



Productive Pipetting From 1 To 384 Channels



Have you ever had a sore wrist from repeatedly hammering on universal pipette tips, or had your experiment wrecked by loose or leaking tips?

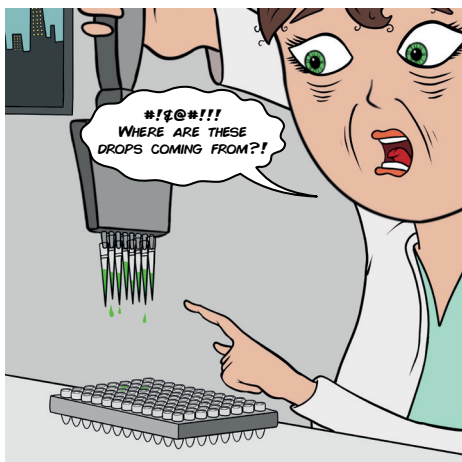
UNIVERSAL TIPS CAN BE A REAL PAIN IN THE...



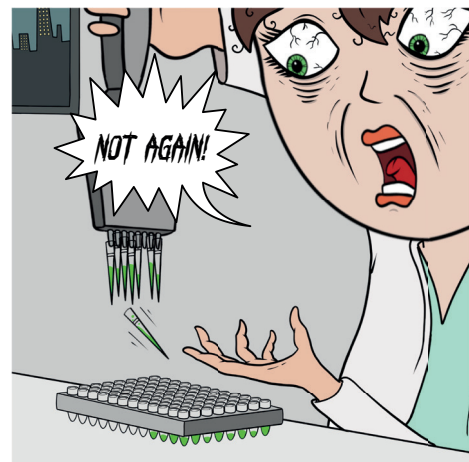
CONSTANT HAMMERING OF TIPS CAN LEAD TO RSI



...UNIVERSAL TIPS CAUSE TIP MISALIGNMENT WHICH LEADS TO...



...LOOSE AND LEAKING TIPS



NOT GOOD FOR SCIENCE



SCIENCE IS HARD ENOUGH WITHOUT PIPETTING PROBLEMS!



**That's why we developed GripTip pipette tips, so that scientists like Tina
- the star of our comic strip - can get the results that they deserve!**



The problems and misery that universal pipette tips have caused Tina are all too familiar to scientists working at the bench...

One size doesn't fit all

Universal pipette tips are designed to fit pipettes from multiple manufacturers, and often require users to hammer on the tips, resulting in a suboptimal fit. Before you know it, your tips are loose, leaking or, worse still, falling off, ruining your results and your day.

The perfect connection

INTEGRA GripTips are designed to offer a perfect fit on all of our pipettes, effortlessly snapping onto the tip fittings. The unique design prevents over tightening, and offers low attachment and ejection forces, ensuring that all tips are at the same height for perfect alignment and seal. So, you can stop worrying about loose, leaking or falling off tips and focus on your science!

SET VOLUMES IN THE BLINK OF AN EYE INSTEAD OF A TWIST OF THE WRIST!

Three quick set dials to change volumes faster and easier than conventional manual pipettes

An ultra light and well-balanced design for unrivalled ergonomics



EVOLVE

Manual Pipettes

**Want a more efficient pipetting solution?
We've got exactly what you need.**

Traditional pipettes use a single rotating plunger to set volumes, which can make frequent volume changes tedious. INTEGRA's revolutionary **EVOLVE** manual pipette is here to change that.

- Three adjustable quick set dials for rapid volume changes, and to prevent volume drift while pipetting
- GripTips securely attach and perfectly align to the EVOLVE, removing the risk of tips leaking or falling off

**Spend less time changing volumes and
more time getting results!**

1, 8, 12 and 16
channels available

0.2 to 5000 μ l
volume ranges

10x faster
volume adjusting



Check out
the **EVOLVE**
in action!

THE PERFECT PIPETTING SYSTEM



VIAFLO

Lightweight Electronic Pipettes

Monotonous manual pipetting getting you down? Problem solved.

Electronic pipettes can significantly improve your workflows and help you get amazing results, fast. And that's why we produced the **VIAFLO**.

- Simple-to-use, predefined pipetting protocols for the most common liquid handling applications
- Customizable multistep programs support specific tasks, including aspiration, repeat dispensing, mixing and more
- Lightweight design, perfect balance and unsurpassed operational comfort for both left- and right-handed users

Intuitive and productive, what's not to like?
Get your hands on the VIAFLO.

1, 8, 12 and 16
channels available

0.5 to 5000 μ l
volume ranges

Up to 40
user-defined programs



Check out
the **VIAFLO**
in action!

ARE YOU PIPETTING SAMPLES BETWEEN DIFFERENT LABWARE FORMATS?



VOYAGER

Automatic Adjustable Tip Spacing Pipettes

Changing sample volumes or formats? We've got you covered.

Individually transferring multiple samples from one labware format to another is a tedious and potentially error-prone task. But we've got just the thing for you – the **VOYAGER**.

