

Mya 4 Reaction Station

One reaction station with
limitless possibilities

- 4 independent zones
- Magnetic and overhead stirring
- -30 °C to +180 °C
- 2 ml to 400 ml
- Software control

Discovery
Package



Let Daisy introduce
our Mya 4 Video

www.radleys.com/mya4



Mya 4 - Key Features

A 4-zone reaction station offering safe and precise heating, active cooling, software control and data-logging for 24/7 unattended chemistry

-30°C **180°C**

Temperature -30 °C to +180 °C

- Independent control of each zone
 - Block or solution control
 - Pt100 temperature probes

Wide range of vessels from 2 ml to 400 ml

- Vials, tubes, round bottom flasks and process vessels

Reflux Head

- Water-cooled
- Efficient refluxing
- Even distribution of inert gas

Up to 200 °C difference in adjacent zones

- High performance insulation minimises zone cross-talk

Excellent visibility

- Easily view your vessel contents

Cool to -25 °C with tap water

- No need for a separate chiller
- Powerful Peltier technology provides rapid cooling

Magnetic stirring from 100 to 1000 rpm

- Control each position independently

Space saving

- Compact benchtop footprint
- Less space than 4 separate reaction set-ups

Touch-screen Control Pad

- Supplied as standard
- Intuitive and easy to use
- Set automated profiles or use manual control

Single or multi-user operation

- Control heating/cooling and stirring of each zone independently

Optional PC Control Software

- Integrate and control 3rd party devices such as pumps, balances and pH sensors

Mya 4 - Overview

A flexible discovery tool for single or parallel synthesis; lead or reaction optimisation; reagent, catalyst and solvent screening



Applications

- ✓ Single or parallel synthesis
- ✓ Lead optimisation
- ✓ Reaction optimisation
- ✓ Reagent, catalyst and solvent screening
- ✓ Design of Experiment (DoE)
- ✓ Process development
- ✓ Scale up
- ✓ Route scouting
- ✓ Crystallisation studies
- ✓ Polymorph screening

Flexible and versatile

- 4 different zones, each with heating and active cooling
- Use one compact system for a range of experiments
- Accepts a wide range of vessel sizes and styles
- Control your experiments and log results automatically

Safer, cleaner, greener and more productive

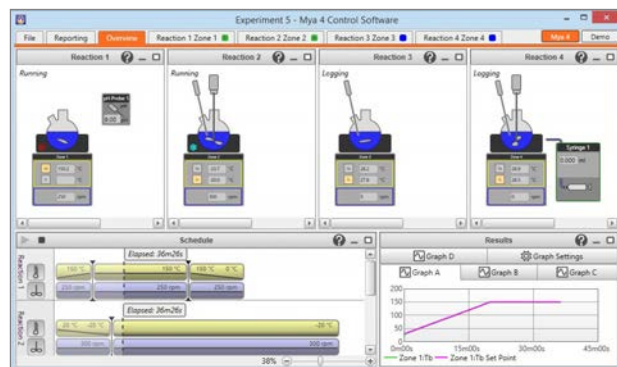
- Replace inefficient, messy and unsafe oil and ice baths
- Save space compared with separate reaction set-ups
- Software control improves safety, reduces manual errors, and allows 24/7 unattended chemistry, for improved productivity
- Create, repeat and share experiments and results with ease and accuracy
- Easily manage complex multi-step and multi-device experiments
- Integrate 3rd party devices such as pumps, balances and pH sensors etc.



Touch-screen Control Pad



Optional PC Control Software



Mya 4 - Details

One flexible reaction station to meet all of your needs. Choose from a wide selection of vials, tubes, round bottom flasks and process vessels, from 2 ml to 400 ml



4 reaction zones

- Use 1, 2, 3 or 4 zones
- Operate zones in parallel or individually by multiple users
- Removable anodised aluminium inserts for different size vessels

Wide selection of vessel styles and volumes

- Vials and tubes from 2 ml to 50 ml:
 - 12 mm, 16 mm, 17 mm, 17 mm tapered, 24 mm, 1 inch and 28 mm diameters
 - Radleys Carousel 12 Plus reaction tubes
- Round bottom flasks from the Carousel 6 Plus range:
 - 25 ml, 50 ml, 100 ml and 250 ml
 - One or two side arm options
 - Standard and wide neck options
 - Baffled vessel options
- Process reaction vessels:
 - With straight sides and dished base to mimic jacketed reactors
 - 50 ml, 100 ml, 150 ml, 250 ml and 400 ml
 - Side arm option
 - Baffled vessel options
- Multi-neck glass lids - 3 or 5-neck
 - For wide neck round bottom flasks and process vessels
- Accessory glassware
 - Condensers, dropping funnels, solid addition funnels, stoppers etc.



Precise temperature control

- Temperature range from -30 °C to +180 °C
- Up to 200 °C difference between adjacent positions
- Control the temperature of each zone independently
- Choose to control by block or solution temperature
- Pt100 temperature probes available in stainless steel or PTFE coated

Use Mya 4 with or without a chiller

- Mya 4 uses powerful Peltier technology to provide rapid cooling to -30 °C
- Peltier cells require tap or chilled water to dissipate heat



Peltier cooling source	Tap water at 15 °C	Chilled water at 5 °C
Minimum block temperature	-25 °C	-30 °C
Minimum solution temperature	-20 °C	-25 °C

Magnetic or optional overhead stirring

- Integrated magnetic stirring - from 100 to 1000 rpm
- Optional overhead stirring - from 100 to 1000 rpm
- Control the stirring speed of each position independently
- Use magnetic or overhead stirring in adjacent zones



