



This quick start guide is intended to provide a quick overview of your VIAFLO 96/384's key features and to offer basic instructions for getting started. For detailed information, please refer to the operating instructions (OI) that can be found at [www.integra-biosciences.com](http://www.integra-biosciences.com) in different languages.

### Intended use

This is a general-purpose laboratory instrument. Any use of this instrument in a medical or IVD setting is the sole responsibility of the user. VIAFLO 96 and VIAFLO 384 are electronic hand held pipettes that can be used with 24-, 96- and 384-channel (VIAFLO 384 only) pipetting heads for aspirating and dispensing aqueous solutions in the volume range of 0.5 µl to 1250 µl using GripTip™ pipette tips only, see [www.integra-biosciences.com](http://www.integra-biosciences.com).

### ⚠ Safety information

Regardless of the listed safety notes, all locally applicable regulations must be observed.

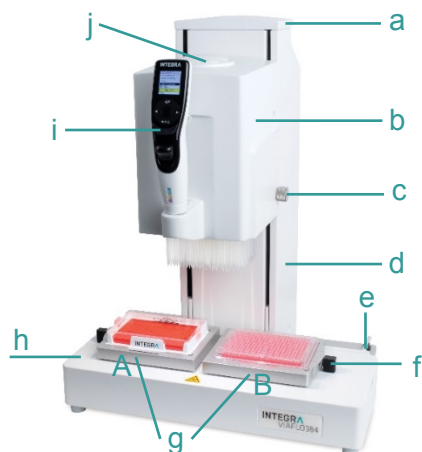
- 1) The pipette may only be used by properly trained personnel in a manner specified by INTEGRA Biosciences.
- 2) Do not use the instrument near flammable material or in an atmosphere with danger of explosion.
- 3) Do not immerse the pipetting head in liquid. Avoid pipetting of liquids emitting corrosive vapors.
- 4) Servicing work and repairs may only be performed by INTEGRA Biosciences or an authorized after-sales service member.

### Getting started



*Set up the instrument on a perfectly horizontal surface according to the IQ/OQ document (PN 125953). Supply voltage: 100–240 VAC, 50–60 Hz.*

Insert a 3 core power cable in the socket on the rear side and connect it to the electricity mains.



- a. Carrying handle of base unit
- b. Pipetting unit, to move up and down (Z-axis)
- c. Knob of Side cover, covers pipetting head
- d. Base unit, to move left and right (X-axis)
- e. Main switch and power socket
- f. Plate slider
- g. Plate holders on position A and B
- h. Instrument deck
- i. Control unit
- j. Tip load button

#### Switch on/off:

Press the main switch (e).

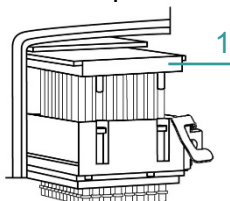
### VIAFLO 96/384 control unit



- k. Display
- l. Touch wheel, spin to scroll the cursor
- m. OK button, to make a selection
- n. Run key, to start operations
- o. Tip ejector
- p. Purge button, to empty tips
- q. Arrow buttons, for selections
- r. Back button, to navigate backward

## Change Head

To install a pipetting head, select the Toolbox option “Change Head”. Remove pipetting head from case and pull Piston plate (1) up.



- Loosen the knob (c) and remove the Side cover.
- Remove the existing head, if installed.
- Push the appropriate pipetting head into the slide block and make sure the Piston plate (1) slides onto the brazen rails.
- Mount the Side cover, screw the knob tightly and press OK to continue.

Check whether the Pipet factor on the display corresponds to the Pipet factor indicated in the latest calibration certificate. Press OK ▷ if the factor coincides. If it doesn't, click ◁ Edit.

## Loading GripTips



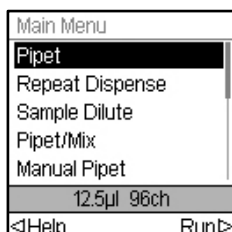
- Put a tip box on the Plate holder.
- Hold the Control unit and lower the pipetting head down onto the tip box until the Tip load button flashes.
- When prompted, push the Tip load button and at the same time push down the Control unit. The Tip load button lights after loading.
- Move the Pipetting unit up until the light of the Tip load button turns off.

If less than the full tip rack needs to be loaded, first press OK before pressing the Tip load button to switch to the low power loading mode. Enter the number of columns to be loaded.

## Selecting a pipetting mode

With your electronic pipette, you have the choice of building protocols by selecting from a menu of predefined programming modes, or you can create custom multi-stepped protocols. A description of the most commonly used Pipetting Modes:

Pipetting mode	Description
Pipet	Liquid transfers when aspirate and dispense volumes are equal.
Repeat Dispense	Dispense multiple aliquots of the same volume.
Sample Dilute	Aspirate two liquids divided by an air gap, followed by dispense.
Pipet/Mix	Multiple mixing by aspiration and dispensing of defined volume.
Manual Pipet	Control the aspiration and dispensing up to the set volume.
Reverse Pipet	Liquid transfers of viscous or high vapor pressure liquids.
Variable Dispense	Dispense multiple aliquots of different volumes.
Multi Aspirate	Aspirate multiple aliquots of different volumes.
Sample Dilute/Mix	Aspirate two liquids divided by an air gap, followed by dispense and mix.
Serial Dilution	Aspirate a transfer volume followed by dispense and mix sequences.
Custom	Allows to create and store of up to 40 multi-stepped pipetting protocols.