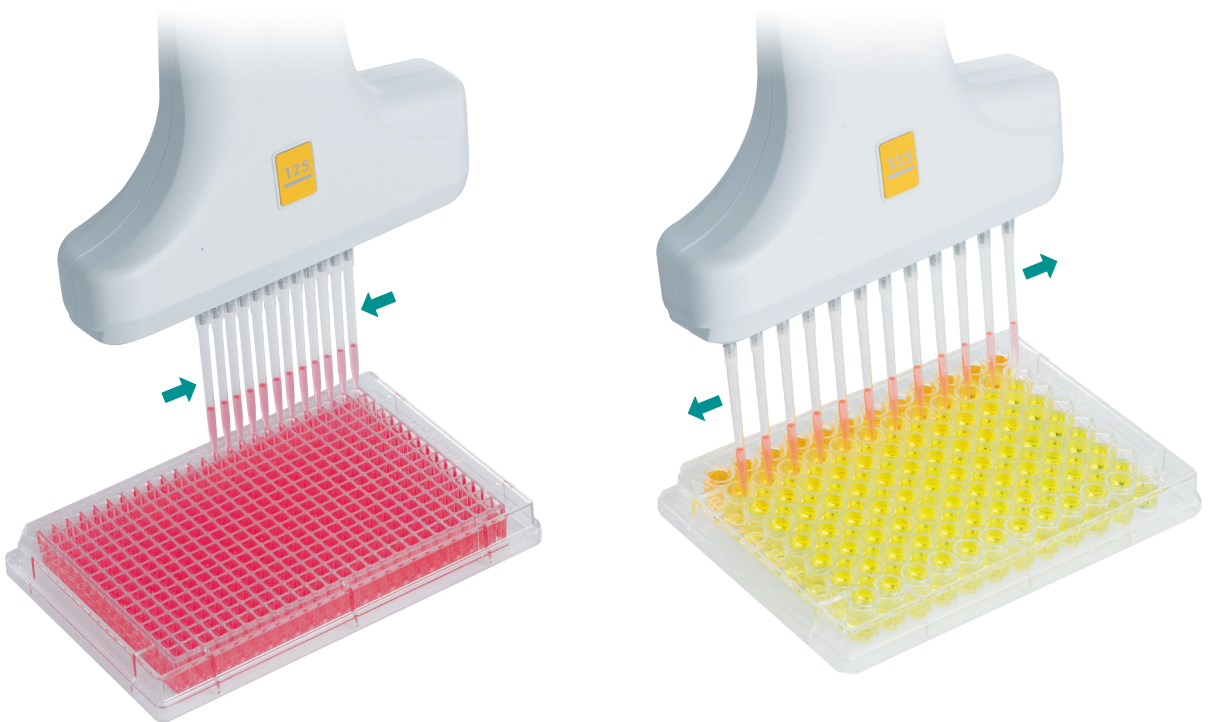
- Supports parallel pipetting between labware of different sizes and formats
- Transfers samples from 1.5 ml tubes to 96 well plates up to 12 times faster than single channel pipettes
- Boosts pipetting productivity and reduces pipetting errors

Save yourself hours of pipetting with the VOYAGER.

"I am very pleased with the VOYAGER, we've had it for several years and it is very robust. It is something that everybody loves and it gets used a lot; it is so user friendly."



Professor Iris Lindberg
University of Maryland Medical School



Transfer samples between different plate formats with ease, minimizing the chance of error and increasing productivity.

Let us solve your pipetting problems! The VOYAGER is your variable tip spacing solution.

Flexibility at your fingertips.

Why go back and forth between different labware with a single channel pipette when you could be using the **VOYAGER**?

- Unique design supports gel loading, plate reformatting, pipetting to and from tube racks, and cell plating
- Reduces the number of sample transfers and prevents the risk of developing repetitive strain injuries and introducing pipetting errors
- The perfect companion for a wide variety of genomic, proteomic and cell culture applications

Sounds too good to be true?
Give it a try and see for yourself.

4, 6, 8 and 12
channels available

0.5 to 1250 μ l
volume ranges

4.5 to 33 mm
adjustable tip spacing



Check out the
VOYAGER in
action!

Handheld Pipetting – Best Practices

1 Before You Start

Ensure Temperature Equilibrium

The pipette, tip and liquids need to be equilibrated to room temperature if the experiment allows.

Temperature differences lead to volume contraction or expansion of the air cushion inside the pipette tip and pipette which can negatively impact the accuracy and precision of the dispense.



2 How To Pipette

Maintain Consistent Pipette Angle

Whenever possible, hold the pipette at a consistent angle throughout the entire pipetting process. The angle should not exceed 20 degrees.

With changing the angle, the hydrostatic pressure inside the tip varies. As a result, the aspiration volume will be inaccurate.



How To Aspirate

It is best to immerse the pipette tips just below the liquid's surface (2-3 mm) to allow the desired volume to be aspirated.

Inserting the pipette tip too deeply increases the risk of liquid droplets clinging to the outside of the pipette tip. Liquid retained on the outside of the tip can result in an inaccurate dispense.



Touch Off After Dispense

After a dispense, use one of the following 3 methods to remove the pipette from the target vessel.

Back Wall Touch Off (Standard Method)

Remove the pipette tip by touching the back wall of the vessel. Remove the pipette tip by touching the back wall of the vessel. Remove the pipette tip by touching the back wall of the vessel.

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3 Optimizing Pipetting Performance

Pre-Wet

After loading tips onto your pipette, aspirate and dispense the nominal volume 3 times. This will equilibrate temperature differences and flush the dead air space inside the pipette and tip.

When neglecting the pre-wetting procedure, the first few dispenses tend to deliver less volume due to evaporation. The evaporation can also cause droplet formation on the tip and as vapor pressure increases and liquid is forced outside the tip.



Optimize The Volume Range

Air displacement pipettes show the best performance between 35 % and 100 % of the nominal volume.

Pipetting within the optimal volume range is less technique dependent and reduces user-related pipetting errors.



Discard First And Last Dispense

When dispensing multiple aliquots, it is recommended to discard the first and last dispense of the series.

These first dispenses should not be used for the assay because they contain the largest error. It is especially important to discard a last dispense as this dispense includes the accumulated error of all previous dispenses.



Pipetting Viscous Liquids

Viscous samples should be aspirated and dispensed at slower speeds and in "Reverse pipet" mode.

The small pipette tip-orifice and the elasticity of the air column prevent viscous samples from being aspirated and dispensed at fast speeds. Viscous liquids also adhere to the tip inside wall, making it difficult to completely empty the pipette tip. Reverse pipette mode aspirates the selected volume plus an extra dispense to compensate for the retained liquid. The extra dispense is discarded.

Pipetting Volatile Liquids

Pre-wet pipette tips to humidify the dead air space. Volatile solutions should be pipetted quickly and in "Reverse pipet" mode.

