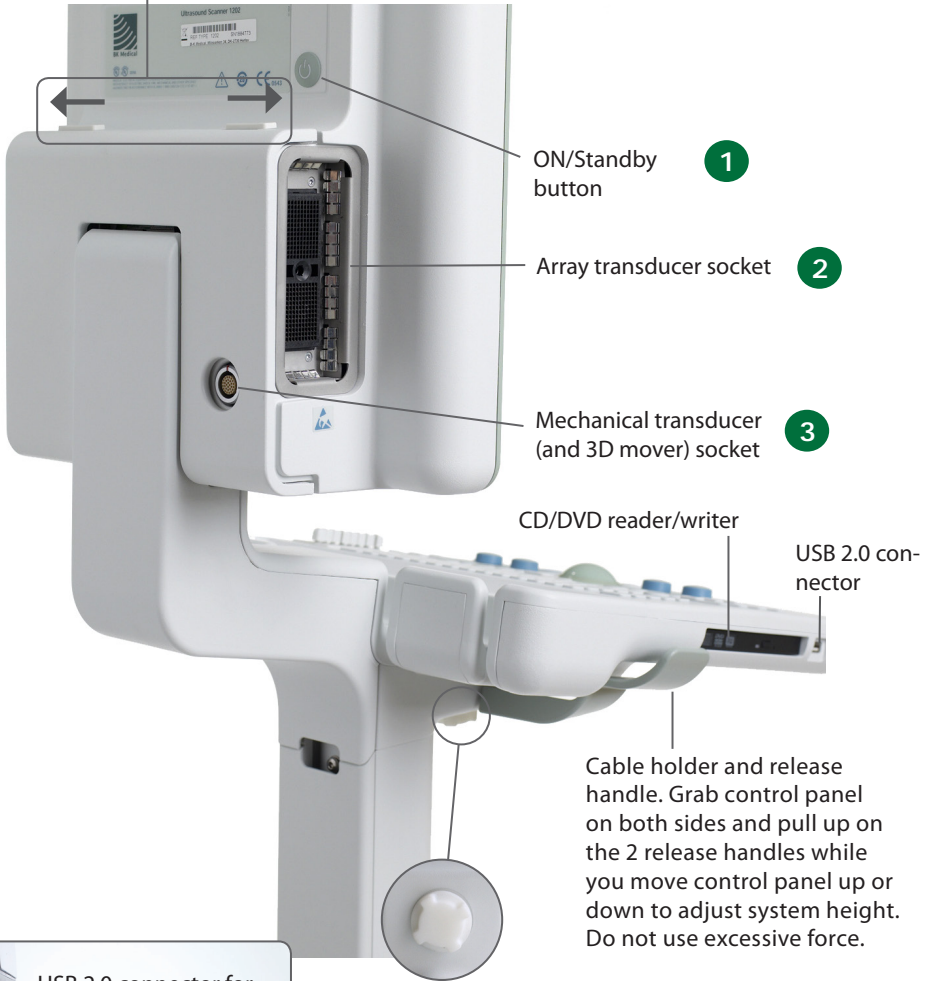


*flex* **Focus**  
Ultrasound Systems



Sliders to release scanner unit. See page 14.



Turn knob to make system easier or harder to rotate on stand

**Note:** Tighten knob before moving system.



## Before You Start

Before you turn on the system, make sure that the installation has been approved by a qualified electrician or by hospital safety personnel. For systems with battery support, make sure that the batteries are charged fully before you turn on the system.

## Turning System On and Off

When you turn the system on or off, you must give the system enough time to save and recover open files and unsaved data. Otherwise, a serious system failure may occur that requires technical support.



**Caution S-c4:** *Never unplug the system from the wall while it is running. Turn off the system and wait for the light on the keyboard and the ON/Standby button to go out before unplugging.*

---

1

To Turn On:

Press ON/Standby button *one* time. Wait until startup screen disappears before you do anything else.

To Turn Off:

Make sure system is completely up and running. Press ON/Standby button *one* time.

---

**Note :** *Always follow the recommended procedure for shutting down your system.*

---

## Connecting Transducers

2

### Array Transducers

To Connect:

1. Insert transducer plug into socket with locking lever in 3 o'clock position.
2. Turn locking lever on transducer plug clockwise to 6 o'clock position.

