# **INTEGRA**



### **SWITCH**

Hybrid pipette
Intuitive manual control, rapid electronic aliquoting



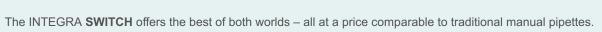


### **NO NEED TO COMPROMISE**

Finding the right pipette often means choosing between control and efficiency.

Manual pipettes offer unparalleled control over liquid handling tasks, but typically fall short for repetitive steps like aliquoting. On the other hand, electronic or repeater pipettes excel at aliquoting and more complex workflows, but come with several limitations: higher costs, the need for user set-up and a less intuitive feel than manual options.

#### But what if you didn't have to choose?





# One pipette for every task

The **SWITCH** is an innovative single channel handheld pipette that is ideal for any task, from precise assays to rapid dispensing into plates and tubes. Due to the light force and low plunger stroke it enables better manual pipetting than standard handheld pipettes, while allowing you to seamlessly shift to repeat dispense mode for efficient aliquoting.

#### When used manually, it offers:

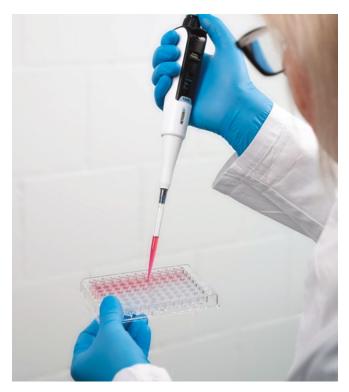
- The simplicity and familiar feel of a traditional mechanical pipette
- Thumb-operated speed control for precise aspiration and dispensing
- Quick set ring for rapid volume adjustments



#### In repeat dispense mode, it offers:

- Rapid dispensing of multiple 0.5 to 1,000 µl aliquots from a single aspiration (depending on pipette's volume range)
- Fewer aspiration steps to speed up workflows
- Easy operation, with no need for complex user configuration or training

Available in 2, 10, 20, 100, 200 and 1,000  $\mu$ I volumes to fit your exact needs, the **SWITCH** is the future of handheld pipetting.





### Did you know?

Need a similar solution for larger volumes? Check out the PIPETBOY GENIUS serological pipet controller, designed for transferring and repeat dispensing volumes from 0.1 to 100 ml!

### Reduced RSI risk

The SWITCH is designed with ergonomics in mind, boasting a light plunger force, an ideal plunger height, easy one-handed operation and best-in-class pipette tips.

#### Low plunger strength and height

A study on ergonomic pipetting by Carolin Heitz, Head of the Workplace Ergonomics Department at Zurich University of Applied Sciences (ZHAW), emphasized the importance of maintaining a neutral thumb position and avoiding extreme joint angles during repetitive pipetting tasks. It also highlighted that operating mechanisms – like pipette plungers - should require as little force as possible to reduce strain.

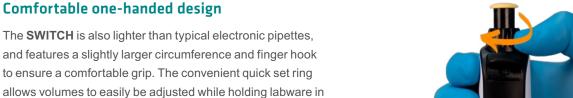
Informed by these principles, the SWITCH has been engineered with an exceptionally light plunger force to significantly reduce thumb strain during prolonged use. Unlike traditional mechanical pipettes, the plunger height remains consistent across all volume settings, eliminating the need for excessive thumb stretching. In repeat dispense mode, the plunger sits even lower, acting as a simple button that supports effortless and rapid aliquoting, while keeping the thumb in a nearly neutral position.

"The thumb should be able to work as much as possible in a neutral position. (...) Extreme joint positions of all thumb joints should be avoided. (...) The operation of the plunger should require the least possible force."

- Carolin Heitz, ZHAW







### Easy tip loading and ejection

overall efficiency in the lab.

Like all INTEGRA pipettes, the SWITCH uses GRIPTIPS pipette tips to ensure a perfect fit, preventing leaks or tip loss. GRIPTIPS snap on without needing to be hammered into place, so attachment and ejection forces are minimal.

the other hand, making it ideal for multitasking and enhancing







## A truly user-friendly design for comfortable, effortless pipetting

The **SWITCH** comes with an intuitive design that supports both manual operation and repeat dispensing. Whether adjusting volumes by hand or setting up for rapid aliquoting, users benefit from a clear interface and simple controls that make pipetting feel effortless – right from the start. This overcomes the complexity and steep learning curve often associated with electronic pipettes.

#### Quick manual volume adjustments

The quick set ring enables rapid volume adjustments: simply turn it to make large volume changes, or fine-tune the volume with precise, step-wise movements. The ring can even be rotated past 100 % to reach 10 % without returning to the starting point. A firmware lock also prevents accidental volume changes when working.

#### Easily determine unknown volumes

The **SWITCH** offers the added convenience of measuring unknown liquid volumes. To use this handy feature, manually aspirate the liquid, and the screen will display the exact volume you've drawn, allowing you to determine how much liquid was in the container.





