

PHILIPS

sense **and** simplicity

Switching from the PLV-100 or 102
to the Trilogy

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Objectives

- Dealing with change
- Product comparison
- Introduction to Trilogy
- Transition example



Change



Change has a considerable psychological impact on the human mind. To the fearful it is threatening because it means that things may get worse. To the hopeful it is encouraging because things may get better. To the confident it is inspiring because the challenge exists to make things better.

[King Whitney Jr.](#)

Transitioning Considerations



- Follow any transition protocol established by physician or DME
- Everyone will respond differently to mechanical ventilators
- Obtain necessary approval from physician to adjust settings as needed
- May not be able to set exact settings on both devices; be prepared to spend some time making adjustments to settings

Transitioning Considerations



- Leak compensation (passive circuit) and bias flow on Trilogy will make the delivery of gas “feel different”
- You may need to modify ventilator settings; especially if you are switching to a passive circuit
- **Be patient;** identify the desired parameters to achieve therapeutic goals and plan how you will best meet these parameters given the change in device

Trilogy to PLV Feature Comparison

Comparison

	Trilogy100 	PLV -100 and PLV-102 
Weight	11 lbs	28 lbs
Intended use	≥ 5kg thru adult	Pediatric to adult
Ventilation type	Volume, pressure and bi-level	Volume Pressure with a pressure limiter
Modes	AC, SIMV, CV CPAP, S, ST,T, PC, PC/ SIMV	AC, SIMV, Control AC, SIMV with Sigh (PLV-102)
Trigger (Sensitivity)	Flow, Digital Auto-Trak	Pressure

Comparison

	Trilogy100 	PLV-100 and PLV-102 
Bias Flow	Yes	No
Circuit	Passive and Active	Active
Battery	3 hr internal, 3 hr detachable	1 hour internal
FAA Cleared	Yes	No
Flow Generator	Blower driven	Piston driven

Introduction to Trilogy

Trilogy 100



- **Portable Volume** and **Pressure** ventilator
- **Proven BiPAP technology**, **Auto-TRAK** algorithm and **AVAPS** feature
- **Non Invasive** and **Invasive** capabilities
- For both **children** (≥ 5 kg) and **adults**
- **Passive** and **Active** Circuit configurations

Trilogy100 is

Easy to Use

Portable

Versatile



Sophisticated Technology

Simple ventilation

Easy to Use interface

Simple Screen



Remarkably Portable

- Weighs 11 pounds
- 3 hour internal battery
- 3 hour detachable battery
- Ability to connect to external battery
- In use bag for transport