To Disconnect:

1. Freeze image.
2. Turn locking lever on plug counterclockwise to 3 o'clock position.
3. Remove plug from socket.

3

### Mechanical Transducers

To Connect:

1. Align **red** mark on plug with **red** dot on transducer socket.
2. Insert plug in socket.

To Disconnect:

1. Pull back on plug locking mechanism (collar).
2. Remove plug from socket.

# Performing an Exam

Keys are described on pages 6 and 7.



1. Press **Patient** key. Enter patient information. (Tab to move between fields.) Click **Start New Exam**.



2. To change transducer type, press button on transducer or press **Probe** key and select transducer (probe).



3. To change exam type, press **Exam type** key. Select examination type.

4. Imaging starts in B-mode.

5. Select highest frequency possible (**Freq** on monitor) to give needed penetration.



6. Adjust other imaging parameters. Turn **Depth** and **Gain** dials to adjust depth and gain as needed.



7. When you want to make a measurement or capture an image, press **Freeze** key to freeze image. (Measurement tab opens.)



8. To make a measurement, press **Measure** key or select measurement keys on monitor. Make the measurement.



9. Press **Capture** key to capture the image (save it to system hard disk). It appears as a thumbnail at the top of the monitor. Frozen = image, Unfrozen = clip. Capture turns red while recording. Click again to stop recording.



10. Press **Freeze** key to start imaging again.



11. Press **End exam** key to conclude exam.

## Exam Type

An examination type specifies both a Pro Package and a Diagnostic Setup.

The Pro Package affects the system user interface — which tabs and controls are displayed, which measurements are allowed, etc.

The Diagnostic Setup affects the ultrasound image — sets the gain, depth, frequency, etc.

selected Pro Package



selected Diagnostic Setup

## Viewing and Copying Images

To select captured images to view them or copy them to another device, use the document pane at the top of the monitor (described on pages 8 and 9).

### View

Double-click thumbnail in document pane. Document is displayed in image area.

### Copy to USB or CD/DVD

#### To Copy Captured Images:

1. Insert USB device or CD/DVD.
2. Click each image to be copied. Frame turns blue.
3. Click **Copy**, then select destination (USB or CD/DVD). The options **without Patient ID** are recommended for patient security.
4. Images are copied to USB immediately. Click **USB Eject** to remove USB device.

When you select CD/DVD, images are copied to a staging area. To copy them to the CD/DVD, click Burn CD and follow instructions.

## System Busy

When the system is busy, a spinning disk appears on the lower right hand side of the monitor.

---

**Note:** Wait until the spinning disk disappears before using any controls, including buttons on the transducer.

---

## Power Save

Systems with battery support can go into power save mode and the monitor will turn off.

#### To Restore the System to Normal Power:

- Press a key or press the transducer button  
or
- move the trackball or touch the touch pad.

# Keyboard

See 'Performing an Exam' page 4









TGC sliders  
Adjust gain in different parts (depths) of the image

User-defined keys. See the *Flex Focus 1202 Advanced User Guide*.





Keys are Backlighted	
If light is	Key function
Bright	On
Dim	Available but not on
Off	Unavailable

Monitor Brightness	
Increase	
Decrease	
Default setting	





## B-Mode Image Keys


<p><b>Focus</b> Select focus indicator on monitor</p> 	<p><b>Puncture Guide</b> Puncture line or brachy matrix on</p> 
<p>Harmonic</p> 	<p><b>3D</b> 3D on, or step through 3D states <b>Long press: 3D off</b></p> 
<p><b>B-Mode/Gain</b> <b>When imaging:</b> <b>Press:</b> B-mode <b>Turn:</b> B-mode gain <b>When frozen:</b> <b>Turn:</b> Scroll Cine <b>Press:</b> Change dial to Post Gain</p> 	<p><b>Zoom/Depth</b> <b>Turn:</b> Adjust depth <b>Press:</b> Zoom box on <b>Turn:</b> Resize zoom box <b>2nd press:</b> Zoom area inside box <b>3rd press:</b> Zoom off, <b>dial returns to Depth</b> <b>Long press:</b> Zoom off</p> 
<p><b>Measure</b> Start default measurement</p> 	<p><b>Calculate</b> Start first measurement for default calculation</p> 


## Spectral Doppler Keys


<p><b>Doppler Angle</b> Angle on and selected <b>Long press:</b> Angle off</p> 
<p><b>Update</b> Changes which Triplex mode is imaging and which is frozen <b>Long press:</b> Unfreeze both views</p> 
<p><b>Doppler Mode</b> <b>Press:</b> Doppler mode <b>Turn:</b> Doppler mode gain In B-mode, controls MI In M-mode, controls M mode gain</p> 
<p><b>Doppler Gate</b> In B-mode, Doppler gate on In Doppler mode, assign cursor to Doppler gate</p> 


