

Spacelabs Qube (91390) and Qube Mini (91389) Monitors with Capnography Pod (92516)

Quick Start Guide



NOTE: This reference guide is intended for a quick start of new alarm tool enhancements. For detailed information, refer to the Qube® and Qube® Mini monitors and Clinical Parameters Operations Manuals.

Spacelabs training acknowledgement

The information in this document is copyrighted by Spacelabs Healthcare. You are granted a limited, non-exclusive, non-transferable, non sublicensable license to view the course, without any right to alter, modify, create derivative works, or publicly display the course material. Each course is intended to supplement, and not replace, the information provided in a product's operators manual and a clinician's use of good clinical judgment. No warranties of any kind, whether express or implied, are given by Spacelabs with respect to any information in the course, which is provided on an "AS IS" basis. Spacelabs hereby expressly disclaims all such warranties, including any implied warranties of fitness for a particular purpose and accuracy. Each course relates to the product software version referred to in the course description.

It is recommended that you review the Operations and Service Manuals in conjunction with viewing these materials.

All data shown in this video is from Spacelabs' simulation program and is not actual patient data.
Specifications subject to change without notice.

© 2024 Spacelabs Healthcare
35301 SE Center Street, Snoqualmie, WA 98065
T +1 425 396 3300 | +1 800 522 7025
www.spacelabshealthcare.com

Confidential and proprietary information
of Spacelabs Healthcare

Overview

The Capno Pod measures end-tidal carbon dioxide (EtCO₂), minimum CO₂, and respiration rate to help determine your patient's ventilatory, circulatory, and metabolic status. A constant-flow vacuum system maintains a 50ml/minute flow rate through the sample line and automatically compensates for ambient barometric pressure to ensure measurement accuracy. To minimize warm-up time between cases, an integrated Suspend Mode smartly disables gas sampling yet maintains power to the Capno Pod for faster start-up.

Designed especially for the Qube and Qube Mini monitors, the Pod attaches seamlessly onto the rear of the monitor and is ready in a snap. The Capno Pod is suitable for use on patients of all ages.

To turn the monitor ON /OFF

1. To power the monitor ON, press the ON/OFF button located on the right side of the monitor screen.



2. To power the monitor OFF, press and hold the ON/OFF button until the screen turns off. A pop-up will present a red bar that will advance until the monitor has turned OFF.



3. When connected to AC power, an LED power cord icon and battery icons are shown in the lower right corner of the monitor screen.



Tip: When the Qube and Qube Mini monitors are running on battery power, the battery status is displayed across the bottom edge of the monitor screen. The following icons may appear:

The Qube monitor can have up to 8 hours of battery life with two batteries. The number of batteries installed is indicated by the number of battery icons displayed.

Regarding battery life alerts:

Yellow battery icon = 30 minutes or less.

An advisory tone will sound and a message that printing will soon be disabled is displayed.

Flashing Yellow battery icon = 15 minutes or less.

An advisory tone will sound and a message that the printing is disabled is displayed.

Flashing Red battery icon = less than 10 minutes.

An advisory tone will sound, and a Low Battery message is displayed. Printing is disabled. At the end of the 10-minute low battery warning cycle, the monitor will power off. Plug in to continue monitoring.



The Monitor Icons

Monitor icons located to the right of the screen have the following functions:



HELP – Touch the HELP icon, then select the key that you need help with.



MONITOR SETUP – Access to Alarm Tone Volume / Screensaver / Privileged Access, Large Numeric Display options, Print Vital Signs configuration, etc.



REMOTE – Access to remote bed information (Remote View / Alarm Watch / Remote Trends / Remote Calcs)



TRENDS – Access to local patient information (Trends, Calcs, and Drug Calculator)



RECORD – Touch the printer icon then select the parameter you want to record. Touch the printer icon twice to access the PRINT VITAL SIGNS key.



PREVIOUS MENU – Takes the user back one menu level.



HOME – Returns user to the home screen.

To admit or discharge a patient:

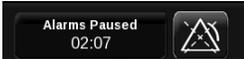
1. Touch **Admit Patient** in the lower left-hand corner of the screen.
2. **ADMIT → CLEAR PATIENT DATA**
→ **YES** (to clear all patient data)
→ **NO** (to keep patient data)
3. Enter patient information via onscreen keyboard.