This minimizes evaporation. The reverse pipette mode incorporates a larger sample volume to minimize the effect of evaporation on the actual volume to be delivered.

Calibrate Based On Liquid Density

Significant pipetting errors can occur when liquids other than aqueous solutions are used. Recalibrate your pipette if the liquid has a considerably different density than water.

Pipettes are normally tested and calibrated at the factory with distilled water at room temperature. Pipetting liquids with different densities results in inaccurate dispenses.



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HANDHELD PIPETTING

Best Practices

Accurate pipetting is an important skill that is often overlooked by many labs, yet it is a vital part of your lab work and will help you to produce the best results. Make sure you and your lab are fully trained in pipetting best practices to maximize reliability and reduce the chance of pipetting errors.

Don't let pipetting errors ruin your results!
Follow pipetting best practices.



Get your poster, now!

YOUR PERSONAL PIPETTING ASSISTANT



ASSIST

Automated Multichannel Pipetting Robots

Want reproducible results? Meet your new lab partner.

Multichannel pipettes are invaluable for getting fantastically reproducible results and increased throughput in multiwell plates. We've made this even better. Here's the **ASSIST**.

- Significantly increase the reproducibility of all pipetting protocols, such as serial dilutions, plate filling and reagent additions
- Automatically carry out protocols for your desired application, reducing the risk of repetitive strain injuries
- Simply click in a VIAFLO electronic pipette for the perfect pipetting partnership

The compact and consistent lab companion.
Reliable results, every time.

8, 12 and 16
channels available

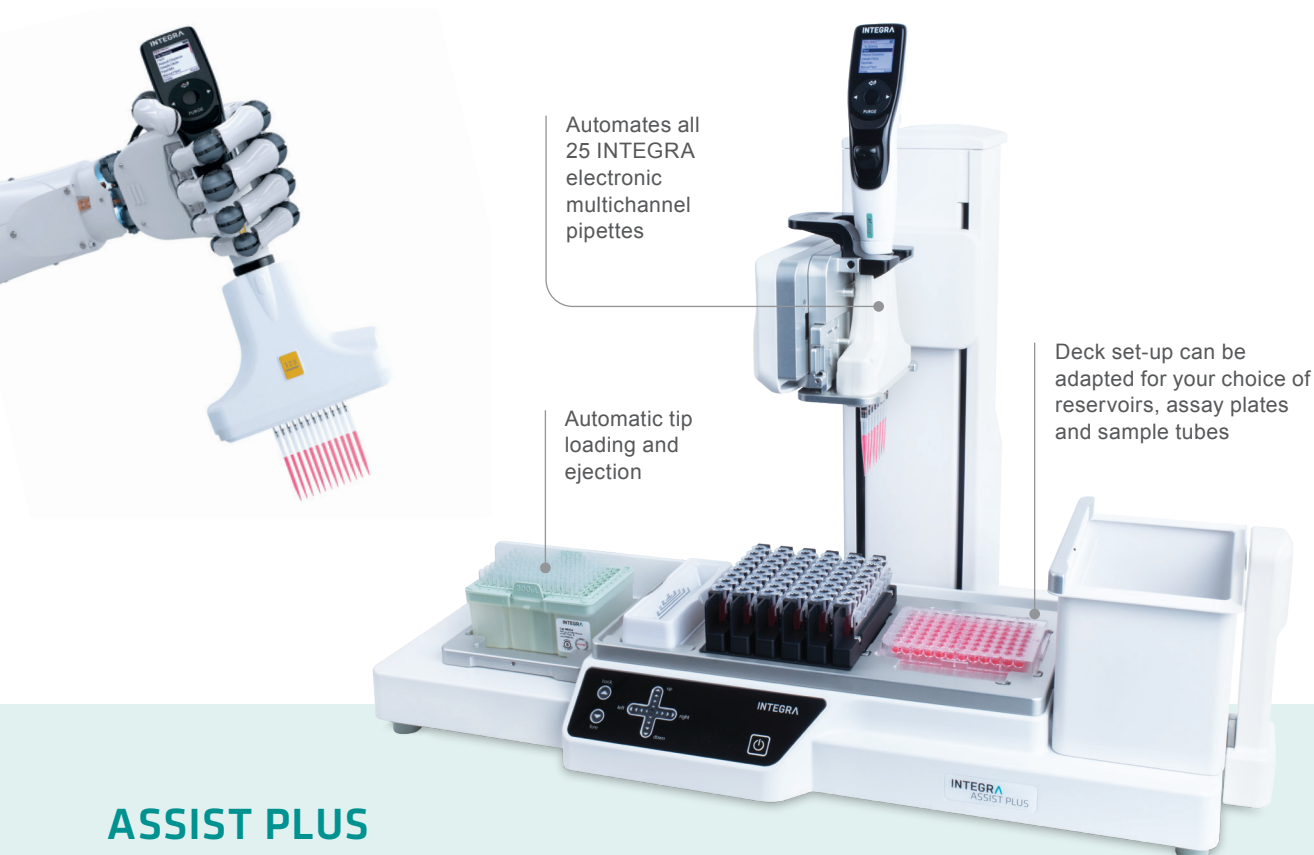
0.5 to 1250 μ l
volume ranges

6 to 384
well microplates



Check out
the **ASSIST**
in action!

YOU ARE NOT A ROBOT...SO DON'T ACT LIKE ONE FREE YOURSELF FROM ROUTINE PIPETTING



ASSIST PLUS

Automated Multichannel Pipetting Robots

**So much to do, so little time.
Time to automate your workflow.**

A pipetting robot is a considerable investment for many laboratories, but it doesn't have to be. We developed a solution – meet the **ASSIST PLUS**.

