



Spacelabs qube™ Monitors (91390) Capnography Pod (92516)



Quick Start Guide

Note: This reference guide is intended for a quick start for the qube™ Monitors. For more detailed information, refer to the Operations Manual.

To turn the monitor ON / OFF:

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



2. To power the monitor OFF, press and hold the ON / OFF button for 3 seconds. 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 will display in the lower right corner of the monitor screen.



Tip: When the qube™ monitor is running on battery power the battery status is displayed across the bottom 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 will appear.

Flashing Yellow battery icon = 15 minutes or less.

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

Flashing Red battery icon = less than 10 minutes.

An advisory tone will sound and a Low Battery message is displayed. Printing is disabled.

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)

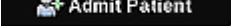
RECORD – Touch the printer icon then select the parameter you want to record. Touch the printer icon twice to access the PRINT VITAL SIGNS key.

DNA – Access to remote applications (optional software)

PREVIOUS MENU – Takes the user back one menu level.

HOME – Returns user to the home screen.

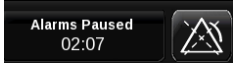


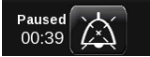

To admit or discharge a patient:

1. Touch  in lower left hand screen.
2. ADMIT > CLEAR PATIENT DATA > YES (to clear all patient data) > NO (to keep patient data)
3. Enter patient information via keyboard provided



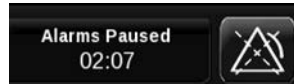
*Note: To discharge the patient, follow the same steps except select **DISCHARGE** key.*

The Alarm Icons

Alarm Symbols	Response/Behavior
	<p>ALARMS PAUSED:</p> <ul style="list-style-type: none"> • Pauses ALL alarms (audio and embedded light) for 2 minutes by default. • Stops alarm recordings. • Default time is set in the Privileged Access menu (1, 2, or 3 minutes). • Countdown timer indicates remaining time. • To pause all the alarms for more time (up to 30 minutes), select the icon twice.
	<p>ALARMS PAUSE DISABLED:</p> <ul style="list-style-type: none"> • Pause Alarms has been disabled in the Privileged Access Menu. • You cannot pause ALL alarms
	<p>AUDIO ON:</p> <ul style="list-style-type: none"> • Audio volume is ON. • Status indicator only. Inactive if no alarm present.
	<p>AUDIO PAUSE with COUNTDOWN TIMER:</p> <ul style="list-style-type: none"> • Pause the current alarm for 45 seconds. • Touch a second time to cancel Audio Paused state.
	<p>ALARMS ACKNOWLEDGE with AUDIO ON:</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>ALARMS ACKNOWLEDGE with AUDIO OFF:</p> <p>OR</p> <p>A countdown timer shows if the violated alarm is not enabled for Alarm Acknowledge.</p>

Note: Alarm controls are located in the lower right corner of the monitor screen.

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 applies to any level of alarm priority (High, Medium, or Low). If an alarm priority (Example: High/Red) has been disabled for the acknowledge feature, the Audio Pause icon silences the alarm audio for 45 seconds.

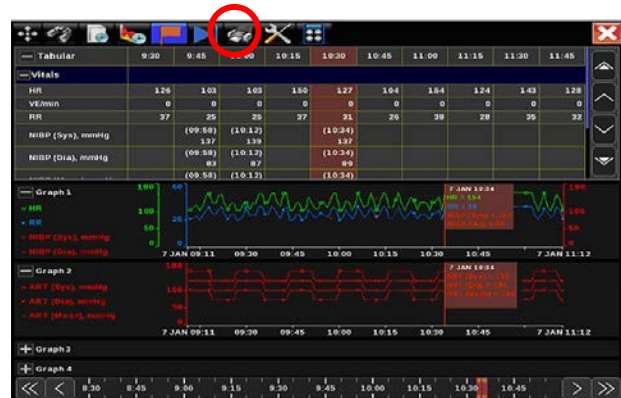


Audio Pause for a disabled Alarm Acknowledge priority

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

1. Touch  on the right side of the screen to view the TRENDS window.

2. To print vital signs trends, select .




Note: In addition to printing vital signs from the TRENDS view, the qube™ monitor provides a PRINT VITAL SIGNS feature that allows a configurable printout of patient vital signs (see page 13 of this guide).