RESPIRONICS

**Display
Screen**

**Audio
Pause**

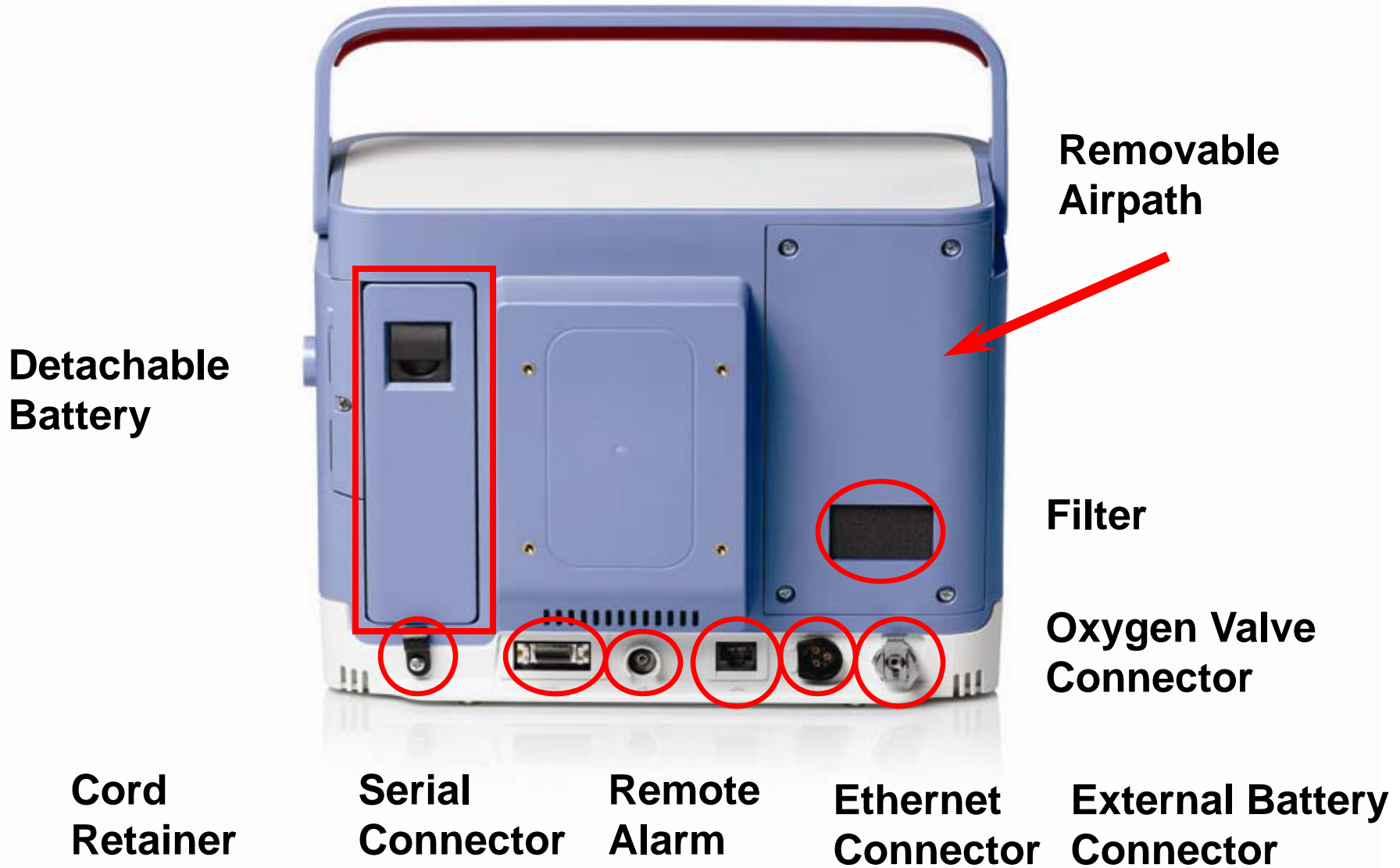
**Right/Left
Buttons**

Up/Down Button

Start/Stop

**AC Power
LED**





Additional Features

Dual Prescription
Option

Alarm and
Event Alarms

Keypad Lock



Replaceable Airpath

Color Monitor
Intuitive Interface

Internal PEEP

Easy to Learn and Maintain

- Clean grey foam filter at least every 2 weeks
- Replace every 6 months
- Preventative maintenance every 2 years or 10,000 hours



Settable Alarms

	Pressure Modes						Volume Modes		
	CPAP	S	S/T	PC	T	PC-SIMV	CV	AC	SIMV
Circuit Disconnect	✓	✓	✓	✓	✓	✓	✓	✓	✓
Apnea	✓	✓	✓	✓	✓	✓	✓	✓	✓
Apnea Rate		✓	✓	✓	✓	✓	✓	✓	✓
High + Low Tidal Volume	✓	✓	✓	✓	✓	✓	✓	✓	✓
High + Low Minute Ventilation	✓	✓	✓	✓	✓	✓	✓	✓	✓
High + Low Respiratory Rate	✓	✓	✓	✓	✓	✓	✓	✓	✓
High + Low Peak Inspiratory Pressure							✓	✓	✓

All settable alarms can be disabled (OFF)

System Alarms and Messages

- ✓ High/Low Pressure Alarms (Pressure modes only)
- ✓ Circuit Occlusion
- ✓ Low Leak (passive circuit configuration)
- ✓ Power/battery Alarms
- ✓ Check Circuit
- ✓ Ventilator Inoperative
- ✓ Service required

High Priority – Red

Medium Priority – Yellow

Informational – No Indication

Key Differences not available on the PLV's

- Passive and Active Circuit Configurations
- Bias flow
- Internal PEEP
- Leak compensation and triggering with passive circuit
- Respiration proven technology (AVAPS, Auto-Trak)

More Versatile

Two Circuit Options

1. Single Connection Circuit (Passive)

- Use Whisper Swivel II for invasive ventilation or mask with integrated leak for noninvasive application
- Compatible with both pressure and volume modes
- Lighter weight, fewer connections and simple to use

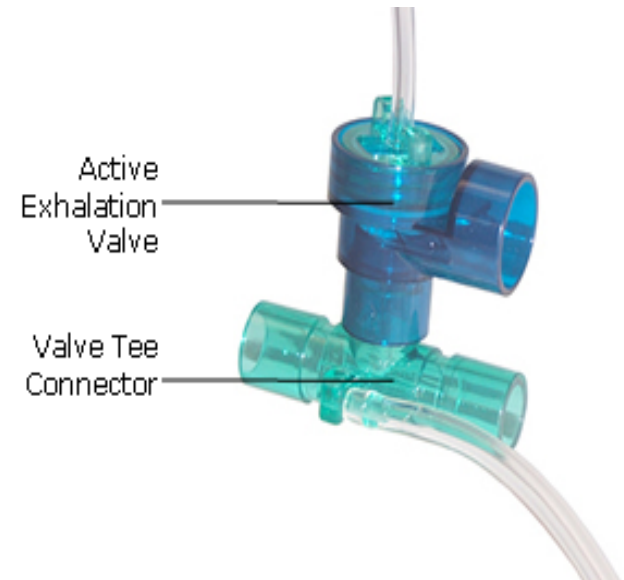


More Versatile

Two Circuit Options

2. Multiple Connection Circuit (Active)

- Use a single limb circuit with proximal pressure and active exhalation valve
- Compatible with both pressure and volume modes



Two Circuit Options



Active Porting Block
Passive Porting Block

Bias flow for comfort

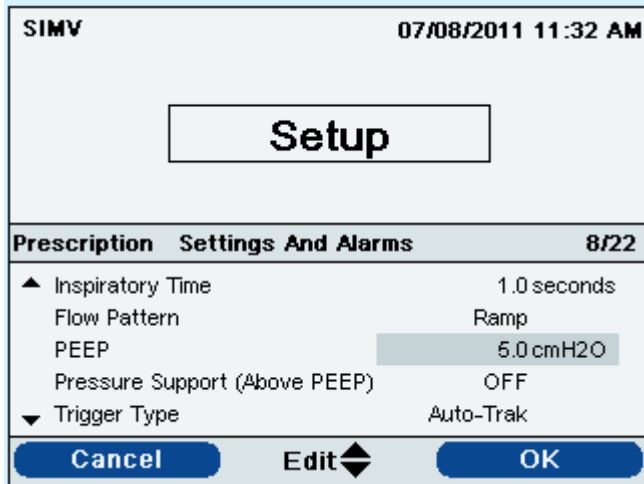
- Bias flow minimizes the work of breathing by tapping into a continuous gas flow rather than initiate flow through a delivery circuit
- Ventilator-set bias flow flushes exhaled CO₂ and stabilizes temperature, humidity and baseline pressure in the circuit
- 10LPM Bias Flow during expiration
- May feel different when breathing with bias flow versus no bias flow

Internal PEEP versus external

Ease of use and increased efficacy

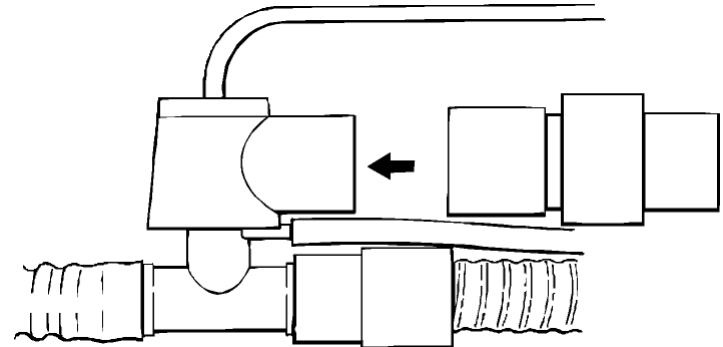
Internal (Trilogy)

- Built in PEEP; no accessory parts; increased accuracy
- PEEP compensated



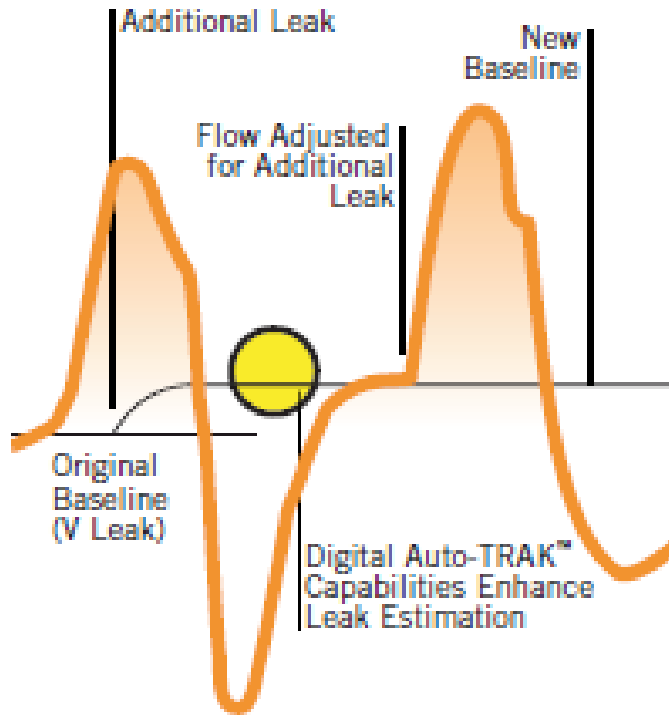
External (PLV)

- Accessory PEEP valve attached to the exhalation manifold of the patient circuit
- Not as accurate
- Uncuffed trach tubes and water build up can effect PEEP level



Leak compensation –

Can provide greater synchrony with the ventilator and less WOB

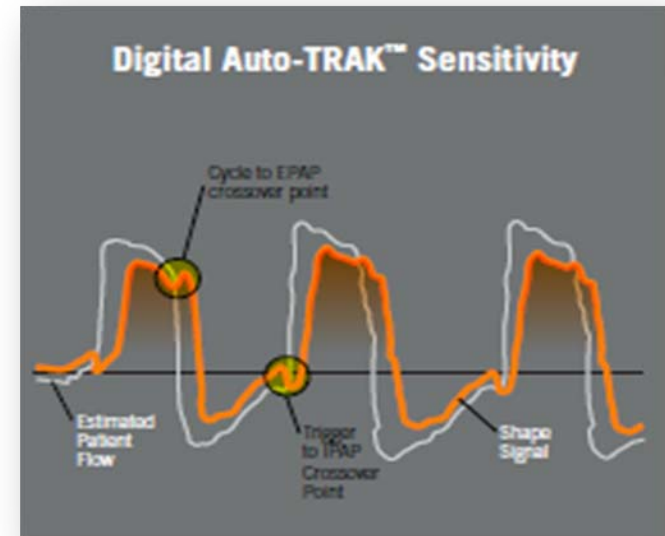


- Auto-Trak identifies leaks by comparing original baseline to the new baseline
- Passive circuit ventilation provides leak compensation in both volume and pressure modes
- *Active circuit ventilation does not provide leak compensation*

Auto-Trak sensitivity

Provides optimum patient/ventilator synchrony

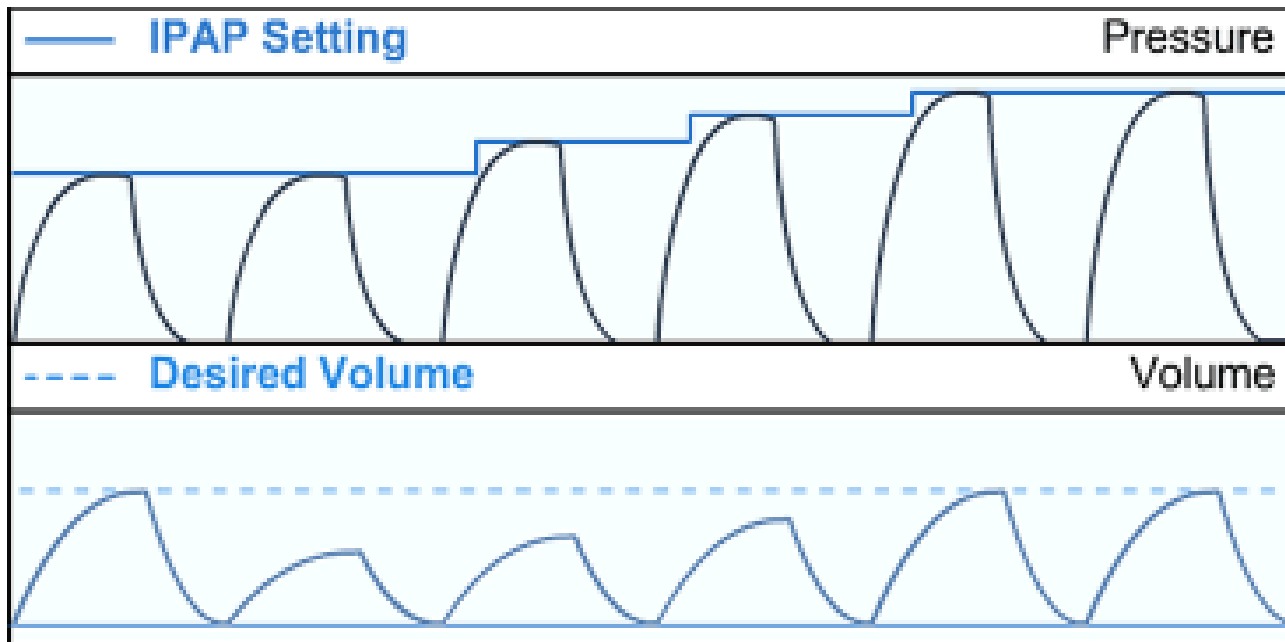
1. Automatically adjusts triggering and cycling
2. Provides advanced leak detection
 - This feature allows the device to recognize and compensate for unintentional leaks and to automatically adjust its trigger and cycle algorithms to maintain optimum performance in the presence of leaks



