

RI

 | Integra 3™



The definitive micromanipulator



Integra 3™

The world's most advanced micromanipulation system

Integra 3™
*Inspired
Intelligent
Indispensable*

No Cold Spots

Thermosafe™ maintains sample temperature with a gentle stream of warm air under the Petri dish

Practical

Motion sensor LED light underneath the stage for improved visibility when changing objectives

Integrated

Bigger built-in mechanical XY stage and controllers with easy access buttons and touch screen space

Super-fast

Improved rapid micropipette set-up with one-step angle adjustment

Safe

Stage temperature control status indicator light and alarm monitors every second of the process

Accurate

New extra fine XY mechanism for smooth and precise movement of the stage

THERMAL IMAGES TAKEN WITH 40X OBJECTIVE IN PLACE ON AN INVERTED MICROSCOPE

43.0°C

43

42

41

40

39

38

37

36

35

34

33

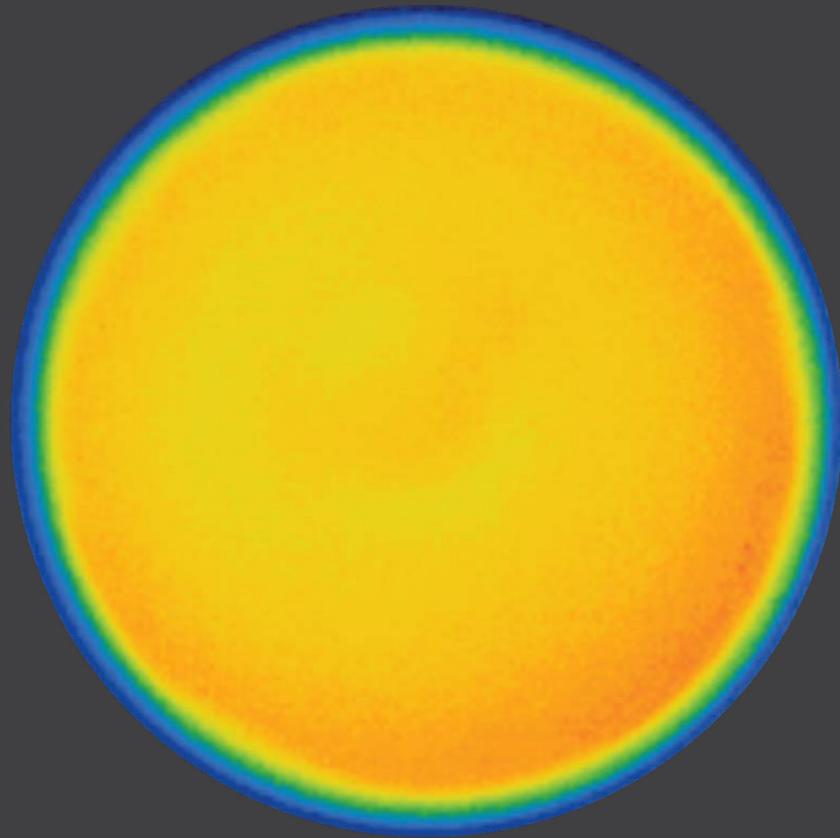
32

31

30

29

28.0°C



Ultimate Thermal Control

Thermal image of dish surface when placed on heated metal plate with **Thermosafe™**



Integra 3™

Featuring

Thermosafe™

Ultimate Thermal Control for Integra 3™

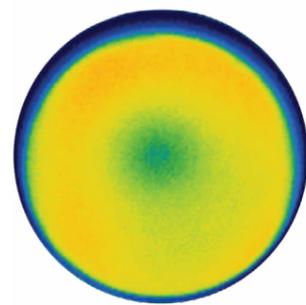
Designed for making life

Every detail of the Integra 3™ is geared towards one goal – to ensure you create the best possible conditions for ICSI and sample manipulation. One feature that makes this possible is our new and world-leading Thermosafe™ warm-air technology.