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





1. **Size:** Resizes the Trends window.
2. **View:** Displays a list of the trend views 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 Trend View
9. **Calcs:** Displays the Calculations view. Also, provides access to the Drug Calculator.

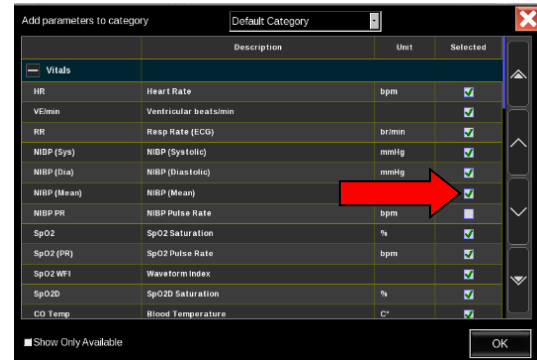
To select a different Trend view:

1. Select the binoculars  to access a list of pre-defined views.
2. Select from the list the preferred view.
3. Additional customized views can be created by your system administrator.



To ADD / REMOVE parameters in a Trend View:

1. Select  to ADD a parameter.
2. A list of parameters will appear. Check the parameters to ADD to your view.
3. Select a parameter label. Select  to REMOVE a parameter.



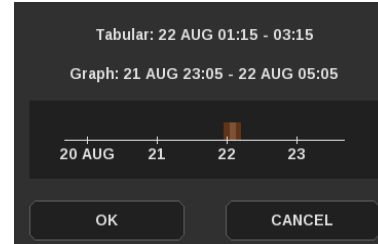
To view trended data beyond 24 hours (up to 96 hours):

1. Touch the TRENDS icon. 
2. Touch the clock icon in the lower left corner of the TRENDS window.



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

3. The following pop-up window will appear:




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

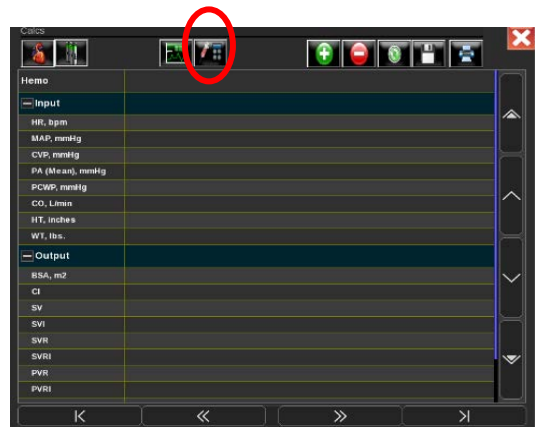
To configure a PRINT VITAL SIGNS report:

1. Touch the MONITOR SETUP icon .
2. Touch the PRINTER tab > select the VITALS SETUP button.
3. Select 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 printout.




To access the Drug Calculator:

1. Touch the TRENDS icon.
2. Touch the CALCULATOR icon.
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 desired Rate and the Dose will automatically calculate.
3. Enter desired Dose and the Rate will automatically calculate.



The screenshot shows 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. The 'Rate' field is set to 1.000 mL/hr and the 'Dose' field is set to 0.333 mcg/kg/min. A numeric keypad is visible at the bottom left, and a red 'X' icon is in the top right corner.


Field	Value	Unit
Drug Amount	400.00	mg
Volume	250	mL
Weight	80.00	kg
Dose Units	mcg/kg/min	
Concentration	1,600	mg/mL
Dose in 1 mL	0.333	mcg/kg/min/mL
Total drip time	250.0	Hours
Rate	1.000	mL/hr
Dose	0.333	mcg/kg/min

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 will highlight in blue.



To configure the Large Numeric display with the parameters you want to view:

1. Touch the Setup icon within the NUMERICS tab. 
2. Touch a large numeric space then touch the parameter to place in that space.



*Note: The two 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 screen:



1. Touch the Monitor Setup icon.
2. Touch the Local Config tab. Select 'Numeric Only (*)' key. Touch the parameter that you want to convert to a numeric. Touch SAVE.



