




# avoset™ Quick Guide



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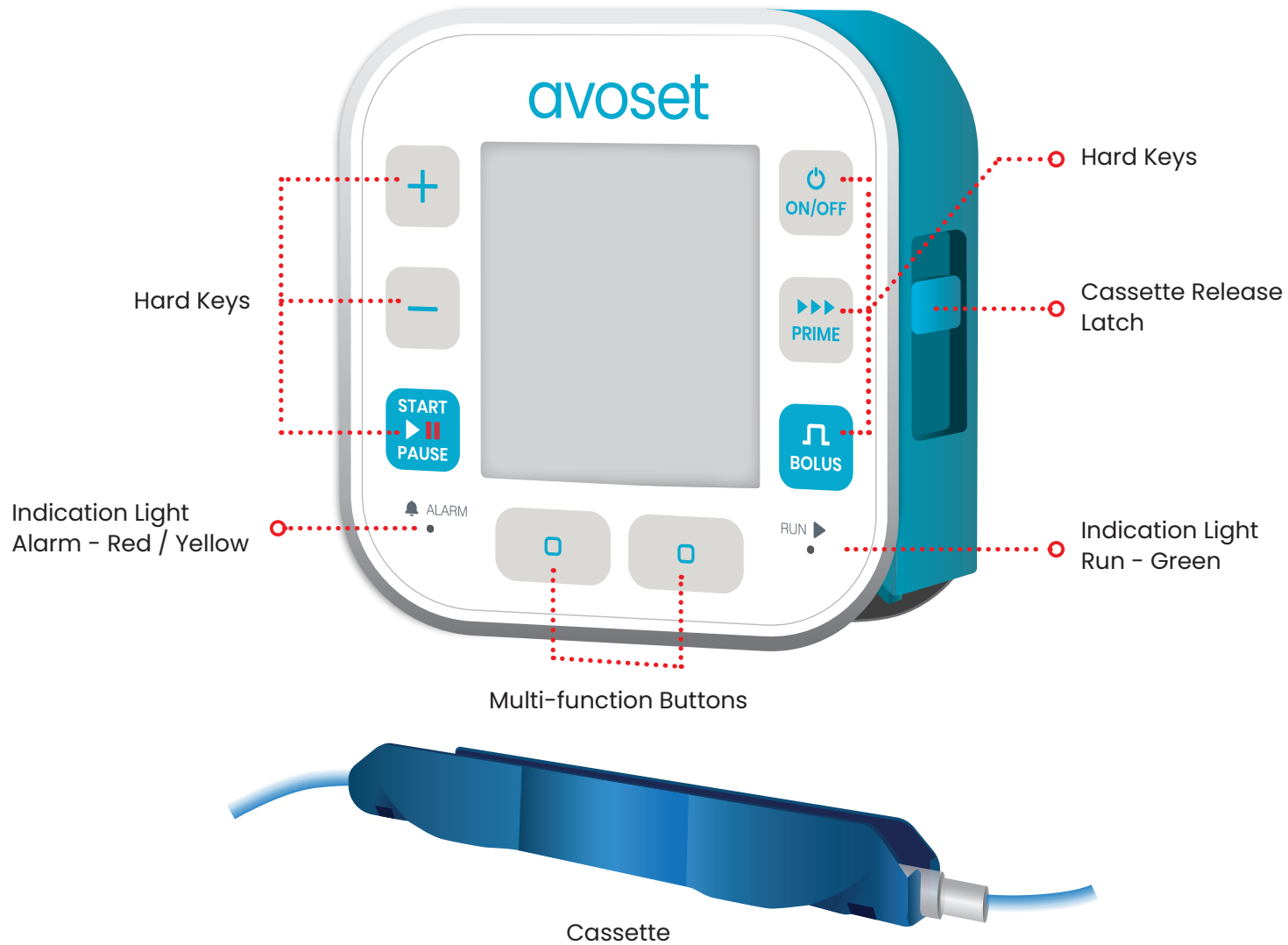
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 This quick guide provides guidelines for the basic functionalities of the Avoset infusion pump. If you are not a clinician please refer to the Important usage information guide, for additional information and the safe use of the product. If you are a clinician, refer to the user manual and the terms of this document use [www.eitanmedical.com/term\\_training\\_materials](http://www.eitanmedical.com/term_training_materials).



# Avoset Pump Layout



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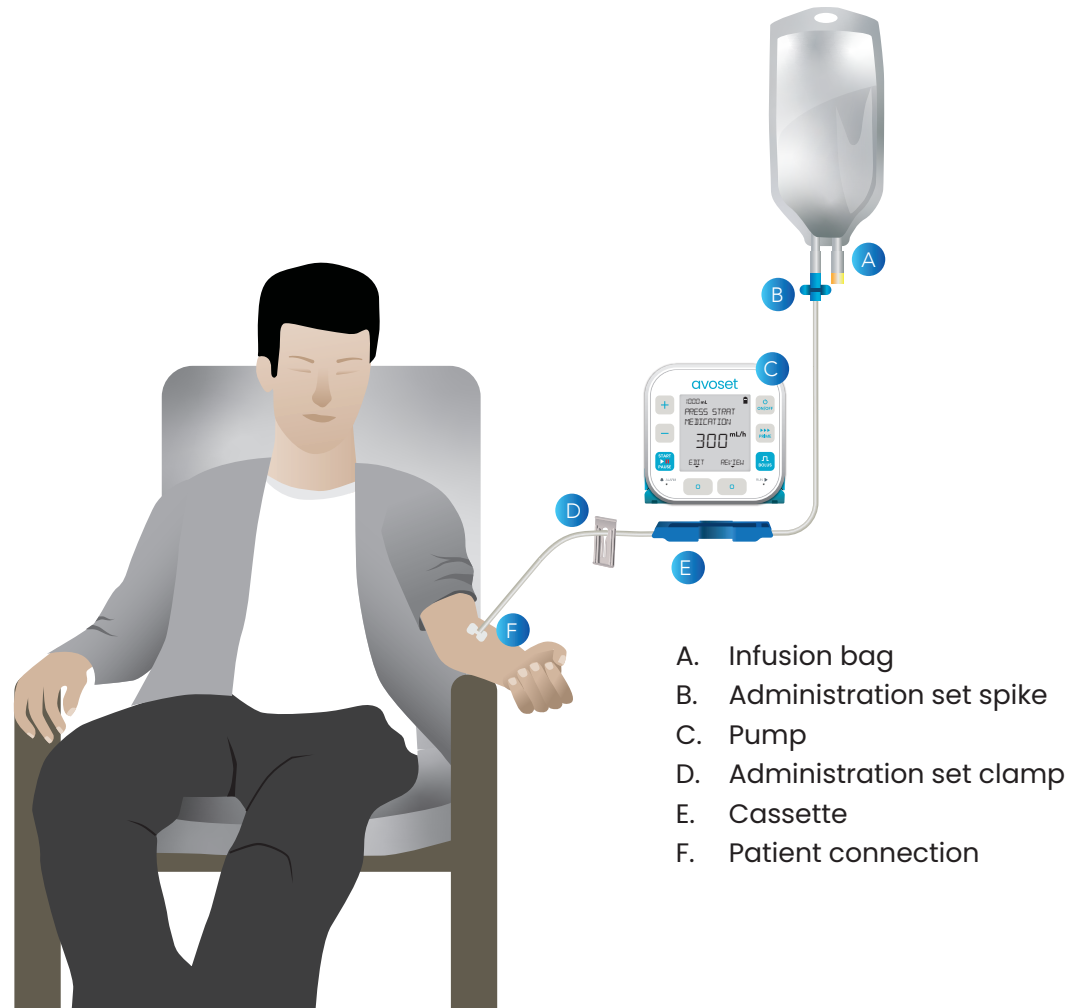


# Setup



# Infusion Setup

1. Insert batteries (see page 7)
2. Turn on the pump (see page 8)
3. Clamp the set (see page 9)
4. Spike the medication bag (see page 9)
5. Remove the AFFV release clip (see page 10)
6. Attach cassette to the pump (see page 10)
7. Open all clamps (see page 12)
8. Prime – remove air (see page 12)
9. Connect set to patient (see page 12)



## Warning

Do not use the pump, administration set, or medication reservoir if they appear damaged in any way. If in doubt, contact your service provider or Eitan Medical.



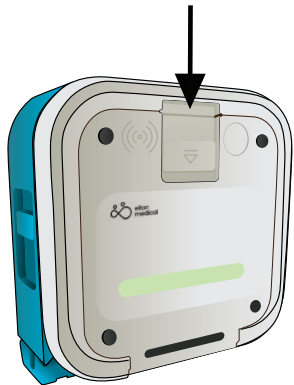
# Insert Batteries

Always turn off the pump before inserting or replacing batteries.



## Warning

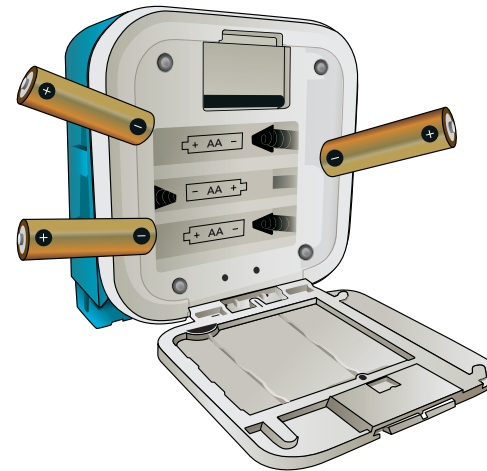
- Change batteries before each treatment.
- Use 3 AA alkaline or rechargeable batteries
- Have extra 3 fresh batteries available during treatment.
- Check the list of supported batteries at [eitanmedical.com](http://eitanmedical.com), as this list may be updated.



1. Press down the battery cover latch to open it



2. Insert 3 AA (1.5V) batteries according the diagram in the battery compartment. Slide the negative (-) end first, compress the spring and snap the positive (+) end into place




3. Close the battery cover



# Turn On the Pump



1. Press  to turn on the pump



2. System self check interim screen is displayed



## Caution

Do not use the pump if during the automatic system check any of the following occur:

1. The screen does not light up, or
2. The pump screen is damaged (black or wight areas cover the screen)
3. The pump does not beep, or
4. The LED indicators do not light up



3. Pump is ready



## In case the pump asks you whether to resume or start new bag of the infusion:

To resume an infusion with the remaining volume in the bag, press the **RESUME** multi-function button (see page 19).

OR;

To start a new infusion with a new bag, press the **NEW BAG** multi-function button (see page 19)



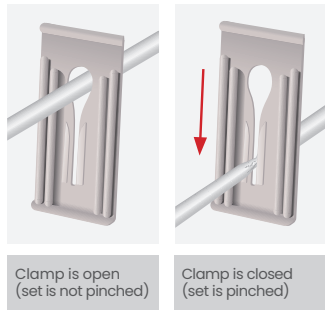
## In case the pump prompts you the last infusion was edited:

One or more parameters was edited during the last infusion. Press **REVIEW** and confirm all parameters until you get to the home screen (see step 3 above).

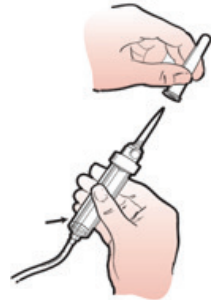




# Spike the Medication Bag



1. Close the clamp on the set



2. Remove the protective cover from set's spike tip



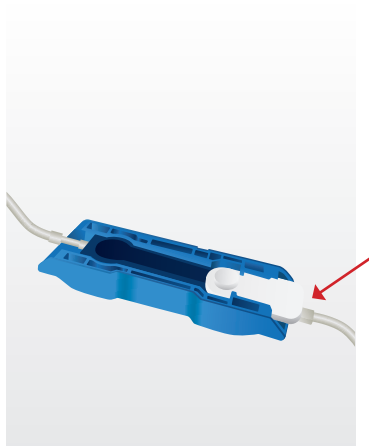
3. Insert spike tip into spike port of the medication bag



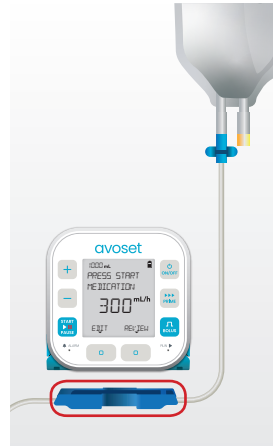
4. Hang the medication bag on a designated hanger, for example: an IV pole



# Attach Administration Set



1. Remove the white clip from the set. In case of reinserting the set, skip this step



2. position the cassette at the bottom of the pump with the infusion bag on the right side



3. Push the cassette into the pump. You should hear two clicks indicating full engagement. Verify the set is lodged in place



4. If Prime Reminder feature is on, the pump asks if you primed the set. Press the NO multi-function button to indicate you have not primed yet. To prime, see page 12



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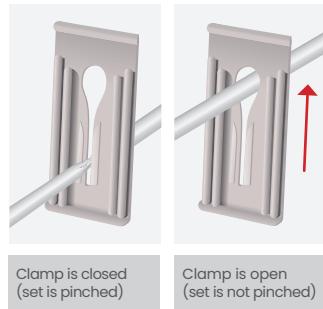


# Prime (remove air)

Following cassette insertion to the pump, prime the administration set to fill it with liquid and remove all air.



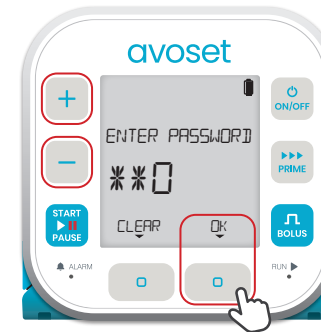
1. Press the **NO** multi-function button.  
\*This question appears only if Prime Reminder feature is on



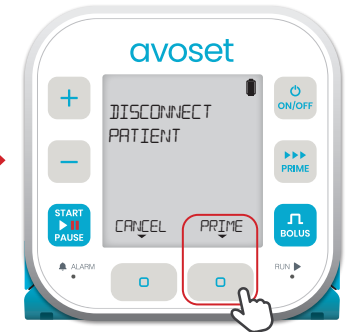
2. Open the clamp (moves freely)



3. Press **PRIME** to start priming



4. Password entry may be required. \*To learn about password, see page 23



5. Once the patient is disconnected from administration set, press the **PRIME** multi-function button to start priming



6. Priming process indication (will end automatically unless you press the **STOP** multi-function button)



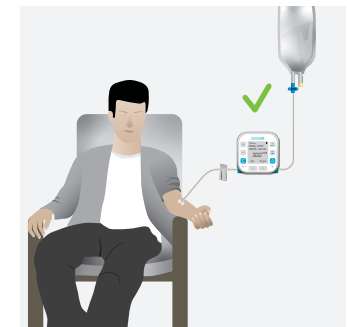
7. Press the **OK** multi-function button



8. Verify there is no air in the set and liquid reaches the end of the set and Press **NO AIR**. Otherwise, press **PRIME**



9. Once the patient is connected, press the **OK** multi-function button



10. Following successful priming, connect the administration set to the patient. The infusion is ready



## Prime (remove air)

---



### **Warning**

- Do not prime with the administration set connected to the patient.
- Do not start without verifying that all clamps are opened and that there is no occlusion.
- Do not allow air into the administration set during priming.
- Do not use the administration set before verifying that all air bubbles have been expelled.



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# Infusion Basic Functions



# Start a New Preprogrammed Infusion



1. Press  to start the infusion



2. The infusion is running



## Warning

- Before starting an infusion, always verify that the medication reservoir contains the correct drug.
- When using an administration set with a filter, place the filter below (lower than) the patient's IV line access point.





# Pause Infusion

Pressing **PAUSE** while the pump is running will pause the infusion.  
The pump will alert if it has been paused and untouched for 30 seconds.

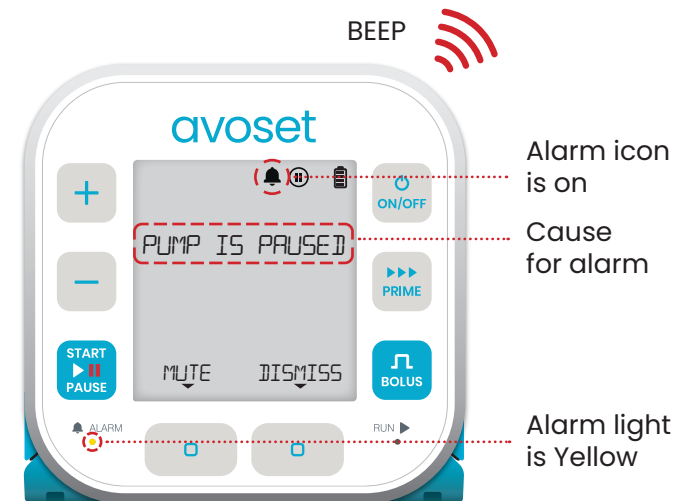


1. Press  to pause the infusion



Pause icon is flashing

30 seconds pass without touching the pump



Alarm icon is on

Cause for alarm

Alarm light is Yellow

MUTE - Silences the alarm  
DISMISS - Dismisses the alarm




# Turn Off the Pump



1. Press  to pause the infusion




2. Press and hold the  key to turn off the pump



3. Keep the  key pressed until the display turns off



4. The pump is turned off

 To resume an infusion after turning off the pump, see next page.