AVAPS

Averaged Volume Assured Pressure Support

- AVAPS automatically adjusts the pressure support to maintain an average tidal volume



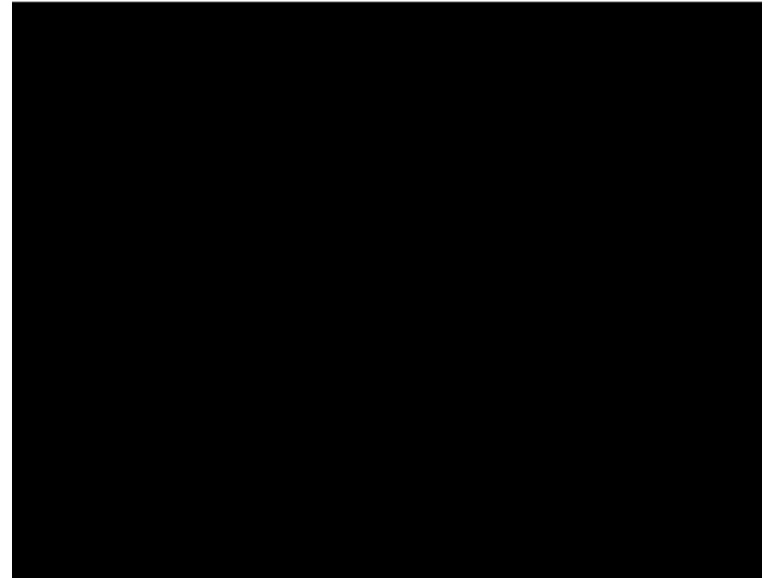
Patient preference settings

Options menu - Screen Saver

Breath



Black



* Off and Dim Screen Savers are also available

SIMV **07/06/2011 06:12 PM**

Setup

Prescription Options **5/17**

▲	Language	English
	Pressure Units	cmH2O
	Alarm Volume	Loud
	Keypad Lock	OFF
▼	Keypad Backlight	OFF