## Color Doppler Keys

<p><b>Steer</b> Change beam angle in Color/Power/ Doppler modes</p> 
<p><b>Power Mode</b></p> 
<p><b>Color Mode</b> <b>Press:</b> Color mode <b>Turn:</b> Color/Power mode gain</p> 
<p><b>Color Box</b> Assign cursor to color box</p> 

**Volume** 

**Baseline** 

**Scale**   
Adjust Color/Power/  
Doppler scale/PRF

**Invert**   
Invert Doppler spec-  
trum (or color scale)

**Home** 

Return to  
default settings for  
current exam type

**Auto** 

**Auto**  
B-mode returns to de-  
fault preset gain.  
D-mode optimizes PRF  
(scale) and baseline

**Split Screen** 

Split screen so 2  
views are displayed,  
or change which view  
is active

**Long press:** Split  
screen off

**Imaging Plane**  
Change imaging plane  
on biplane and tri-  
plane transducers

Long press = press for 1–3 seconds.

# Monitor Functionality

The screenshot shows the B-K Medical ultrasound monitor interface with the following labeled components:

- Select transducer:** Points to the dropdown menu showing 'S8000' and 'Una Prostate: Prostate'.
- Select exam type:** Points to the dropdown menu showing '12-11-2013' and '12-21-16'.
- Enter patient information:** Points to the '(NoID)' field.
- Double-click or drag to enlarge and view captured image or clip:** Points to the row of image thumbnails.
- Document pane:** Points to the area containing the thumbnails.
- Pull here to enlarge image thumbnails:** Points to the edge of the thumbnail row.
- Click and drag to adjust focus area:** Points to the vertical line on the left side of the main image.
- Puncture line:** Points to the curved line on the main image.
- Click here to select a different brachy matrix or puncture guide:** Points to the 'UA1250' label on the main image.
- Image data shown here:** Points to the technical data panel on the right, including 'Cine Play', 'Res / Hz', 'B Freq', and 'B Gain'.
- Measurements shown here:** Points to the measurement bar at the bottom of the main image, showing 'Pr-W 23.3 mm', 'Pr-H 18.5 mm', 'Pr-L 18.2 mm', 'MI: 0.84<1.60', and 'TIS: 0.2<2.0'.
- Imaging Mode tabs:** Points to the 'General', 'Color', and 'Doppler' tabs.
- Workflow tabs:** Points to the 'Image', 'Measure and Mark', and 'Documentation' tabs.

To minimize *all tabs*, click the workflow tab on top. To open again, click any tab.

To open a workflow tab that is not on top, click it.

Start/stop imaging



# Monitor Controls

The Pro Package determines what tabs are available and which controls they contain. For example, the M-mode tab or 3D tab is available only when it is part of the selected Pro Package.

Available controls depend on whether the image is scanning or frozen.

---

**Note:** “Click a tab” means click the tab name.

---

## Workflow Tabs

Workflow tabs open automatically as needed. That way, only relevant controls are displayed. You can also open a tab manually to see its controls as described on page 8.

“Freeze” toggles between **Image** and **Measure and Mark** tabs.

## Imaging Mode Tabs

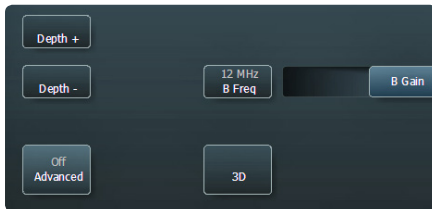
Controls on the **Image** workflow tab are grouped on various **Imaging Mode** tabs.

- To start an imaging mode, click the tab while imaging. It opens so you can use the relevant controls.
- Click **Image** tab to display mode tabs on the top. In order to activate, click **Unfreeze**.
- Clicking the imaging mode tab on top turns off that imaging mode.

## Visible Controls

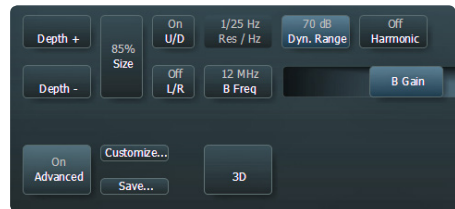
Tabs can be customized to include different controls, so your monitor may not look exactly like the one pictured. The *Flex Focus 1202 Advanced User Guide* contains information about customizing your setup.