*NOTE: To discharge the patient, follow the same steps except select **Discharge** key.*

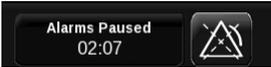
The Alarm Icons

NOTE: ALARM CONTROLS ARE IN THE LOWER RIGHT CORNER OF THE MONITOR SCREEN.

Alarm Symbols	Response/Behavior
	<p><i>Alarm Pause</i></p> <ul style="list-style-type: none"> - Pauses ALL alarms (audio and embedded light) for 2 minutes by default. - Stops alarm recordings. - Countdown timer indicates remaining time. - Touch the Alarm Pause triangle, to turn the feature On and then Off. - To add more temporary time to the alarm pause, touch the countdown timer. The additional time is added to the countdown (The amount of time/additional time feature is customized by the accounts.)
	<p><i>Alarm Pause Disabled</i></p> <ul style="list-style-type: none"> - Pause Alarms has been disabled in the Privileged Access Menu. - You cannot pause ALL alarms
	<p><i>Audio ON</i></p> <ul style="list-style-type: none"> - Audio volume is ON. - Status indicator only. Inactive if no alarm present)
	<p><i>Audio Pause with Countdown Timer</i></p> <ul style="list-style-type: none"> - Pause the current alarm for 45 seconds. - Touch a second time to cancel Audio Paused state

Alarm Symbols	Response/Behavior
 	<p><i>Alarm Acknowledge with Audio ON</i></p> <ul style="list-style-type: none"> - Active only when an enabled alarm has been violated. - Pauses all audio and embedded lights indefinitely for the violating alarm. - An Audio On or Audio Off indicator always shows with the Alarm Acknowledge icon. <p>OR</p> <p><i>ALARM ACKNOWLEDGE with AUDIO OFF:</i></p> <p>OR</p> <p><i>A countdown timer shows if the violated alarm is not enabled for Alarm Acknowledge.</i></p>

Alarm Pause pauses ALL alarms (audio and embedded lights) for 2 minutes by default and stops alarm recordings.



If the acknowledge feature is turned on, an Alarm Acknowledge icon appears left of the **Audio Pause** bell.



The **Alarm Pause** or **Alarm Acknowledge** feature is customized based on clinical workflow.

Trends

To view and/or print vital signs or graphic trends:

1. Touch Trends icon on the right-side of the screen to view the Trends window.
2. To print vital sign trends, select the Printer icon in the Trends window.



Note: In addition to printing vital signs from the TRENDS view, the Qube/Qube Mini monitor provides a PRINT VITAL SIGNS feature that allows a configurable printout of patient vital signs (see page 12 of this guide).

The Trends toolbar consists of the following icons and their functions, from left to right:



1. **Size:** Resizes the Trends window.
2. **View:** Displays a list of trend view that are currently available.
3. **Interval:** Displays a list of the intervals that are currently available.
4. **Duration:** Displays a list of the durations that are currently available.
5. **Cursor:** Toggles the Flag cursor on and off. Touching the graphic trend will also display the Flag cursor.
6. **Refresh:** Touch to enable or disable auto refresh for trends data.
7. **Print:** Sends to the default printer the data that is currently visible on the screen.
8. **Tools:** Displays the Trends Setup window to re-configure the Trends View.
9. **Calcs:** Displays the Calculations view. Also, provides access to the Drug Calculator.

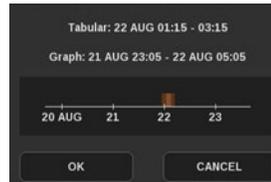
To select a different Trend view

1. To access a list of pre-defined view, select the binoculars icon on the top of the trends window.
2. Select from the list the preferred views.
Additional customized views can be created by your system administrator.



To view trended data beyond 24 hours (up to 96 hours).

1. Select the Trends icon.
2. Touch the clock icon in the lower left corner of the Trends window.
3. The following pop-up window is displayed.



4. Click the time bar at the approximate time you want to view.
5. Click **OK**.

Note:

- The time bar lists the month and date with the tic marks representing the start of that date (00:01).
- The orange marker indicates the time base of the Graphic display. The longer the Graph time base selected, the wider the orange bar will be.
- The time frame for the Tabular and Graph display indicates the time frame initially presented on the screen.



To configure a PRINT VITAL SIGNS report.