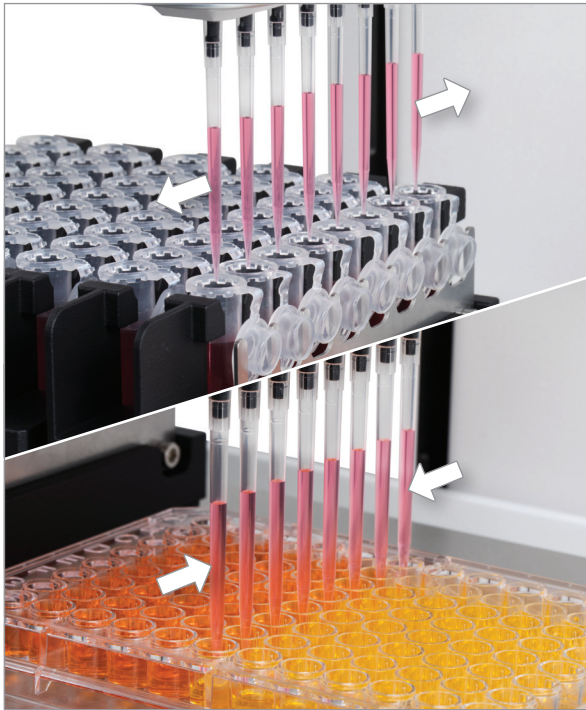
- Automation of electronic multichannel pipettes streamlines routine pipetting tasks for superior reproducibility
- This compact system increases both hands-free time and throughput
- Intuitive VIALAB pipette automation software simplifies program set-up

**ASSIST PLUS is the smallest and most affordable
pipetting robot to offer variable tip spacing!**

“The level of automation provided by the ASSIST PLUS has been hugely beneficial to our entire group, and it can be used in many applications within our workflow.”



Yvette Hoade
The Cancer Institute,
University College
London



Tube to plate reformatting at the press of a button, with INTEGRA's VOYAGER adjustable tip spacing pipette.



Choose any of INTEGRA's 25 electronic multichannel pipettes and click it into the ASSIST PLUS for exceptional workflow flexibility.

Equip the ASSIST PLUS with a VOYAGER pipette to enable tip spacing to be adjusted automatically!

With multiple pipetting options, you'll never look back.

- Exceptional flexibility at an affordable price
- Compatible with numerous labware types, including reservoirs, tubes and plates
- Provides access to new applications by using any of INTEGRA's 25 electronic multichannel pipettes

Excellent results and unmatched ergonomics – what are you waiting for?

- Processes increased sample numbers quickly and efficiently, streamlining lab work
- Enhances process control and increases workflow consistency by removing inter-operator variability and human error
- Eliminates the physical strain of manual pipetting, reducing the chance of repetitive strain injuries

4, 6, 8, 12 and 16
channels available

0.5 to 1250 µl
volume ranges

12 to 384
well microplates



Check out the
ASSIST PLUS
in action!

Go on, treat yourself – get the pipetting solution you deserve!

EASY, COMPACT AND AFFORDABLE



VIAFLO 96/384

Handheld Electronic Pipettes

Reached the limit of productivity with traditional pipettes? It's time for an upgrade.

Fully automated liquid handling robots are typically large and expensive, but we can increase your pipetting throughput without breaking the bank. Here's the **VIAFLO 96/384**.

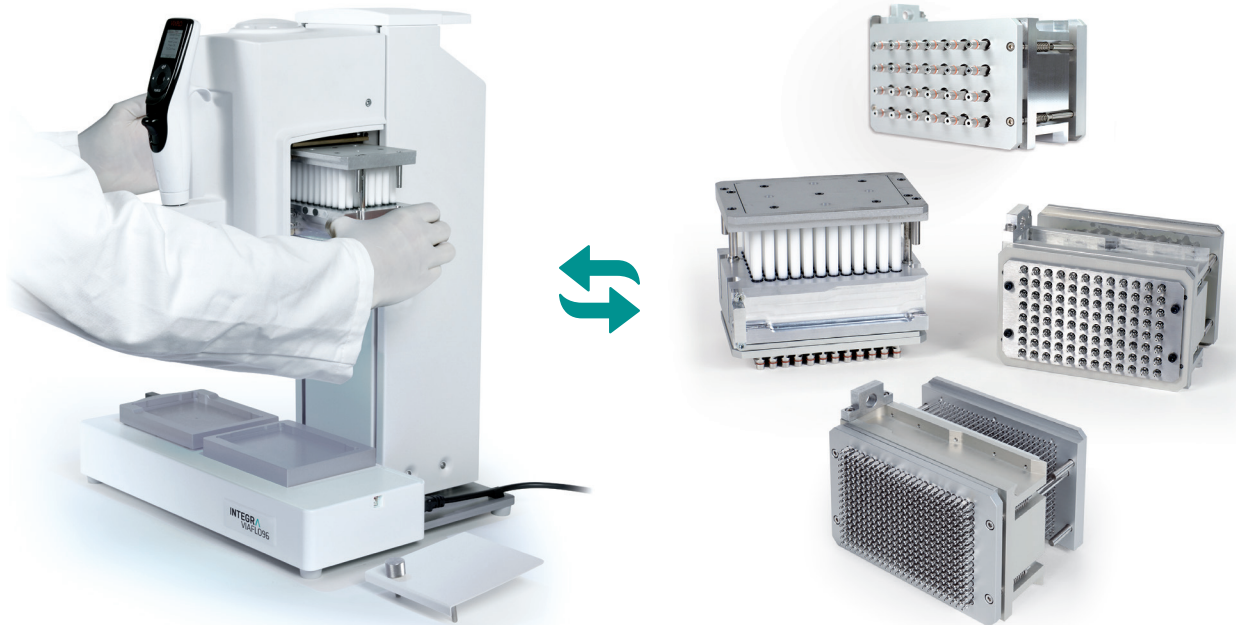
- Streamline routine pipetting tasks for superior reproducibility
- Transfer 24, 96 or 384 samples in a single step, significantly increasing throughput
- A fraction of the cost of larger, more complicated robots

Four times faster than an 8 channel electronic pipette for filling five 96 well plates.

