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# HRC Product Portfolio Training

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## Ventilators

| Noninvasive | Invasive |
|---|---|

Mid Acuity

Respironics V680

Respironics V60

Trilogy 202

Low Acuity

## Consumables

### Noninvasive Ventilation Masks and Circuits

AF541

PerforMax

AF531

AF421

AF811

AP111

Pediatric PerforMax

PN841

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# Hospital Respiratory Care Ventilator Family

**V60**
Non-Invasive Ventilation with Superior Patient Comfort

**V680**
Non-Invasive Ventilation with Life-Support Capabilities

**Trilogy 202**
Non-Invasive Ventilation with Life-Support Capabilities, Transport ready

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# V60

## Dedicated to Successful NIV

- ICU grade NIV performance with enhanced monitoring and alarms
- Treatment for a wide range of clinical severities and patients from pediatric to adult
- Approved for use on patients 20kg and up
- Flexibility for intra-hospital transport with internal 6 hour battery
- Advanced NIV with Auto-Trak
- Connectivity

- AVAPS - maintains a target tidal volume in a pressure-limited mode.
- PCV - can be used when full control of the patient's breathing pattern is required.
- CPAP - Three levels of flow-based expiratory pressure relief.
- Proportional Pressure Ventilation (PPV) - provides inspiratory flow and pressure in proportion to the patient's spontaneous effort *(optional)*
- Auto-Trak Plus – A customized titration of triggering and cycling criteria *(optional)*

# V680

## The two-in-one ventilator

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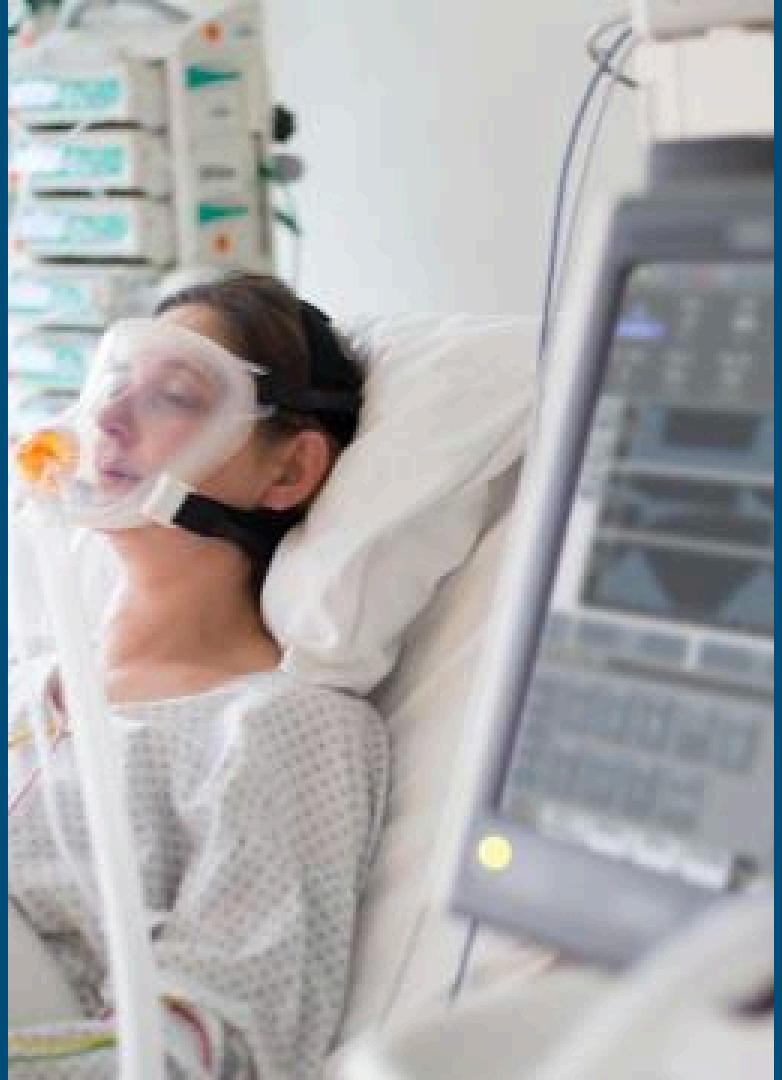
- Meets the changing therapeutic needs of a broad range of adult and pediatric patients
- Bridges the gap between dedicated NIV and critical care life support
- Single-limb non-invasive ventilation and dual-limb invasive ventilation
- Fast and easy switch from invasive to non-invasive ventilation
- Emergency Ventilation Mode



- Simple, familiar operation (based on V60)
- Auto-Trak+
- 4 hour built-in battery for intra-hospital transport
- Alarms and back-up ventilation
- Escalating alarms
- Apnea back-up ventilation mode
- Dynamic Respiratory Mechanics in NIV and IV
- Connectivity

GCX
Mounting Solutions

# GCX Cart for MX550 with V680

Cart includes:

- IV pole with 4 hooks
- Mounting system for power cable
- MX550 mount with tilt and swivel capabilities
- Custom tray with integrated handle and cable management features for V680 (V680 quick-connect feet to be provided by Philips)
- Downpost with humidifier mount
- Storage basket
- Single e-cylinder mount (dual cylinder optional)
- Counterweight for stability