Mya 4 - Control Options

Take control of your chemistry with 24/7 unattended software control for improved productivity, safety and reduced manual errors

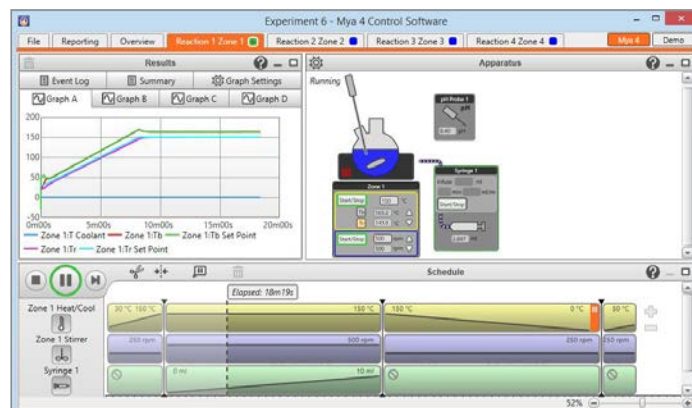
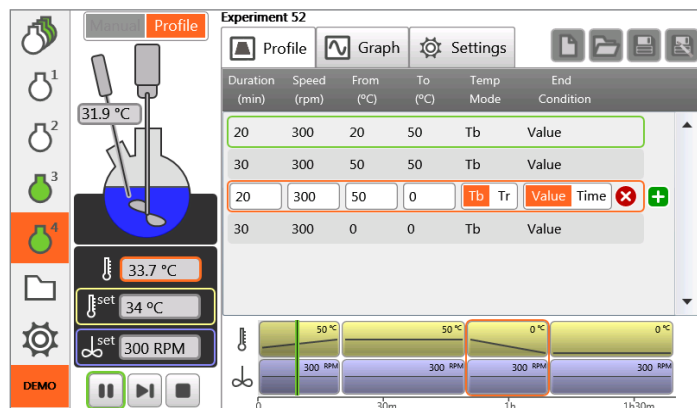
Touch-screen Control Pad

- Supplied as standard with Mya 4
- Intuitive and easy to use
- Compact footprint
- Set automated profiles or use manual control



PC Control Software - optional

- Integrate and control 3rd party devices
- Create complex experiments with any number of steps
- Report Wizard creates reports in rich text format or export results in CSV



Control Options

Features	Touch-screen Control Pad	PC Control Software
Touch-screen Control Pad is supplied as standard with Mya 4	Included	Optional
Intuitive and easy to use touch-screen control	✓	✗
Compact footprint - fumehood compatible	✓	✗
Maximum 10 steps of 16 hours each	✓	✗
Multi-user - independently run experiment in 4 zones	✓	✗
Control and log the temperature and stirring of each zone independently	✓	✓
Set safety limits	✓	✓
Export experimental profiles and results in CSV via USB memory stick	✓	✓
Adjust parameters manually - using manual/direct mode	✓	✓
Create multi-step recipes - using profile/schedule mode	✓	✓
Flexibility to make and track on-the-fly adjustments to your experiment	✓	✓
Automatically log all data	✓	✓
Share experimental results and recipes with other users	✓	✓
View real-time graphs	✓	✓
Control and log up to 16 x 3rd party devices on one screen	✗	✓
Create complex experiments with any number of steps	✗	✓
Interlink devices and set feedback/control loops and end point conditions	✗	✓
Report Wizard creates detailed reports in RTF or export results in CSV	✗	✓
Log comments	✗	✓
Runs on a Windows laptop	✗	✓

Control 3rd party devices

PC Control Software will control and log the following 3rd party devices:

- Syringe Pumps
- pH Sensors
- Peristaltic Pumps
- Balances
- Vacuum Pumps
- Gas Flow Controllers
- Pressure Sensors
- Conductivity Sensors

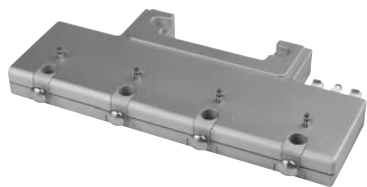
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How to order a Mya 4 Discovery Package

1. Select reflux head



2. Select vessel style



3. Select standard or wide neck reflux tubes and Easy-On caps



4. Select inserts



5. Select accessories



6. Select magnetic stirring bars



7. Optional - Select PC control software



Mya 4 - Discovery Package

Choose the reflux head for integrated reflux cooling; combines well with magnetic stirring; ideal for use with round bottom flasks

Discovery Package for:

- ✓ Lead optimisation
- ✓ Single or parallel synthesis
- ✓ Reaction optimisation
- ✓ Reagent, catalyst & solvent screening
- ✓ Crystallisation studies



Mya 4 - Process Package

Choose the manifold head for use with glass condensers, overhead stirrers and process vessels; ideal for mimicking jacketed reactors

Process Package for:

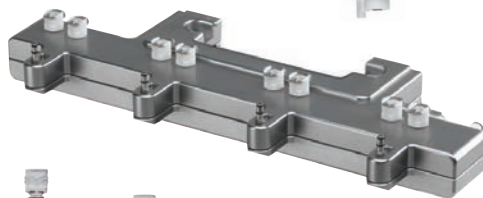
- ✓ Process development
- ✓ Design of Experiment (DoE)
- ✓ Polymorph screening
- ✓ Crystallisation studies
- ✓ Route scouting



Alternative
PROCESS
Set-up



Mya Compact Stirrers



Manifold Head



How to order a Mya 4 Process Package

1. Select manifold head



2. Select vessel style



3. Select a multi-neck lid & condenser



4. Select inserts



5. Select accessories



6. Select overhead stirrer and paddle



7. Optional - Select PC control software



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