# Resume Infusion or Start New Bag

If the pump was turned off or the cassette was removed and reattached to the pump during an infusion, you will have two options (i) Resume the incomplete infusion or (ii) Start new bag to repeat the same infusion with the original bag volume.

## (i) Resume incomplete infusion



1. Press **RESUME** to continue the interrupted infusion with the remaining volume in the bag



2. Press **START PAUSE** to resume the infusion



3. The interrupted infusion is running

The Running icon is spinning

Green light is flashing

## (ii) Start new bag to repeat last infusion from the beginning



1. Press **NEW BAG** to repeat the same infusion over again with a new bag



2. Press **YES** to confirm reset of the infusion volume to be infused (VTBI)



3. Press **START PAUSE** to start new infusion



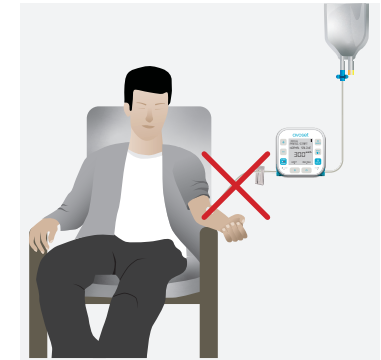
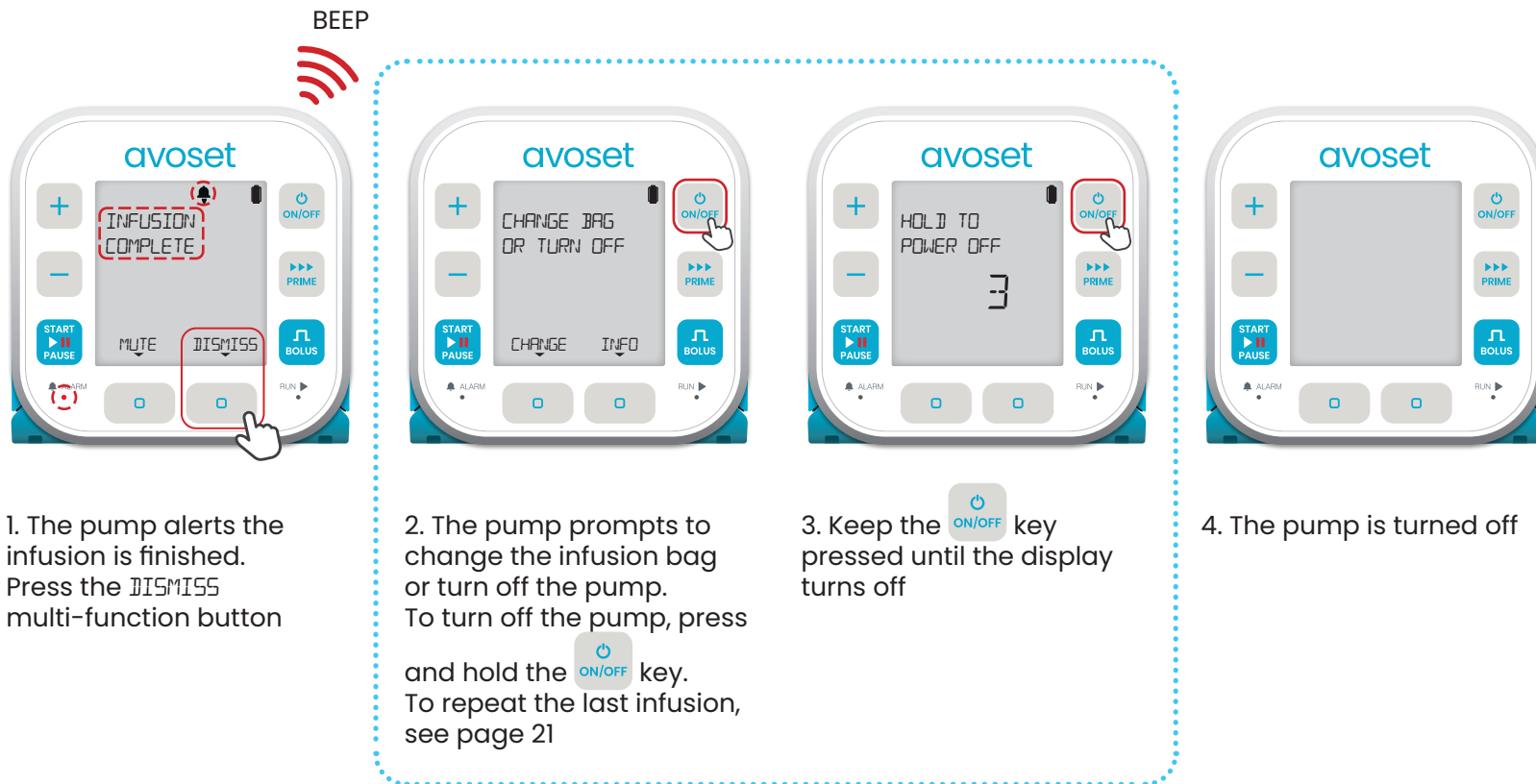
4. The new infusion is running

