uses by default RS422 as the serial communication protocol.

USB-to-Serial Adapter

The supplied USB-to-Serial adapter enables communication between the instrument and your computer via a USB port. By default, the instrument is shipped with a RS422-USB converter. An additional RS232-USB converter may be ordered with the instrument on request. For instructions on how to change the serial communication protocol, please refer to the [How can I change the serial protocol on my Aquadopp 2?](#) article found on the **Nortek Support Center** page.

24V power Supply

A 24V power supply is provided with the instrument to power it from main AC.

Toolkit

The toolkit contains:

- Molykote 111 Silicone grease for lubricating the instruments O-rings
- A dummy plug for protecting the instrument connector from water when operating on batteries
- Spare end bell O-rings

Documentation

The package includes several printed documents:

- This information letter
- The shipping box contents list
- The factory test reports
- Battery documentation (if batteries were ordered)

3. Resources and Further Information

Information and guidance on configuring, operating, and maintaining your instrument can be found on the **Nortek Support Center** (<https://support.nortekgroup.com/>).

We recommend starting with the [Getting started](#) section, which covers the essential information for getting your instrument ready for use.

For an overview of the available documentation, see [Where can I find information for my Aquadopp 2 instrument?](#)

Software

The primary way to communicate with your Aquadopp Gen 2 is through the instrument software called **Nortek Deployment**. This software is available free of charge and can be accessed from our [Software webpage](#) or downloaded directly from the [Microsoft Store](#). The software can also be launched from your web browser from deployment.nortekgroup.com

Firmware

The firmware is the internal software that manages the instrument's functions and communication with external devices. Nortek continuously releases new firmware versions with upgrades and improvements. To ensure optimal operation, make sure that your

instrument is always running the latest firmware version, which is common for all variants of the Aquadopp Gen 2 instrument. The latest version can always be downloaded free of charge from the [Nortek software and firmware download page](#) and updated using the Nortek Deployment software.

Technical Specifications and Drawings

Technical specifications and detailed instrument general arrangement (GA) drawings are available on the respective [Product pages](#). Navigate to your instrument's product page from www.nortekgroup.com/products to view the specifications or drawings directly in the web interface or download them as a PDF.

Release notes

Users familiar with earlier generations Aquadopps should get familiar with the [Product updates release notes](#), found on the [Release notes](#) pages (<http://www.nortekgroup.com/release-notes>), which describe the key differences between the original Aquadopp instruments and the Aquadopp Gen 2, including updates to the physical design, electronics, measurement capabilities, and configuration options. They also explain compatibility considerations for batteries, cables, data formats, and software.

4. Getting Started

This section explains how to connect your Aquadopp Gen 2 instrument to a computer, establish communication using **Nortek Deployment**, and perform a basic function test.

4.1 Install Nortek Deployment

Nortek Deployment is the primary software for configuring, testing, and deploying your instrument. The software is free of charge and can either be installed as an app on your computer or launched from your web browser.

Option A: Windows Application

The software application can be installed directly from Microsoft Store. An installer version is also available for download from our Software webpage. Run the installer upon download and follow the instructions on screen.

Option B: Web Application

Nortek Deployment is also available as a browser-based application supporting multiple operating systems. The application can be launched from your web browser from deployment.nortekgroup.com.

4.2 Connect and power the instrument

- 1) Mate the 8-pin connector on the supplied cable with the 8-pin connector on the instrument. Before proceeding further, please ensure that:
 - The connector is lubricated with silicone grease.
 - The connector is fully seated.
 - The locking ring is tightened securely to ensure a watertight connection and help prevent corrosion.



Figure 6. Close-up of the connector correctly attached to the instrument.

- 2) Power the instrument, either with the external power supply or internal batteries. Once power is applied, the LED on the instrument head should illuminate, indicating that the instrument is powered. If the LED does not turn on, verify that the power supply is connected correctly and switched on.
- 3) Use the supplied USB-to-Serial adapter to connect the instrument to your computer.

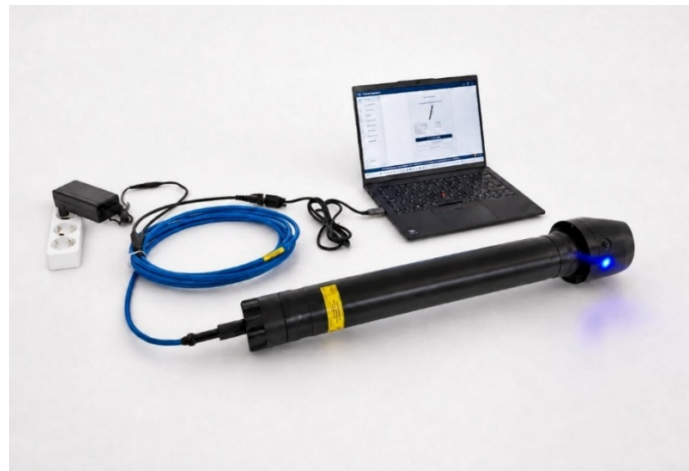


Figure 7. Cable connections between the instrument, USB-to-Serial adapter, power supply, and computer.



NOTE: Ensure that the instrument is powered with the correct voltage. **Excessive voltage will damage the instrument.** Refer to the instrument's technical specifications for voltage limits.

4.3 Connect to the Instrument

Open **Nortek Deployment** and click on **Connect** to access the **Connection** page in Nortek Deployment. In the help panel, expand **Connect to Aquadopp 2** and select the **Serial** article. Follow the step-by-step instructions to select the correct serial port and baud rate and establish the connection.