1. Touch the Monitor Setup icon.
2. Touch the Printer Tab > select the VITAL SETUP button.
3. Touch up to 8 parameters, a Report Time Period, and Data Interval (turn NIBP ON to include all episodic NIBP readings).
4. Touch PRINT VITAL SIGNS key to initiate a printout.
Note: This format of Print Vital Signs is only active with a built-in strip printer.



Drug Calculator

To access the Drug Calculator.

1. Touch the Trends icon.
2. Touch the Calculator icon (last icon on the top of the Trends window).
3. Touch the Drug Calculator icon.



To use the Drug Calculator

1. Enter or confirm **Drug Amount**, **Volume**, **Weight**, and **Dose Units** (how the drug is to be delivered).
2. Enter the desired Rate and the Dose will automatically calculate.
3. Enter the desired Dose and the Rate will automatically calculate.

The screenshot displays the Spacelabs Drug Calculator interface. It features several input fields and a numeric keypad. The 'Drug Amount' field is set to 400.00 mg. The 'Volume' field is set to 250 mL and the 'Weight' field is set to 80.00 kg. The 'Dose Units' field is set to mcg/kg/min. The 'Concentration' field is set to 1,600 mg/mL. The 'Dose in 1 mL' field is set to 0.333 mcg/kg/min/mL. The 'Total drip time' field is set to 250.0 Hours. A numeric keypad is visible at the bottom left, and a 'Rate' field is set to 1.000 mL/hr and a 'Dose' field is set to 0.333 mcg/kg/min. A red 'X' icon is present in the top right corner of the calculator interface.

Drug Amount	400.00	mg	Concentration	1,600	mg/mL
Volume	250	mL	Weight	80.00	kg
Dose Units	mcg/kg/min		Dose in 1 mL	0.333	mcg/kg/min/mL
			Total drip time	250.0	Hours
7	8	9	Del	Rate	1.000
4	5	6	Clear	mL/hr	
1	2	3	Enter	Dose	0.333
-	0	.		mcg/kg/min	

Screen Format Numeric Options

To view parameters as Large Numerics

1. Touch the Monitor Setup icon.
2. Touch the Numerics tab.
3. Touch the display format you want.
The selected display icon is highlighted in blue.



To configure the Large Numerics display with the parameters you want to view

1. Touch the Setup icon on the Numerics tab.
2. Touch a large numeric space.
3. Touch the parameter to place in that space.
4. Close views using the red “X” or Home Icon.



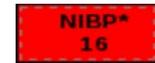
Note: The tabs at the top allow you to view and configure the different displays. However, the view selected in the NUMERICS tab is the view that will be presented on the monitor.

To position a parameter as a “Numeric Only” key at the bottom of the monitor screen

1. Touch the Monitor Setup icon.
2. Touch the **Local Config** tab.
3. Select Numerics Only (“*”) key.
4. Touch the parameter that you want to convert to a numeric.
5. Touch **Save**.



Note: A Numeric Only parameter is noted with an asterisk on the parameter label.



To change the color of a parameter

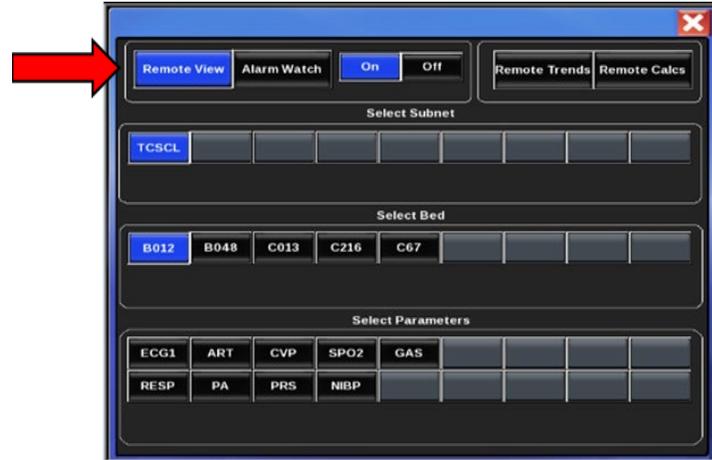
1. Touch the Monitor Setup icon.
2. Touch the Local Config tab. Select the 'Change Color' key.
3. Touch the parameter/s that you want to apply the color to.
4. Touch **Save**.