The Running icon is spinning

Green light is flashing



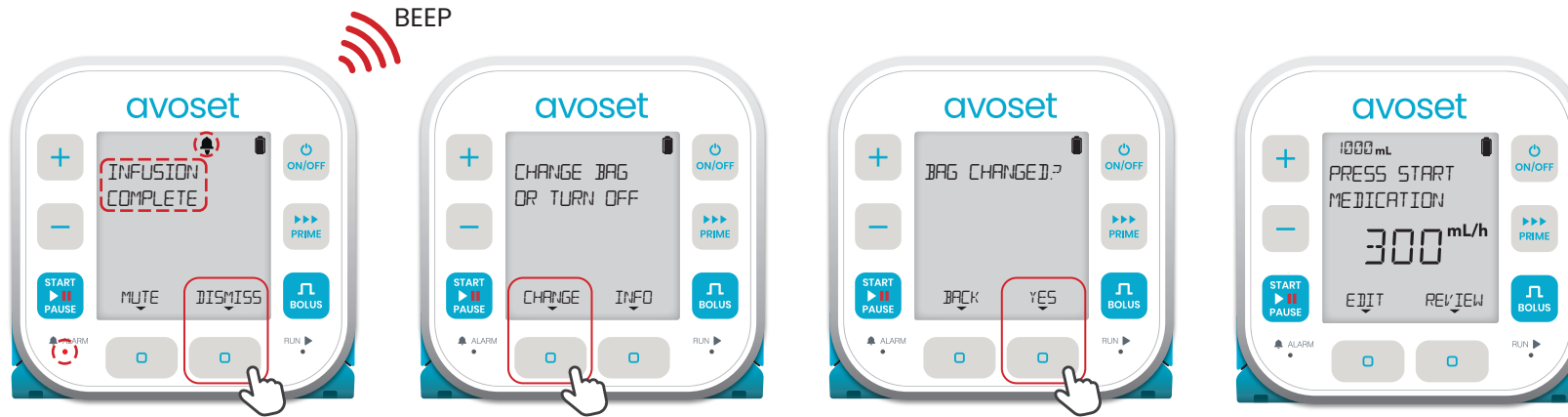
# End of Infusion



5. Disconnect set from patient



# Repeat Last Infusion



1. The pump alerts the infusion is finished. Press the *DISMISS* multi-function button

2. Press *CHANGE* multi-function button or remove the set and attach a new set and a new bag

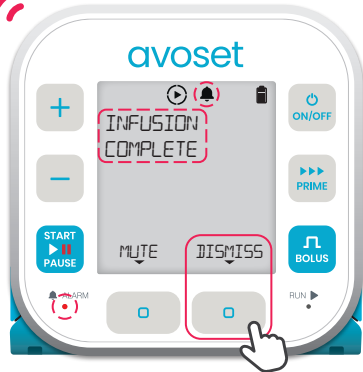
3. Change the medication bag and press *YES* multi-function button

4. Pump is ready to start new infusion

**i** In case the infusion ends with KVO; quit the KVO before repeating the infusion, for quit KVO instructions see page 22



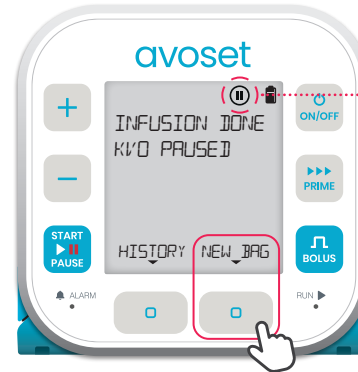
# Quit Post Infusion KVO



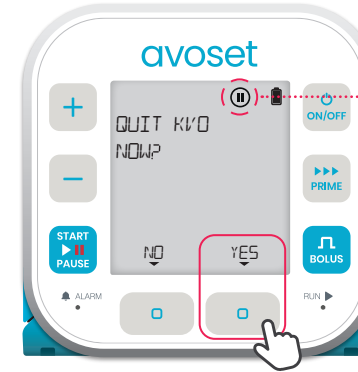
1. The pump alerts the infusion is finished. Press the **DISMISS** multi-function button



2. press **START PAUSE** to pause the post infusion KVO



3. Press the **NEW BAG** multi-function button



4. Press the **YES** multi-function button to quit post infusion KVO

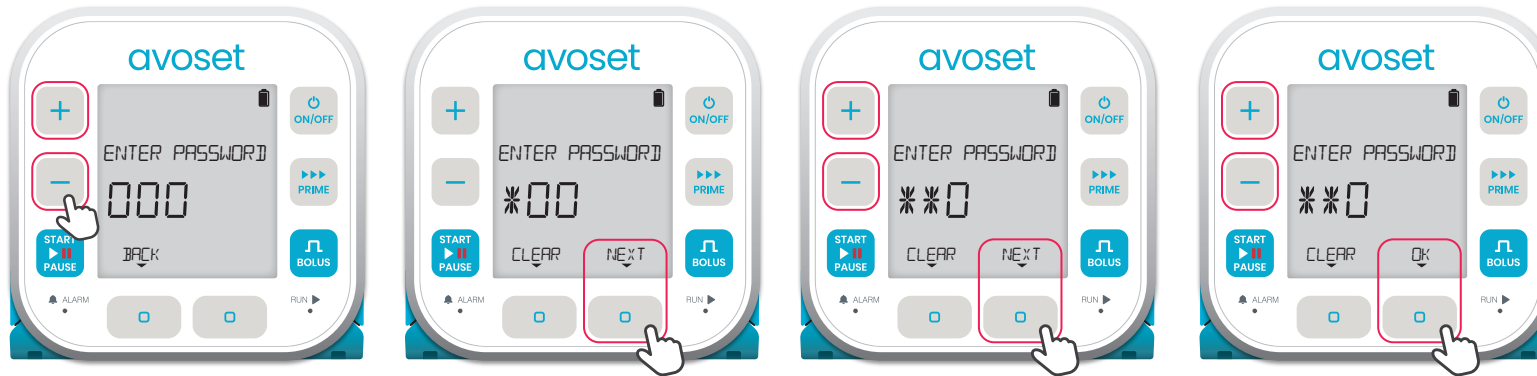


To repeat last infusion, see page 21.  
To turn off, see page 20



# Unlock with a Password

Specific pump features may be password-protected in order to prevent unauthorized user modification.



