pipetman®

M96

Quick Guide
EN

Introduction

PIPETMAN® M96 is a convenient and intuitive air displacement electronic pipette for high-throughput pipetting on 96- and 384-well microplates. It is part of the PIPEMAN® M range, combining its renowned accuracy and precision with user-friendly functions for increased efficiency and fast microplate filling.

Increase the productivity of your workflow with the all-in-one, simple, and intuitive PIPETMAN M96:

- **Simple and flexible**: intuitive and fully assisted screen for various applications; programmable to confidently create and handle your workflows.

- **Convenient**: fully transportable for working on benches or under fume hoods, used with standard PIPETMAN® DIAMOND Tips, and compatible with a large variety of SBS-standard labware.

- **Ready-to-use pipette**: no setup is required with the integrated screen, and the main accessories are already installed.

For more information, refer to PIPETMAN M96 complete User's Guide LT801671. Scan the Data Matrix code above with a smart device to reach our gilson.com webpage containing complete product information.

PIPETMAN M96 is available in four different models, covering a total volume range from 2 μL to 200 μL.

PIPETMAN® M96				
Model	**Part Number**	**Volume Range**		
		Standard Pipette Mode	**Repetitive Mode**	**Custom Mode**
P96x20M Connected	**FH10001**	2-20 μL	1-20 μL	1-20 μL
P96x200M Connected	**FH10002**	10-200 μL	5-200 μL	10-200 μL
P96x20M	**FH10003**	2-20 μL	1-20 μL	1-20 μL
P96x200M	**FH10004**	10-200 μL	5-200 μL	10-200 μL

PIPETMAN M96 Connected models are smart, Bluetooth®-connected pipettes compatible with the Gilson application PipetteScope®.

> **NOTE** PIPETMAN M96 Connected models are available in select locations. Please contact your Gilson representative for more details.

Description

PIPETMAN M96 is a compact, electronic 96-channel pipette equipped with accessories for optimal use with various SBS-size microplates and labware.

Some accessories are included in the box ●, and other accessories are sold separately ●. Refer to the information below and PIPETMAN M96 User's Guide LT801671 on gilson.com, part Accessories Recommended for Optimal Usage for more details.

> **NOTE** When it is unpacked, PIPETMAN M96 is ready to use. Accessories are already in place; no special handling is required to install the pipette.

Rotating tray reversible 96-96

Rotating tray reversible 96 left side – 384 right side or rotating tray reversible 384-384

Single tray reversible 96-384

Multi-tray for 96- and 384-well microplates

Figure 1
PIPETMAN® M96 accessories description

PIPETMAN® M96 Recommended Accessories		
Part Description		**Part Number**
1	Multi-tray for 96- and 384-well microplates	**FH07005**
2	Rotating tray reversible 96 left side – 384 right side	**FH07004**
	Rotating tray reversible 384-384	**FH07003**
A	PIPETMAN M96 pipette	
B	Rotating tray reversible 96-96 (provided with the pipette, and available as an extra accessory)	**FH07002**
C	Single tray reversible 96-384 (provided with the pipette, and available as an extra accessory)	**FH07001**
● Included in the PIPETMAN M96 box	● Sold separately		

Main Features Description
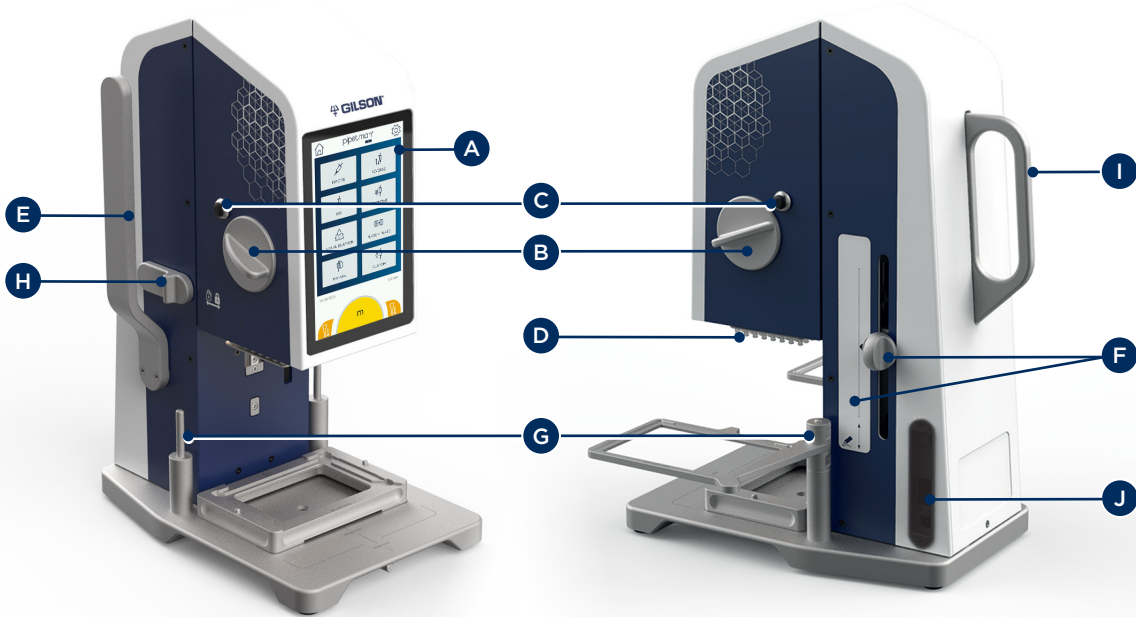
Features	
A	Intuitive touchscreen with integrated pipetting touch button and ejection buttons for left- or right-handed users
B	Adjustable finger rest – can move around an axis for optimal comfort and ergonomics
C	Pipetting buttons – can be used instead of the central touchscreen button: freedom of choice for a preferred way of pipetting
D	Pin-plate (96-channel tip holder) near a white light illuminating the tips and microplates
E	Tip-fitting arm
F	Height-fixing screw – to define the lowest possible pipetting height and prevent touching accidentally the bottom of the microplate wells. Preferred height can be personalized and marked with dry-erase markers on the whiteboard sticker
G	Rotating tray holder
H	Head locking bar – recommended to move the pipette from one place to another
I	Transport handle
J	Switch (1/0), DC input for mains adapter and USB-C port

NOTE The light of the pipetting head can be turned off when working with specific light-sensitive reagents or samples.