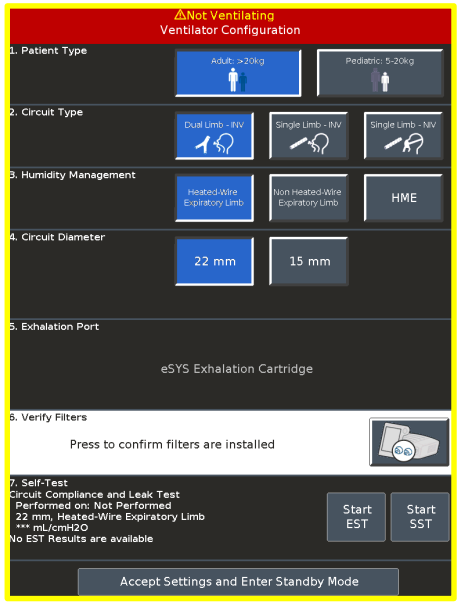
Price: $1500 each

Total height with IV post: 191 cm
Width: 50 cm
Depth including cylinder: 78 cm

# What's new in v1.3

| V680 Version 1.30 Software Features |
| --- |
| 1. Changing the primary mode breath type automatically changes the Apnea mode breath type to match. |
| 2. The label on the Apnea controls button now reads "Apnea Settings". |
| 3. Selecting Mask/Interface Leak “1” and Exhalation Port “None” prompts a message that the selection is not allowed. |
| 4. When the User changes the Auto-Trak+ settings from Normal values, the Auto-Trak+ label displays on the Active Mode bar. |
| 5. The user can now view any alarm condition that occurs while in any non-ventilating start up screen. |
| 6. When configuring the ventilator for single limb ventilation, the user is able to see if a failed EST is in memory. |
| 7. The Minute Volume Alarm will not trigger on start up until after delivering the number of breaths to compute the minute volume. |
| 8. The Manual Breath button is always visible and active during ventilation, even when the alarms screen is open. |
| 9. The 2-minute 100% O2 button is always visible and active during ventilation, even when the alarms screen is open. |
| 10. Updated default settings for each patient type, mode and breath type. |
| 11. Mode changes retain the common ventilator settings such as FI02, PEEP, Pressure Support and Trigger Sensitivity. |
| 12. The batch settings labels are a bolder yellow so the user can easily distinguish between altered and non-altered settings. |
| 13. The touch sound volume is at a fixed level and not linked to the volume adjustment of the audible alarm. |
| 14. The auto escalation feature is now abled/disabled in the diagnostic mode. The delay period to begin alarm volume escalation changes from 45 sec. to 15 sec. Alarm auto escalation status displays in the Menu tab under "Loudness". |
| 15. Added Languages: Simplified Chinese, Japanese and Russian. |
| 16. The user can now save and recall multiple loops to assess changes. Save up to five loops with time and date stamps. |
| 17. Selecting a single-limb circuit in the Configuration Menu, yet using a dual-limb circuit, triggers an alert that an incorrect circuit is used. |
| 18. The EST is now all inclusive of pre-use checks and includes the SST tests. Both EST and SST now require an oxygen connection due to the addition of a cross-calibration feature. |
| 19. There is an expanded selection of approved filters and circuits on V680. Passing EST clears the tested circuit, filter and accessory combination. |
| 20. Flow-Trak demand flow is now available to the patient during volume ventilation. |
| 21. In PRVC, the Min P and Max P settings are now relative to the PEEP level. |
| 22. The 10 mm circuit is no longer a circuit selection. |
| 23. There are no patient weight ranges on the Adult and Pediatric patient selection buttons. |
| 24. The Philips Ventilator Open Interface (PVOI) is a new connectivity protocol. |
| 25. In the Configuration Screen, there is a new button labeled "Yes" to confirm that there are filters installed. |

# Screen changes

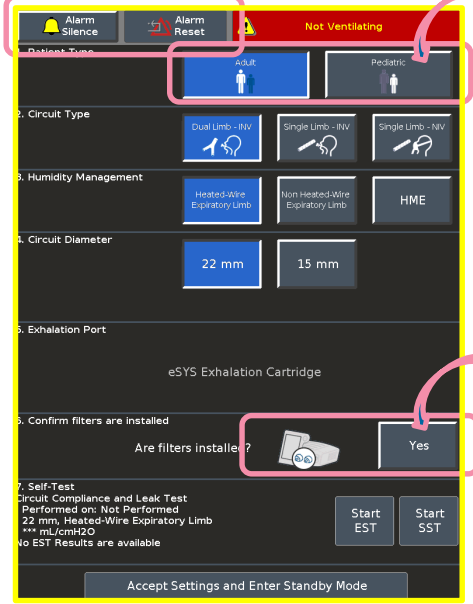



Old Software (Version 1.2)

See and silence alarms in Configuration Screen

Weight labels removed

Touch to confirm filters




New Software (Version 1.3)



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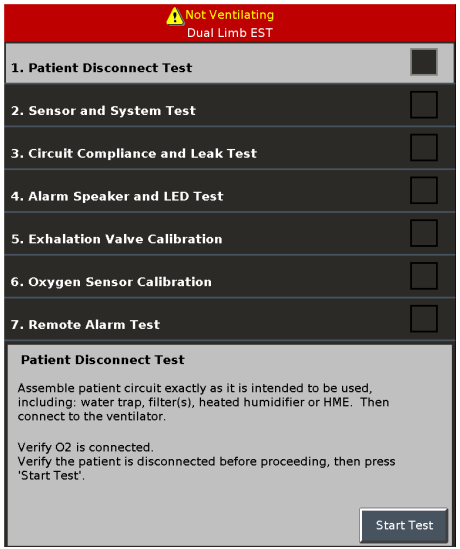
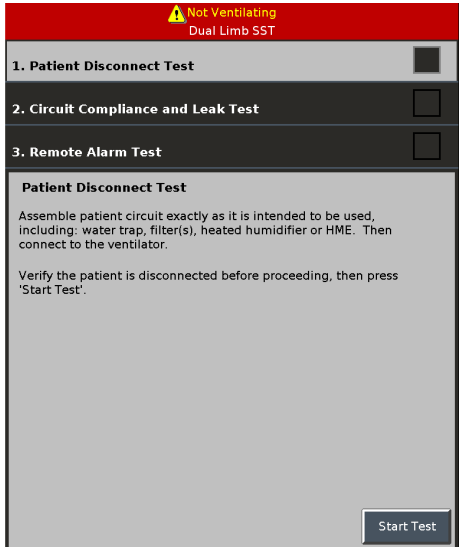
# Changes to EST and SST

EST




- You no longer have to run the SST and then EST between patients.
- Only run the EST.
- Use SST for circuit changes only.

SST




- SST will pass a wider range of circuits and filters.
- Always run SST with all filters, humidifiers and adapters

New cross-calibration feature requires $O_2$ connection for EST and SST.

Internal use only

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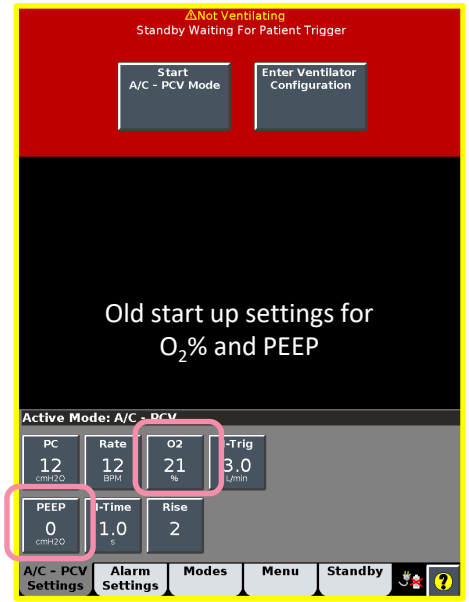
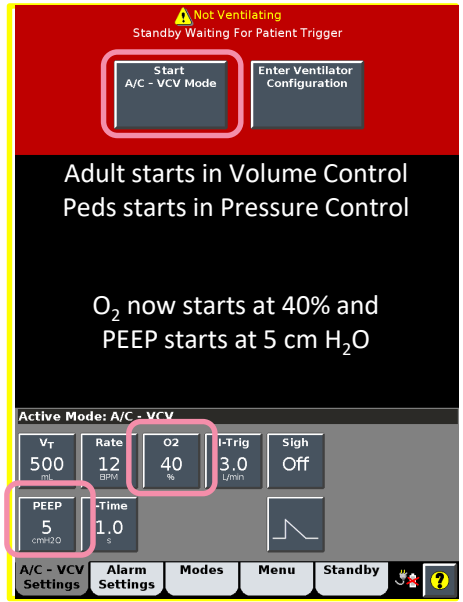
# Screen changes
# (New start up settings)




Old Software (Version 1.2)




New Software (Version 1.3)



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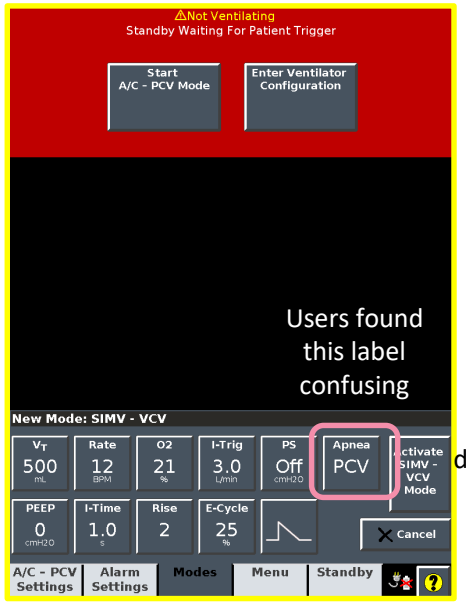
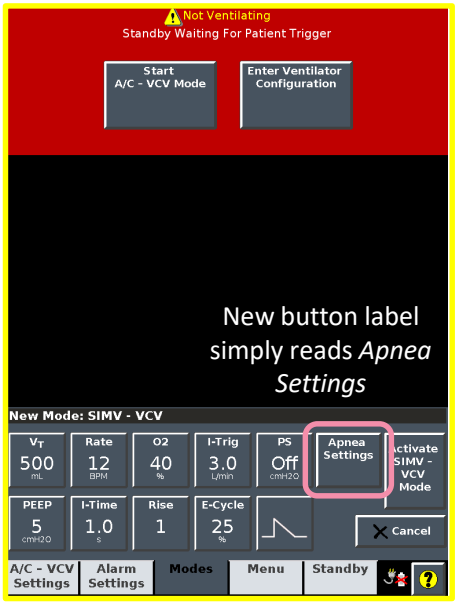
# Screen changes
# (Apnea settings simpler)