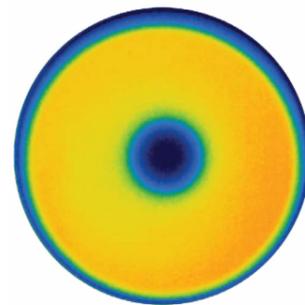
Put simply, this is an integral heating system that helps to keep samples at the optimum temperature. It emits warm air towards the Petri dish precisely and uniformly. The result of this is a fail-safe guarantee, with no more cold spots, no more hot spots and no more ambiguity. There is also a stage temperature health indicator light to reassure you that the integrated heated stage is functioning correctly.

Comparison with other systems

Thermal images, above and below, display the cooling effect of the objective in the centre of the dish with and without Thermosafe™



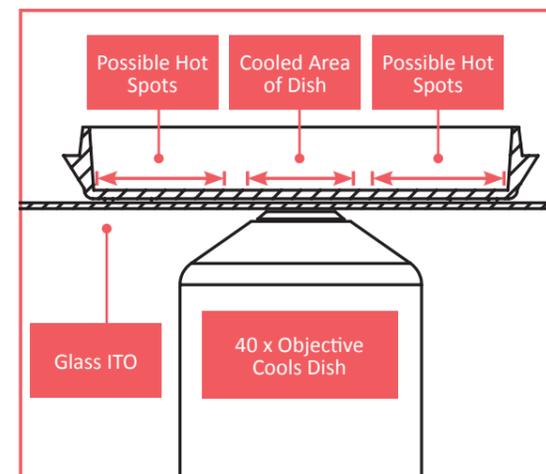
Dish surface when placed on market leading glass ITO **without Thermosafe™**



Dish surface when placed on heated metal plate **without Thermosafe™**

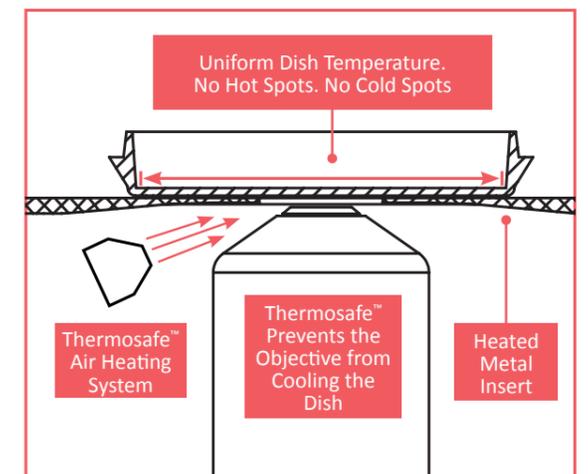
Without Thermosafe™

Market leading glass ITO insert with objective



With Thermosafe™

RI heated metal insert with Thermosafe™ air heating system with objective





Integra 3™



Integra 3™ takes micromanipulation to new heights

You push the boundaries. We try to remove them. Together, we're a pretty good team because we both believe in a pioneering approach. Integra 3™ is the latest evidence of our relentless desire at Research Instruments (RI) to maximise your expertise and make your day go as smoothly and successfully as possible.

Temperature is critical, but time is also crucial. Integra 3™ is ultra-responsive and effortlessly smooth, so it's quick and easy to use, thanks to RI's advanced mechanical design. You can change micropipettes in seconds which can transform the efficiency of your lab overnight.

We have increased the size of the integrated heated stage by 40% but kept the footprint to a minimum to keep your work area uncluttered.

More giant steps in the world of micromanipulation

We've added a whole spectrum of other functions and features that improve on our previous model, the Integra Ti™. You'll find they all add up to making the Integra 3™ the most intuitive and natural micromanipulation system the world has ever known.

Motion-triggered LED light

This shines up underneath the stage as soon as it sees your hand, to help you see when changing objectives.

Colour touch screen

A 100 x 50mm liquid crystal display can check temperature, track time with a stopwatch and count the number of injections done. The electronic height gauges track the vertical movement of the fine controller.

Precise and intuitive control

When you perform ART micromanipulation procedures, accuracy is paramount. Integra 3™ offers the finest possible movement on the XYM stage and fine and coarse levers, centring knobs and a choice of oil or air syringes for the control of specimens.



Integra 3™ Touch Screen



SAS-SE Air Syringe

SOS Oil Syringe

SAS Air Syringe

Precise and Intuitive Control

Quick Pipette Set-up

Motion Triggered LED Light

Shortcut Functions

Shortcut video and images

If you need to keep track of samples or procedures, just hit the shortcut buttons to film or photograph any stage of the process. There's a stopwatch to keep track of timings too.

RI Viewer™ software

You can use the Integra 3™ as a stand-alone machine, or if it's connected to a computer, we can supply the RI Viewer™ software. With RI Viewer™ you can use the shortcut keys and sync up with Saturn™ laser and IMSI systems. Enjoy razor-sharp full screen imaging from the microscope, with digital magnification and a modern, clean user interface. It also offers line measurement tools and a built in simulator for training and demonstration purposes.

Syringes

The Integra 3™ includes two of our SAS air syringes as standard. These syringes offer superb control and eliminate the need for oil. Also available is the SAS-SE for superfine air control or our SOS oil syringe with a quick fill feature for minimum set-up time.



Great British Biotech Quality, since 1962

The Integra 3™ is very proudly built at our high-tech factory in the South West of Britain. We've made thousands of micromanipulators since the early sixties, each one assembled under the dutiful eye of the designers who developed them.

Our commitment to quality, durability and reliability has been there since day one. This is why our Integra™ has proven to be the micromanipulator of choice for ART clinics worldwide.

