

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

Process
Set-up



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



Wide range of vessels from 2 ml to 400 ml

- Vials, tubes, round bottom flasks and process vessels

Temperature -30 °C to +180 °C

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



Mya Compact Stirrer

- Stirs from 100 to 1000 rpm
- Control each position independently
- Powerful, high torque motor
- Tool-free attachment

Manifold Head

- Distributes water for condensers
- Distributes gas for inerting

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 process development tool for design of experiment, scale up, reaction optimisation, and crystallisation studies



Applications

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

Flexible and versatile

- 4 different temperature 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

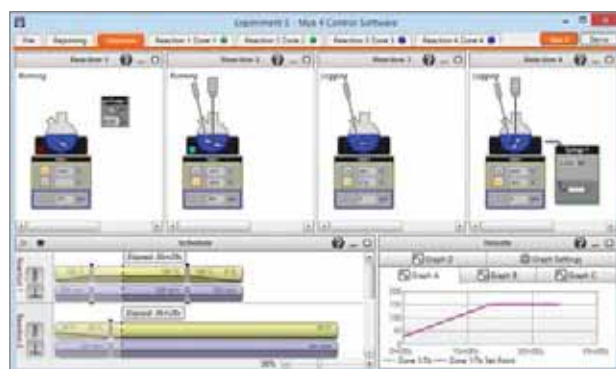
- Replace inefficient, messy and unsafe oil and ice baths
- Save space compared with separate reaction set-ups
- Software control improves safety, reduces manual errors, and allows 24/7 unattended chemistry, for improved productivity
- Create, repeat and share experiments and results with ease and accuracy
- 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

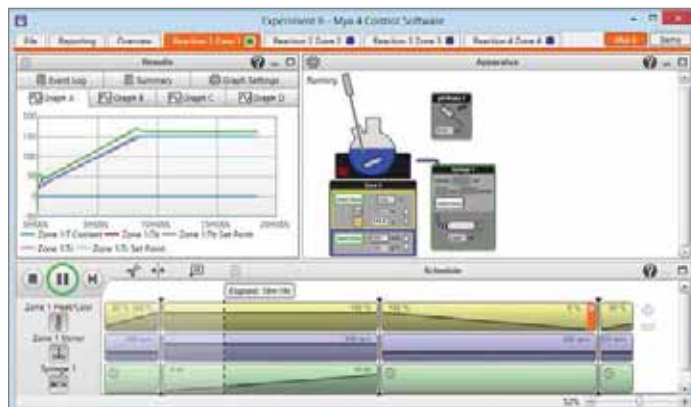
Touch-screen Control Pad

- 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

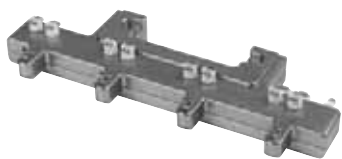
Let Daisy introduce our Mya 4 Video

www.radleys.com/mya4



How to order a Mya 4 Process Set-up

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



Mya 4 - Process Set-up

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

Process Set-up for:

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



Mya 4 - Discovery Set-up

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

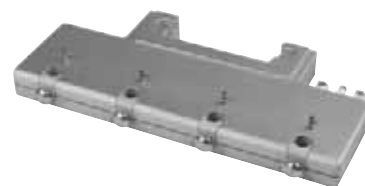
Discovery Set-up for:

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



How to order a Mya 4 Discovery Set-up

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



World leaders in innovative productivity tools for chemists

Radleys provide innovative chemistry equipment for safer, cleaner, greener and more productive chemical research.

We have been manufacturing scientific glassware and laboratory instruments for over 50 years and our customers include leading blue-chip industrial and academic research facilities around the world. Our areas of expertise are equipment for chemical synthesis, process development, work-up and evaporation.

Visit www.radleys.com to see our full range of chemistry productivity tools.



International Product Guide

Innovative tools for chemical synthesis, process development, work-up and evaporation.



Carousel 12 Plus

Simultaneously heats/cools, stirs and refluxes multiple samples under an inert atmosphere.



Reactor-Ready Lab Reactors

Innovative, patented, low cost, reaction work stations for glass vessels from 100 ml to 5 litres.



AVA Lab Control Software

Control and log multiple devices including stirrers, circulators, balances, pumps and temperature sensors.



Findenser SUPER Air Condenser

Replaces water-cooled condensers in over 95% of common chemistry applications.



Carousel 6 Plus

Simultaneously heats/cools, stirs and refluxes multiple samples under an inert atmosphere.

 **IGZ Instruments**
smart solutions & service

IGZ Instruments AG Tel. +41 44 456 33 33
Rüffelstrasse 32 Fax +41 44 456 33 30
CH-8045 Zürich www.igz.ch igz@igz.ch



www.radleys.com

Shire Hill, Saffron Walden,
Essex, CB11 3AZ, United Kingdom.
t: +44 1799 513320
f: +44 1799 513283
e: sales@radleys.co.uk