Old Software (Version 1.2)

Apnea settings default to the current breath type VCV or PCV




New Software (Version 1.3)



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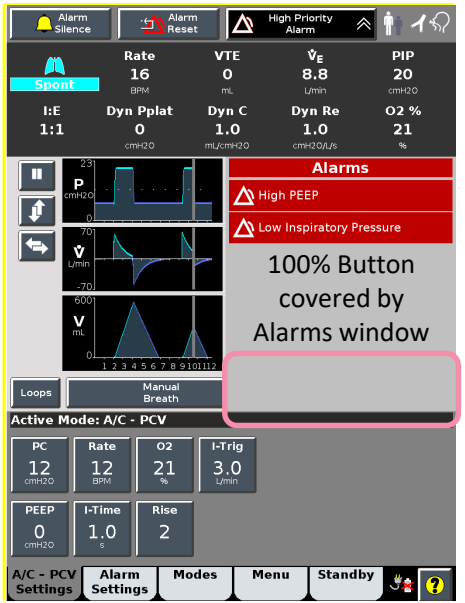
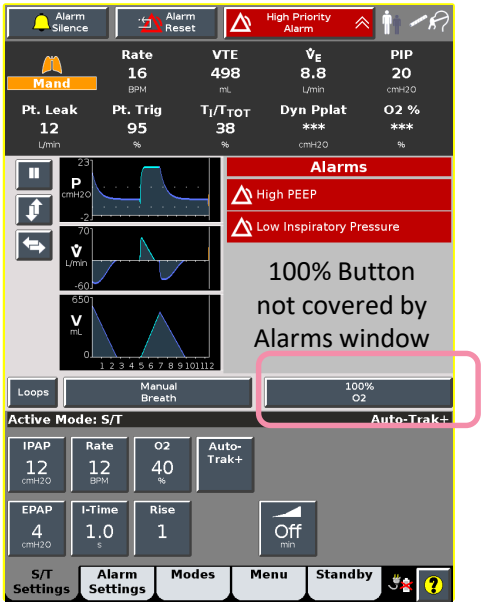
# Screen changes
# (100% O2 Button always displayed)




Old Software (Version 1.2)




New Software (Version 1.3)



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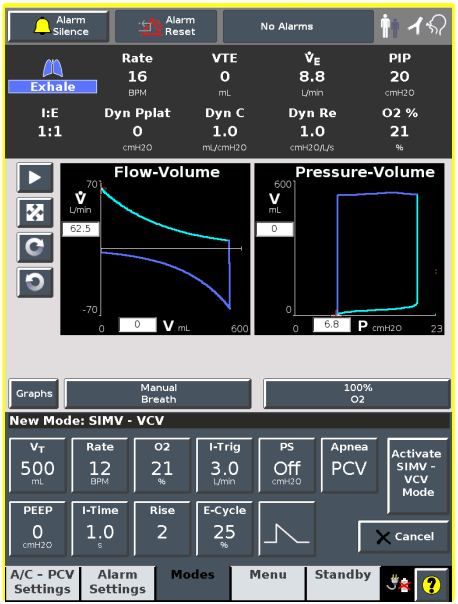
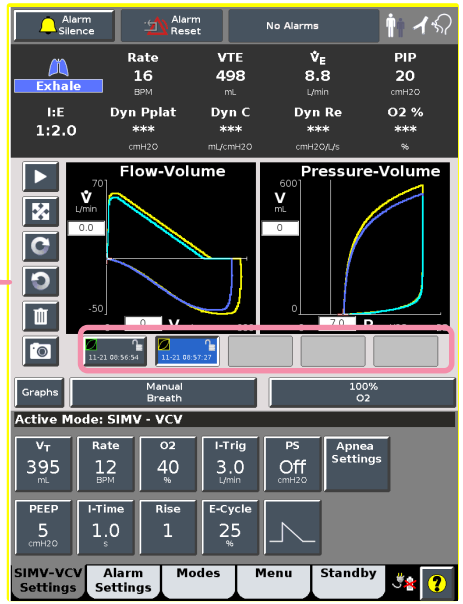
# Screen changes
# (Loop save and overlay)




Old Software (Version 1.2)

New controls for saving and deleting loop overlays




New Software (Version 1.3)

Save up to 5 loops with date and time stamps for trending. Button Color matches loop color for easy identification.



Internal use only

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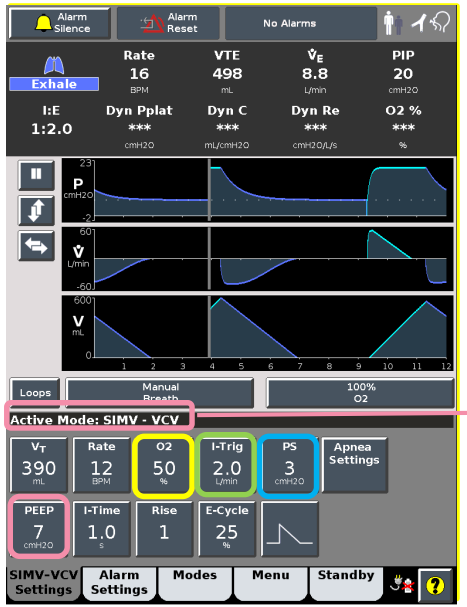
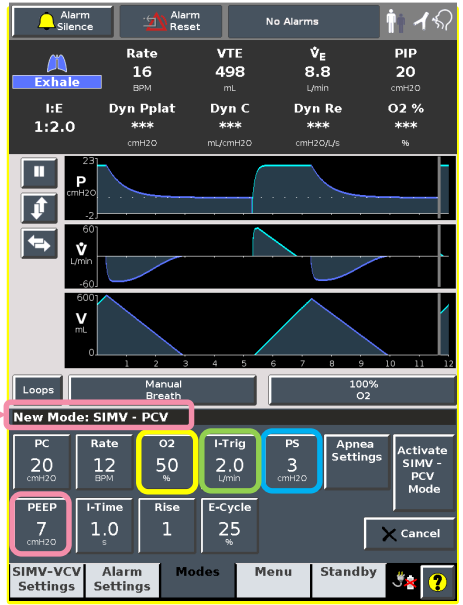
# Other screen changes
# (Common settings retained)




New Software (Version 1.3)

Common settings are retained when you change to a new mode.