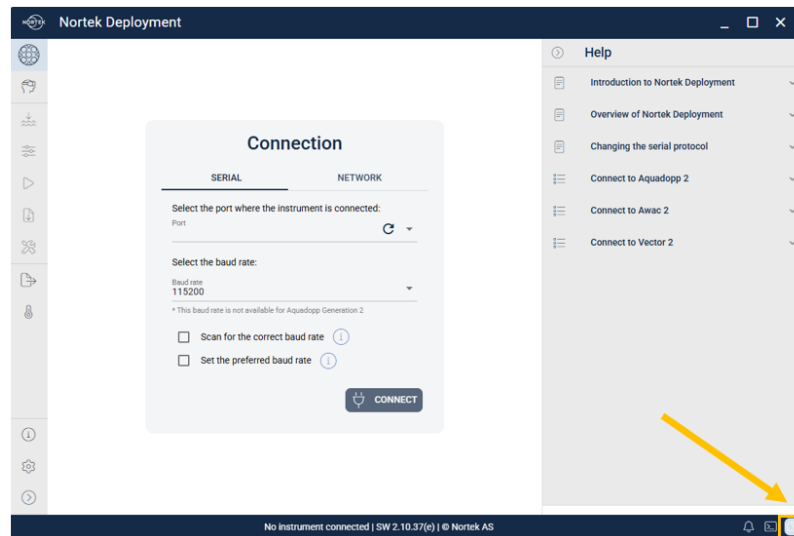


Figure 8: Help section of Nortek Deployment

4.4 Perform a Function Test

After connecting the instrument, we recommend performing a function test. This allows you to verify that the instrument is functioning correctly and familiarize yourself with its sensors and the data they provide.

To perform the test, open the **Test instrument** tab in **Nortek Deployment** and select **Start function test**. The complete procedure to test the instrument is then available in the help panel within the software and can also be found in the following article: [Function test](#). It is recommended to perform an instrument function test before each deployment.

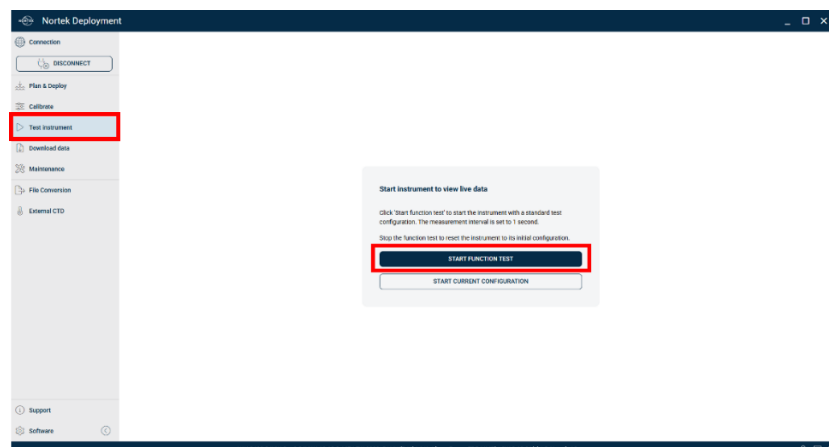


Figure 9: Function Test in Nortek Deployment

5. Maintenance and care

Regular maintenance and proper care of your Aquadopp Gen 2 are essential to keep the instrument in good working condition and prevent damage. Before using your instrument, we recommend becoming familiar with the [Maintenance](#) section of the **Nortek Support Center**.

Pay particular attention to the following:

Connector Care

- Regularly lubricate the instrument's **8-pin connector** with **3M Silicone Spray or equivalent** to help prevent corrosion.
- Never submerge the instrument with the connector exposed. When no cable is connected, always install the supplied **dummy plug** to protect the connector from corrosion and water ingress.
- For detailed instructions, refer to the [Connector care](#) article of the **Nortek Support Center**.



NOTE: Grease the connector each time it is mated

Bio-fouling

Bio-fouling on the transducers can affect measurement quality and should be considered when planning your deployment.

- Consider using **Nortek anti-fouling patches** to limit bio-fouling on the transducer surfaces. Contact your local Nortek representative for more information.
- When removing bio-fouling after a deployment, clean the instrument carefully.
- Refer to the [Bio-fouling](#) article of the **Nortek Support Center** for Nortek's recommended cleaning procedure.



NOTE: Aggressive cleaning methods can damage the instrument and transducer surfaces. Do not use sharp objects or chemicals.

O-ring Care

Proper maintenance of the end bell O-rings is essential to maintain the watertight seal and prevent water ingress.

Inspect and maintain the O-rings whenever the instrument is opened. Refer to the [O-ring care](#) article of the **Nortek Support Center** for detailed instructions.

6. Operating the Instrument on Internal Batteries

If your instrument is equipped with internal batteries, please refer to the [Exchange batteries on the Generation 2 Aquadopp](#) article of the **Nortek Support Center** for information on how to install or replace the battery packs



NOTE: Always dry the instrument thoroughly before opening and removing the end bell nut. Opening a wet instrument can introduce water or moisture into the housing, potentially damaging the electronics of the instrument battery cradle.

7. Instrument Disposal

At the end of its service life, dispose of the instrument in accordance with local regulations governing electronic waste. For additional information regarding recycling and disposal, refer to the *Instrument disposal / end-of-life* article of the **Support Center**.

Need help? Contact us at support@nortekgroup.com