If the correct password is entered, the pump will unlock. Otherwise, an `INCORRECT PASSWORD` message is displayed

1. The pump prompts you to enter password. The first digit is blinking. Use the `+` / `-` keys to set the first digit

2. Press the `NEXT` multi-function button once the required digit is reached

3. The second digit is blinking. Use the `+` / `-` keys to set the second digit and press the `NEXT` multi-function button

4. The third digit is blinking. Use the `+` / `-` keys to set the third digit and press the `OK` multi-function button



# Remove Administration Set

Before removing the administration set close all the clamps and disconnect the patient from it.



1. Push down the release latch on the pump's side



2. The cassette is released from the pump



3. Remove the cassette





# Alarms

## Troubleshooting



# List of Alarms

ALARM TEXT	CAUSE	TROUBLESHOOTING	ALARM PRIORITY
<b>INFUSION HANDLING</b>			
AIR IN LINE PRIME SET	Single or accumulated air bubbles detected in the set	Disconnect set from patient and prime the set (see page 12)	High-priority Alarm
CASSETTE MISPLACED	The set cassette is missing or incorrectly inserted into the pump	Remove and reinsert the set's cassette	High-priority Alarm
DOWNSTREAM OCCLUSION	The tube connecting the pump to the patient is occluded	Straighten the tube, check for kinks, verify the set is positioned correctly and all clamps are open (see page 32)	High-priority Alarm
UPSTREAM OCCLUSION	The tube connecting the infusion bag to the pump is occluded	Straighten the tube, check for kinks, verify the set is positioned correctly and all clamps are open	High-priority Alarm
CHECK EMPTY SET/RESERVOIR	2mL of air bubble detected in the set	If the bag is not empty, disconnect set from patient, prime the set and resume the infusion (see page 19). If the bag is empty, replace it and resume the infusion	High-priority Alarm
REMOVE AND REINSERT SET	Pump was not able to identify the administration set	Remove and reinsert the set's cassette	High-priority Alarm
UNPRIMED SET	The set is not primed	Prime the set (see page 12)	Low-priority Alarm
REPLACE SET	Set's cassette failed internal pump testing	Remove the connected administration set and connect a new set	Low-priority Alarm



# List of Alarms

ALARM TEXT	CAUSE	TROUBLESHOOTING	ALARM PRIORITY
<b>INFUSION PROGRESS</b>			
INFUSION COMPLETE	The VTBI has been delivered	Replace the bag or turn off the pump (see page 20)	High-priority Alarm
CHANGE BAG NOW	The VTBI has been delivered	Replace bag	High-priority Alarm
ACTION INCOMPLETE	The infusion has not started yet, or an action issued is incomplete, and no key was pressed for a predefined time duration	Start the infusion or address the incomplete action	Low-priority Alarm
PUMP IS PAUSED	The infusion has already started and the pump was paused for 30 seconds	Press the Start/Pause button if the infusion should be resumed (see page 30)	Low-priority Alarm
TIME TO CHANGE BAG	Infusion bag is almost empty	Replace bag	Low-priority Alarm
<b>BATTERY</b>			
BATTERY DEPLETED	Battery power is too low to operate the pump	Replace batteries (see page 34)	High-priority Alarm
(Screen turns off with a blinking Red light and a beep)	Batteries were removed or the pump suddenly lost power during operation	Replace batteries (see page 35). Verify batteries are installed correctly	High-priority Alarm
LOW BATTERY	The batteries are low	Replace batteries (see page 33)	Low-priority Alarm



# List of Alarms

ALARM TEXT	CAUSE	TROUBLESHOOTING	ALARM PRIORITY
<b>PUMP MALFUNCTIONS</b>			
ERROR 1 REPLACE PUMP	A critical internal error	Do not use pump. Patients: contact your service provider, pump should be replaced Non patients: turn off pump and send it for service	High-priority Error
ERROR 2 REPLACE PUMP	A non-critical internal error	Do not use pump. Patients: contact your service provider, pump should be replaced Non patients: send a new infusion program to the pump	High-priority Error
ERROR 3 REPLACE PUMP	An internal clock error	Do not use pump. Contact your service provider	High-priority Error
ERROR 4 REPLACE PUMP	Pump software update failure	Do not use pump. Patients: contact your service provider, pump should be replaced At service: update pump software	High-priority Error
RESTART PUMP	An internal error preventing pump operation	Restart pump. If the alarm occurs for the second time, replace the pump and contact your service provider	High-priority Alarm
HIGH TEMPERATURE	Pump overheating	Turn off pump and let it cool down, if the temperature is still too high when the pump is turned on, the alarm will occur again	High-priority Alarm
RECOVERED FROM ERROR	Pump restarted after an internal error	The interrupted infusion cannot be resumed. VTBI was reset to the initially programmed value. If you start the infusion, it will not resume from where it stopped before interrupted	High-priority Alarm