New Software (Version 1.3)



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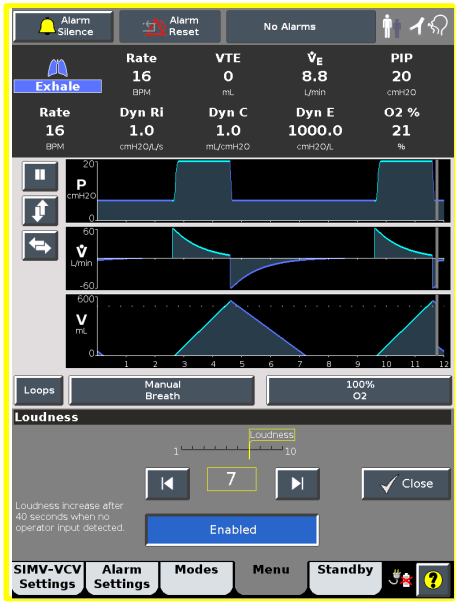
# Other screen changes (Escalating alarm volume)




Old Software (Version 1.2)

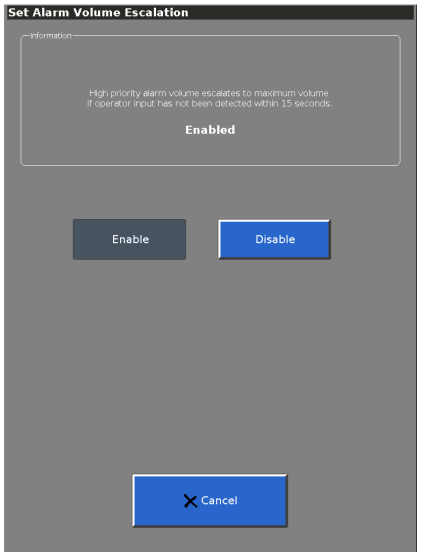
Enabled and disabled in Loudness Menu tab.

Time delay was 40 seconds.

New Software (Version 1.3)

Enabled and disabled in Diagnostic Screen System Settings.

User informed time delay is now 15 seconds.




New Software (Version 1.3)

Enabled and disabled in Diagnostic Screen System Settings.

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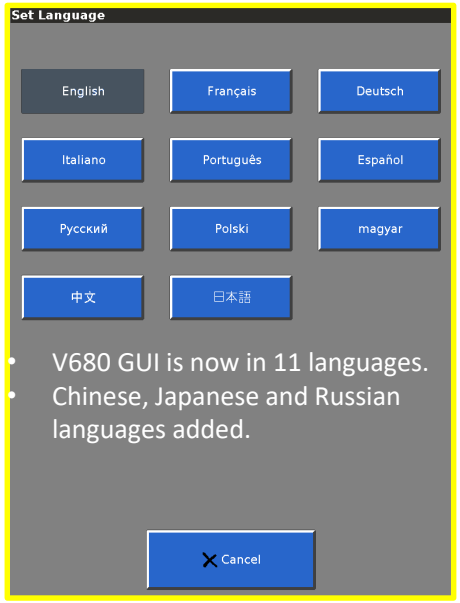
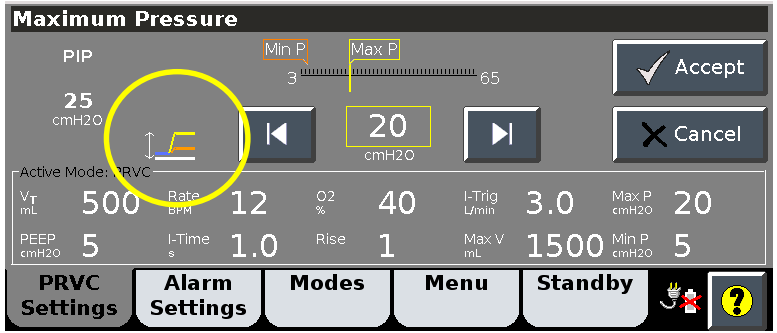
# Other screen changes




- V680 GUI is now in 11 languages.
- Chinese, Japanese and Russian languages added.




PRVC MaxP and MinP are relative to PEEP now.
Previously, they were absolute.



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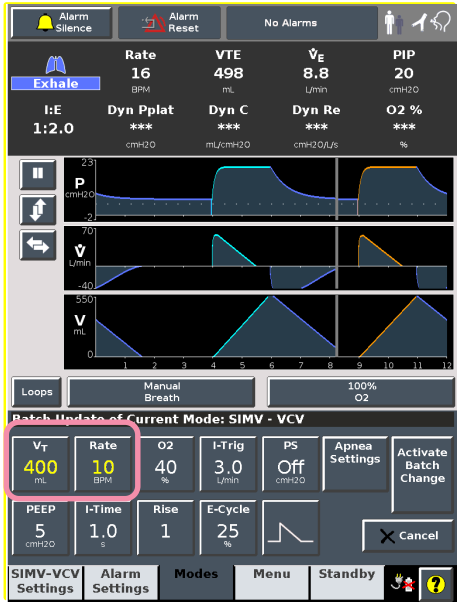
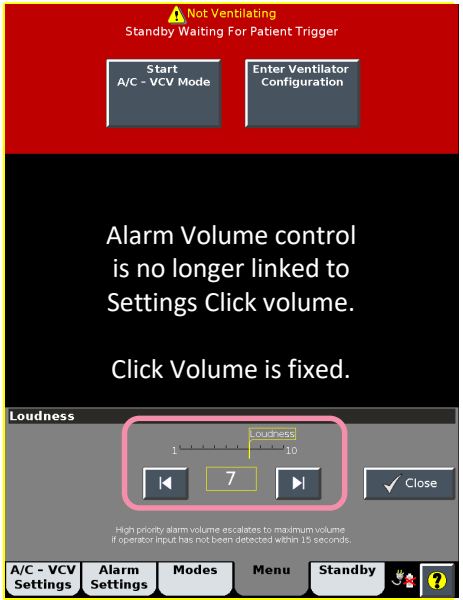
# Other screen changes (small, but significant)

Batch settings colors are more visible




New Software (Version 1.3)




New Software (Version 1.3)



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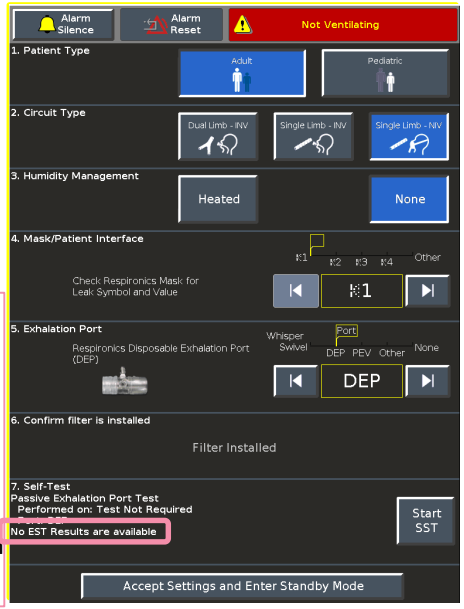
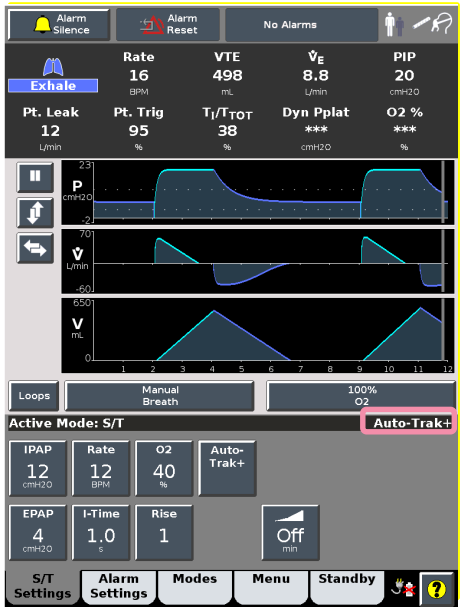
# Other screen changes (Single limb set up)

EST status now displayed to show why you cannot advance out of configuration screen




New Software (Version 1.3)




If Auto-Trak+ settings are changed, label is displayed on mode status bar

New Software (Version 1.3)