“The VIAFLO 96/384 has significantly improved the accuracy and reproducibility of our pipetting; there is no human hand that can manually pipette into a 384 well plate with the same accuracy.”



Dr. Wissam Mansour
Anima Biotech,
Israel



Easily swap between up to 10 different pipetting heads to access different channels and volume ranges for multiple applications.

Minimal set-up time for standard pipetting tasks such as plate to plate transfers and multiple dispenses.

Accelerate your multiwell pipetting!

- Ideal for quick sample transfers from plate to plate, reservoir to plate or within plates
- Minimizes pipetting errors, providing better accuracy and precision
- Perform serial dilutions by loading only 8 channels, or fill/mix entire plates with ease

Handheld microplate processing with intuitive operation.

- As simple to use as traditional handheld pipettes, with added productivity
- A compact design allows the VIAFLO 96/384 to be easily moved between workspaces
- Easily modify settings using the touch wheel controlled graphical user interface

24, 96 and 384
channels available

0.5 to 1250 μ l
volume ranges

24 to 1536
well microplates

Upgrade your workflow today!
Add a VIAFLO 96/384 to your team.



Check out the
VIAFLO 96/384
in action!

Pipette Routine Check – Best Practices

Why A Routine Check?

Pipettes should be calibrated annually to maintain their performance. In the interim, it is recommended to perform a routine check to test the functionality of your pipettes in order to be confident with your pipetting results. Follow the guidelines below to properly perform such a routine check.

On INTEGRA's electronic pipettes you can set a calibration reminder either in days or cycles.

1 Environment And Materials

Environment

Draft free, constant temperature between 15 °C and 30 °C, max. ±0.5 °C deviation during the measurements.

Materials

Balance
Equipped with draft protection and evaporation trap.
Alternative tip: 4 containers filled with water in each corner of the windward.

Number of required digits is determined by the nominal volume of your pipette.

Volume | Digital Resolution
100 µL x 0.1 µL | 0.001 mg
10 µL x 0.01 µL | 0.001 mg
1 µL x 0.001 µL | 0.001 mg

Weighting Container

Preferably use a metal container to minimize build-up of static charges.

Alternative: 1.5 ml microcentrifuge tube.

Test Liquid

Distilled water.

Pipette Tips

Use pipette manufacturer's recommended tips for best results.

INTEGRA GripTip
pipette tips snap on
and never loosen,
leak or fall off.

2 Before You Start

Place pipette, tip and test liquid in the test room 2 hours before starting measurements to reach equilibrium with room conditions.

Note date, ambient temperature and air pressure. If no barometer is available, search the internet for atmospheric pressure at a local weather station.

The use of correct pipetting techniques is crucial. Learn about best pipetting practices by reading the *Standardized Pipetting – Best Practices* poster available on the INTEGRA website.

3 Leak Test

Before performing any gravimetric measurements, test if the pipette is leaking.

1. Pre-wet the tip(s) by aspirating and dispensing the nominal volume 3 times.

2. Using the same tip(s), aspirate the nominal volume.

3. With the tip(s) immersed 2 mm in liquid, hold the pipette vertically for 30 seconds.

4. If liquid level does not drop, continue with validation. A decreasing liquid level indicates a leak. Contact the manufacturer to discuss further steps.

4 Gravimetric Measurement

The weighing container should not be dry.

Add some distilled water.

Number of Measurements

Perform at least 4 measurements each at 100 % and at 10 % of the nominal volume. Start at 100 %.

Validate the first and a middle channel on multichannel pipettes.

Procedure

1. Tare the balance with the weighing container.

2. Load a new tip.

3. Perform a pre-wet (see section 3).

4. Dispense liquid into the weighing container.

Ensure to dispense along the inner container wall and finish by drawing the tip end along wall to remove residual liquid.

5. Record the weight in a table.

6. Using the same tip, repeat steps 4 to 5 at least 4 times. Tare the balance after each reading.

7. Eject the tip and load a new tip.

8. Repeat steps 1 to 7 for the second test volume.

5 Data Analysis

1. Convert balance readings (mg) to volume (µl) using the Z factor. A corresponding table can be downloaded from the download section on the INTEGRA website.

$V_i = m_i \cdot Z$
 V_i = Single volume in µl
 m_i = Single weighing in mg
 Z = Z factor

2. Calculate the mean volume per test volume and per channel:

$\bar{V} = \frac{1}{n} \cdot \sum_{i=1}^n V_i$
 \bar{V} = Mean volume
 n = Number of weighings

3. Calculate the accuracy (systematic error) in %:

$a_s = \frac{100 \cdot (\bar{V} - V_s)}{V_s}$
 a_s = Systematic error in %
 V_s = Selected test volume

4. Calculate the precision (random error) in %:

$s_s = \sqrt{\frac{\sum_{i=1}^n (V_i - \bar{V})^2}{n-1}}$
 s_s = Repeatability standard deviation
 CV = Coefficient of variation in %

Compare the calculated accuracy and precision with the manufacturer's specifications. If the calculated values are not within specifications, the pipette needs to be calibrated. If the pipette has passed the routine check, it is working as intended.

INTEGRA electronic pipettes can be easily calibrated. Simply enter target volume and actual volume you have measured and then click *Calibrate*.



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PIPETTE ROUTINE CHECK

Best Practices

Pipettes need to be calibrated annually to maintain their performance – ask your local sales person about our extended warranty and maintenance options. In the interim, it is recommended that you perform routine checks to make sure your pipettes are working at their best, and to give you confidence in your pipetting results. It's quick and easy – and we can show you how to do it!

Look after your pipettes, and be confident in your results.
Give your pipettes a health check.



