syp | Waikato Scientific Instruments

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A WaikatoLink Brand

Syp fluid sampler

Quick-start guide

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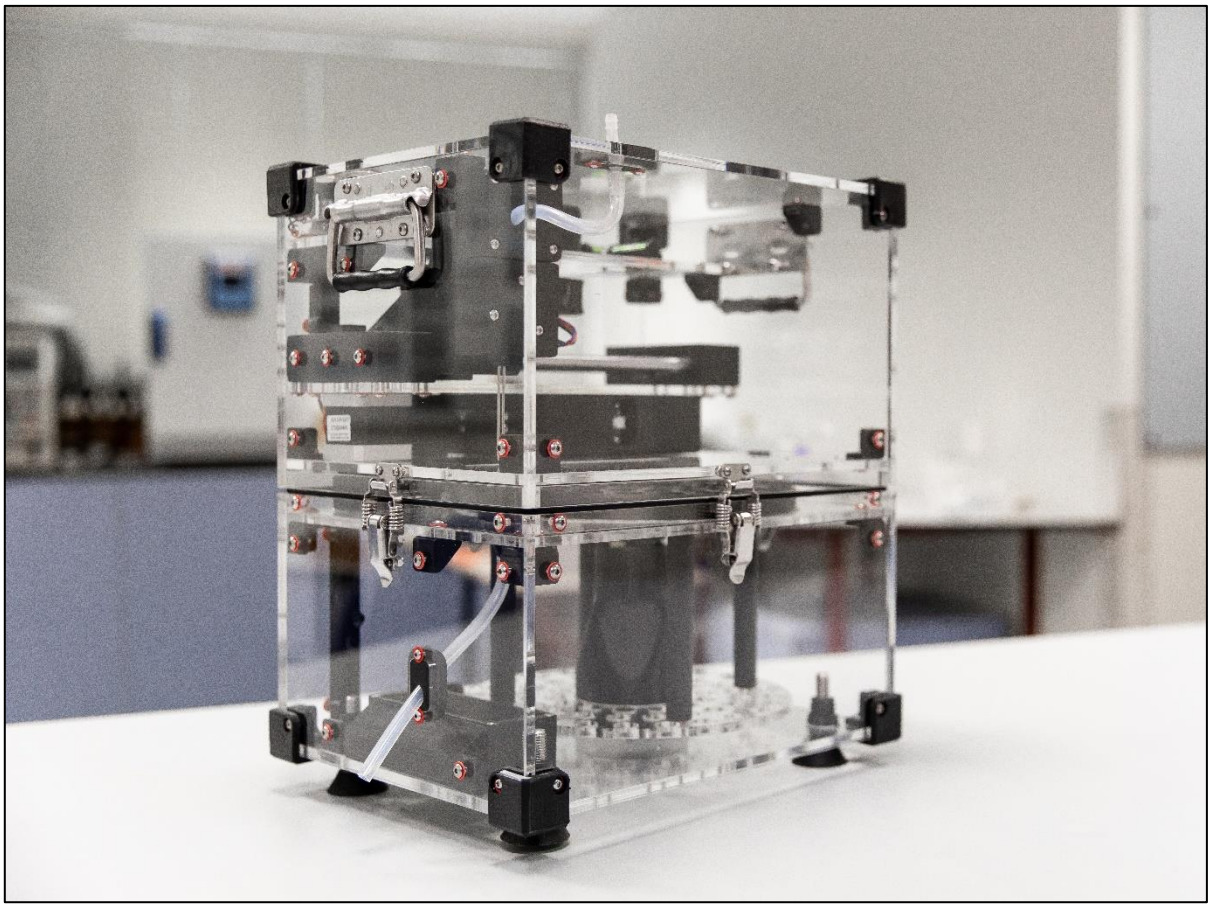
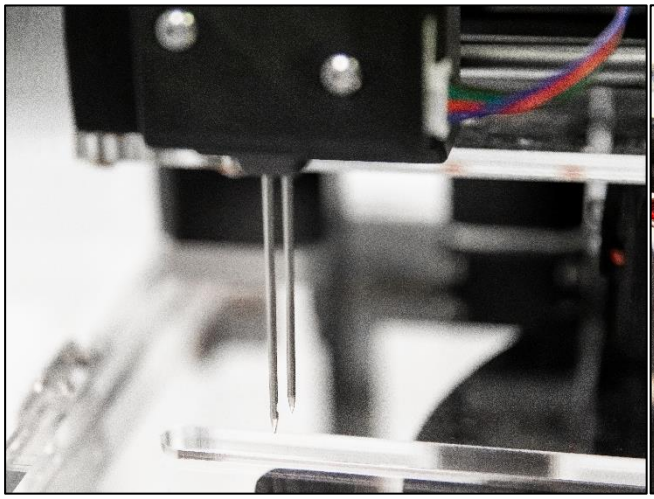