Figure 2
PIPETMAN® M96 main features description

Intuitive Touchscreen
The display includes information and tactile areas for quick and easy handling of the pipette right from the first use.

Features	
1	Main menu with touch icons to start a pipetting mode – refer to **PIPETTING** for more details
2	General Parameters icon: touch the icon and reach the General Parameters screen
3	Touch pipetting button
4	Ejection buttons for left- or right-handed users
5	Home icon: touch the icon and reach the Home page with the main menu
6	General Parameters menu with touch icons – refer to **GENERAL PARAMETERS AND PIPETTING OPTIONS** for more details
7	Pipetting parameters, displayed to be set before starting pipetting (adapted to each pipetting function) – refer to **PIPETTING MODES AND APPLICATIONS** for more details
8	The **Contextual Help Bar** assists the user at each step of the protocol. Pressing on the ℹ️ icon will provide further assistance or explanations on the current pipetting mode
9	Information on the current pipetting mode
10	On-time pipetting information, with the on-time level of liquids remaining in the tips The dark blue bar above the pipetting button indicates the next step
11	Abort button, to push whenever a protocol must be stopped or canceled – refer to **PIPETTING** for more details
12	When Bluetooth® is enabled (for connected models only), a Bluetooth logo will appear on the screen 🅱️ When service is overdue, a reminder service icon will appear on the screen 🛠️

NOTE

PIPETMAN M96 Connected are smart Bluetooth®-enabled pipettes. Bluetooth can be turned on and off from the Device Config page. When enabled, the Bluetooth logo will appear on the top bar of the screen as indicated in the table above.

The next service date can be set in the General Parameters (refer to GENERAL PARAMETERS AND PIPETTING OPTIONS for more details).

Safety Precautions and Limitations of Use

For safety reasons, it is important to observe the following instructions:

- Use PIPETMAN M96 and its AC adapter indoors.
- **When pipetting infectious, radioactive, toxic, and other hazardous solutions,** please observe all the safety precautions (e.g., wear protective clothing, goggles, and gloves) and regulations appropriate for your country.

⚠CAUTION

Watch out for the pinch when moving the different elements.

Pipetting corrosive liquids may damage PIPETMAN M96 parts in contact with the solution. In case of contact with aggressive liquids, immediately clean up parts in contact. To protect the inside parts of PIPETMAN M96 when pipetting corrosive or volatile liquids, the use of filter tips is highly recommended.

Pipetting of extremely viscous or highly evaporating liquids is at your own risk. The same applies to aggressive and corrosive reagents.

Avoid aspiration of any liquid into the pin-plate.

General Operations

Getting Started

To start PIPETMAN M96:

1 Switch on

2 The screen and light will turn on

3 An animation explaining how to fit tips will appear

4 Home screen appears: the pipette is ready

General Parameters and Pipetting Options

DEVICE CONFIG ⚙

- Select the **sound parameters** according to your preferences.
- Set the **time and date** according to your preferences.
- Control the **light** and the **brightness** of the screen
- Enable **Admin control**: create an Admin PIN to secure some protocols and service information.
- Enable the **screen saver** and define its parameters: when activated, the screen switches off after the defined timeout. A simple touch on the screen will turn it on back to where it was before switching off.
- Enable the **Bluetooth** (for PIPETMAN M96 Connected versions only).

NOTICE	When creating an Admin PIN code, save it somewhere as an extra safety: in case of a forgotten PIN code, PIPETMAN M96 will not recall it.

PIPETTING PREFERENCES (PREFS) ⚙

- **Auto mix:** select the button for an automatic mix after pipetting (refer to **PIPETTING MODES AND APPLICATIONS**, part Mix for further details).
- **Auto purge**: select the button for an automatic purge after each pipetting step.
- **Auto blow-in**: select the button for an automatic blow-in after each pipetting step. Define the blow-in delay to allow time to remove the tips from the liquid before the blow-in

NOTE	Purge consists of emptying the tips after each pipetting step with a blow-out step to expel residual liquids from the tips. It is followed by a blow-in step, in which the piston returns to its initial position. During the blow-in step, a small amount of air is aspirated. **Ensure that the tips are not in contact with the liquid during blow-in to avoid any liquid aspiration.**	PURGE > BLOW-IN

SERVICE INFO 🛠

- Define your next service date according to your SOPs. Choose either cycles, periods, or dates. When service is overdue, a pop-up will appear on the screen, and the Service icon will remain lit on the top of the screen.
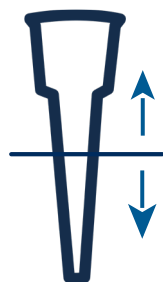
If Admin control has been enabled in the General Parameters, you must enter the PIN code to access this menu.

- The Gilson Service button is accessible from Gilson Service representatives only by entering a unique PIN code, specific to Gilson. Complementary information can be filled in this menu when maintenance is done.

SELF-CALIBRATION 🎯

PIPETMAN M96 models are factory-calibrated using water for analytical laboratories (ISO 3696) and very high precision balances. If you prefer to work with mass rather than volume for solutions with a different density than analytical water, PIPETMAN M96 offers the option of self-adjustment at three points: 10%, 50%, and 100% of the nominal volume.
For that, volume vs. mass should be calculated using density. The calculated volume is set in a dedicated field of the SELF-CALIBRATION menu.

Set a lower measured volume to aspirate more (ex. set the volume at 190 µL)

Nominal volume (ex. 200 µL)

Set a higher measured volume to aspirate less (ex. set the volume at 210 µL)

NOTE	If Admin control has been enabled in the General Parameters, you must enter the PIN code to access this menu.
	The SELF-CALIBRATION function is not a regular service and maintenance.

⚠CAUTION	To revert to distilled water calibration, please disable the self-calibration option or enter the calibration information mentioned on the Gilson Test report provided with the device.
	If your laboratory procedures require the use of a certified ISO 8655 calibrated pipette, lock this mode with the Admin control function.

DEVICE INFO AND USER'S GUIDE 📖

- DEVICE INFO provides essential product identification and traceability elements, including manufacturer, model, serial number, and firmware version.
  1. Touch the device name bar to rename your pipette.
  2. A keyboard appears: enter the name and then select confirm.
- When pressing the USER'S GUIDE button, a Data Matrix code will appear.

Scan it with a smartphone and you will reach our Gilson.com web page, containing complete product information such as the PDF version of the User's Guide and Quick Guide, product specifications, flyer, and any information related to PIPETMAN M96.

Fitting and Ejecting the Tips

It is recommended to use PIPETMAN® DIAMOND Tips for optimum performance. These tips are made from pure polypropylene. Plastic tips are for a single application—they must not be cleaned for reuse.

PIPETMAN® DIAMOND Tips offer a wide range of packaging. For increased productivity and minimal plastic waste, **the use of Blister Refills and Reload Packs is recommended**.

Associated PIPETMAN DIAMOND Tips

PIPETMAN® M96		
Standard Tips	**Sterilized Tips**	**Sterilized Filter Tips**
P96x20M (2-20 µL)		
D200 / DS200	D200ST / DS200ST	DF30ST / DSF30ST / DF100ST / DF200ST / DSF200ST
P96x200M (20-200 µL)		
D200 / DS200 / D300	D200ST / DS200ST / D300ST	DF30ST / DSF30ST / DF100ST / DF200ST / DSF200ST / DF300ST

NOTE
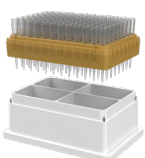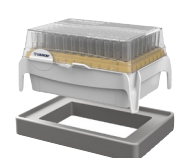
Performances are optimal when using D200 tips, which are the reference tips for the Gilson Maximum Permissible Errors.

Choose the right model of tips according to the pipetting volume: DF30ST are recommended to pipette small volumes of liquid (up to 30 µL), and D300 are recommended to pipette volumes of liquids close to the nominal volume of the pipette (P96x200M only).

DS tips are Certified 384-well and are recommended when using 384-well microplates.

Adapters for Tips

Depending on the tips you choose, **always use the right adapter to ensure a proper tip fitting** and maximum performance. Both adapters are provided with the pipette and are available as separate accessories.

Blister Refill and Reload Pack (Recommended)		TIPACK	
Adapter for PIPETMAN DIAMOND Tips Blister Refills and Reload Packs (PIPETMAX Tip Reload Block)	**Part Number**	Adapter for PIPETMAN DIAMOND Tips TIPACK	**Part Number**
	32000175		FH07006
Place the tip rack on the adapter and then place the adapter on the microplate location.		Place the TIPACK on the adapter and then place the adapter on the microplate location.	

Tip Fitting

To fit 96 tips on the pin-plate:

1. Place the tips and their adapter under the pin-plate
2. Lower the pipetting head to insert the tip holders into the tips
3. Lower the tip-fitting arm until the end
4. Lift the pipetting head
5. Start pipetting
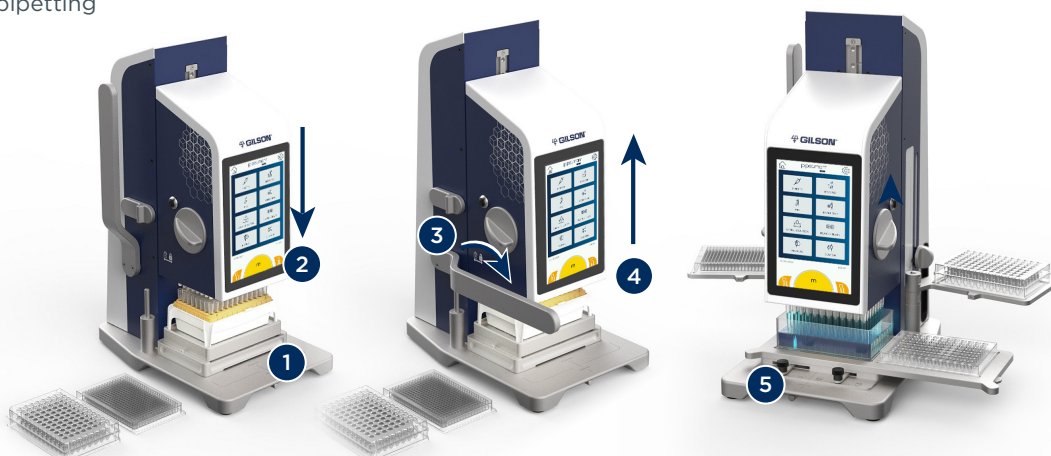
NOTE

To fit the tips, ensure that the height of the pipetting head is unlocked and that the height-fixing screw is at its lowest position.

Partial Tip Fitting

PARTIAL TIP FITTING USING THE SINGLE TRAY

1. Prepare the tips rack by removing unnecessary tips and keeping only the desired ones.

Tips can be fitted on the left, right, or any desired tip holder.
Partial tip fitting using the single tray is a convenient way to fit tips when pipetting tasks with various microplates (such as 12-well microplates) are part of a protocol – without the need to slide the plate column by column.

2. When the rack is partially filled with tips, follow the previous **Tip-Fitting** instructions using the tip-fitting arm.

Left   **Special pattern for 12-well microplates**

| NOTICE | Empty tip racks can also be filled with tips corresponding to the partial tip fitting desired pattern, following the Standard Operation Procedures (SOPs) of the laboratory to limit the risks of contamination. |

Figure 3
PIPETMAN® M96 partial tip fitting using the single tray

Tip Ejection

A Ejecting the tips when the pipette is not operating, before or at the end of a pipetting task.

B Ejecting the tips when the pipette is operating, or during a pipetting protocol:

During pipetting, the ejection buttons are inactive (grey color instead of yellow) until the purge and blow-in tasks have not been done.

- At the end of the tasks, ejection buttons are active: tips can be ejected as previously described.

- Before the end of a task, tips must be emptied of the remaining liquid before ejection. Touch the Abort button and follow the instructions on the screen to empty the tips and reach the pipetting function main page. Ejection buttons can then be activated to eject the tips as described in the previous paragraph.
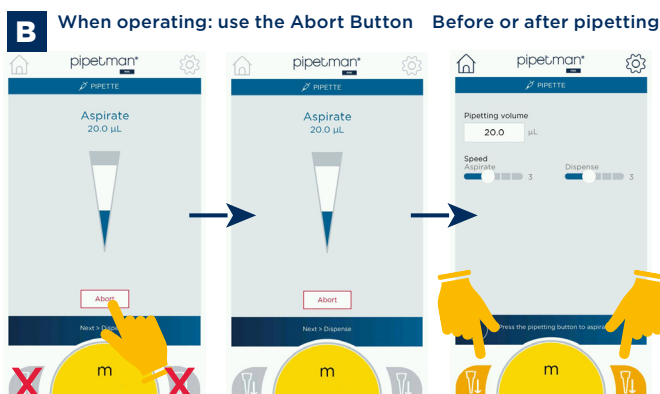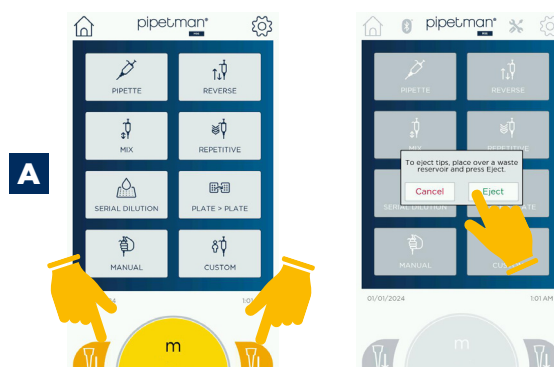
NOTE	**Abort will end the ongoing protocol** and lead to the pipetting function main page.
	For **custom protocols** that combine several pipetting tasks with different liquids, **tip ejection buttons are active after each task** to allow ejection and new tip fitting before pipetting another liquid.
	The use of the Abort button is recommended to eject tips full of liquid. It will end the running protocol, add purge and blow-in steps before allowing tip ejection.

Pipetting

PIPETMAN M96 is simple and intuitive, as easy to use as a pipette, and a **Contextual Help Bar** assists the user at each step of the protocol. For each mode, pressing on the 🛈 icon of the **Contextual Help Bar** will provide further assistance or explanations on the current pipetting mode.

> ⚠️**WARNING** Pipetting corrosive liquids may damage PIPETMAN M96 parts in contact with the solution. In case of contact, immediately clean up aggressive liquids.

Pre-Wet the Tips

Pre-wetting the tips before pipetting helps prepare the tips for the best pipetting performance. Ideally, the pre-wet includes both immersing the tip in the liquid and performing one or more pipetting steps (a minimum of five pipetting steps is recommended).

Pre-wetting the tips helps ensure that your pipette will achieve accurate and precise volumes within specifications.
PIPETMAN M96 enables the user to pre-wet the tips in different ways.

The **Mix mode is recommended**: set several mix cycles at mid or low speed to pre-wet the tips.

Pipette mode or Manual mode can also be used to pre-wet the tips, including a purge between each pipetting cycle (refer to **PIPETTING MODES AND APPLICATIONS** for further details).

Adjustable Finger Rests

To reinforce ergonomics, PIPETMAN M96 is equipped with adjustable finger rests that can move around an axis to fit any finger size and conveniently lift or lower the pipetting head.

Figure 4
Adjustable finger rest

Height Adjustment

Adjust the pipette height to the microplate location or the labware being used.

Use the height-fixing screw to define the lowest possible pipetting height and prevent accidentally touching the bottom of the microplate wells:
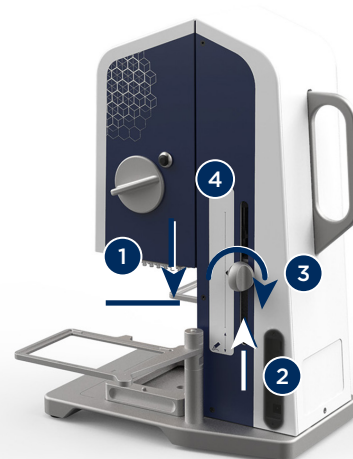
1 Place the pipetting head at the desired lowest level

2 Unscrew and lift the height-fixing screw until it stops

3 Lock the screw

4 Mark your preferred height on the white sticker with dry-erase markers for reproducible results when pipetting in several microplates of the same kind.

> **NOTICE** If the screw is at its lowest position, the pipetting head is free, and there is no minimal height defined. Height can be locked or adjusted at any time or during any pipetting task.

Pipetting

To start pipetting, place a vessel containing the liquid to be pipetted on the microplate area of the chosen accessories (refer to the PIPETMAN M96 User's Guide LT801671 on gislon.com, part **Accessories Recommended for Optimal Usage** for further details).

For each Pipetting mode:

1 From the Home screen, touch the button to reach the desired pipetting function.

2 **Set the pipetting parameters** (refer to detailed parameters in the **PIPETTING MODES AND APPLICATIONS**). A message will appear on the **Contextual Help Bar** to guide you to the next steps.

Press on the 🛈 icon of the **Contextual Help Bar** for further explanations on the current pipetting mode.

3 Push on the **Pipetting button** to start the task.

Either the central touchscreen button or the buttons on the side of the pipette can be used for a preferred way of pipetting and reinforced ergonomics.

4 Follow the instructions on the screen until the end of the task.

> **NOTE** To stop a protocol before its end, touch the Abort button and follow the instructions on the screen to empty the tips and reach the pipetting mode main page.

Pipetting In 384-well Microplates with Reversible Trays

PIPETMAN M96 and its accessories enable pipetting in 384-well microplates with only four movements.

The single tray and rotating tray adapted to 384-well microplates enable the user to slide the microplate manually. Dimensions of the trays are larger than the size of the microplate to let the user move the microplate from one corner to another and fill a 384-well plate with 96 tips.

1. Place the microplate on the tray and ensure it is located at the first corner. Tips must be above the first series of wells.
The plate is ready for the first pipetting step.

2. To reach the next series of wells, slide the microplate to the next position, on the second corner of the tray. Tips must be above the second series of wells. The plate is ready for the second pipetting step.

3. 4. Repeat the operation for the two remaining series of wells: slide the plate to the next corner of the tray and pipette.