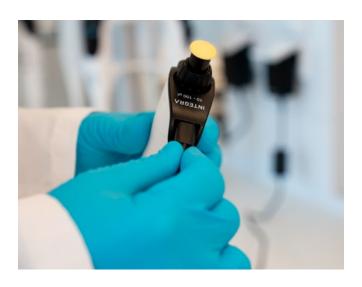
### Aliquoting set-up as easy as ABC

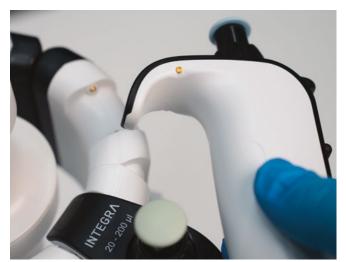
The **SWITCH** simplifies repeat dispensing – the most commonly used function of electronic pipettes – with a straightforward interface. The mode switch enables a smooth transition from manual to electronic pipetting, and only 3 parameters – dispense volume, number of aliquots and pipetting speed – need to be selected. Once these parameters have been set, aspiration and each dispense are precisely controlled by the pipette and activated with a simple press of the plunger. When repeat dispensing is complete, simply return to manual pipetting using the mode switch.



## A pipette that works all day, every day

A common concern with electronic pipettes is the risk of the battery dying unexpectedly, disrupting workflows. The **SWITCH** addresses this problem with a long-lasting battery specifically designed to support at least a full day's work. In the unlikely event that the pipette does run out of battery, it can be charged during use via the USB-C port on the handle, allowing you to carry on working without interruption. The **SWITCH** also features a charging contact on the finger hook that enables it to be charged on a Flex charging stand.





### Flex charging stand: a flexible storage solution

The Flex charging stand securely holds and charges up to 6 **SWITCH** pipettes simultaneously, keeping them upright and organized. It can alternate between a rotary and a linear design, adapting to your workspace requirements. The stand can also store (but not charge) VIAFLO and VOYAGER electronic pipettes, as well as EVOLVE manual pipettes, making it a versatile all-in-one storage solution.





#### INTEGRA: your reliable partner for productive pipetting

INTEGRA offers a complete range of handheld pipettes to meet your liquid handling needs. Each pipette is designed for maximum workflow efficiency, ensuring precise, reliable performance with every use. Find the perfect pipetting solution for your lab today.

# **Ordering information**

Instrument		Part no.
SWITCH*	Hybrid pipette, 1 channel, 0.2 – 2 μl	2011
	Hybrid pipette, 1 channel, 1 – 10 μl	2012
	Hybrid pipette, 1 channel, 2 – 20 μl	2013
	Hybrid pipette, 1 channel, 10 – 100 μl	2015
	Hybrid pipette, 1 channel, 20 – 200 μl	2016
	Hybrid pipette, 1 channel, 100 – 1,000 μl	2018

<sup>\*</sup>Instrument does not include a mains adapter, please choose your desired charging option below

Starter pack	Accessory	Part no.
3 pipettes with	+ 1 mains adapter	2040
nominal volumes 20, 200 and 1,000 µl	+ 1 Flex charging stand	2041

Storage and charging options	Part no.
Wall mount for handheld pipettes	3205
Shelf hook, 1/pack	3210
Shelf hook, 5/pack	3211
Rotary stand	3213
Linear stand	3215
Short linear stand	3214
Flex charging stand, US, JP version, IEC type A	2215
Flex charging stand, EU, KR version, IEC type C	2216
Flex charging stand, UK version, IEC type G	2217
Flex charging stand, AU, CN version, IEC type I	2218
Mains adapter for INTEGRA devices, USB-C, 15 W, US, JP version, IEC type A	1200
Mains adapter for INTEGRA devices, USB-C, 15 W, EU, KR version, IEC type C	1201
Mains adapter for INTEGRA devices, USB-C, 15 W, UK version, IEC type G	1202
Mains adapter for INTEGRA devices, USB-C, 15 W, AU, CN version, IEC type I	1203

Accessories		
Туре	Description	Part no.
Pipette battery	Battery, LiPo	2205
Cover	for USB-C port	2210
Replacement O-rings for	200/300 µl, replacement kit, 24/pack	100-00027-50
tip fittings	1,000/1,250 µl, replacement kit, 24/pack	100-00028-50

GRIPTIPS for use with SWITCH	
Description	Part no.

For part no. please refer to our website (www.integra-biosciences.com/GRIPTIPS)

# **Technical data**

Pipetting technology	Air displacement
Pipetting speed	User controlled when pipetting manually/up to 10 steps, adjustable in repeat dispense mode
Weight	130 g
Running time	Approx. 1,500 pipetting cycles, equal to 1 working day

Operating conditions	5-40 °C, max. 80 % RH
Power requirements	100-240 V, 50/60 Hz
Battery	Rechargeable, LiPo, 3.7 V, 605 mAh

## www.integra-biosciences.com











Contact us: