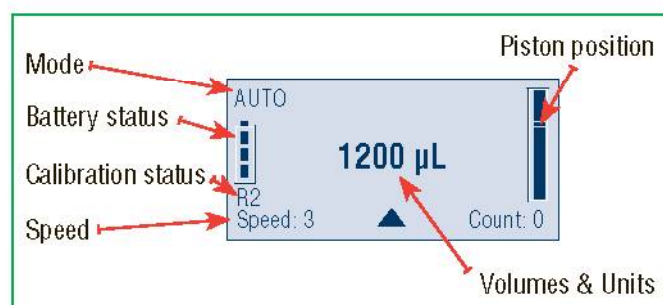


GETTING STARTED

- 1) Slide the battery block into the pipette.
- 2) Plug the pipette onto the charging stand.
- 3) Connect the AC adaptor to a suitable AC power supply and plug the adaptor into the charging stand (or directly into the pipette). It takes two hours to fully charge the battery or one hour for 80 % charge. We strongly recommend you fully charge the battery before using the pipette.
- 4) Press any button to activate the pipette.

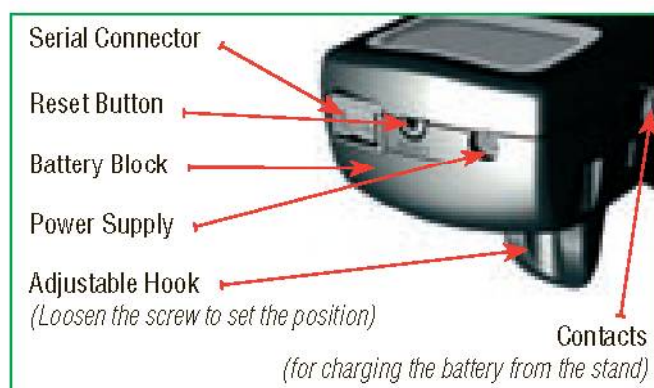
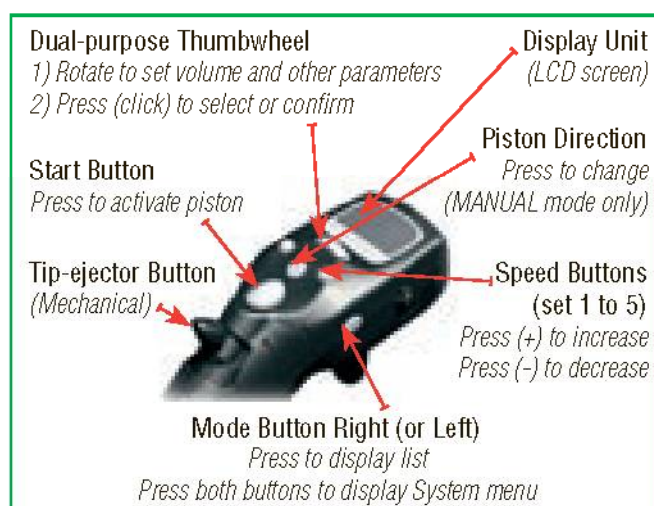
DISPLAY (AUTO MODE)



COMMON OPTIONS

- 1) The speed can be changed before or during a pipetting cycle.
- 2) In some modes the user has access to a cycle counter, which is incremented after each pipetting cycle. It counts up to 999 before starting again at zero. The counter is reset to zero each time the volume is changed.
- 3) In each of the modes listed below the parameters last used are kept in memory until you change them.
- 4) To abort the active mode, press one of the Mode buttons during the current cycle.

BUTTONS AND CONNECTORS



PIPETTING MODES

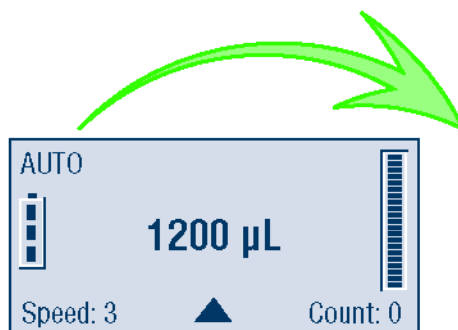
Press either of the **Mode** buttons. The Mode menu shows on the LCD screen. The active mode will blink. To select another mode, scroll the different modes by turning the thumbwheel, then press the thumbwheel to confirm. After a few seconds, the display returns to the last mode used if no mode is selected.

PIPETMAN[®] Concept

AUTO

This is the simplest mode. Aspirate and dispense are initiated using the **START** button.

Set the sample volume: press and turn the thumbwheel until you see the selected volume is displayed on the screen, then press the thumbwheel to lock the volume – you cannot dispense until this is done.



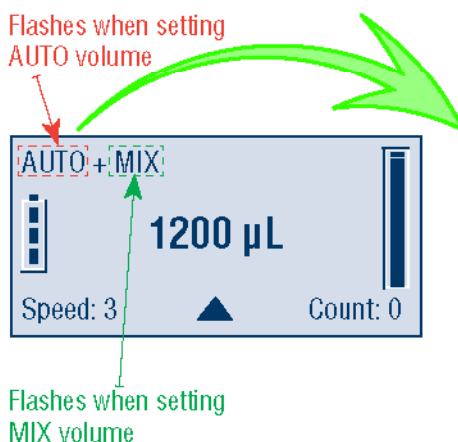
- 1) To aspirate: click (press and release) the **START** button.
- 2) To dispense: click (press and release) the **START** button. Three things happen: sample dispense, automatic purge and piston reset to zero. However, if you keep the button pressed until the end of the dispense, the piston reset takes place after you release the **START** button again. This feature enables you to remove the tip from the liquid – otherwise liquid would be re-aspirated when the piston resets.