### Basic Tabs (Advanced Off)



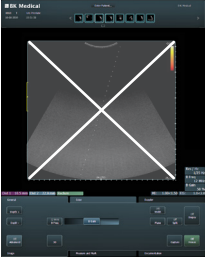
Basic tabs contain the most often used controls.

### Advanced Tabs (Advanced On)



To see and use all available controls for a workflow tab, click **Advanced**.

## Touch Monitor



**Note:** The ultrasound image part of the monitor is not touch-sensitive.

Make sure that the monitor is clean before you start imaging. If you attach a sterile cover to the lower part of the monitor (to cover the monitor controls), make sure that the scanned image is not covered.

Look directly at the monitor, not at an angle, to ensure that your touch is accurate.

If a monitor key is not highlighted, you cannot use it – you may need to freeze or unfreeze the image.

To click a monitor control, tap it with your finger or use the touch pad on the control panel. The monitor reacts *when you remove your finger*, not when you touch it.

To undo a measurement, double click and hold.

For “**More**” lists, use the slide bar on the right to scroll up and down in the list.

### Document Pane (Top of Monitor)

Slide your finger down the right side of the pane to enlarge the documents. To browse through the documents, flick your finger across the thumbnails. Drag to review thumbnails.

## Special Monitor Controls

Monitor Control	Function/Note
Reset	Return to default settings for the exam type
B Gain Near	Adjust the gain in the near part of the image
B Gain Far	Adjust the gain in the far part of the image
Multiselect	When this is on, documents you select are added to a selection. When this is off, only the one document you select remains selected.

## Keyboard on the Monitor

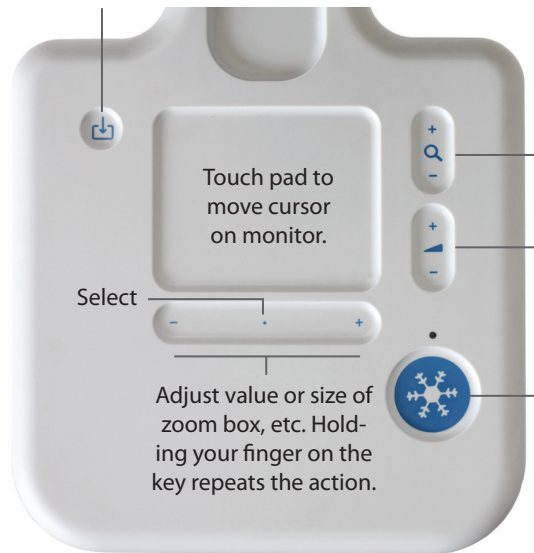
Click **Enter patient** and a monitor keyboard opens for you to enter patient information. You can also access the keyboard via the **Keyboard** tab.

### Shift, Ctrl, Alt and fn Monitor Keys

Use these special keys to type special characters or obtain additional keyboard functionality. For example, click **Shift** and then click **5** to type %.

## Touch Control Panel

Capture an image to the system hard disk or print it. User-defined.



In B-mode, adjust Depth.  
If Doppler on, adjusts Doppler PRF. If Color is on but not Doppler, adjusts Color PRF.

Adjust gain for one mode only, the first in this list that is active: Doppler, Color, Power, B-mode.

**Freeze.** Start/Stop imaging.

### To Select:

Press anywhere on the +/- key (except at either end) or press anywhere on the touch pad.

### To Drag:

To drag an object on the monitor, select it and slide your finger on the touch pad to move the cursor. If you use the touch pad to select, keep your finger down after the second press and slide it around.

### Long Click (to Delete a Measurement, Label or Body Mark From the Monitor):

1. Place the cursor.
2. Press the touch pad or **Select** twice, holding the second press to be a long press.

*The Remote Control UA1237 for the Flex Focus 1202 touch monitor is described in the Flex Focus 1202 User Guide.*



# Basic Monitor Controls






Key		Function/Note
3D	*	Turn on 3D imaging
ACI	*	Angular Compound Imaging (improve organ definition)
Archive		Send to PACS (DICOM) or staging area for archive CD
Biopsy		Display puncture line or brachy matrix
Bodymark		Bodymark on image
Capture		Save image (if frozen) or clip (if imaging) to system hard disk
Copy		Copy to USB or CD/DVD
Depth -		Decrease max. tissue depth shown (increase magnification)
Depth +		Increase max. tissue depth shown (decrease magnification)
Dyn. Range		Adjust contrast
ETD	*	Enhanced Tissue Definition (reduce speckle)
Freeze/Unfreeze		Start/stop imaging
Freq		Change imaging frequency
Gain		Adjust gain of selected mode
Harmonic		Tissue harmonic imaging
L/R		Image orientation left/right
Pro Package		Select different Pro Package
Res/Hz		Select resolution/frame rate
Save...		Save setups
Scale		Adjust Color/Power/Doppler scale/PRF
Simultan		Both split-screen views imaging simultaneously (Color or Power mode in one view only)
Size		Image bigger or smaller
Split		Split screen into 2 views
U/D		Image orientation up/down

These are the controls needed for basic examinations.