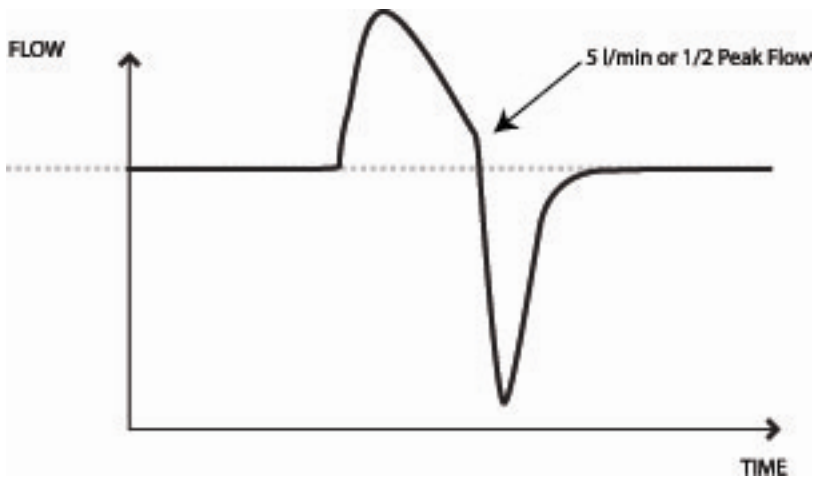
Cancel

Edit

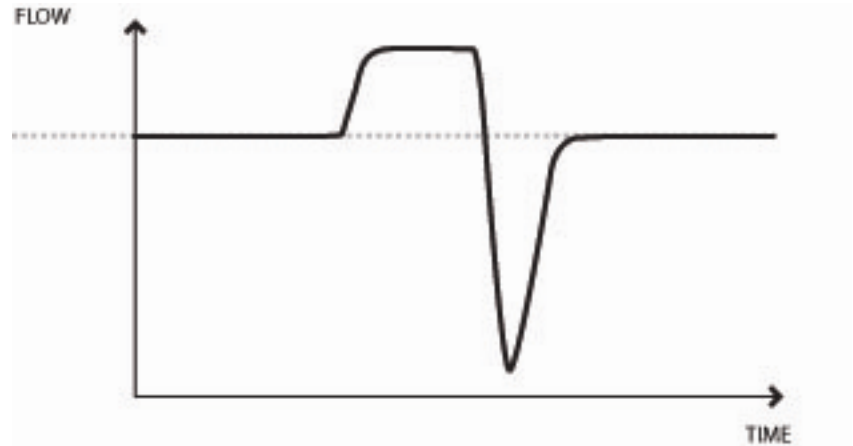
OK

Waveform Patterns

- Ramp

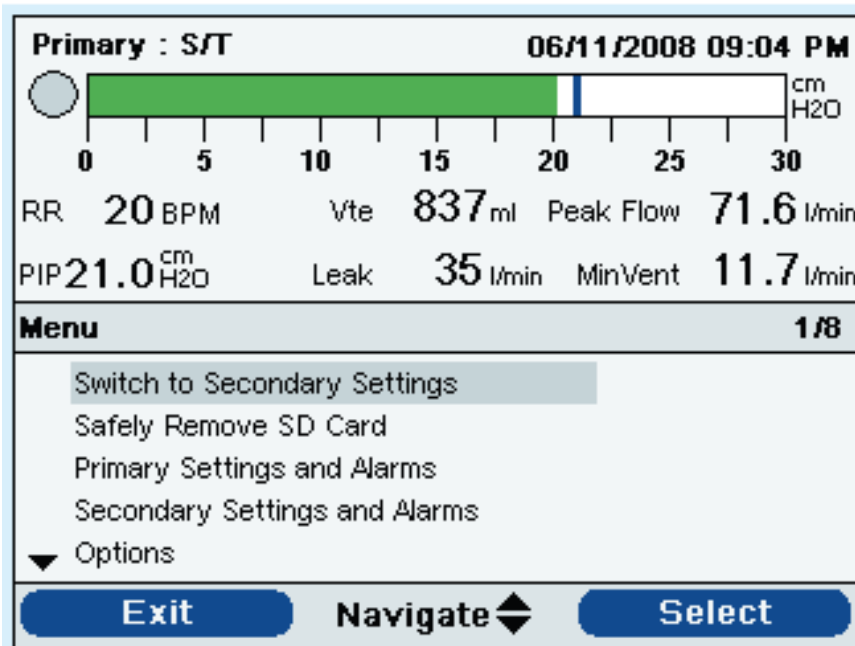


- Square



Dual prescription feature –

Greater ease of use and safer with daytime and nighttime settings



Trilogy provides a dual prescription feature that allows you to enter a primary prescription and a secondary prescription for the patient if needed

Note: Both prescriptions must use the same circuit type.

Transition Example

Case Example

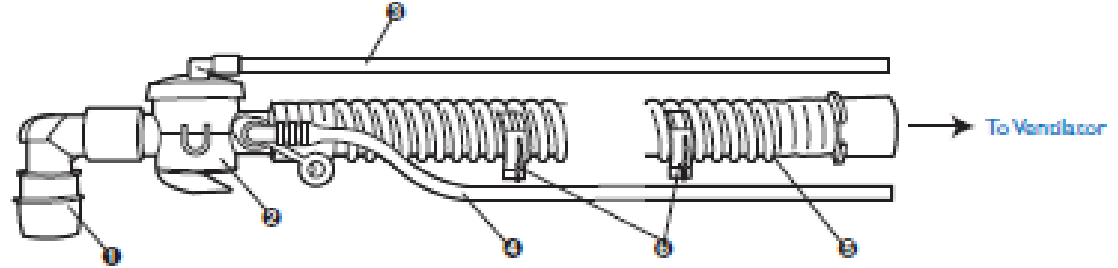
Transition to Trilogy from a PLV-100

- 63 year old male with Quadriplegia and respiratory failure
- 24 hour vent dependent, using PLV-100 since 2000
- Resides at home – family members care for him

Settings	
Mode	AC
Vt	1000 cc
RR set	15
IT	1.5 sec
FIO ₂	21%
PEEP	5 cm H ₂ O
Sensitivity	- 1 cm H ₂ O

Option 1

Transition Steps



- Choose circuit type
- Active or passive?

