

FAQs – Sequential DVT Pump

1. What is a Sequential DVT Pump?

A Sequential DVT Pump inflates the sleeve in **multiple chambers (sections) one after another**, creating a **wave-like compression** that mimics natural blood flow.

2. How does a Sequential DVT Pump work?

The pump inflates chambers **from distal (foot) to proximal (thigh)** in sequence, pushing blood upward through the veins.

3. What is the benefit of sequential compression?

It provides **more effective circulation support** by simulating the natural muscle pump action.

4. When should a Sequential Pump be used?

It is recommended for:

- Higher-risk patients
 - Post-surgical recovery
 - Advanced DVT prevention
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5. Do all chambers inflate at the same time?

No, pump inflates chambers **from distal (foot) to proximal (thigh)** in sequence, not simultaneously.

6. How many chambers are present in a sequential sleeve?

3 Chambers are there in a sequential sleeve.

7. What is the pressure in each chamber during inflation?

The pressure in each chamber depends on the selected setting. For example, if the set pressure is **40 mmHg**, the lower chamber will have approximately **35 mmHg**, the middle chamber will have **40 mmHg**, and the top chamber will have approximately **50 mmHg**.

8. Can the sequence timing be changed?

No, the sequence timing is **preset by the system**.

9. What if one chamber does not inflate?

Possible causes:

- Blocked one of the channels
 - Air leakage
 - Faulty sleeve
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10. Is sequential compression more effective than intermittent?

Yes, in many cases it is **more effective**, as it better supports natural blood flow.

11. Why does sequential compression start from the foot?

It mimics the natural flow of blood, pushing it **upward toward the heart**, improving venous return.

12. Does sequential compression improve efficiency compared to intermittent?

Yes, it provides **more efficient and physiologically accurate blood flow support**.

13. Can sequential pumps be used for critical patients?

Yes, they are often preferred for **high-risk or post-operative patients**, under medical supervision.

14. Can sequential pumps adjust pressure per chamber?

Typically, pressure is **controlled centrally**, but the sequence ensures gradual pressure build-up.

15. Why does the sleeve feel like a wave during operation?

This is normal and indicates **sequential inflation**, creating a wave-like compression effect.

16. Is sequential compression uncomfortable?

No, when properly set, it provides **gentle, progressive compression**.

17. Can the sequence direction change?

No, the direction (distal to proximal) is **fixed and medically designed**.

18. Does sequential compression reduce swelling?

Yes, it helps in **reducing edema** by promoting fluid movement.

19. What maintenance is required for sequential sleeves?

Regular checks for:

- Air leaks
- Chamber integrity
- Cleanliness

Advanced Comparison & Practical Questions

20. Which pump is better for long-term therapy?

Sequential pumps are generally better for **long-term and advanced therapy**, while intermittent pumps are suitable for basic use.

21. Which pump provides faster circulation improvement?

Sequential pumps are more effective due to **progressive pressure movement**.

22. Which DVT pump is more cost-effective?

Intermittent pumps are usually **more economical**, while sequential pumps are more advanced.

23. Which system requires more maintenance?

Sequential systems may require more attention due to **multiple chambers and complexity**.

24. Which system is easier for caregivers?

Intermittent pumps are simpler, while sequential pumps require **slightly more understanding**.

25. How to ensure optimal performance for both systems?

- Proper installation
 - Correct pressure setting
 - Regular inspection
 - Timely maintenance
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Frequently Asked Questions (FAQs) –

1. What is the purpose of DVT Pump?

The device is designed to help prevent **Deep Vein Thrombosis (DVT)** by improving blood circulation in patients who are immobile or at risk. It applies intermittent pneumatic compression to assist venous blood flow.

2. How does the DVT Pump work?

The device generates controlled air pressure cycles that inflate and deflate the sleeves. This compression mimics natural muscle movement, helping blood flow through the veins and reducing clot formation risk.

3. Who should operate the DVT Pump?

The device should be operated by **trained healthcare professionals or caregivers**.

4. Is training required to use this pump?

Basic training is recommended to ensure proper setup, operation, and safety.

5. When should the DVT Pump be used?

It is used for patients who are:

- Bedridden
 - Post-surgery
 - At risk of DVT
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6. Where should the pump be placed?

The pump should be placed on a **flat, stable surface** or securely hung on a bed rail using the provided hooks.

