

READY Condition | CANNOT MEET PIP | LOSS OF PIP



Why is the READY Condition Important?

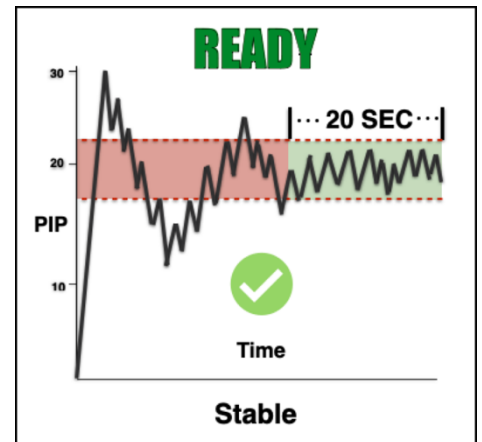
When illuminated, the Ready light indicates alarms have been automatically calculated and are active around Servo and Mean Airway Pressure (MAP). High servo alarms protect the patient by limiting flow available. The Jet will be in the READY condition 99% of the time. Pressing ENTER (*or Reset on the LifePulse 203) removes the Jet from Ready, placing it in the non-Ready condition with no active alarms.

Patients should be considered hands off during the non-Ready condition. Staff should remain at the bedside until **READY** is illuminated in the alarms panel. Understanding the importance of and how the LifePulse achieves Ready, will aid in troubleshooting common alarms.

How is the READY Condition Achieved?

When ENTER is pressed, the LifePulse begins ventilating the patient in the non-Ready condition, also known as the “learning mode”. In the non-Ready condition, there are no active alarms. During this time the Jet is adjusting Servo (flow to the patient) to achieve the monitored Jet PIP within a targeted range of set Jet PIP (+2.0 to -1.5 cmH₂O).

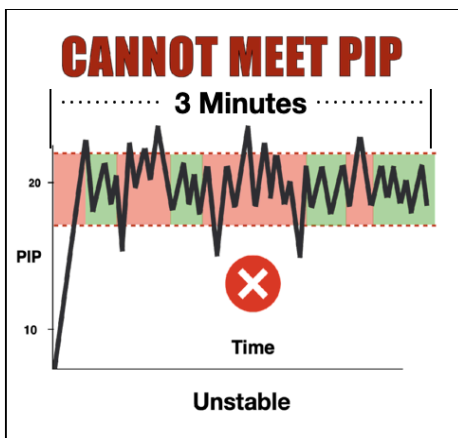
It is normal when initiating ventilation from Standby, for the monitored PIP to overshoot, undershoot, and then settle near the set value. Monitored PIP variations during this time may seem extreme but are safe due to the small pressure changes at the alveolar level. When the pressure has stabilized and is maintained within the targeted range for a *continuous 20 secs*, the READY indicator will illuminate. Generally, the Ready condition is achieved within 45 to 90 seconds but may take up to 3 minutes. Alarms are calculated at +/- 20% based on the Servo (flow) required to achieve desired settings. Once active, alarm limits can be manually adjusted.



**Pressing ENTER (RESET) recalculates all manually adjusted alarms*

What is the CANNOT MEET PIP Alarm?

The CANNOT MEET PIP alarm is activated when the LifePulse remains in the non-Ready condition for greater than 3 minutes after pressing ENTER. A stable, consistent PIP for a continuous 20 sec has not been met. **The patient continues to be ventilated** while the LifePulse is actively trying to achieve the Ready condition.



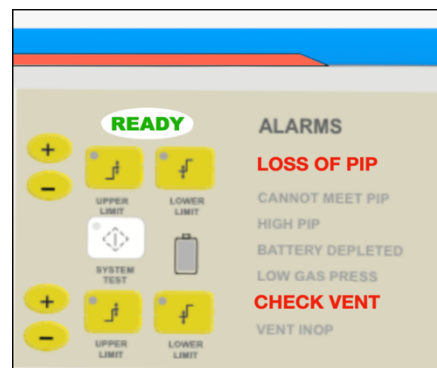
Common Causes:

- *Malfunction of the Pinch Valve in the Patient Box*
- *Spontaneous Breathing*
- *Crying, Coughing, Hiccups*
- *Need for Suctioning*
- *Interference from CMV bpm, PIP, iTime*
- *Minimal Settings on the LifePulse*
- *Excess Condensation*
- *Leaks, Cracks or Loose Connections*

What is the LOSS OF PIP Alarm?

The LOSS OF PIP alarm is activated when the Jet is unable to deliver or monitor Jet pulses due to a possible disconnect or occlusion of either the green gas delivery line or the patient monitoring tube. LOSS OF PIP occurs when any one of the following is met:

1. The monitored PIP has dropped below 25% of the set PIP
2. The monitored PIP is <math>< 3\text{cmH}_2\text{O}</math>
3. The monitored value for Delta P is <math>< 2\text{cmH}_2\text{O}</math>



Always Visualize Patient to Verify Ventilation

Common Causes:

- Disconnect of the Green Delivery Tube at the LifePort Adapter
- Disconnect or Occlusion of the Clear Patient Monitoring Tube
- Malfunction of the Pinch Valve in the Patient Box
- Excess Condensation
- Leaks, Cracks, or Loose Connections
- Spontaneous Breathing at Low Jet Settings, Crying, Coughing, Hiccups, or the Need for Suctioning
- Suctioning with the LifePulse Running

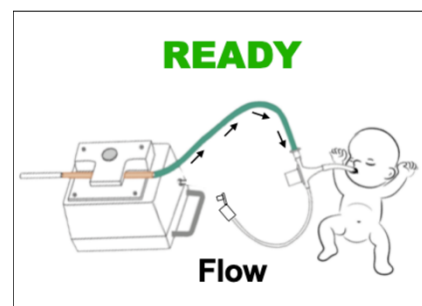
LOSS OF PIP In the READY Condition (Alarms Active)

Always Verify Ventilation

Flow will Continue to Deliver Breaths – Check Patient Connections

During a LOSS OF PIP in the READY Condition Servo (flow) locks at or near the previously established operating value. Flow is available to deliver Jet breaths if the green inspiratory line is connected to the LifePort Adapter (LPA). If the patient monitoring tube is disconnected or occluded, the monitoring section may display incorrect values for Jet PIP, Delta P, PEEP, and Mean Airway Pressure.

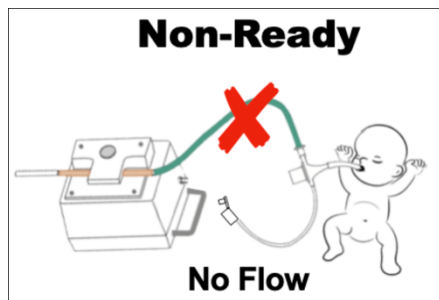
ATTENTION: DO NOT PRESS ENTER (or RESET). This places the LifePulse in the Non-Ready condition (no active alarms) and the patient will **NOT** be ventilated.



LOSS OF PIP In the non-READY Condition (NO Active Alarms)

Always Verify Ventilation

No Flow - Patient will NOT be Ventilated



During a LOSS OF PIP in the Non-READY condition servo control valves are turned off and Servo (flow) will drop to **Zero** in order to protect the patient. ***There will be no flow available to deliver Jet breaths.*** The patient box will continue to cycle but no breaths will be delivered until the LOSS OF PIP alarm is cleared. Make certain all patient connections are secure and clear of obstructions. Press ENTER to resume flow in order to reestablish operation and achieve set PIP. Remain at the bedside until READY is illuminated.