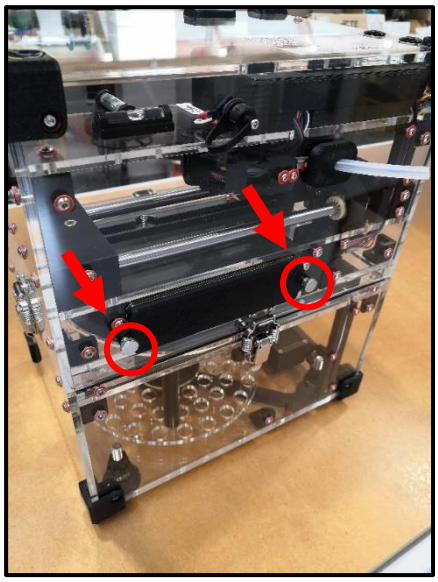


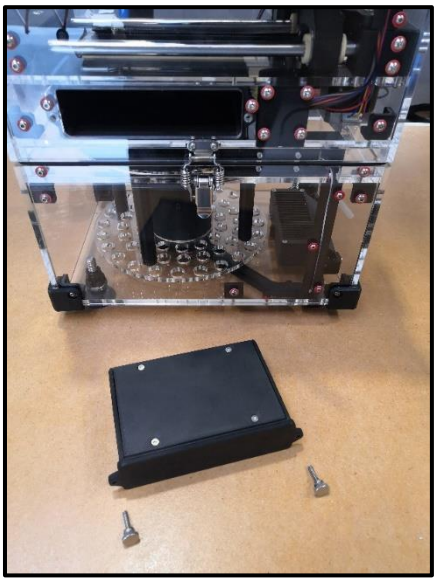
Step 1: Before you begin

1. Batteries

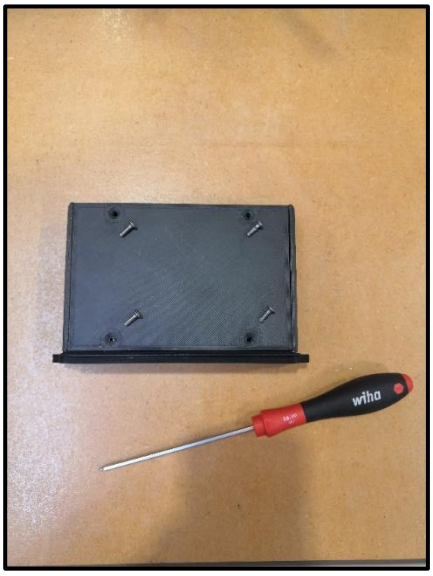
The Syp automatic fluid sampler runs on 16x alkaline AA batteries (not included with purchase). Batteries are installed in the battery pack on the top-rear of the device:

1. Locate the battery cartridge at the rear of the device
2. Remove the two thumb screws holding the cartridge in place



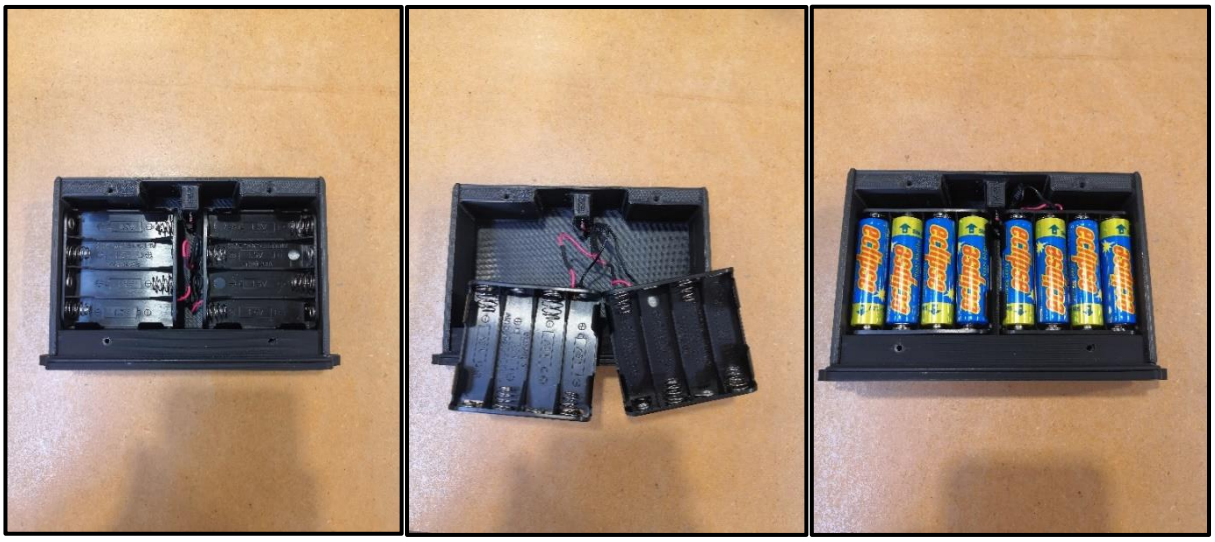


3. Pull battery cartridge out to expose 4 screws on the top of the cartridge
4. Remove the 4 screws ontop of the battery cartridge using a 2mm Hex driver or allen key to open the top cover



5. With the battery cartridge top cover removed, gently pull the inner battery holders out of the cartridge and replace or fill the battery slots in one or both holders
    a. Ensure every battery is in the correct orientation. Incorrect orientation can cause operation errors or damage batteries

6. Gently move wires out of the way when replacing the battery holders, so the wires are not underneath or above the battery holders



7. Screw the cover back onto the battery cartridge, making sure the cover is in the correct orientation
    a. Countersunk holes for the screws must face upwards

8. Push the cartridge back into the Syp fluid sampler and tighten the thumb screws

Battery voltage can be checked via the Syp app as an indication of remaining charge.

2. Sample tubes & stoppers

Syp comes with 58 sample tubes and accompanying stoppers. To prepare your tubes for deployment,

1. Push a stopper firmly into the top of each sample tube. Ensure tight, secure fit.
2. Remove the top half of the unit to expose the bottom half, containing the carousel.
3. Screw sample tubes directly into the carousel. Ensure that tubes are secure without over-screwing.
4. Join the two halves of the device together and lock the fasteners.

The waste tube can optionally be sealed with a stopper to reduce moisture build-up inside the device.

Step 2: Physical setup

Syp's comprehensive functionality means it can be deployed in a range of different scenarios. **Always test that your setup works properly before leaving the site.**

Syp is not waterproof, only water resistant. For very wet deployments, such as those in high flood risk areas, additional protection is required and is the responsibility of the user.

1a. Pump setup

If you wish to use pump mode to collect samples:

1. Screw the pump electrical lead into the circular threaded port at the top-centre of Syp's rear panel
2. Push hose tightly onto the fitting on the top panel of the device.
    a. Ensure hose / lead placement facilitates liquid flow – avoid kinks or excessive directly vertical configurations.
    b. If necessary, set up a funnel or reservoir to ensure sample liquid feeds into the device. Determined by field conditions.
3. Configure operation via Syp webapp (described later)

1b. Gravity setup

If you wish to use either gravity-operated mode to collect samples:

1. Push hose tightly onto the fitting on the top panel of the device.
    a. Ensure hose / lead placement facilitates liquid flow – avoid kinks or excessive directly vertical configurations.
    b. If necessary, set up a funnel or reservoir to ensure sample liquid feeds into the device. Determined by field conditions.
2. Configure operation via Syp webapp (described later)

For gravity-reliant modes, ensure there is sufficient pressure ("hydraulic head") to drive flow to vials by gravity alone. Kinks or dips in tubing will cause operating issues.

Step 3: Software configuration

1. Connect to the Syp app

The Syp fluid sampler can be configured via a web application from any smart device.

1. Press the ‘Sample / reset’ button to turn on the Syp fluid sampler
2. From any smart device, connect to the ‘Syp fluid sampler’ WiFi network
3. Scan the below QR code or navigate to **192.168.4.1** in your web browser.
    a. Google Chrome is recommended.

2. Choose your settings & start

You will land on the Syp fluid sampler Status page. To configure your device,

1. Press the ‘Menu’ button at the bottom of the page to navigate to the main menu
2. Press the ‘Settings’ button at the top of the page to navigate to the Settings menu
3. Choose your preferred Mode, Diagnostics, Start Trigger and Sample Settings.
    a. See the Syp User Manual for detailed guidance
4. Press the ‘Submit’ button
5. Press ‘Back’ button to navigate back to the menu
6. Press ‘Back button again to navigate to the main Status page
7. Enter the carousel position for your first sample (if other than 1)
8. Press ‘Start’ to begin sampling according to your settings

A detailed explanation of the Syp fluid sampler’s features and functions can be found in the Syp User Manual. Alternatively, contact us at info@waikatoscientific.com for support.