From the Main Menu, use the Touch Wheel to scroll to your desired function-based programming mode. Press OK to enter the mode and to start defining parameters.

## Setting/changing parameters



Scroll to Edit and press OK.



A list of editable steps is displayed.



Select a step and press OK. Use the Touch Wheel to set the value and press OK. Press  $\triangleright$  to save your settings.

## Running a program

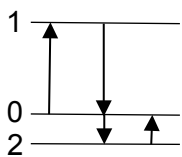
Insert the GripTips into the liquid to be transferred. Press and release the Run key to aspirate the volume selected in the first step (marked with a triangle on the Run screen). Your pipette will prompt you to press the Run key at each successive step.

## Set Z-Position



- To define the optimal tip immersion depth, press  $\triangleleft$  or  $\triangleright$  to access the Z-position screen.
- Move the pipetting unit to the target position (A or B) until the actual Z-height is displayed.
- Finally, move the unit down to the desired dispensing height and select Set  $\triangleright$  to save your setting.

## Two Step Blowout



During aspiration, the piston of your electronic pipette moves up (1).

During dispensing, the piston returns to the initial position (0). During the last dispense of a program, it automatically moves further down (2) and blows the remaining liquid from the tip (**Blowout**  $\downarrow$ ).

When the piston returns to the initial position (0), a small amount of air is aspirated, provided the tip is no longer immersed in the liquid (**Blowin**  $\uparrow$ ).

Note: Manually delay the blowin by holding the Run Key pressed during the last dispense. Remove the tips from the vessel and release the Run Key to start blowin.

## Using the Plate slider, e.g. for reformatting

To access a plate that has 4x more wells than the head channels, the plate must be shifted beneath the pipetting head. To accommodate the front or rear positions, set the plate slider. To accommodate the left and then the right positions, move the pipetting head one well to the right.



- **Plate slider at the back:** pipette into the front wells.
- **Plate slider in the middle:** pipette into plates that have as many wells as the head has channels.
- **Plate slider at the front:** pipette into the rear wells.

## Maintenance



Always switch off the device and disconnected form the electricity supply when carrying out maintenance work.

Clean the VIAFLO 96/384 housing a lint-free cloth lightly soaked with mild soap solution in distilled water or with a 70 % solution of isopropanol or ethanol.

## Equipment disposal



VIAFLO 96/384 must not be disposed of with unsorted municipal waste.  
Dispose of VIAFLO 96/384 in accordance with the regulations in your area governing disposal of devices.

## Manufacturer

**INTEGRA Biosciences AG**  
CH-7205 Zizers, Switzerland  
T +41 81 286 95 30  
F +41 81 286 95 33

[info@integra-biosciences.com](mailto:info@integra-biosciences.com)  
[www.integra-biosciences.com](http://www.integra-biosciences.com)

**INTEGRA Biosciences Corp.**  
Hudson, NH 03051, USA  
T +1 603 578 5800  
F +1 603 577 5529



## Declaration of conformity

**INTEGRA Biosciences AG – 7205 Zizers, Switzerland**

declares on its own responsibility that the devices

Description	Models
VIAFLO 96	6000, 6001
VIAFLO 384	6030, 6031

comply with:

### EU Directives

Low Voltage Equipment	2014/35/EU
Electromagnetic Compatibility	2014/30/EU
Restriction of Hazardous Substances	2011/65/EU
Waste Electrical and Electronic Equipment	2012/19/EU

### EU Regulations

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) **1907/2006**

### Standards for EU

Safety requirements for electrical equipment for measurement, control and laboratory use - General requirements.	<b>EN 61010-1: 2010</b>
Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes.	<b>EN 61010-2-81: 2015</b>
Electrical equipment for measurement, control and laboratory use - EMC requirements.	<b>EN 61326-1: 2013</b>

### Standards for Canada and USA

Safety requirements for electrical equipment for measurement, control and laboratory use - General requirements <sup>a</sup> .	<b>CAN/CSA-C22.2 No. 61010-1</b>
Safety requirements for electrical equipment for measurement, control and laboratory use - General requirements <sup>a</sup> .	<b>UL 61010-1</b>
Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes <sup>a</sup> .	<b>UL 61010-2-81</b>


Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Part 15 of the  
FCC Rules  
Class A**

<sup>a</sup>NRTL certificate number (TÜV Süd): U8 17 05 42035 007

Zizers, March 2, 2020

  
Urs Hartmann  
CEO

  
Thomas Neher  
Quality Manager