7. Can the pump be mounted on a bed?

Yes, it can be hung using the foldable hooks on the back of the unit.

8. Why should the air vents not be blocked?

Blocking vents can restrict airflow, affecting compressor performance and causing overheating or malfunction.

9. How are the sleeves connected?

Connect the sleeves to the extension hoses and then connect the hoses to the pump. Ensure a **click sound** is heard for secure connection.

10. Can I use only one sleeve?

Yes, the pump automatically detects whether one or both sleeves are connected.

11. What precautions should be taken with hoses?

Ensure hoses are not **kinked, bent, or trapped**, as this can affect airflow and cause alarms.

12. How do I start the pump?

- Connect hoses and sleeves
- Plug into power supply
- Switch ON mains power
- Press and hold the power button

13. How do I stop the pump?

Press and hold the power button, then switch OFF the mains power and unplug the device.

14. What is the default pressure setting?

The default pressure is **40 mmHg**, which is automatically selected at startup.

15. What pressure levels are available?

Available pressure settings are:

30, 40, 50, and 60 mmHg (for calf and thigh sleeves).

16. What is 120 mmHg pressure used for?

120 mmHg is used **only for foot sleeves**. It should not be used for calf or thigh sleeves as it may cause injury.

17. How do I adjust the pressure?

Press and hold the pressure button to enter setting mode, then press to select the desired pressure level.

18. What happens during pressure adjustment?

The device temporarily pauses compression cycles until the pressure is set.

19. What is the function of the timer?

The timer tracks total usage hours, which helps in monitoring therapy duration and maintenance schedules.

20. What does the LP (Low Pressure) alarm indicate?

It indicates that the system is unable to reach or maintain the required pressure, usually due to leakage in sleeve or disconnection.

21. What causes LP alarm?

- Punctured sleeve
 - Loose or disconnected hose
 - Air leakage
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22. How to resolve LP alarm?

Check all connections and replace damaged sleeves if necessary.

23. What does HP (High Pressure) alarm indicate?

It indicates excessive pressure inside the sleeve.

24. What causes HP alarm?

- Blocked or kinked hose
 - External pressure on sleeve
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25. How to resolve HP alarm?

Remove any obstruction and ensure hoses are straight and unobstructed.

26. What does SE (Sleeve Error) mean?

- No sleeves are connected to the pump.
 - Solution:
 - Connect one or both sleeves properly
 - Restart the pump
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27. Can alarms be muted?

Yes, most alarms can be muted for **30 minutes**, except the HP alarm.

28. What do blinking red indicators mean?

They indicate an active fault or alarm condition.

29. Why is the pump not turning ON?

Check power cord, mains supply, switch status, and fuse condition.

30. Can the pump operate on battery?

Yes, it has a rechargeable battery with up to **6 hours backup**.

31. How is battery level displayed?

Green bars indicate battery level; each bar represents approximately **20% charge**.

32. What does red battery indicator mean?

It indicates that the pump is running on battery power.

33. Why are sleeves not inflating?

Possible causes:

- Loose connections
- Damaged connectors
- Internal disconnection

34. What should I do if air is not flowing?

Check all hoses, connectors, and ensure no blockage or leakage.

35. What if the issue persists after troubleshooting?

Contact an authorized service engineer.

36. Can the device be used near water?

No, it should be kept away from liquids to avoid electrical hazards.

37. What if the patient feels discomfort?

Stop using the device immediately and consult a healthcare professional.

38. Can users repair the device themselves?

No, internal repairs should only be done by authorized personnel.

39. Is it safe to use a damaged cable?

No, replace damaged cables immediately.

40. How often should the air filter be cleaned?

Every **6 months**.

41. How is the filter cleaned?

Use compressed air or gently shake off dust.

42. Is calibration required?

Yes, annual calibration is recommended for accuracy.

43. What should be checked after a drop?

Inspect all electrical and pneumatic connections.

44. Can the device overheat?

Yes, if vents are blocked or used improperly.

45. What happens if fuse fails?

The device will not power ON.

46. What type of fuse is required?

1A, 250V slow-blow fuse.

47. Can the device be used continuously?

Yes, under proper supervision and conditions.

48. How should the device be stored?

In a dry, cool place away from direct sunlight.

49. What is the operating temperature range?

15°C to 35°C.

50. How should the device be disposed of?

As per local regulations for electronic equipment.