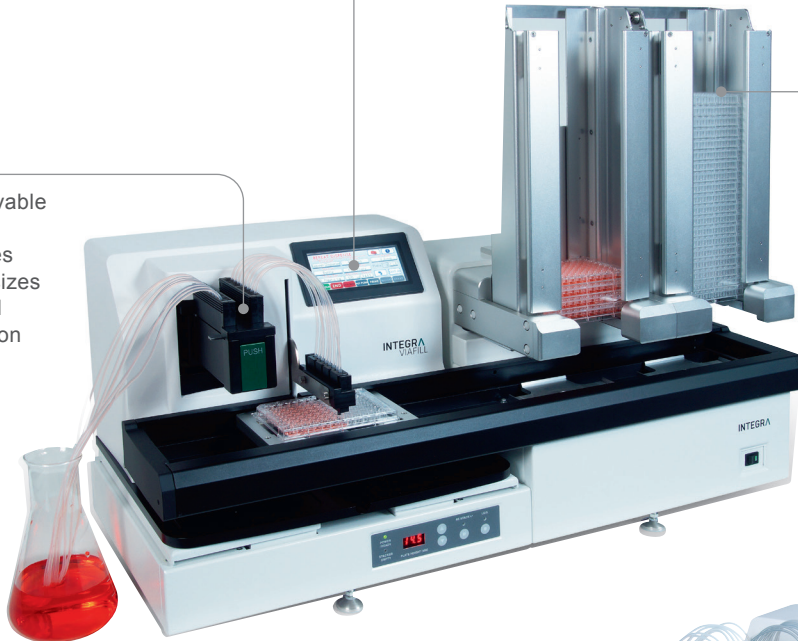
Get your poster, now!

SAVE TIME WITH REPEAT DISPENSING!

A choice of autoclavable 8 and 16 channel dispensing cassettes with different bore sizes allows accurate and rapid reagent addition

The interface allows users to quickly edit predefined programs, or create, store, name and recall up to 99 individual liquid handling programs

Well plates are conveniently stored in the stacker using removable chimneys designed for either 25 or 50 plates



VIAFILL

Rapid Reagent Dispenser

Non-contact dispensing in a flash? It has to be the VIAFILL.

Are you ready to let rapid dispensing speed up your workflows and increase accuracy in your experiments? Then look no further than the **VIAFILL**.

- The first reagent dispenser to feature a color touchscreen user interface for intuitive navigation
- Simple set-up of repeat, variable volume and custom dispensing for a range of applications, from ELISAs to compound additions
- Additional plate stacker for increased throughput and unattended operation

**Increase your accuracy and save time.
Get the VIAFILL today!**

6 to 1536

well plate compatibility

<10 second

dispense time for 100 µl
to 96 well microplate

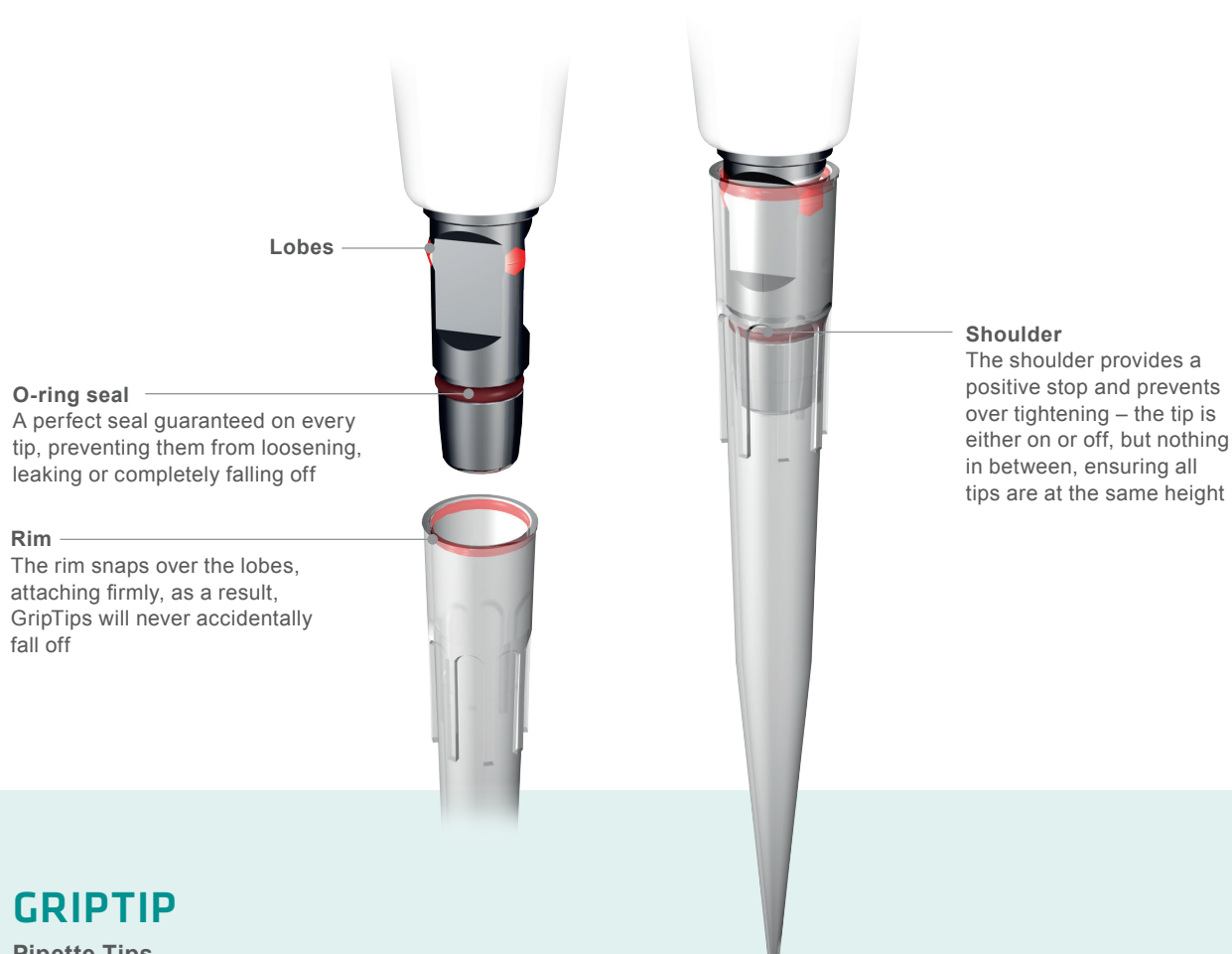
0.5 to 9999 µl

volume range



Check out the
VIAFILL in
action!