Active

SIMV 07/06/2011 05:26 PM

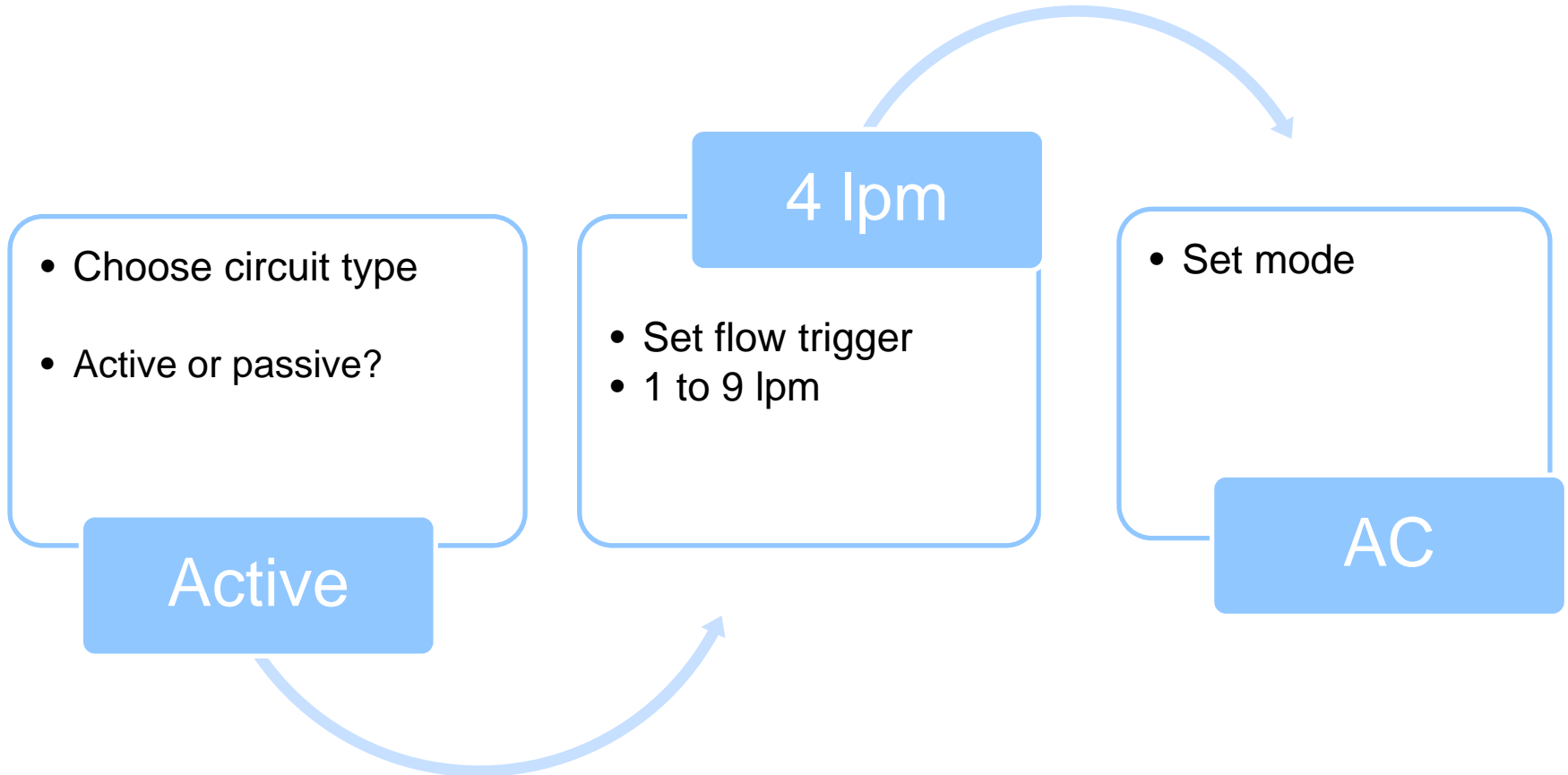
Setup

Prescription Settings And Alarms 2/22

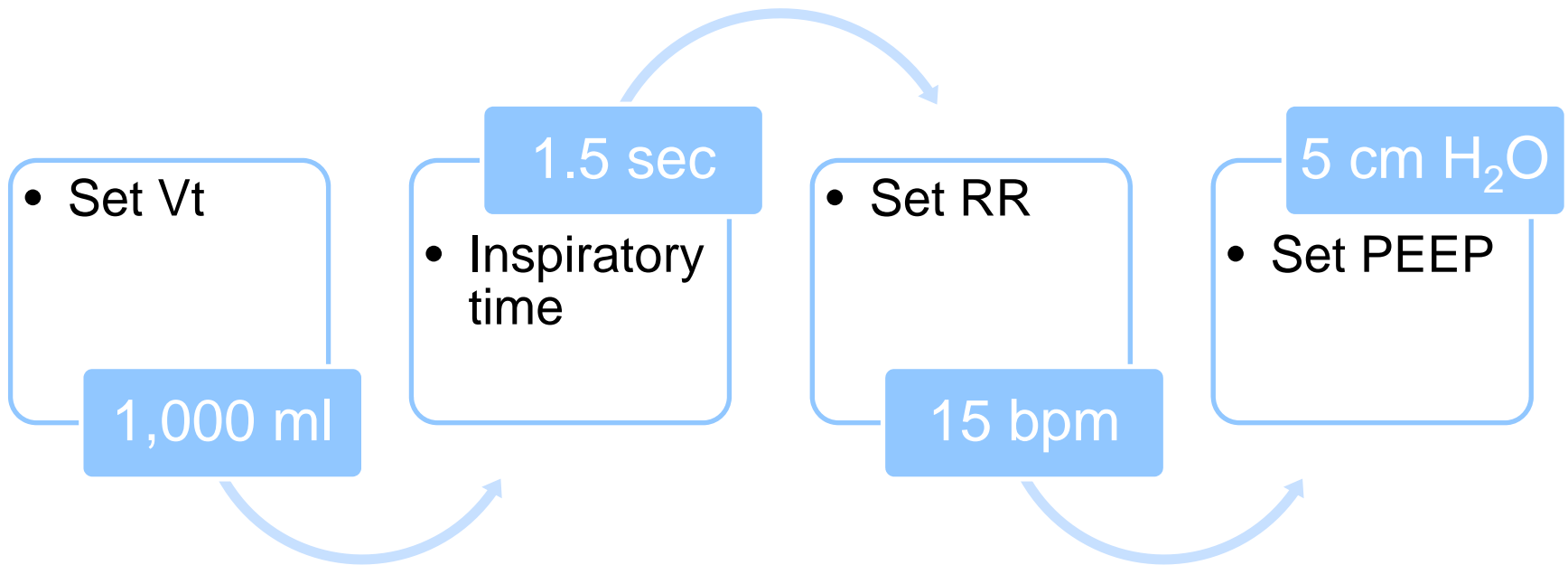
Dual Prescription	OFF
Circuit Type	Active PAP
Mode	SIMV
Tidal Volume	500 ml
▼ Breath Rate	10 BPM