384-well microplate filling pattern: square from A1 to B1 well
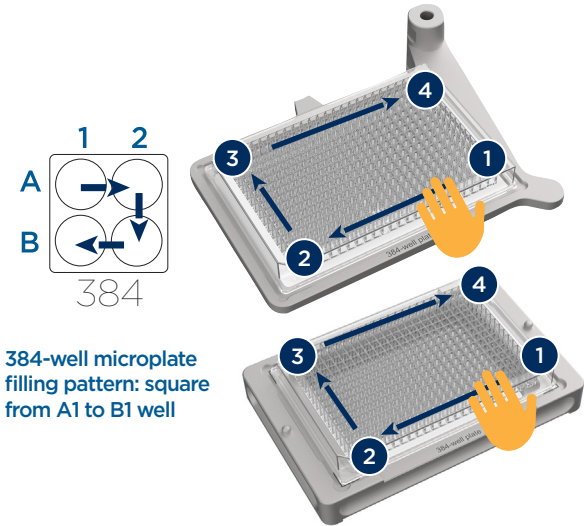
Pipetting Modes and Applications

Intuitive and easy-to-use, PIPETMAN M96 offers direct access to standard pipetting functions, and pipetting applications specific to the use of microplates: Plate-to-Plate and Serial Dilution modes.

| Pipetting Modes Accessible from the Home Screen	Recommendations	Pipetting Modes Accessible from the Home Screen	Recommendations
Pipette	All standard applications. Partial plate filling (with partial tip fitting).	**Reverse**	Reverse pipetting mode is recommended for dense, foaming, or high vapor pressure liquids; cold or hot samples.
Mix	Mix and homogenize different solutions right after a pipetting step. Perform several mix cycles at mid or low speed to pre-wet the tips (recommended)	**Repetitive**	Dispensing aliquots. Filling several plates (ex. reagent addition, plate preparation).
Serial Dilution	10-fold dilutions (pipette + mix row by row)	**Plate-to-Plate**	Plate transfer, plate replication, and plate reformatting with one or up to 4 different liquids. Source plates: 96- or 384-well. Destination plates: 96- or 384-well
Manual	Manually controlled pipetting such as: multiple aspirations of supernatant, multiple dispenses of medium or reagent to fill plates without setting specific volume. Titration. ELISA: addition of the last reagent to stop a reaction.	**Custom**	Creation of personalized protocols including different tasks. X-fold serial dilutions. Partial plate filling, plate filling with different liquids or samples.

NOTICE — When working with 6-, 12-, 24-, and 48-well microplates, follow the partial tip fitting instructions in Fitting and Ejecting the Tips.

To remove droplets, re-immerse the tips, then slightly move the microplate and put the tips against the wall of the wells.

The pipetting modes proposed, accessible from the Home screen, guide the user from the pipetting settings to the end of the tasks. They all follow the same workflow:

1. Define the pipetting settings
2. Execute using either the touchscreen or the buttons on the side of the pipette
3. Follow the instructions for the purge and blow-in steps
4. Back to the pipetting settings page to start again
5. Or touch the icons at the top of the display to reach the Home screen to change function or the parameters screen
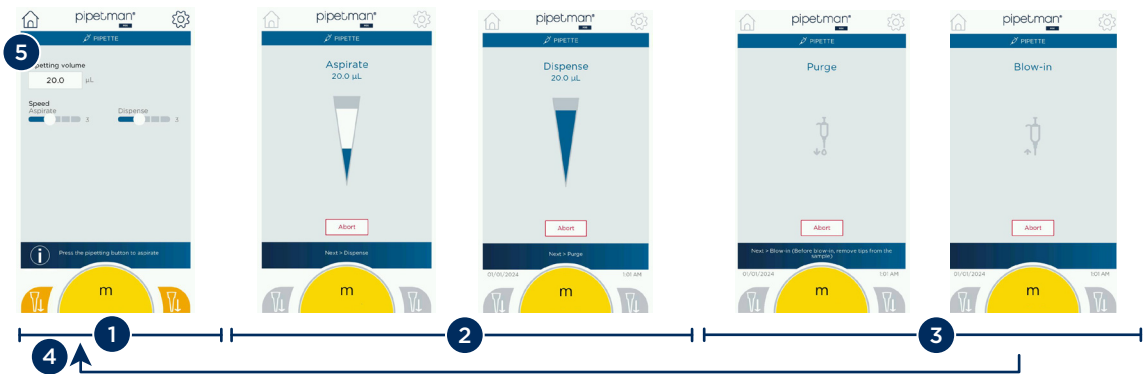
Pipette

Pipette Mode Description		
	Pipetting Steps	**Setting Parameters**
	Aspirate Dispense Purge Blow-In	Pipetting volume Aspiration speed (1-6) Dispense speed (1-6)

Reverse

Reverse Mode Description		
	Pipetting Steps	**Setting Parameters**
	Aspirate Dispense Purge Blow-in	Pipetting volume Aspiration speed (1-6) Dispense speed (1-6)

Mix

Mix Mode Description		
	Pipetting Steps	**Setting Parameters**
	Aspirate Dispense Mix X times Purge Blow-in	Pipetting volume Aspiration speed (1-6) Dispense speed (1-6) Mix volume Number of mix cycles Mix aspiration speed (1-6) Mix dispense speed (1-6)

Repetitive

Repetitive Mode Description		
	Pipetting Steps	**Setting Parameters**
	Aspirate Discard Dispense aliquots (X Times) Purge Blow-in	Aliquot volume Number of aliquots Aspiration speed (1-6) Dispense speed (1-6) Mix volume Number of mix cycles Mix aspiration speed (1-6) Mix dispense speed (1-6)

NOTE An extra volume is aspirated to ensure equal operating conditions for each dispensed aliquot. This discard step is mentioned on the touchscreen: discard this extra volume in a vessel different from the working microplate.
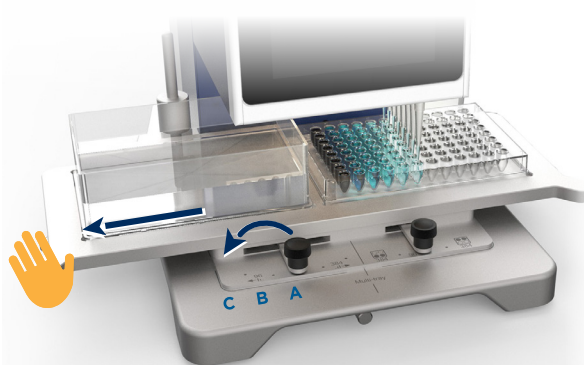
Serial Dilution Using the Multi-Tray