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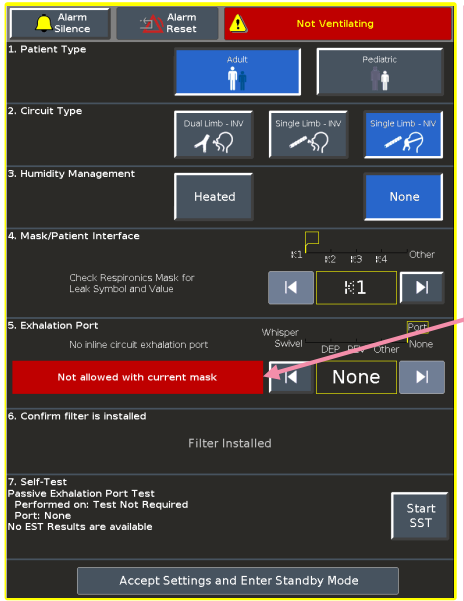
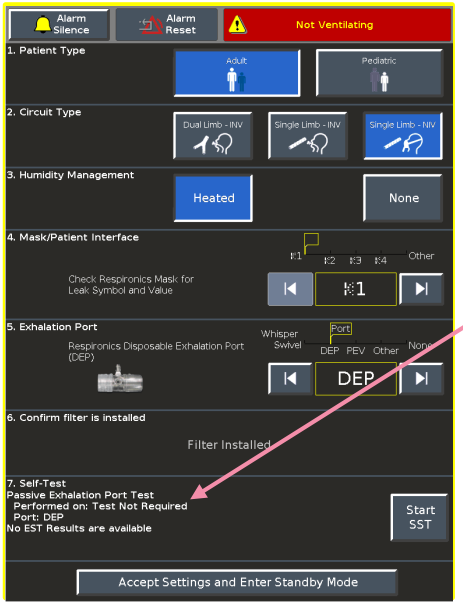
# Other screen changes (Single limb set up)




If mask and port selection is not allowed, message will alert user. Before, user could not advance to next screen, but was not clear why.

New Software (Version 1.3)




If Leak 1 and DEP are selected, no port test is required. SST button is available for Remote Alarm Test only.

New Software (Version 1.3)



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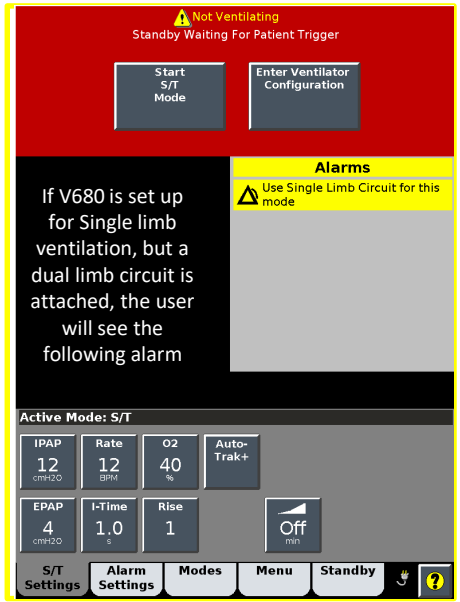
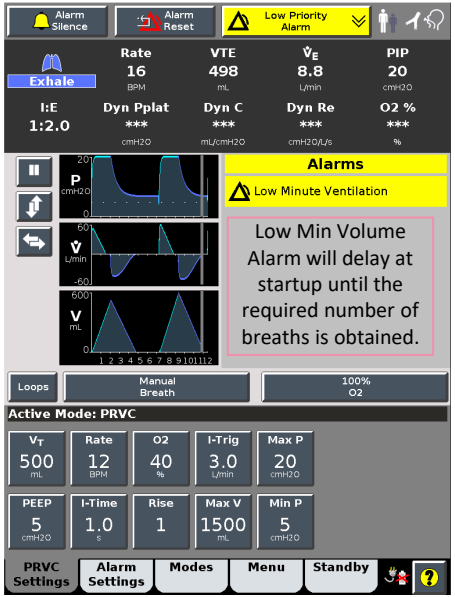
# Other screen changes (Single limb set up)




New Software (Version 1.3)




New Software (Version 1.3)



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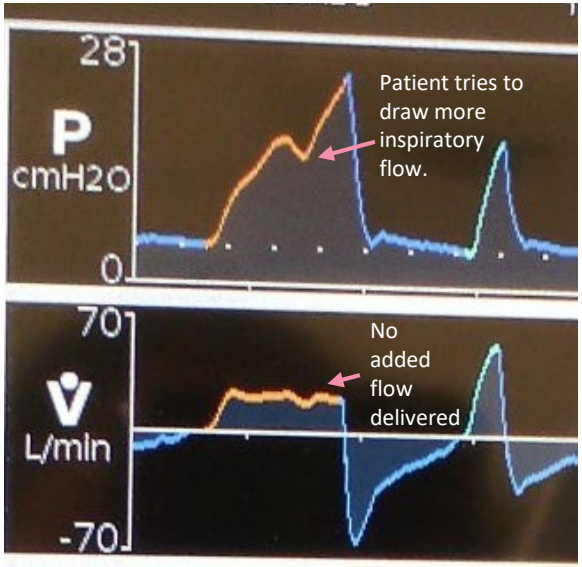
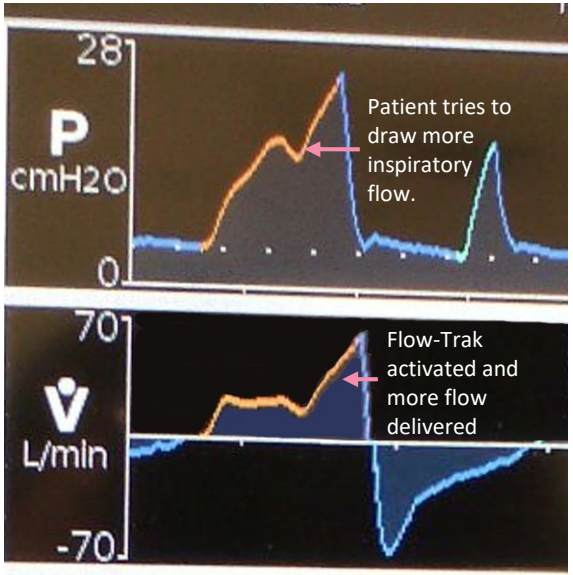
# Flow-Trak

Flow-Trak provides additional flow on demand if the set Peak Flow is not high enough to satisfy the patient's inspiratory flow requirements.