Note: A 'Numeric Only' parameter will be noted with an asterisk on the parameter label



To Change Color of a parameter:



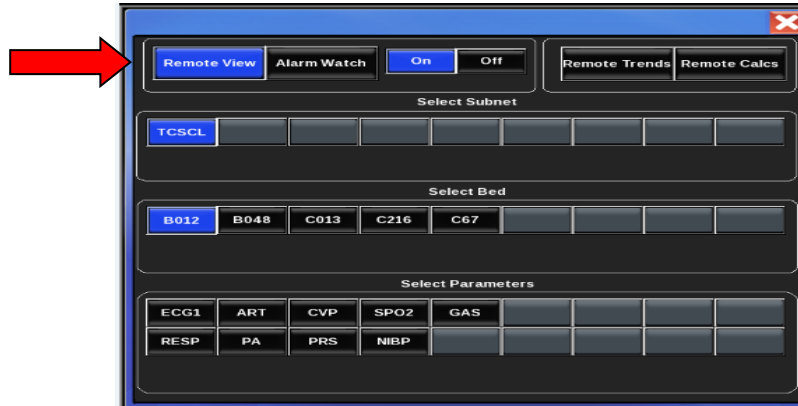
1. Touch the Monitor Setup icon.
2. Touch the Local Config tab. Select the 'Change Color' key. Touch the parameter/s that you want to apply the color to. Touch SAVE.



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)



Capnography Pod (92516)



The Capno Pod attaches to the back of the qube monitor as shown in the pictures below.



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

The Nomoline adaptor comes in two options:

- Single patient use
- Multi-patient use adaptor

Nomoline Product Description	Picture	Usage	Replacement
Nomoline, P/N 015-0683-xx Sampling line with a male luer lock connector, single-patient use. Adult/Pediatric/Infant, 2.0 m		Intubated patients, maintenance	Single-patient use
Nomoline Adapter, P/N 103-0234-xx Sampling line with female luer lock connector. Adult/Pediatric/Infant, 0.15 m		Intubated/spontaneous breathing patients	Multi-patient use

Light Emitting Gas Inlet (LEGI):

The Capno Pod has a light emitting gas inlet (LEGI) which detects the presence of a Nomoline adaptor. 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 adaptor.

To start capnography monitoring:

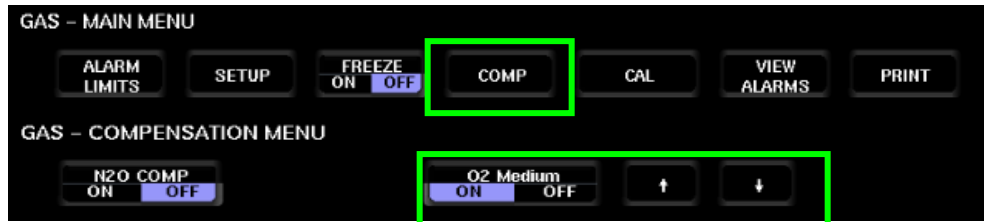
1. Attach the pod to the monitor.
2. Connect the sampling line to the inlet sample port.
3. Touch GAS on the qube monitor screen.
4. Allow the pod to warm up for a **minimum of 10 seconds**.
5. Connect the other end of the sampling line to the patient or breathing circuit.



To compensate for the effect O₂ has on EtCO₂ reading:

1. Touch GAS on the qube monitor screen.
2. Touch COMP in menu at the bottom of 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.
Turn N₂O comp ON if patient is receiving Nitrous Oxide.*

RECORDER - Option U:

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

1. The recorder can be configured for printing Alarm or Manual strips (12 or 20 seconds).
2. The STOP RECORDING key will stop the printout that is currently being printed. 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 will continue until the request has been terminated (STOP RECORDING).

Note: If the paper runs out, a message 'Local Printer Paper is out' will be 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 – Option Z:

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

1. The monitor has wireless capability, but it is 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.

Note: 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).





Note: This reference guide is intended for a quick start of new alarm tool enhancements. Refer to the Operations Manual for more detailed information or call one of the contacts listed:

Contact Information

Spacelabs Contacts

Technical Support: **800-522-7025 option #2**

Field Service Engineer: _____

Clinical Education Consultant: _____

Sales Representative: _____