Cancel Edit OK

Transition Steps



Transition Steps

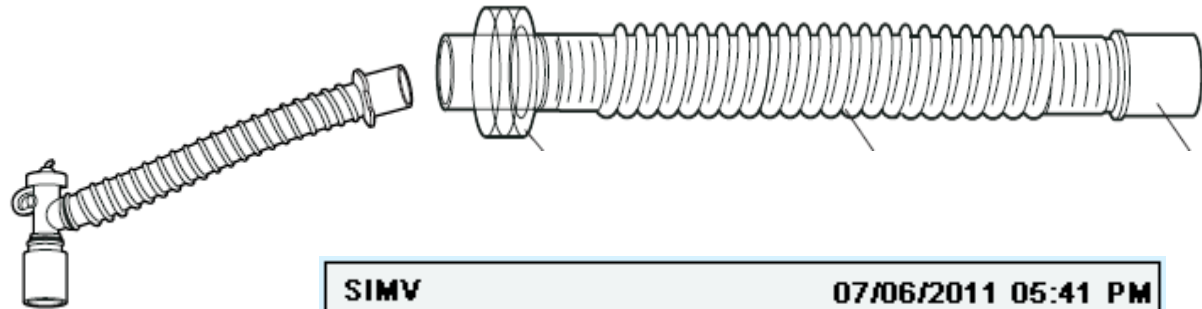


Option 2

Transition Steps

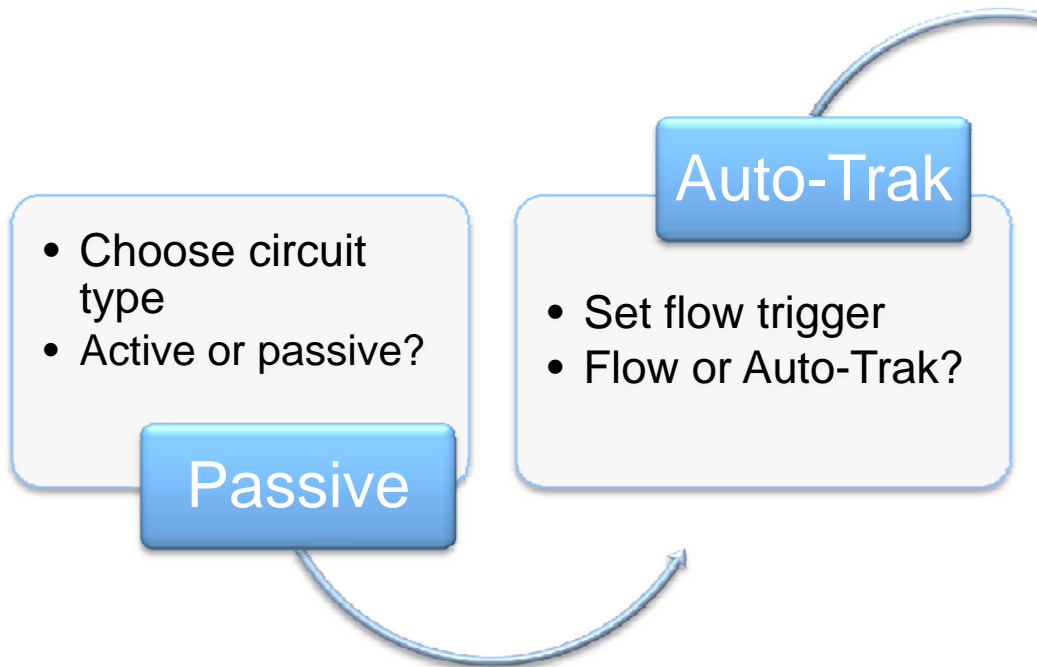
- Choose circuit type
- Active or passive?

Passive

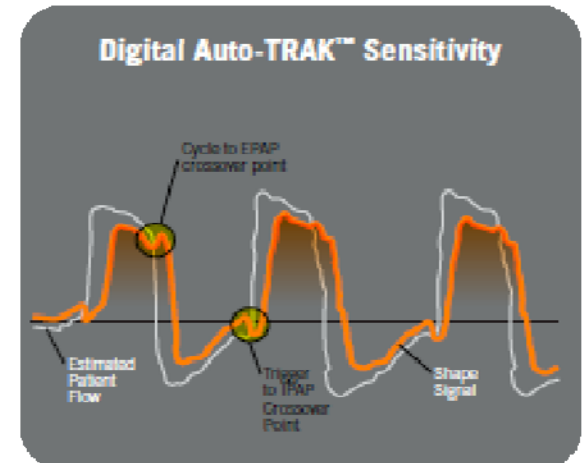


SIMV		07/06/2011 05:41 PM		
Setup				
Prescription	Settings And Alarms	2/22		
Dual Prescription		OFF		
Circuit Type		Passive		
Mode		SIMV		
Tidal Volume		500 ml		
▼ Breath Rate		10 BPM		
Cancel		Edit ⬆	OK	