THE PERFECT FIT



GRIP TIP

Pipette Tips

Get the best for your pipette!

Our **GripTips** have been designed in tandem with INTEGRA pipettes, creating a unique, integrated system that offers the securest pipette tip connection on the market. This completely removes the chance of your tips leaking or falling off during experiments, resolving the common issues associated with universal tips. Who wouldn't want that?

Tips for every application

We're continually expanding our GripTip range to ensure we meet the needs of every customer, for every application.

Don't risk your results. Use GripTips!

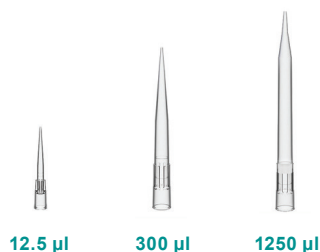
0.5 to 5000 μ l
volume range

**Non-sterile,
sterile and filter**
options available

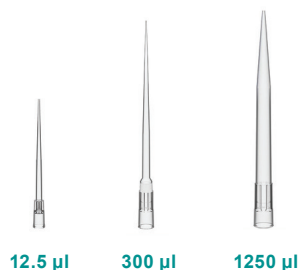
Specialty GripTips
available



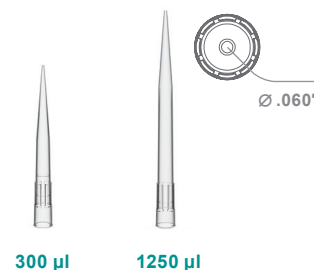
Check out
GRIP TIPS
in action!

SHORT GripTips

- 12.5 µl tips support the targeting of small wells
- 300 µl and 1250 µl tips offer improved ergonomics by allowing the user to pipette closer to the bench

LONG GripTips

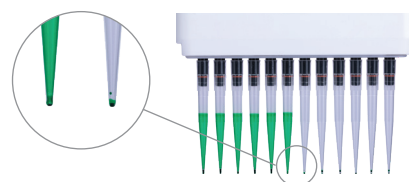
- 12.5 µl tips allow access to the bottom of 1.5 ml microcentrifuge tubes
- 300 µl and 1250 µl tips allow access to 100 mm tubes without the risk of contamination.

Wide Bore GripTips

- Prevents shearing of cellular material while pipetting
- Supports pipetting of viscous liquids

Low Retention GripTips

- Created from a unique polypropylene blend with heightened hydrophobic properties to allow maximum liquid recovery
- Ideal for non-aqueous and low surface tension samples, such as viscous liquids and surfactants
- Increases pipetting accuracy and consistency, and prevents the loss of precious reagents

**Rack and refill options****ECO racks**

- Thermoform racks reduce plastic waste by more than 60 %
- An optional PopTop base allows the lid to be opened easily with a single finger

**GREEN CHOICE refills**

- An environmentally-friendly refill system
- Allows reuse of the current tip racks, significantly reducing plastic waste

**Tip racks**

- Single rack inserts in 96 and 384 tip configurations
- The 384 tip configuration is highly space efficient and allows tip loading even with a 16 channel pipette

**XYZ tip racks**

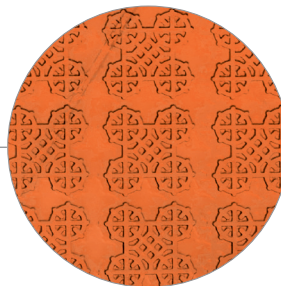
- Extra sturdy to withstand the loading forces from automated multichannel pipettes
- Carbon-filled base to prevent static build-up, so that tips stay perfectly aligned for easy tip loading



Not sure which tips fit your INTEGRA pipette?
Try our GripTip Selector Guide!

MINIMIZE REAGENT DEAD VOLUME

Clear graduations on the reusable base offer more accurate measurements and less reagent waste

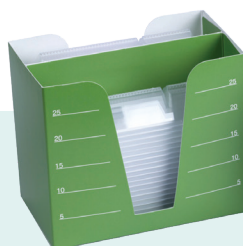


SureFlo™ anti-sealing array

Unique SureFlo anti-sealing array and hydrophilic surface treatment spreads reagents evenly across the base of the reservoir, allowing tips to sit on the bottom without aspirating air and reducing dead volumes

CLEAR ADVANTAGE™ REAGENT RESERVOIRS

with SureFlo anti-sealing array



Polystyrene



Polypropylene

Don't waste precious reagents! Take advantage of INTEGRA's range of reagent reservoirs.

Unlike traditional reagent reservoirs that have hard to see graduations, all of our reservoirs fit into a reusable base with bold, crisp, clearly visible markings. This unique design leads to more accurate measurements, no over pouring and less waste – amazing!

INTEGRA's fantastic range of reagent reservoirs covers a wide range of volumes from 10 ml to 300 ml.

- INTEGRA's reservoirs are made of crystal clear 100 % virgin polystyrene or polypropylene for improved chemical compatibility
- Disposable inserts fit into reusable bases to reduce plastic waste
- Convenient pour back spouts allow easy return of excess fluid to a source container, minimizing reagent waste
- Inserts are designed to nest inside each other, saving 75 % of space and reducing inventory footprint requirements and shipping costs

Multichannel Reagent Reservoirs

Available with or without SureFlo anti-sealing array

Can accommodate an inverted second reservoir insert as a lid, preventing evaporation or contamination



10 ml



25 ml



100 ml

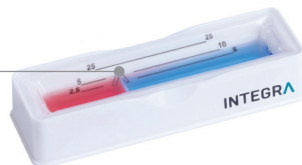
An extra deep trough design accumulates liquid, reducing dead volume and ensuring maximum reagent recovery



Check out **MULTICHANNEL REAGENT RESERVOIRS** in action!