51. Why is the pump not turning ON?

- Check if the mains switch is ON.
 - Ensure the power cord is properly connected.
 - Verify that the pump power switch is ON.
 - Check if the fuse is working; replace if necessary.
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52. Why are the sleeves not inflating?

- Check if the sleeves and extension hoses are properly connected.
 - Ensure connectors are properly fitted (you should hear a click).
 - Inspect O-rings for damage or absence.
 - Check for loose or disconnected internal tubes.
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53. Why is the alarm beeping continuously?

- The system has detected an issue (LP, HP, or SE alarm).
 - You can mute the alarm for 30 minutes using the mute button.
 - Fix the issue to stop the alarm completely.
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54. Why is the pump running on battery instead of mains power?

- Power cord may not be connected properly.
 - Wall socket switch may be OFF.
 - Pump power switch may be OFF.
 - Fuse may be faulty.
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55. Why is the pump not maintaining pressure?

- There may be a leak in the sleeve or hose.
 - Check for loose connections or damaged parts.
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56. Why are the green LEDs blinking on the display?

The blinking green LEDs indicate that the **battery is currently charging** while the device is connected to mains power.

57. What do steady (non-blinking) green LEDs mean?

Steady green LEDs indicate the **current battery charge level**.

58. What does it mean if some LEDs are steady and others are blinking?

- **Steady LEDs** show the current charge level.
- **Blinking LEDs** indicate that the battery is still charging toward full capacity.

59. What does it mean if green LEDs are not glowing at all?

- The battery may be **fully discharged**, or
 - The battery may not be present or properly connected.
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60. What does blinking green LED with red outline mean?

- The device is **running on battery power**, and
 - The battery level is being indicated.
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61. Why is the battery not charging even when connected?

Possible reasons:

- Mains power is OFF
 - Power cord is not properly connected
 - Fuse may be faulty
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62. Can I use the device while the battery is charging?

Yes, the device can operate normally while charging.

63. What should I do if the battery does not charge at all?

- Check power supply and connections
 - Inspect fuse
 - Contact service engineer if issue persists
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64. Why does the green LED turn red during operation?

The LED turns red to indicate a **fault condition**, usually due to **low pressure in the sleeve (LP alarm)**.

65. Why does the LED turn red for one side only?

This means the issue is **specific to one sleeve (left or right)**, such as:

- Air leak
- Loose connection
- Damaged sleeve

66. What causes the pressure to drop in the sleeve?

- Puncture or tear in the sleeve
- Loose or disconnected hose
- Leakage in connectors

67. How do I identify which sleeve has a leak?

The **red LED indicator on that specific side** will blink, showing which sleeve is affected.

68. Can I ignore the red LED indication?

No, it should not be ignored as it indicates **improper therapy or system fault**.

69. Can the alarm be muted in this condition?

Yes, the alarm can be muted temporarily, but the **issue must still be resolved**.

70. What happens after fixing the leak?

The system will automatically **restore normal operation**, and the LED will return to normal (green).

71. When should I replace the sleeve?

Replace the sleeve if:

- It has visible damage
 - The leak persists after reconnection
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72. Can a loose connection also cause red LED?

Yes, even a slightly loose connection can cause pressure drop and trigger the red LED.

73. Does red LED always mean a leak?

Mostly it indicates a **low-pressure condition**, which is commonly caused by leakage or disconnection.

74. What if the LED remains red after fixing everything?

- Recheck all connections
 - Restart the device
 - Contact service engineer if issue continues
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75. What is the cycle timing of the device for both sleeves?

The cycle consists of 12 seconds inflation, followed by 18 seconds deflation, then 12 seconds inflation for the next sleeve, followed by 18 seconds deflation. This cycle repeats continuously.

76. Why is inflation shorter than deflation?

Short inflation quickly compresses the veins, while longer deflation allows proper blood refilling and circulation.

77. Is the inflation and deflation cycle automatic?

Yes, the device operates on **automatic timed cycles**.

78. Can I change the inflation or deflation time?

No, the cycle timing is **preset and cannot be adjusted**.

79. What should I do if timing seems incorrect?

- Restart the device
 - Check connections
 - Contact service engineer if issue persists
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80. Does pressure setting affect timing?

No, pressure level and timing operate independently.

81. What is cycle timing if only one sleeve is connected?

12 sec inflation, 48 sec deflation.