The Serial Dilution mode allows 10-fold dilutions from one microplate column to another, or dilutions that require to transfer several times the same volume of liquid from one column to the other.
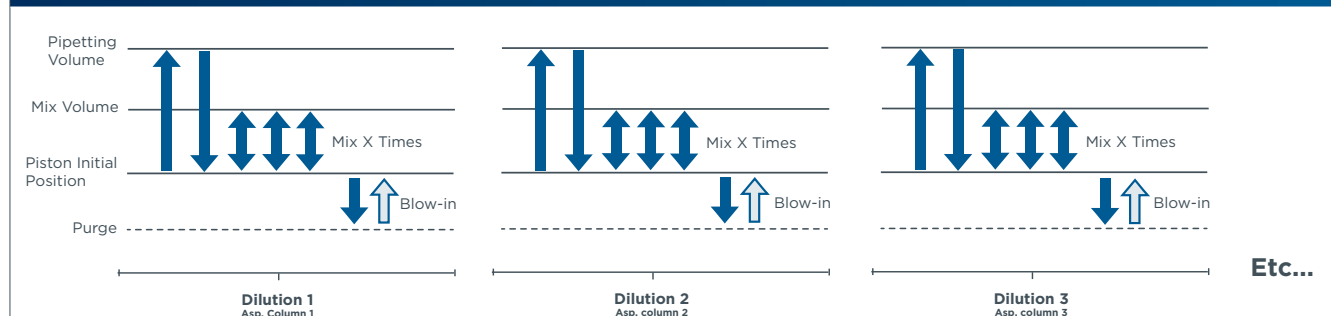
Rows of eight tips can be fitted either on the left or right of the pipetting head.

Use the multi-tray to slide the microplate under the pipetting head from one column to another.

- **Position A** of the shifting lever: free slide of the tray without pre-set position
- **Position B**: pre-set positions of the column width – slide the tray from one column to another thanks to a slight notch
- **Position C**: same as position B with a more significant notch

Serial Dilution Mode Description

Pipetting Steps	Setting Parameters
- Aspirate (From Column 1) Dispense (To Column 2) Mix (In Column 2 X Times) Purge Blow-in - Aspirate (From Column 2) Dispense (To Column 3) Mix (In Column 3 X Times) Purge Blow-in - Etc. (Pipetting cycle repeated X times)	Dilution volume (always the same) Number of dilutions Aspiration speed (1-6) Dispense speed (1-6) Mix volume Number of mix cycles Mix aspiration speed (1-6) Mix dispense speed (1-6)

NOTICE When the dilution factor is different from 10, or when the volume to dilute is different from one row to the other, use the Custom mode to program the different steps of the plate filling and dilutions.

Plate-To-Plate

The Plate-To-Plate mode allows to transfer liquids from one microplate to another.

1 Press plate selection to define your microplate patterns.

Various combinations are possible from source to destination plates: transfer, replicate, or reformat microplates with one or up to four different liquids in only a few steps.

2 Set the volume and the pipetting speeds.

3 **4** Start pipetting and follow the instructions

For 384-well plates, the single tray, multi-tray, and reversible rotating trays 96-384 and 384-384 can be used.

Plate-to-Plate Mode Description
From 96- to 384-well Microplates (Standard Mode, and Custom Plate-To-Plate Mode Examples)

	Pipetting Steps	Setting Parameters

	When the same liquid or no indication on liquids: Pipette mode
	• Aspirate from plate 96
	  Dispense in well 1/4 in plate 384
	  Purge
	  Blow-in
	• Aspirate from plate 96
	  Dispense in well 2/4 in plate 384
	  Purge
	  Blow-in
	• Same operations in wells 3/4
	• Same operations in wells 4/4
		Pipetting volume
		Aspiration speed (1-6)
		Dispense speed (1-6)

	When four different liquids: Pipette mode
	• Aspirate liquid 1 ● from plate 96
	  Dispense ● in well 1/4 in plate 384
	  Purge
	  Blow-in – change tips if needed
	• Aspirate liquid 2 ● from plate 96
	  Dispense ● in well 2/4 in plate 384
	  Purge
	  Blow-in – change tips if needed
	• Same operations with liquid 3 ● in wells 3/4
	• Same operations with liquid 4 ● in wells 4/4
		Pipetting volume
		Aspiration speed (1-6)
		Dispense speed (1-6)

	When two wells one after the other are filled with the same liquid: Repetitive* and Pipette mode
	• Aspirate liquid 1 ● from plate 96
	  Discard
	  Dispense aliquot 1 ● in well 1/4 in plate 384
	  Dispense aliquot 2 ● in well 2/4 in plate 384
	  Purge
	  Blow-in – change tips if needed
	• Aspirate liquid 2 ● from plate 96
	  Dispense ● in well 3/4 in plate 384
	  Purge
	  Blow-in – change tips if needed
	• Same operations with liquid 3 ● in wells 4/4
		Pipetting volume (when aliquots: they are automatically calculated to correspond to the pipetting volume)
		Aspiration speed (1-6)
		Dispense speed (1-6)

*If the total volume to pipette with the same liquid does not exceed the nominal volume (otherwise: Pipette mode).

Plate-to-Plate Mode Description
From 96- to 96-well Microplates

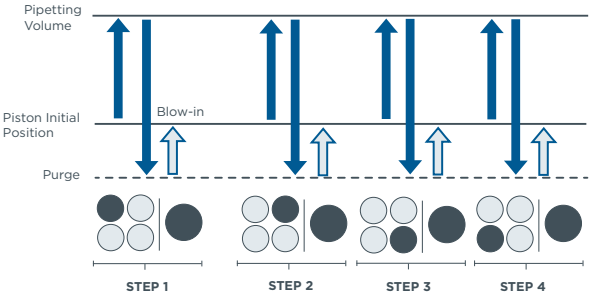|	Pipetting Steps	Setting Parameters
	Aspirate from plate 96 Dispense in plate 96 Purge Blow-in	Pipetting volume Aspiration speed (1-6) Dispense speed (1-6)

Plate-to-Plate Mode Description
From 384- to 384-well Microplates

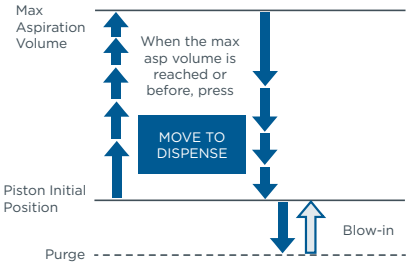|	Pipetting Steps	Setting Parameters

	• Aspirate from well 1/4 in plate 384
	  Dispense in well 1/4 in plate 384
	  Purge
	  Blow-in
	• Aspirate from well 2/4 in plate 384
	  Dispense in well 2/4 in plate 384
	  Purge
	  Blow-in
	• Same operations in wells 3/4
	• Same operations in wells 4/4
		Pipetting volume
		Aspiration speed (1-6)
		Dispense speed (1-6)

Plate-to-Plate Mode Description
From 384- to 96-well Microplates (same liquid in each well of the 384-well Microplate)

Pipetting Steps	Setting Parameters
• Aspirate from well 1/4 in plate 384 Dispense in plate 96 Purge Blow-in • Aspirate from well 2/4 in plate 384 Dispense in plate 96 Purge Blow-in • Same operations from wells 3/4 • Same operations from wells 4/4	Pipetting volume Aspiration speed (1-6) Dispense speed (1-6)

Manual Pipetting

The Manual Pipetting mode allows for aspiration and dispensing as long as the pipetting button is held. Unique or multiple aspirations can thus be done according to the working protocol.