Divided Reagent Reservoir

5 and 10 ml compartments for working with smaller reagent volumes



25 ml



Check out the **DIVIDED REAGENT RESERVOIR** in action!

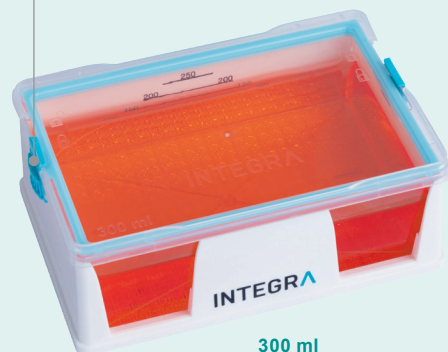
Automation Friendly Reagent Reservoirs

Perfectly suited for 24, 96 and 384 channel pipetting devices

Fits all industry standard microplate holders



150 ml



300 ml

Dual viewing windows allow tips to be safely positioned

Latching lid with gasket prevents spillage during transport, and evaporation during short-term storage



Check out **AUTOMATION FRIENDLY REAGENT RESERVOIRS** in action!

Maximize reagent savings with the lowest dead volume reservoirs in the world!

THE WORLD'S MOST POPULAR PIPETTE CONTROLLERS



The PIPETBOY pro is the only pipetting aid in the world with integrated LEDs, optimizing illumination for accurate pipetting and preventing eyestrain



PIPETBOY

Pipette Controllers

Pipetting problems? Get the best on the market.

Serological pipetting can be a repetitive and laborious task, which is why we brought you the innovative **PIPETBOY** range.

- Unmatched speed and pipetting control for productive serological pipetting with the PIPETBOY pro and PIPETBOY acu 2
- Unique valve and dosing system for simple switching between dropwise addition and fast liquid displacement
- Ergonomic shape allows the pipette controller to sit comfortably in the hand, and your fingers to keep a natural position, reducing the risk of repetitive strain injuries

Brighten up your lab. And up your pipetting game.

1 to 100 ml

volume range with all serological pipettes

Up to 13.5 ml/s

preset speed range

2 versions

multiple colors to choose from



Check out the **PIPETBOY** in action!

GO WITH THE FLOW!

An intuitive and multilingual user interface, coupled with simple on-screen instructions, makes it extremely simple to operate



The DOSE IT pump head accommodates different tubing sizes so that a wide range of volumes – from milliliters to liters – can be dispensed with speed and precision

DOSE IT

Peristaltic Pumps

Flow rate can be doubled by using a second pump head, a modification that can also be used to minimize flow pulsation



Searching for an easy-to-use peristaltic pump? Look no further.

Peristaltic pumps are incredibly helpful when dispensing culture media, buffers, or other solutions, but most are difficult to program, oversized and bulky. Never fear, **DOSE IT** is here.

- Up to 20 protocols can be stored and recalled at the push of a button, for dispensing media or buffer, or filling Petri dishes
- A large display and intuitive user interface offer easy handling and straightforward setting of parameters
- The lightweight and compact design means that the system fits anywhere in the lab and can be easily moved, without wasting valuable bench space

Don't let repetitive dispensing waste valuable lab time.
Try DOSE IT!

**0.6 ml/min
to 5 l/min**
flow rate

0.1 to 9999 ml
dose volume

1 to 8 mm
inner diameter tubing sizes



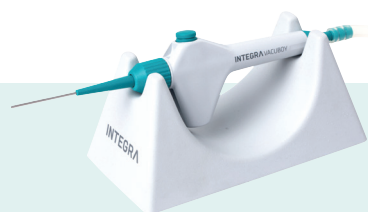
Check out
the **DOSE IT**
in action!

THE ASPIRATION SYSTEM FOR SAFE DISPOSAL OF LIQUIDS

The VACUSAFE offers various safety features, including self-closing quick couplings and liquid level detection

Adjustable vacuum level depending on needs, from gentle removal of supernatants to quick emptying of culture flasks

The VACUBOY hand operator can be used with different adapters for removal of liquids from virtually any laboratory vessel



VACUSAFE

Aspiration Systems

Safety first. Get the best protection for yourself and the lab.

A routine task like the aspiration, collection and disposal of liquids requires user-friendly equipment that is easy to install and can safely remove waste – the **VACUSAFE** is here to help.

- A compact, all-in-one laboratory vacuum pump that simplifies the removal of media, supernatants and wash solutions
- Straightforward operation – switch on, set the desired vacuum and start working, allowing you to fully concentrate on more complex tasks
- Vacuum source protection to avoid lab contamination, and a shatterproof bottle for maximum safety

**Collect and contain liquid waste in the safest way.
Get the VACUSAFE.**

-300 to -600 mbar
adjustable vacuum range

17 ml/s
aspiration rate

3 different models
depending on requirements



Check out the
VACUSAFE in
action!

SIMPLE WASTE REMOVAL WHEREVER YOU NEED IT!



VACUSIP

Benchtop Aspiration Systems

Limited space?

Get the most compact benchtop aspiration system.

Aspiration systems are popular pieces of lab equipment, and often need to be moved around for different tasks and experiments. That's why we made the portable **VACUSIP**.

- A convenient, compact and ready-to-use system for benchtop liquid waste disposal, with no installation or additional equipment required
- Completely independent from external vacuum sources for total portability
- A rechargeable battery means that no power cable is needed, making working in a safety cabinet easier and more comfortable

Don't put it off any longer. Give the VACUSIP a go!

2.3 ml/s

pump flow rate (with
40 mm stainless steel tip)

-250 mbar

vacuum range ($\pm 20\%$)

Up to 10 ml

aspiration volume



Check out
the **VACUSIP**
in action!



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