Old Software without Flow-Trak (Version 1.2)

New Software with Flow-Trak (Version 1.3)



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# Philips Ventilator Open Interface (PVOI)

- V680 Expanded communications protocol
- Available to all monitor and EMR providers for driver creation

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# Trilogy 202

## Simplicity and versatility

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- Volume-control and pressure-control ventilator
- Invasive and noninvasive ventilation
- The versatile breath delivery and setup options free you from burdensome equipment exchanges
- Compensates for leaks in both pressure and volume control modes

- Intra-hospital transport with a 3 hour internal battery and optional 3 hour external battery
- Patients 5Kg and up
- For use in hospital and alternative care sites
- Uniform settings to support hospital to home transition
- Connectivity Option

# Philips Trilogy 202 Ventilator

**Standard Features**

- Basket with 2 hooks and 2 cord wraps
- Humidifier mount
- Mounting plate for Trilogy
- Rail mounting (both sides)
- Cord tethers (3) at ventilator base level
- Five wheel base (4” casters, 4 locking, 1 non-locking)
- Threaded mounting sockets (2)
- Cable Clearance for Connectivity

**Optional Accessories**

- Oxygen Tank Holders accommodate 4.25 inch (shown) and 5.5 inch (Not shown) diameter tanks). This accessory includes an oxygen manifold bracket.
- Oxygen Manifold (not visible)
- Water Bag Pole and mounting block (shown)
- Support Arm (shown)
- Rail mounting block (shown)
- CleanClip Bracket (shown)
- Accessory Mounting Post (shown)

| Features | V60 | V680 | TRILOGY 202 |
|---|---|---|---|
| Circuit | Single-limb Passive<br>(non-heated, heated) | Single-Limb Passive<br>Dual-Limb – pediatric, adult<br>(Non-heated, heated) | Adult/Pediatric: Single-Limb Passive<br>(invasive, noninvasive)<br>Single-Limb Active (invasive, noninvasive) |
| Patient type | >20kg | Pediatric 5-20kg<br>Adult >20kg | Pediatric 5-20kg<br>Adult >20kg |
| Modes | **Noninvasive**: S/T, AT, PCV, CPAP, AVAPS, PPV*, AT+ | **Noninvasive**: S/T, PCV, CPAP, AVAPS, AT+, PPV*, AVAPS+*,<br>**Invasive**: A/C-VCV, A/C PCV, SIMV-VCV, PSV, PRVC | **Noninvasive**: S/T, PCV, CPAP, AVAPS, AT+,<br>**Invasive**: A/C-VCV, A/C PCV, SIMV-VCV, PSV, CV |
| Graphics | Pressure, Flow, Volume | Waveforms: Pressure, Flow, Volume<br>Loops: Flow/Volume, Pressure/Volume | Waveforms: Pressure, Flow |
| Transport | Manifold kit, O2 tank holders | Manifold Kit, O2 Tank Holders | Manifold Kit, O2 Tank Holders |
| Battery | Up to 6 hours | Up to 4 hours | Up to 6 hours: 3 hour internal, 3 hour detachable (optional) |
| Weight | 11.7kg | 12.3kg | 5.6kg |
| Communication | Multiple Options | Multiple Options | Multiple options |
| Additional Features | 100% FiO2 button (software v2.3)<br>Auto-escalating alarms (software v.2.3) | Respiratory Mechanics<br>Expanded Monitoring Options<br>100% FiO2 button<br>Manual Breath Button<br>Apnea Ventilation<br>Compliance Compensated Vt<br>Aerogen USB Controller<br>Circuit Occlusion Ventilation<br>Inspired O2 Monitoring<br>Auto-escalating alarms | Auto-adaptive triggering, cycling, and leak compensation<br>(available in all modes, passive circuit only)<br>SD Card Port<br>100% FiO2 button<br>Oximetry<br>Mouth Piece Ventilation<br>AVAPS AE |



Internal use only

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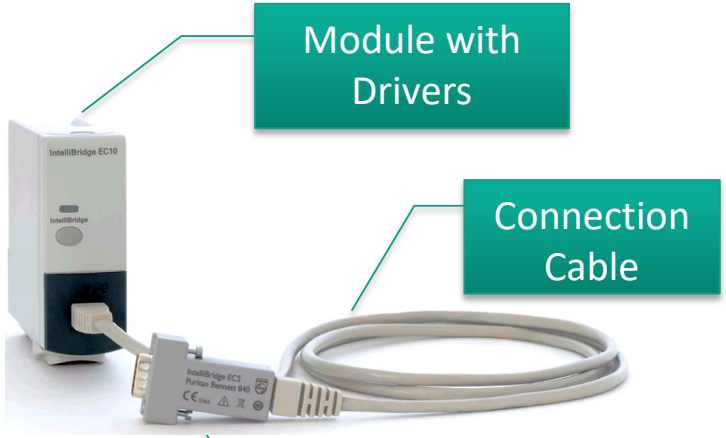
# Connectivity

# IntelliBridge EC10/EC5 Module



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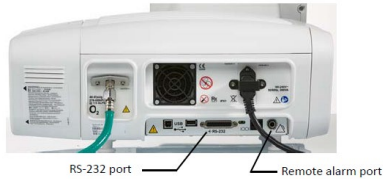
# IntelliBridge EC10 Connectivity to V60 and V680



EC5 with 25pin plug and CAT 5 cable

865114 #105 #L01

IntellBridge Module EC10

865115 A01 #101

MX500-MX800

IntelliBridge Interface Board #J32

MX400-MX 550 #J32

IntelliVue PM SW H.15 and higher

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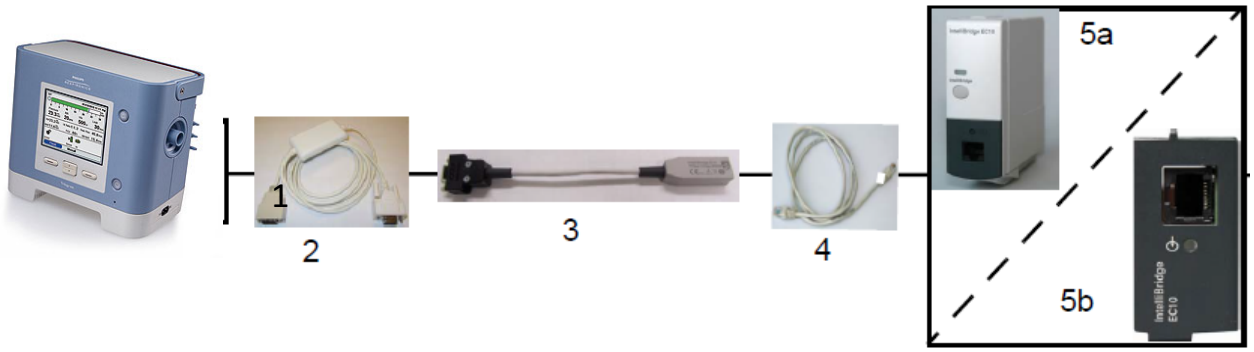
# Connectivity to Trilogy 202



**1** Philips Respironics Trilogy ventilator **SW Rev 14.x and higher**

**2** Trilogy isolated RS232 9 pin serial cable (PN: 1046972)

IntelliVue PM SW H.15 and higher

**3** IntelliBridge EC5 ID dongle 865114 ED#237#Lxx (labeled: “Philips Trilogy 202/O2”)

**4** CAT5 cable 1,5/3/10 m = #L 01,02,03

**5a** IntelliBridge Module EC10 865115/A01 #237 **ED237** (MX500-MX800)

**5b** IntelliBridge Interface Board EC10* MX400-MX550 #J32

Internal use only

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# IntelliBride EC40/80 connection to Trilogy