This mode can be used when there is no need for a precise volume of liquid to handle.

Manual Pipetting Mode Description

Pipetting Steps	Setting Parameters
Aspirate (manually activated) Move to dispense (button) Dispense (manually activated) Purge Blow-in	Maximum aspirated volume Aspiration speed (1-6) Dispense speed (1-6)

NOTICE
When pipetting the screen indicates the approximate volume of liquid in the tips. It corresponds to the total aspirated volume when aspirating, and the remaining volume of liquid in the tips during dispensing. This indication is provided for information purposes only and is not for accurate and precise volume measurement.

Switching from aspiration to dispense can be done before the maximum aspirated volume has been reached. When the dispensing has started, the pipette will not return to aspiration.
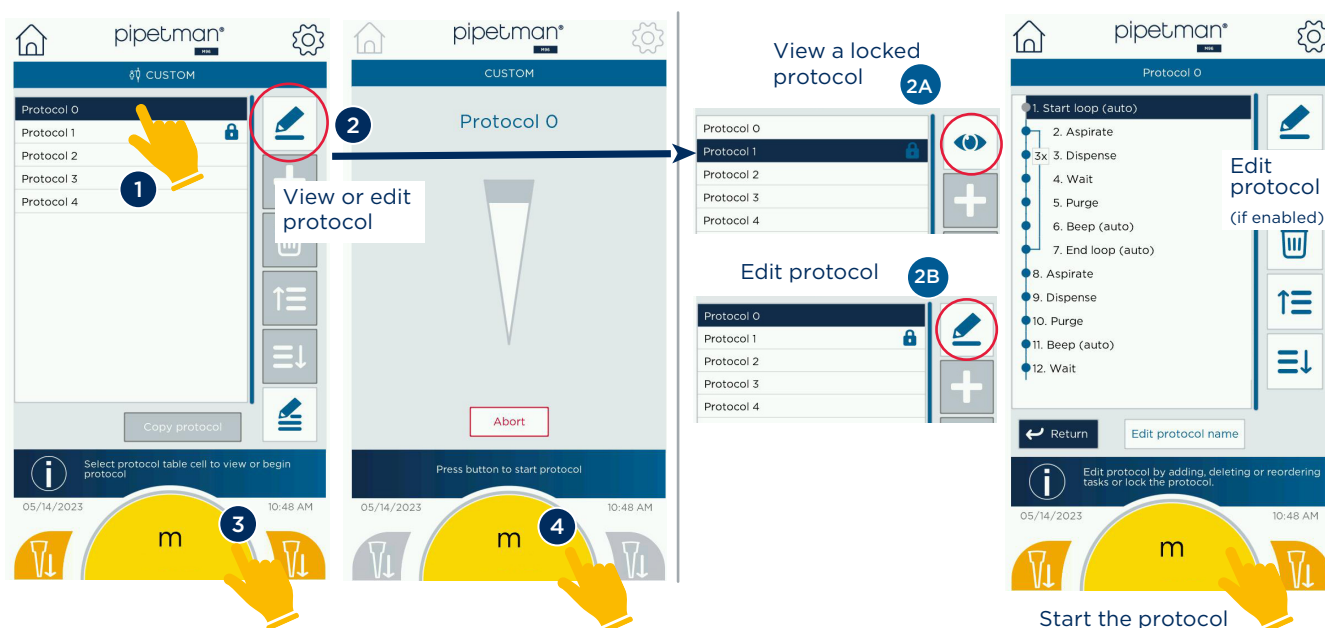
Custom

The Custom mode allows the creation of personalized pipetting protocols, including different tasks or using existing protocols (previously created).

NOTICE
To avoid any accidental change of the protocol or to follow your SOPs, protocols can be locked if the Admin control function has been enabled.

RUN A PRESET PROTOCOL

View or edit protocol

View a locked protocol — 2A
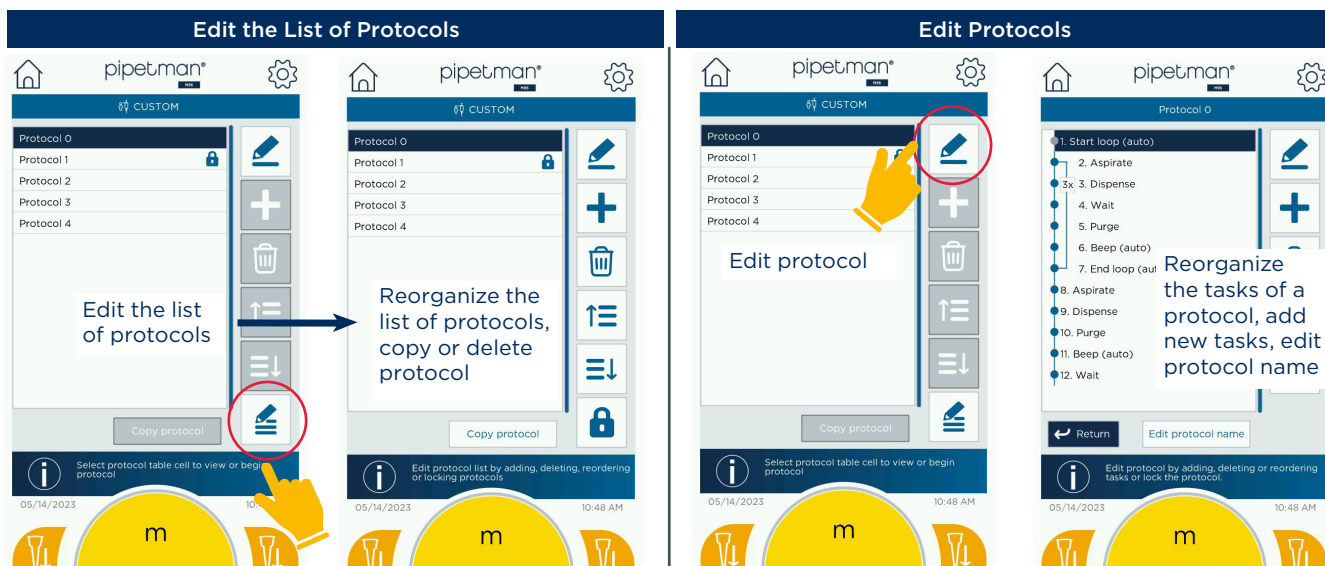
Edit protocol — 2B