# List of Alarms

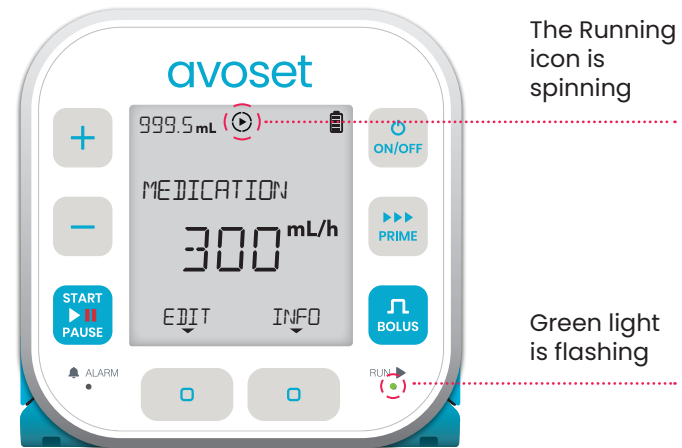
ALARM TEXT	CAUSE	TROUBLESHOOTING	ALARM PRIORITY
<b>PUMP MALFUNCTIONS</b>			
KEY STUCK	A key is stuck or pressed for too long	Release the pressed key	Low-priority Alarm
AUDIO WARNING 1	The speaker <b>and</b> the backup audio system are malfunctioning during infusion. The alarm is <b>not</b> accompanied by audio	Continue infusion while taking into consideration that there is no audio. Contact your service provider	Low-priority Alarm
AUDIO WARNING 2	The speaker or the buzzer is malfunctioning during infusion and the pump uses a backup audio system	Continue infusion while taking into consideration that the pump's sound might be different from usual. Contact your service provider	Low-priority Alarm



# Pump is Paused



1. Press  to resume the infusion

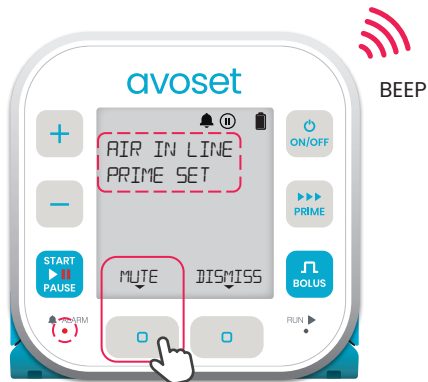


2. The infusion is running

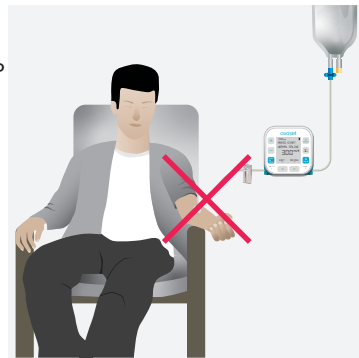


# Air In Line

The pump detects an air bubble. The administration set needs to be primed



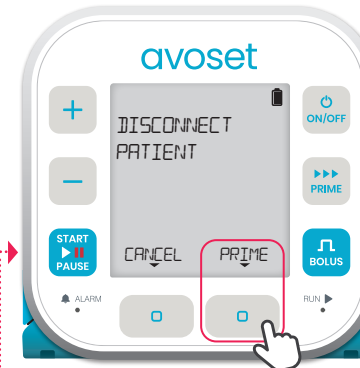
1. Press the MUTE multi- function button



2. Disconnect the administration set from the patient before priming



3. Press PRIME to start priming



4. Make sure the patient is disconnected and press the PRIME multi- function button



5. Priming process indication (will end automatically unless you press the STOP multi- function button)



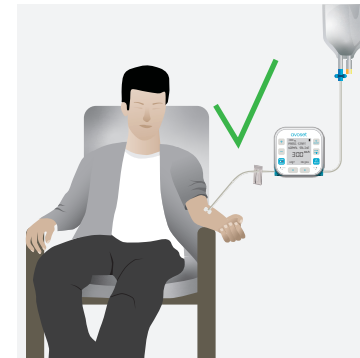
6. Press OK multi- function button



7. Verify there is no air in the set and liquid reaches the end of the set and Press NO AIR. Otherwise, press PRIME



8. Once the patient is connected, press OK multi- function button



9. Following successful priming, connect the administration set to the patient



10. Press START/PAUSE to resume the infusion

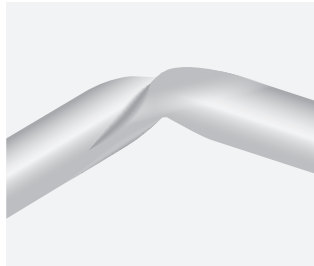


# Downstream Occlusion

Reasons for an Occlusion alarm:



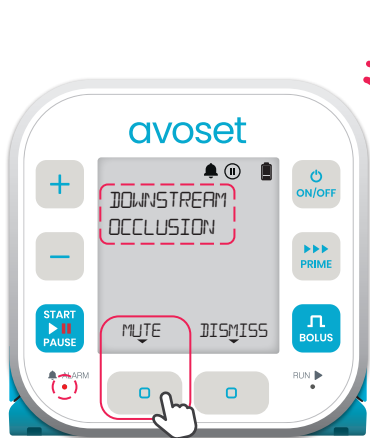
1. Clamps are closed



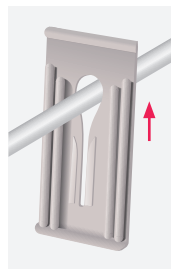
2. Set is kinked



3. Administration set cassette is pressed



1. Press the **MUTE** multi-function button



Clamp is open (set is not pinched)



Set is straightened (no kinks)



Set cassette is not pressed


2. Verify all reasons for occlusion were resolved (open closed clamps, straighten kinks or verify cassette is not pressed)



The Running icon is spinning

Green light is flashing

3. The infusion resumes automatically once the occlusion is resolved. Press **OK** to acknowledge. If the pump doesn't resume

automatically, press the  key to resume the infusion



4. The infusion is running





# Low Battery

The batteries are about to deplete in 30 minutes for the current running infusion.