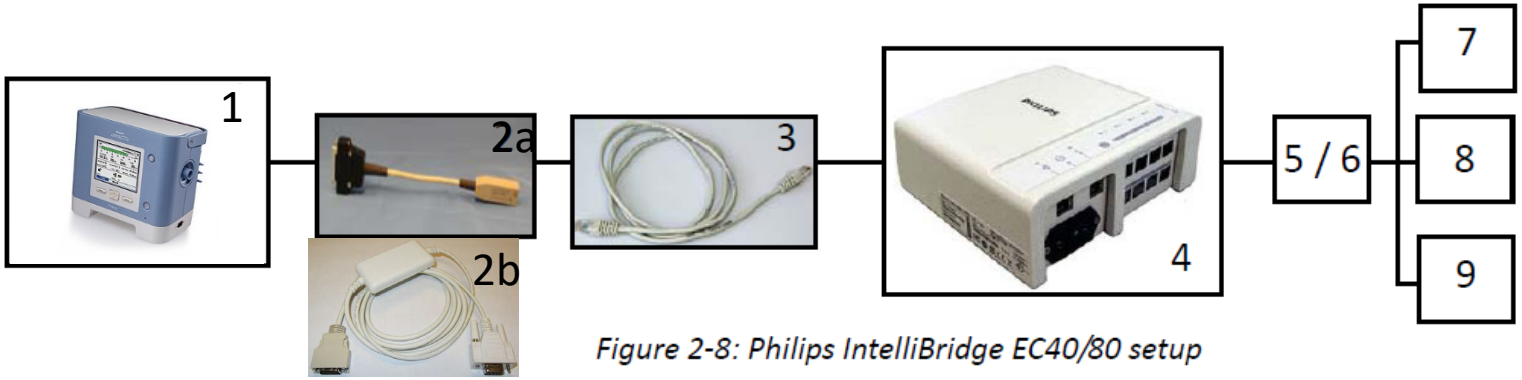


*Figure 2-8: Philips IntelliBridge EC40/80 setup*

**1** Philips Respironics Trilogy ventilator SW Rev 14.x and higher
**2a** Trilogy isolated RS232 9 pin serial cable (PN: 1046972)

**2b** IntelliBridge EC5 ID dongle 865114 IB ED237(labeled: “Philips Trilogy 202/O2”) PN 865056-10017
**3** CAT5 cable 1,5/3/10 m = #L 01,02,03
**4** IntelliBridge EC40/80 865056/ with device driver IB **ED237**

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# HRC Consumables

## Ventilators

### Noninvasive

### Invasive

Mid Acuity

Respironics V680

Respironics V60

Trilogy 202

Low Acuity

DreamStation

## Consumables

### Noninvasive Ventilation Masks and Circuits

AF541

PerforMax

AF531

AF421

AF811

AP111

Pediatric PerforMax

PN841

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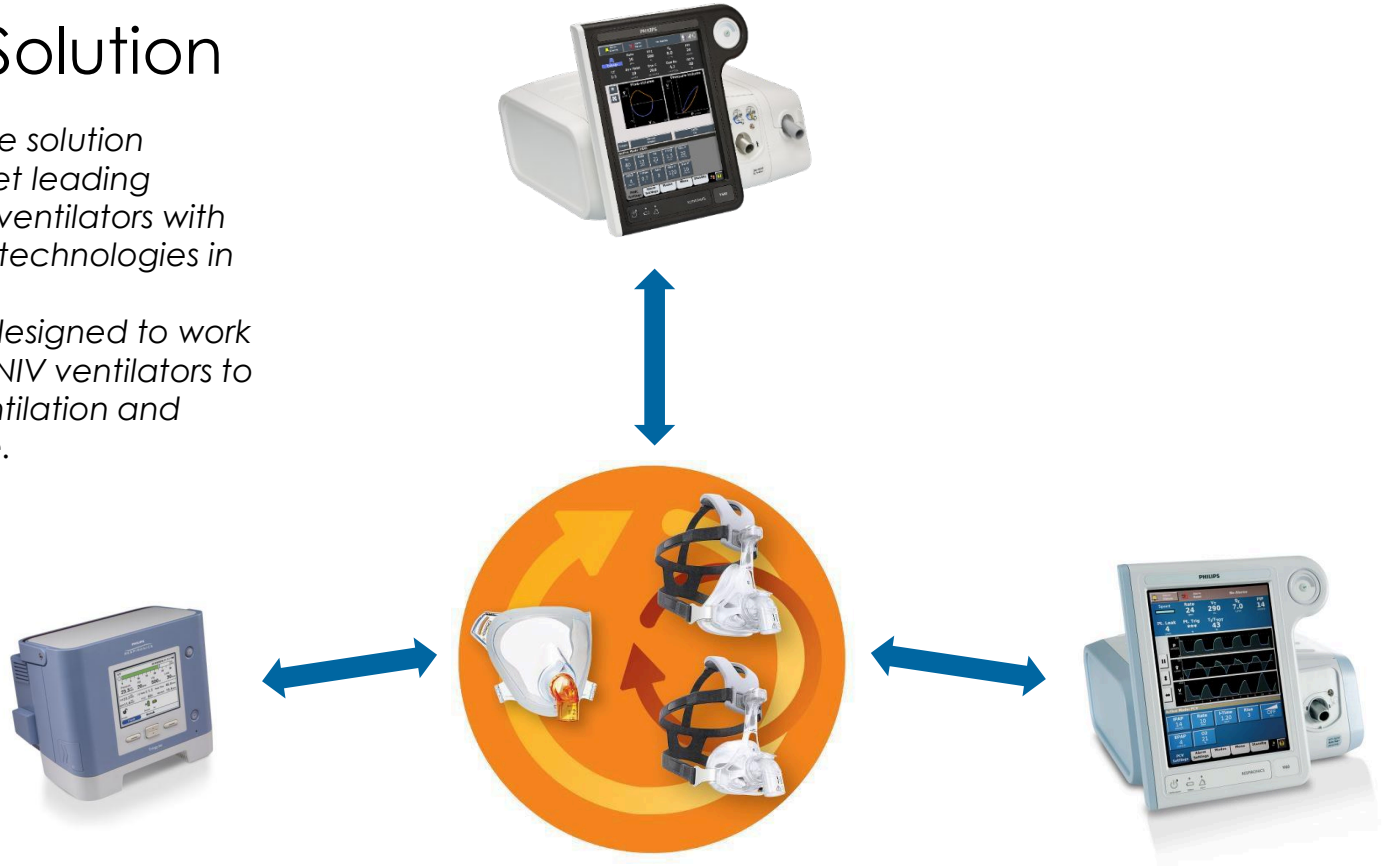
# Total NIV Solution

*The total noninvasive solution combines the market leading technologies in our ventilators with the market leading technologies in our interfaces.*
*Our NIV masks are designed to work seamlessly with our NIV ventilators to provide optimal ventilation and patient compliance.*



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# Philips HRC Consumable Products