Edit protocol name

Edit protocol (if enabled)

Start the protocol

EDIT, MODIFY, AND CREATE PROTOCOLS

Editing and modifying protocols can be done when protocols are unlocked or when the padlock icon is touched: a pop-up will appear. Enter the Admin PIN code and the protocol is temporarily unlocked for modifications.

Edit the List of Protocols

Edit the list of protocols → Reorganize the list of protocols, copy or delete protocol

Edit Protocols

Edit protocol

Reorganize the tasks of a protocol, add new tasks, edit protocol name

If Admin mode is enabled or if protocol is locked: touch the padlock icon and enter the PIN code

TASK SETTING PARAMETERS

Task	Parameters	Task	Parameters
Aspirate	Aspirate volume Aspiration speed (1-6) Button activates on click	**Mix**	Mix volume Number of mix cycles Mix aspiration speed (1-6) Mix dispense speed (1-6) Button activates on click
Dispense	Dispense volume Dispense speed (1-6) Button activates on click	**Wait**	Duration Button activates on click
Dispense all	Dispense speed (1-6) Button activates on click	**Purge (+ auto blow-in)**	Button activates on click
Reverse	Pipette volume Aspiration speed (1-6) Dispense speed (1-6) Button activates on click	**Beep**	-
Repetitive	Aliquot volume Number of aliquots Aspiration speed (1-6) Dispense speed (1-6)	**Loop**	Loop count

NOTE

The **activate on click** toggle enables the execution of a task automatically or when the pipetting button is pressed. When "Activate on click" is selected, the task will start only when the pipetting button is pressed. When tasks are done automatically, **"(Auto)"** will appear after the name of the task on the screen as a reminder.

To **set a timer** (ex. Incubation 30 minutes), select the task Wait, add 30 minutes in the duration parameter and rename it Incubation 30'. This task can be preceded and followed by the Beep task to remind you that the incubation time is done.

Cleaning

PIPETMAN M96 and its accessories are designed so that the parts in contact with contaminants can regularly and easily be cleaned and decontaminated.
Wipe PIPETMAN M96 and the trays with a soft cloth dampened with a mild detergent and disinfect as needed.

NOTICE

Standard laboratory cleaning and disinfecting solutions can be wiped on the pipette, such as: sodium hypochlorite (chlorine bleach), hydrogen peroxide, ethanol, and surface decontaminants (eg. RNaseZap, Lookout® DNA Erase). Avoid using highly concentrated solutions or solvents that could damage the cover, the colored housing of the pipette, or the identification label on the back of the pipette (e.g. isopropanol, methanol, or solvents like dichloromethane and chloroform).

⚠CAUTION

Turn the power off and unplug the power cable before cleaning

The liquid must not enter inside the pipette.

If the surfaces of the PIPETMAN M96 or the trays have been in contact with biohazardous material, they must be decontaminated according to the laboratory Standard Operating Procedures (SOP).

Regulatory Compliance

Gilson certifies on its sole responsibility that PIPETMAN M96 and PIPETMAN M96 Connected models comply with the requirements of the following standards:

EU REGULATION ALL MODELS

2014/30/EU Electromagnetic compatibility, EMC

2014/35/EU Low Voltage Directive, LVD

2011/65/EU Restriction of Hazardous Substances (RoHS-2)

(EU) 2015/863 Restriction of Hazardous Substances (RoHS-3)

EU REGULATION FOR CONNECTED PRODUCTS

2014/53/EU Radio Equipment Directive

UK REGULATION ALL MODELS

Electromagnetic Compatibility, Regulation 2016

Electrical Equipment (Safety), Regulation 2016

Radio Equipment Regulation 2017/1206

WEEE

The WEEE symbol (crossed-out wheeled bin), according to the European Directive 2012/19/EU, indicates separate collection for WEEE – Waste of Electrical and Electronic Equipment.

Do not dispose of electronic devices and their batteries in a household bin, use the recycling path in place in your country.

USA USER INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference,

(2) This device must accept any interference received, including interference that may cause undesired operation.

> ⚠**CAUTION** Any changes or modifications not expressly approved by Gilson and the party responsible for compliance could void the user's authority to operate the equipment.

Regulatory Compliance for Bluetooth-Connected Models

This Bluetooth-enabled device also complies with the following requirements:

USA, User information: Contains FCC ID: 2AAQS-ISP1807

> ⚠**CAUTION** Any changes or modifications not expressly approved by Gilson and the party responsible for compliance could void the user's authority to operate the equipment.

Canada, User information: Contains IC: 11306A-ISP1807

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this devic e must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Japan, TELEC certification n°020-200037

South Korea, KCC Certification n° R-C-iNs-ISP1807

Warranty

Gilson warrants this device against defects in material under normal use and service for a period of **24 months** from the date of purchase.

This warranty shall not apply to devices which are subject to abnormal use and/or improper or inadequate maintenance (contrary to the recommendations given in the user's guide), including, but not limited to devices which have been subjected to physical damage, improper handling, spillage or exposure to any corrosive environment. This warranty shall also be void in the event devices are altered or modified by any party other than Gilson or its designates. Gilson's sole liability under this warranty shall be limited to, at Gilson's sole option, repair or replacement of any defective components of devices or refund of the purchase price paid for such devices.

THE FOREGOING WARRANTY IS EXCLUSIVE AND GILSON HEREBY DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND ANY WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, UNDER NO CIRCUMSTANCES SHALL GILSON BE LIABLE FOR ANY CONSEQUENTIAL, PUNITIVE, INDIRECT OR INCIDENTAL DAMAGES ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY.

Specifications subject to change without notification — errors excepted.

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