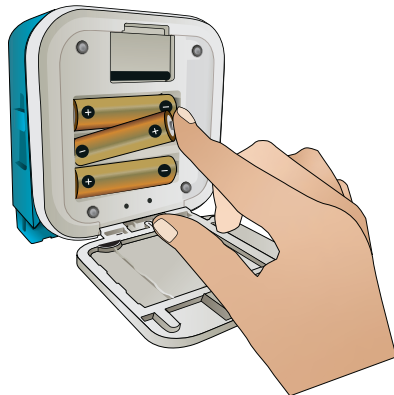
**i** Infusion is saved when batteries are removed, and can be resumed later.

1. Press **START PAUSE** to pause the infusion

2. Press and hold the **ON/OFF** key to turn off the pump



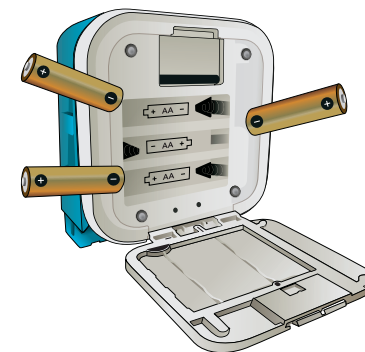
3. Press down the battery cover latch to open it



4. Remove each battery starting with the positive (+) ends



5. Insert 3 AA (1.5V) batteries according to the diagram in the battery compartment. Slide the negative (-) end first, compress the spring and snap the positive (+) end into place



6. Close the battery cover. To resume infusion, turn the pump on and select RESUME multi-function button (see page 19).



# Battery Depleted

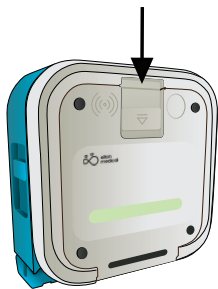
The batteries are about to deplet in 3 minutes.



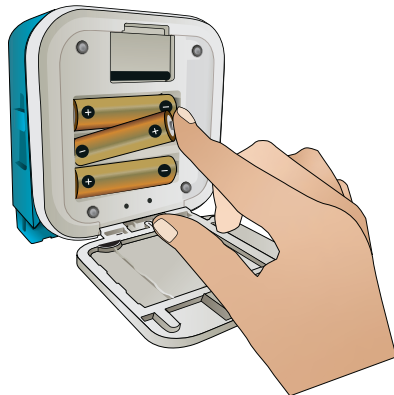
**i** Infusion is saved when batteries are removed, and can be resumed later.

1. Press the **SHUTDOWN** multi-function button

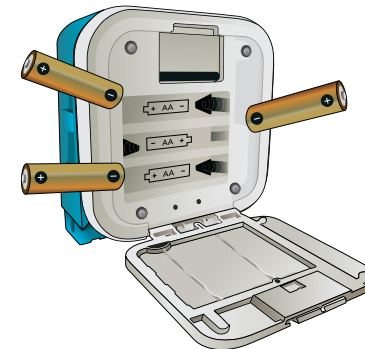
2. The pump is turned off



3. Press down the battery cover latch to open it



4. Remove each battery starting with the positive (+) ends



5. Insert 3 AA (1.5V) batteries according the diagram in the battery compartment. Slide the negative (-) end first, compress the spring and snap the positive (+) end into place

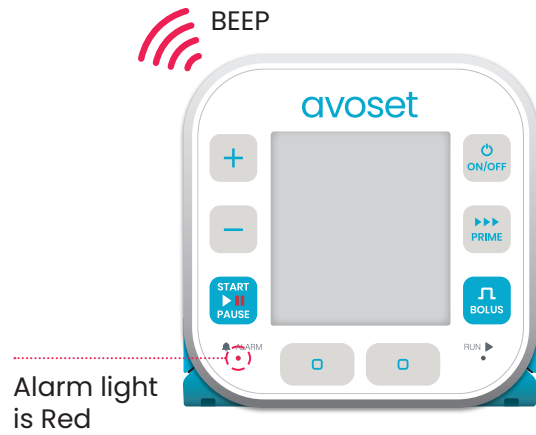


6. Close the battery cover. To resume infusion, turn the pump on and select **RESUME** multi-function button (see page 19).




# Battery Extracted

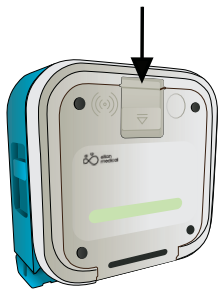
A sudden power depletion or battery disconnection while the pump is on.



Alarm light is Red

 Infusion is saved when batteries are removed, and can be resumed later.

1. The pump is turned off



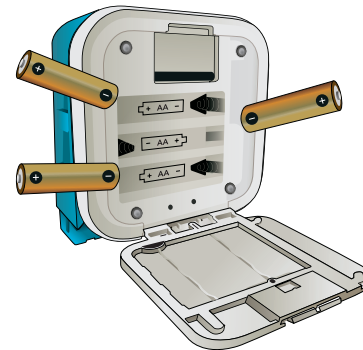
2. Press down the battery cover latch to open it



3. Remove each battery starting with the positive (+) ends



4. Insert 3 AA (1.5V) batteries according the diagram in the battery compartment. Slide the negative (-) end first, compress the spring and snap the positive (+) end into place



5. Close the battery cover. To resume infusion, turn the pump on and select RESUME multi-function button (see page 19).





Avoset English Quick Guide | 15125-048-0008-UM, Rev.02



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