To view another patient's waveforms, vital signs, or calculations

1. Touch the Remote icon.
2. Turn **ON** Remote View or Alarm Watch or select Remote Trends / Remote Calcs.
3. Select a Subnet > Bed > Parameter.
(Remote View only)

Note: Remote View and Alarm Watch cannot be used at the same time. Telemetry Transmitters cannot be seen in Alarm Watch.



Capnography Pod (92516)

The Capno Pod attaches to the back of the Qube/Qube Mini monitor as shown in the pictures below.



The Capno Pod uses the Nomoline (no moisture) adapter, a proprietary technology.

See <https://www.spacelabshealthcare.com/products/supplies/> for ordering information.

Light Emitting Gas Inlet (LEGI)

The Capno Pod has a light emitting gas inlet (LEGI) which detects the presence of a Nomoline adapter. The LEGI shows color-coded status information. A steady green light indicates the system is ready for use.

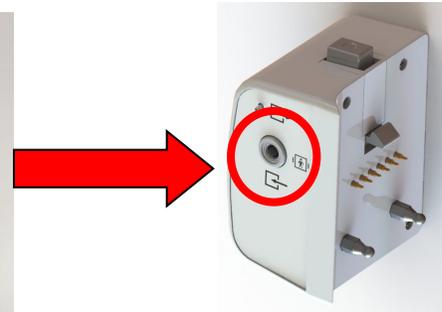
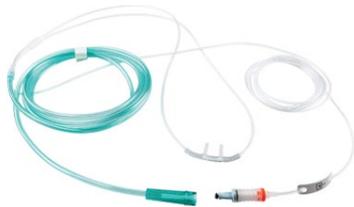


Indication	Status
Steady green light	System OK
Blinking green light	Zeroing in progress
Steady red light	Sensor error
Blinking red light	Check sample line

Note: RED light, either steady or blinking, may require replacement of the Nomoline adapter.

To start capnography monitoring

1. Attach the pod to the monitor.
2. Before putting the cannula on the patient, connect the nomoline adapter to the inlet sample port.
3. Touch GAS on the Qube/Qube Mini monitor screen.
4. Allow the Pod to warm up for a minimum of 10 seconds.
5. Secure the integrated cannula (non-intubated) onto the patient or airway adapter (intubated) into the breathing circuit as directed in the instructions for use of the nomoline device.



To compensate for the effect O₂ has on EtCO₂ reading

1. Touch **GAS** on the Qube/Qube Mini monitor screen.
2. Touch **COMP** in the menu at the bottom of the screen.
3. Choose **O2 ON**.
4. Adjust COMP setting using the arrows to the right of COMP key according to the following O₂ concentrations:

O₂ Low (21-30%), Medium (30-70%), or High (70-100%)



*Note: Toggling the **O2 COMP** key **OFF** and **ON** returns the setting to Medium.*

*If the patient is receiving Nitrous Oxide, turn **N2O COMP ON**.*

Integrated Thermal Printer

Monitors with an optional recorder display a **PRINTER** key in the lower left corner.

Printer settings

1. The recorder can be configured for printing Alarm or Manual strips (12 or 20 seconds).
2. The **STOP RECORDING** key stops the printout that is currently printing. Any print request that is in the queue will still print.
3. The **CONTINUOUS** key allows a manual recording to be converted to a continuous recording. This printout continues until the request has been terminated (**STOP RECORDING**).



Note: If the paper runs out, a message. 'Local Printer Paper is out' is displayed in the lower left message area of the monitor. A technical alert will sound. Turning the printer OFF will also turn off the technical alert.

Wireless

Monitors with wireless capability will show the status of the network/wireless connections as follows:

1. The monitor has wireless capability, but it is not connected to a hardwire network.
2. The monitor is disconnected from the hardwired network and is connected to the wireless network. The number of bars indicates the strength of the signal.
3. A yellow icon will display if the wireless transmission is inhibited either due to incorrect wireless settings or if the monitor is unable to communicate with a wireless access point (e.g., out of range).

1



2



3



NOTE: This document is intended as a quick start guide. For more detailed information, refer to the product Qube and Qube Mini Operations Manual (P/N 070-2112-xx) and the Clinical Parameters Operation Manual (070-2113-xx) for the Capno Pod.

Contact Information

Technical Support: [\(1\) 800-522-7025](tel:18005227025) (available 24 hours a day / 7 days a week)

Clinical Education Consultant: _____

Sales Representative: _____