AUTO + MIX

This mode operates in the same way as AUTO, but is followed by a mixing phase.

Set the sample volume: with “AUTO” flashing on the screen.

Set the mix volume: with “MIX” flashing on the screen. The default is the sample volume previously selected, to accept this value for mixing simply press the thumbwheel for the second time.

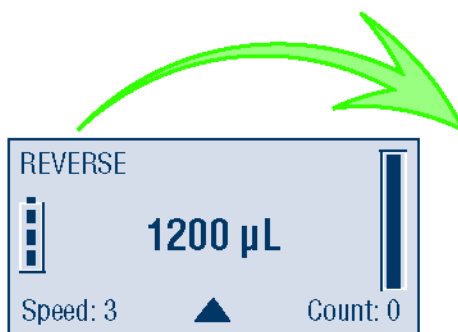


- 1) To aspirate: click the **START** button.
- 2) To dispense: click the **START** button.
- 3) To mix: press the **START** button; mixing continues for as long as you keep the **START** button pressed. Release the **START** button to complete the current mixing cycle.
- 4) Purge: click on **START** to purge and reset the piston. “BLOW OUT” appears on the screen until the piston has reset to zero.

REVERSE

This mode is like reverse mode pipetting using a mechanical pipette.

Set the sample volume: press and turn the thumbwheel until you see the selected volume displayed on the screen, then press the thumbwheel to lock the volume.

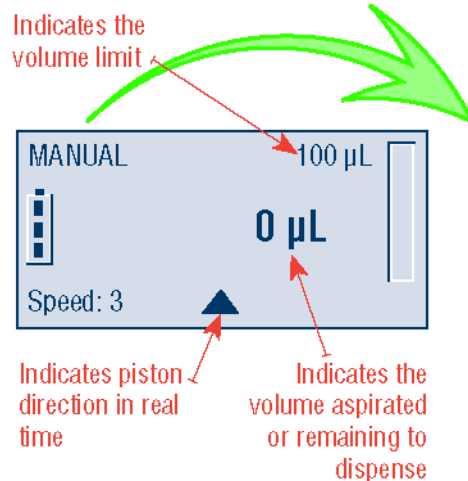


- 1) To aspirate: click the **START** button.
- 2) To dispense: click the **START** button.
- 3) “BLOWOUT” appears on the screen: click on **START** to purge and reset the piston. However, if you keep the button pressed until the end of the dispense cycle, the reset takes place after you release the **START** button again.

MANUAL

This mode simulates the way in which a manual pipette is operated. The user can stop and start the aspirate and dispense phases at will.

Set the sample volume (optional): click on the thumbwheel than turn it until you see the selected volume limit (Vmax) displayed on the screen, then press the thumbwheel to lock the volume.

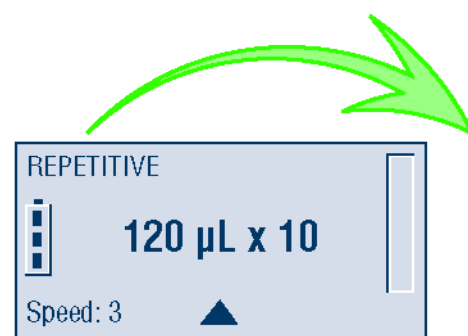


- 1) To aspirate: keep the **START** button pressed. You can stop by releasing the **START** button and restart by pressing it again. You can aspirate until Vmax or the nominal volume is reached.
- 2) Press the **DIRECTION** button to change the direction in which the piston moves from up to down. You can change direction at any time during an aspirate or a dispense cycle.
- 3) Dispense: keep the **START** button pressed. At any time, you can stop by releasing the **START** button and restart by pressing it again. When the volume reaches 0 µL, dispensing stops.
- 4) Purge: click on **START** to purge and reset the piston. "BLOW OUT" appears on the screen until the piston has reset to zero.

REPETITIVE

This mode distributes a number (N) of equal aliquots. You supply the aliquot volume (AV) and the pipette automatically calculates the maximum number of aliquots from the nominal volume (NV) of the pipette as follows: $N = NV/AV$.

Set the aliquot volume: click the thumbwheel. Then press the thumbwheel to lock the volume and calculate the number of aliquots. The number of aliquots flashes. You can change the number of aliquots using the thumbwheel or simply press the thumbwheel to accept the number displayed.



- 1) To aspirate: click the **START** button.
- 2) To dispense: click the **START** button "N" times to sequentially dispense the aliquots. The number of aliquots left to dispense is displayed on the screen.
- 3) "BLOW OUT" appears on the screen: click on **START** to purge and reset the piston. However, if you keep the button pressed until the end of the dispense cycle, the reset takes place after you release the **START** button again.

PROGRAMMING MODES

The REVERSE mode can be replaced by another programmed mode that can be uploaded by the user with a PC-connection kit (optional). The kit, which includes a PC/pipette connecting cable, programming and configuration software, can be obtained from your usual Gilson representative (reference number F30755).

SYSTEM MENU: SYNOPSIS

Press both **Mode** buttons at the same time to accede to the System Menu. This menu lets you choose between 4 sub-menus: Configuration, Calibration, Maintenance and Personalization. Select a menu by rotating the thumbwheel, then click on the required item to enter the sub-menu; select an item from the sub-menu in the same way.