Microscope Compatibility

Nikon

TMD, D200 / 300
TE2000, Ti

Leica

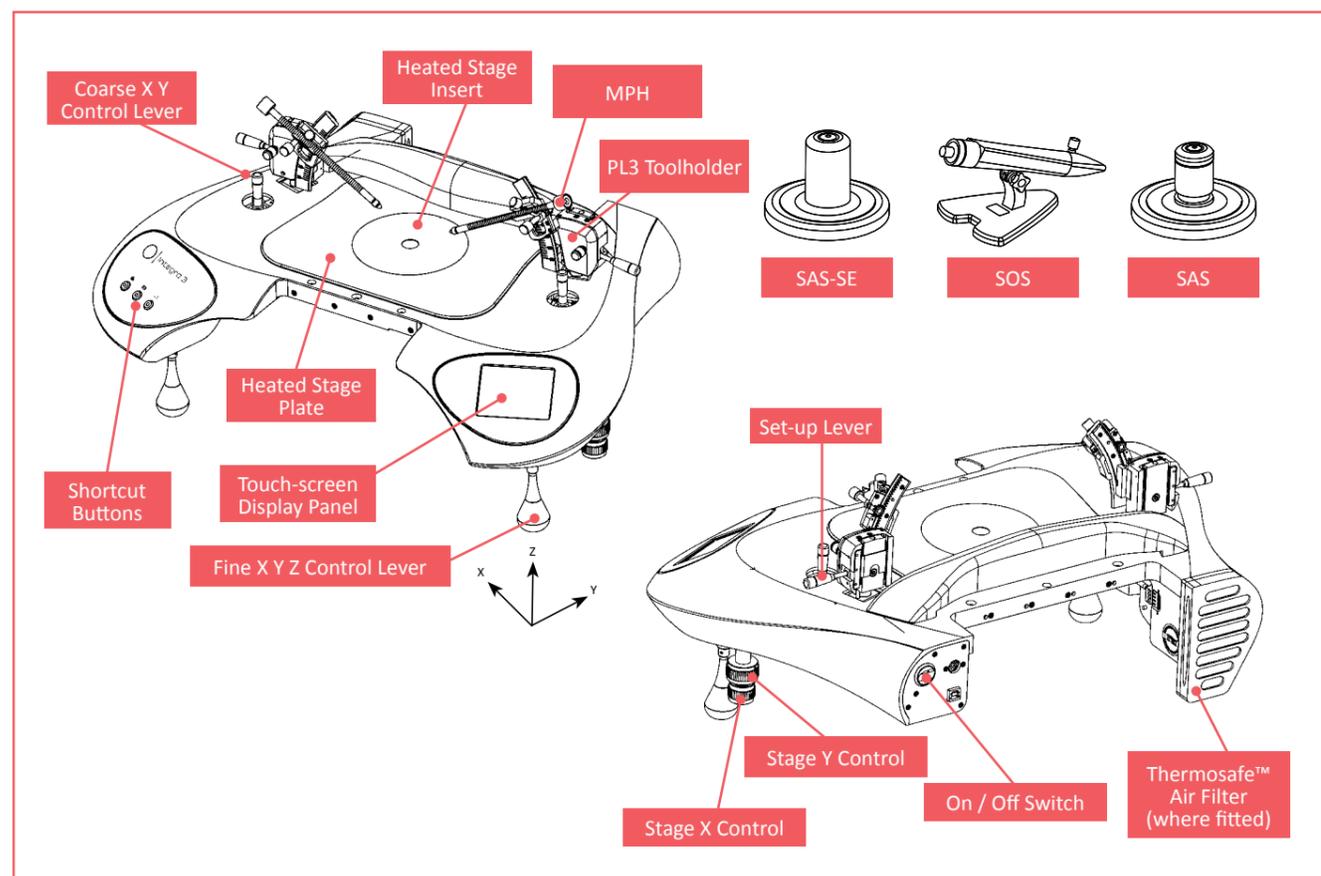
DMIRB, DMI3000B / 4000B / 6000B
DMIL

Olympus

IMT2, IX50 / 70,
IX51 / 71/81, IX53 / 73 / 83

Zeiss

Axiovert 40 / 100 / 200
Observer, Axiovert A1



<i>Manipulators Fine Control</i>	X, Y and Z movement from one lever (X = side to side, Y = front to back, Z = up and down) Sub-micron resolution 1.0mm Adjustable X and Y travel, 5mm Z travel
<i>Manipulators Coarse Control</i>	X and Y movement, 10 micron resolution, 4mm X and Y travel
<i>Toolholders</i>	Fast pipette location Pipette angle adjustment - 16 to 40 degrees
<i>Heating System</i>	Thermosafe Air Heating System with: Heated Metal Insert: 16mm (standard) 25mm (optional) ITO Heated Glass Insert (optional)
<i>Temperature Controller</i>	Accuracy: stability better than $\pm 0.1^{\circ}\text{C}$ when calibrated against known reference Resolution: 0.1°C
<i>Displays</i>	LCD touch screen displays for temperature control
<i>Connectivity</i>	USB Type B socket for connection to PC running RI Viewer™ software. Refer to software manual for further information Connected PC to be compliant with IEC 60950-1
<i>XY stage</i>	Aluminium heated stage plate 40mm travel in X and Y, 28mm per turn
<i>Syringes</i>	Choice of SAS (air), SAS-SE (air) and SOS (oil)
<i>Weight</i>	Maximum weight of microscope mounted components (excluding front and rear adaptors): 10.4kg Actual weight is configuration dependent
<i>Dimensions</i>	Footprint (not including microscope): width 56cm, depth 38cm
<i>Power supply</i>	Input: 100-240VAC, 50-60Hz, Max. 1.8A, Class I Output: 12VDC, Min. 11A (132W)
<i>Operating Range</i>	Temperature: 15°C (59°F) to 40°C (104°F) Humidity: 15% to 85% RH (non condensing)

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