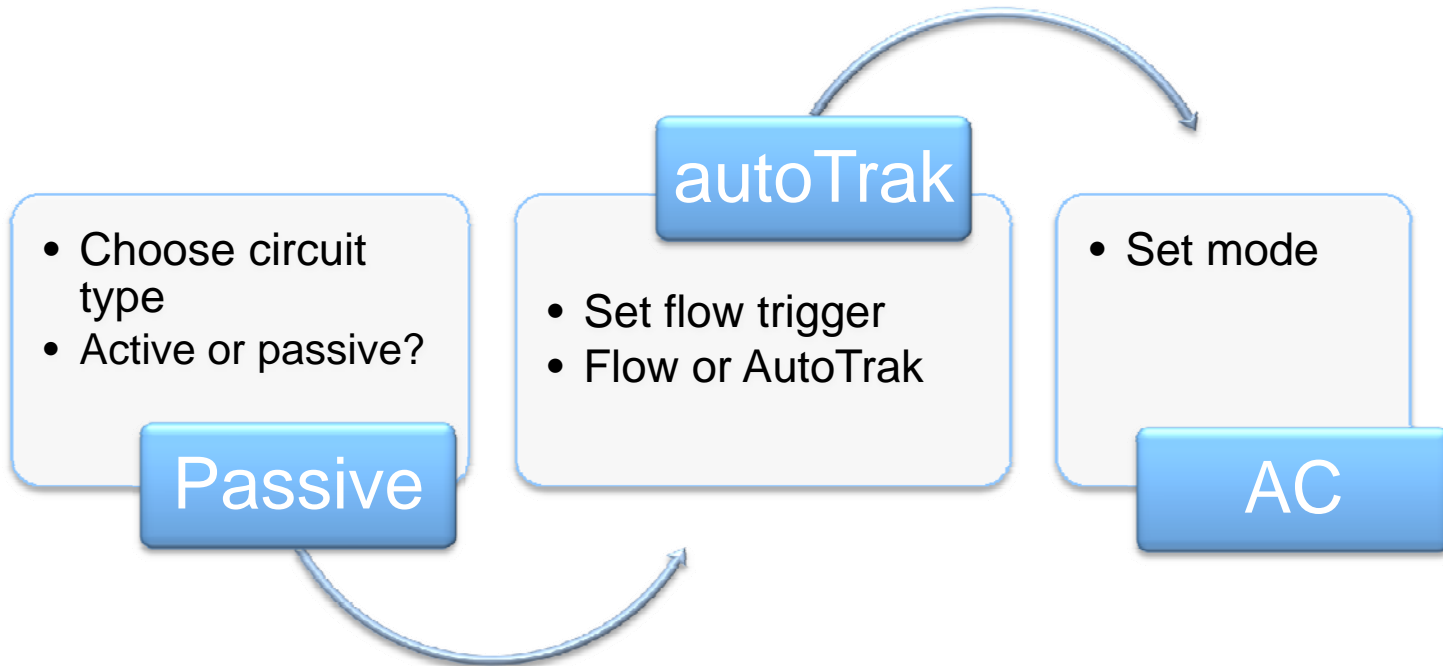
Transition Steps



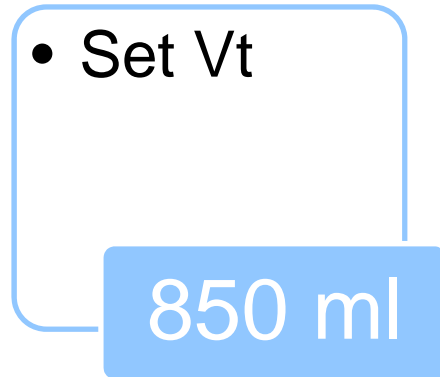
Automatically adjusts triggering and cycling



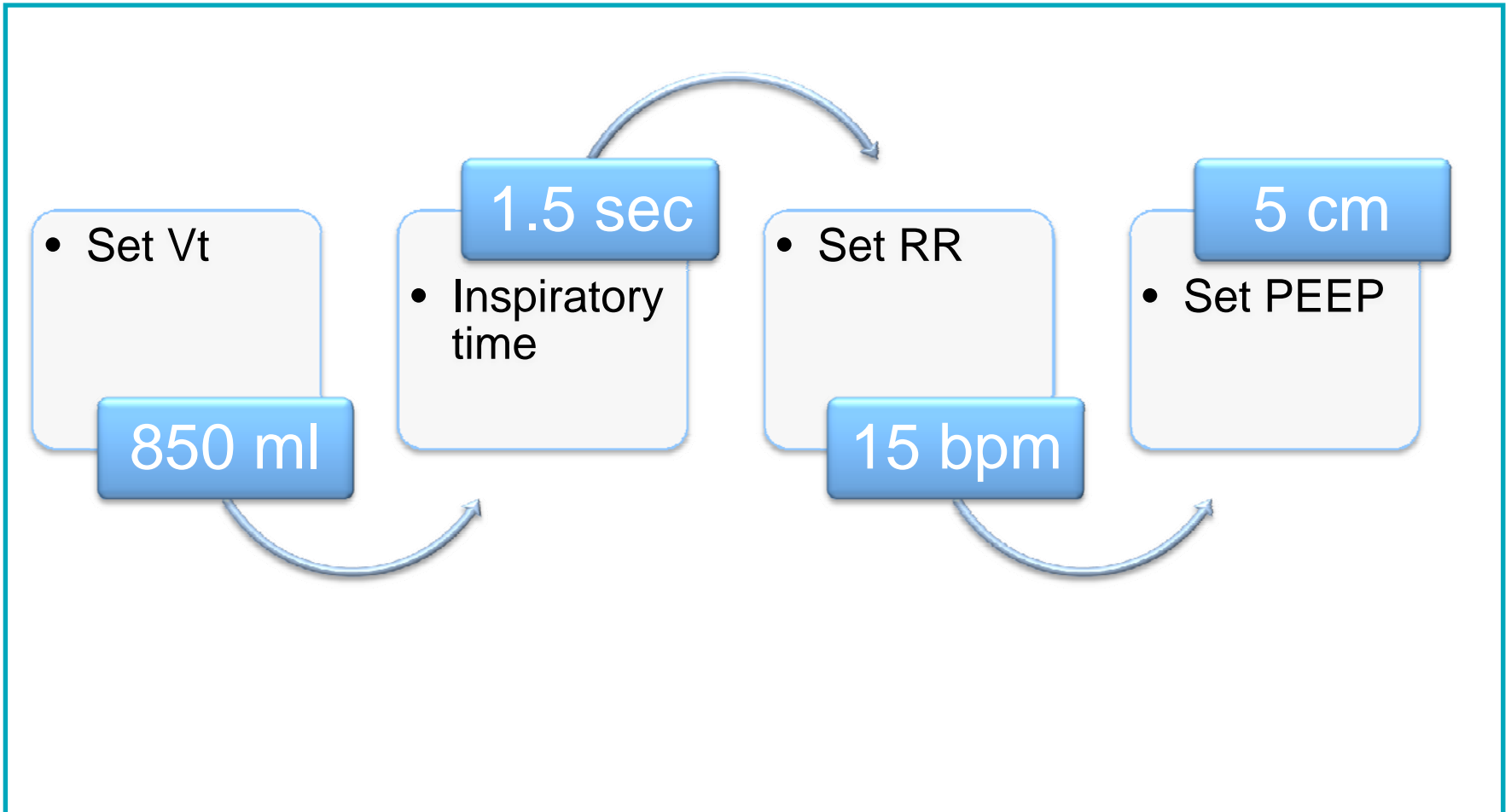
Transition Steps



Transition Steps



Transition Steps





With the right preparation, the transition to Trilogy can be seamless, simple and beneficial