## Noninvasive Ventilation Masks and Circuits

### ADULT

#### AF541

#### AF531

AF421

PerforMax

AF811

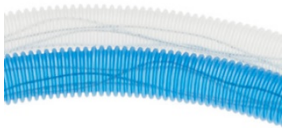
AP111

### Pediatric

PN841

Pediatric PerforMax

### Circuits



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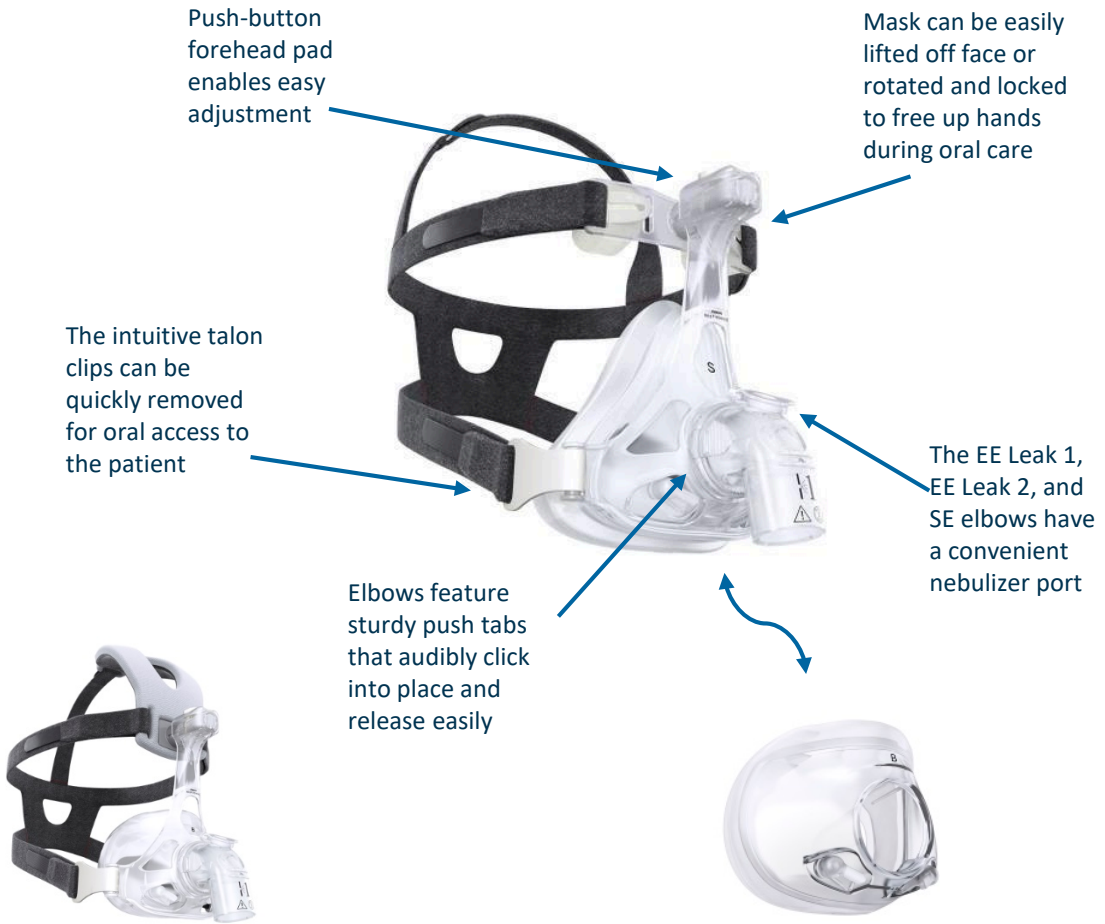
# AF541 – *Best Solution*

- Delivering high-quality respiratory care to your patients in today's complex healthcare environment demands new thinking — especially when it comes to patient comfort and addressing skin breakdown.
- Designed to rest comfortably on the face, the Philips AF541 noninvasive ventilation (NIV) mask features interchangeable under-the-nose (UTN) and over-the-nose (OTN) cushions to achieve the benefits of mask rotation while using a single mask.
- Made from materials that do not contain BPA



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# AF541 Interchangeable Elbows

EE Leak 1 NIVO Port

SE Leak 1 NIVO Port

EE Leak 2 NIVO Port

## Interchangeable Elbows Improve workflow

- NIVO port in all elbows
- Easy to change
- Audible click confirms elbow is secure

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# AF421 – *Good Solution*

- Innovative bellows style cushion to aid comfort and leak prevention
- Simple, intuitive Talon Clips
- New sizing gauge technique
- Pediatric through XL sizes (S,M,L, XL)
- Green packaging with zip-lock bag
- 20 pack bulk packaging (Leak 1 only)
- Replacement for Image 3
- Clean Clip holder included

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| Good | Best |
|---|---|
| AF421 | AF541 |
| Single leaf, bellows cushion | Dual-leaf, premium cushion |
| No adjustment on forehead pad | Adjustable forehead pad |
| Translucent, two-piece shell | One-piece, crystal clear shell |
| Elbows fixed | Interchangeable elbows |
| EE, SE, and Leak 2 | EE, SE and Leak 2<br>Bronch* and NIVO elbows |
| Hinged forehead piece | Available CapStrap feature |
| Clean Clip mask storage / Clean Clip Sidecar | Clean Clip mask storage |
| Automatic leak calibration | Automatic leak calibration |

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# PerforMax

**Key advantages**

- Improves comfort, minimizes skin breakdown, and eliminates nasal bridge challenges
- Standard adult size fits most patients.
- Perimeter facial contact maximizes comfort and simplifies fitting by sealing around the flat surfaces of the face and avoiding the sensitive nasal bridge.
- The clear, unobstructed view provided by the PerforMax Full Face Mask helps reduce patient claustrophobia.
- Interchangeable elbows accommodate quick transitions between single- and dual-limb ventilator circuits. With a choice of the standard elbow (SE) for dual-limb systems and the entrainment elbow (EE) for single-limb systems, clinicians can use the PerforMax Mask with any noninvasive ventilator.

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# PN841 Pediatric Nasal Mask

- ✓ Develop a mask truly designed for children
- ✓ Provide support to clinicians (and parents) and ease the stresses of a child's treatment
- ✓ Build on the success of other Philips Respironics pediatric masks!
- ✓ This mask has a Leak 3 and SE elbow option
- ✓ May be used on patients that weigh 5kgs or greater
  - There is no age requirement
  - There is no set upper limit.
- ✓ Mask free from natural rubber latex, DEHP or BPA
- ✓ 3 Mask package options
  - Small, Medium, Large

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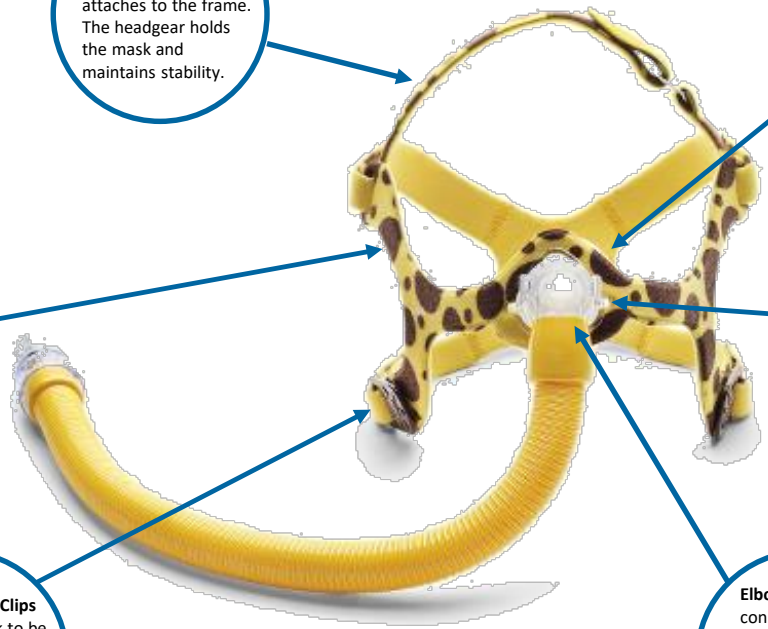
The **Headgear** wraps around the head and attaches to the frame. The headgear holds the mask and maintains stability.

The **Cushion**, which is available in different sizes, fits over the nose to deliver therapy.

The **Frame** rests against the face and holds the cushion in place on the mask.

The **Quick Release Tabs** on the elbow allow the child to be temporarily disconnected from the machine.



The **Headgear Clips** allow the mask to be removed without readjusting the headgear tabs every time.

**Elbow and Tube** connect the mask to the hose on the therapy device. The tube provides extra length to allow movement

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# Pediatric PerforMax

## Key advantages

- ✓ PerforMax allows for quick fitting and elimination of nasal bridge challenges For patients 1 year or older and >7kg
- ✓ Pink, blue, and yellow bonnet selection Cushion provides a sealing surface around the perimeter of face
- ✓ Compatible with single limb and dual-limb noninvasive ventilators
- ✓ CleanClip supports infection control effort
- ✓ Along with Sami and Tucker on the packaging, the XSmall and XXSmall size have other child-friendly design features that address the comfort and compliance needs of your patients

Internal use only

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