myra
Liquid Handling System

Performance | Size | Simplicity

bms
bio molecular systems

Open your eyes to new possibilities

The world's first liquid handling system that can see

Simplicity

Setup - Run - Analyse

Myra introduces a perfectly seamless workflow between the Myra liquid handling system and Mic qPCR cycler.

One setup only – configure your Mic qPCR run, tell Myra where your tubes are and watch Myra do the pipetting for you. Run files for Mic are automatically generated at the end so no need to export or import sample names, assays, thermal profiles or analysis settings.
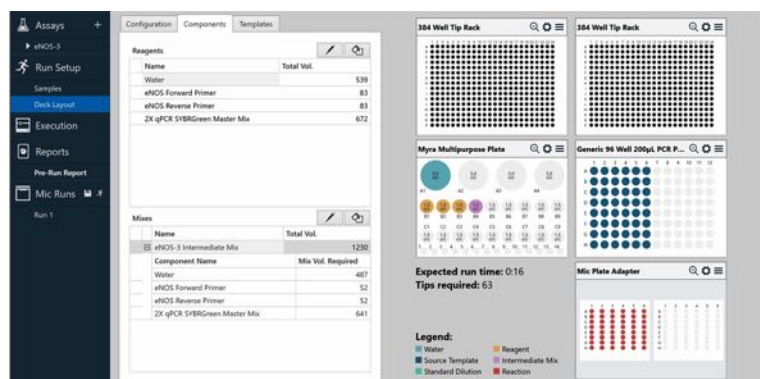
It's now even easier to setup experiments for multiple Mic cyclers using a single Myra liquid handling system. Then complete your analysis by combining all of your runs together using Mic's powerful Project analysis software.


Size

At only 10 kg and with a footprint of less than 1700 cm² Myra is half the size of other in class liquid handling systems. Myra comes complete with UV LED lights and a compact HEPA filter to ensure the cleanest possible qPCR setup environment.

Pain-free calibration

With an integrated miniature camera and advanced vision technology, calibration of plasticware on Myra couldn't be simpler. Simply show Myra the centre of your well and calibration is complete. No more sticking your head under the hood and eye balling the pipette tip positions. Myra does it all for you.
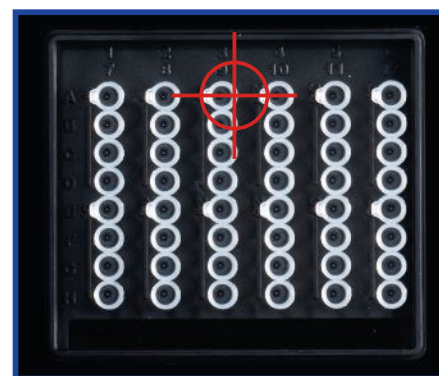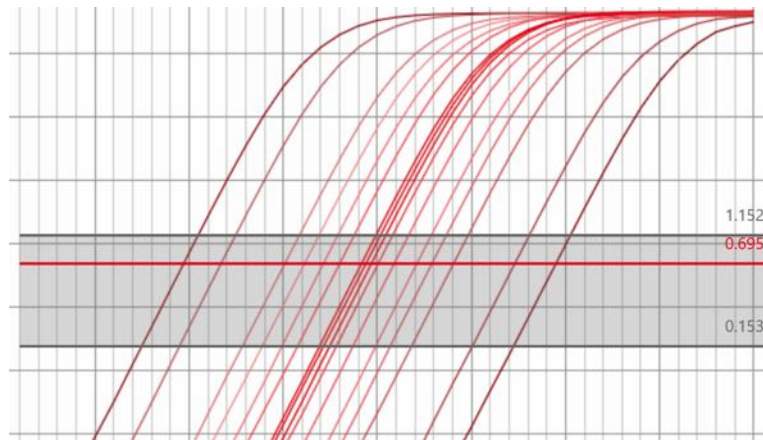
Performance

Pipetting System

Best in class accuracy and precision of < 10% for 1 µL pipetting volumes. Myra will pipette even the smallest volumes reliably and consistently day-in, day-out.   Combine this with a robust pipette head design optimised for multi-dispense and tip-reuse and your plates are loaded faster than you ever thought possible.


Perfecting the Art of Precision, Accuracy and Uniformity.
A complex pattern of various dilution factors from 10 fold to as low as 1.2 fold, all achieved from the one Myra setup and Mic run.

Myra's pipette head is designed to be easily interchange-able. Easily send your head away for annual calibration to ensure your samples are always pipetted accurately. The design incorporates high precision pipette tip positioning for small aperture tubes such as 384 well plates and Mic tubes. Together with the integrated camera calibration system you can be assured Myra will always pipette inside even the smallest wells.

State of the art technology

Myra has been designed using the latest state of the art technology.   With advanced motion control systems, integrated camera and pipette monitoring systems Myra will ensure only the best results every time.

Designed directly into Myra's pipette head is a miniature pressure sensor, enabling both liquid level sensing using conventional tips as well as real time monitoring of aspirate and dispense process for errors. Be confident that all samples have been pipetted exactly as you need them.
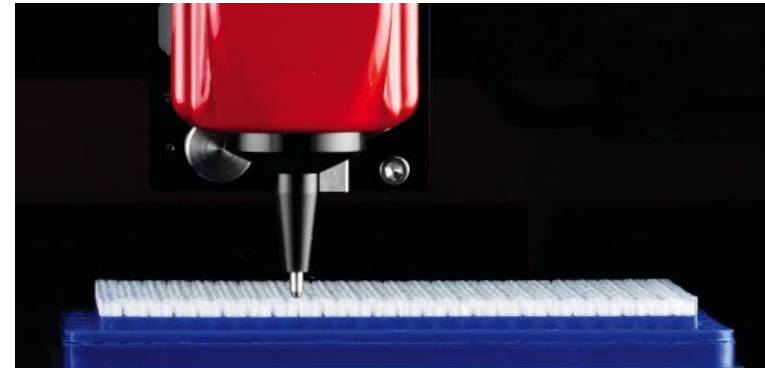
Future Proof

It doesn't stop here. Myra has been designed for easy upgradeability. Future developments will enhance Myra's vision system to make your job even easier.

Specifications

460 mm

360 mm

310 mm (610 mm lid open)

Performance	Position control	Closed loop, 100 μm resolution
	Level detection type	Pressure sensing
	Calibration	High precision camera
	Strategy	Single or multi-dispense

Communication	Connection type	USB 2.0
	Min. PC requirements	Intel Core i3 or equivalent 4 GB RAM, 5 GB disk space 1366 x 768 display

Environment	Temperature range	18 - 30°C
	Humidity range	30 - 80%

Pipette	Volume	1 - 50 μL	
	Tips per rack	384	
	Precision	1 μL	< 10% CV
		2 - 50 μL	< 1% CV
	Accuracy	1 μL	< 10%
		2 - 50 μL	< 1%

Contamination control	Tip disposal	Internal enclosed waste tub
	UV decontamination	High intensity 70 mW 280 nm UV LED
	HEPA air filtration	99.98% at 0.3 μm