For information about other controls, see the *Flex Focus 1202 Advanced User Guide*.

\* Optional, not available on all versions of the *Flex Focus 1202*

## Your Custom Keys

Key	Function/Note
	
	
	
	
	

## Your Notes

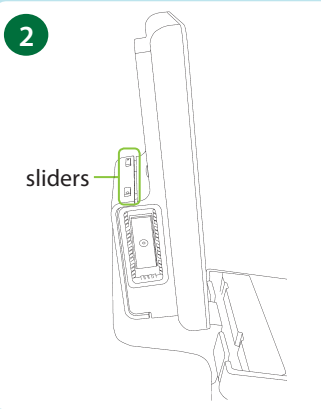
# Undocking and Docking the Scanner Unit

## Removing the Scanner Unit From a Docking Unit

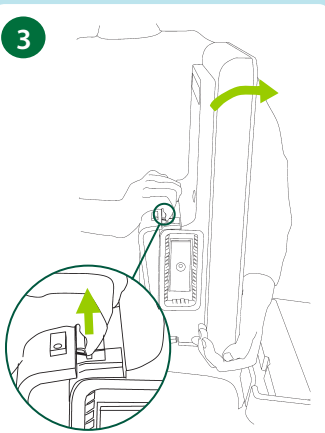
- 1 Turn off the system and disconnect all transducers.

Push the 2 sliders away from the middle.

The scanner unit tilts forward in the dock.

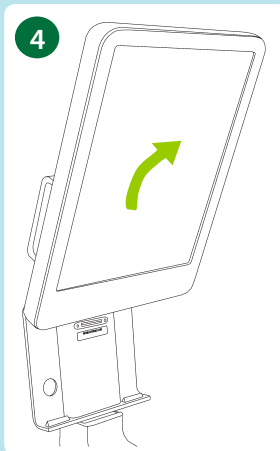


3



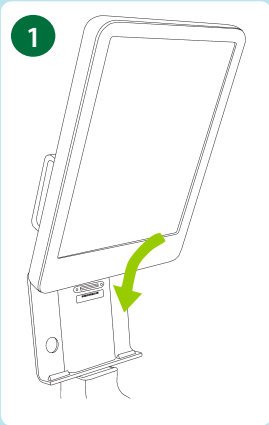
Hold the scanner unit securely while you reach inside the slot to release the safety bracket. *The bracket may be warm.*

4

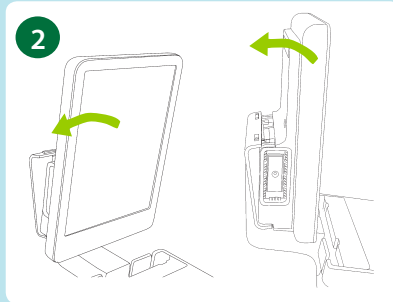


Remove the scanner unit from the dock.

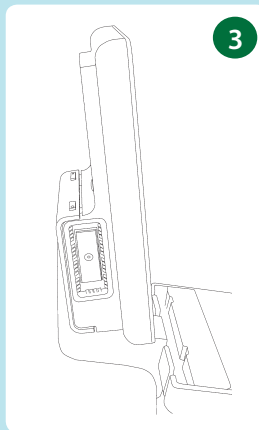
## Docking the Scanner Unit



1  
Tip the scanner unit and slide it into the dock.



2  
Tip the top of the scanner unit back until it clicks into place.



3  
The system looks like this when it is correctly docked.

## This Book is not a Complete User Guide

Before you use the system, you must read the Safety chapter in the *Flex Focus 1202 User Guide*. It contains safety information that is important for avoiding injury and for avoiding damage to the equipment. You must also read *Care and Cleaning*, which contains information about cleaning and disinfection as well as information about required inspections, calibration and maintenance. The *Flex Focus 1202 Advanced User Guide* contains detailed information for the advanced user.

## www.bkultrasound.com

This guide is also available on the BK Ultrasound website. Please go to the *Customer Service* section to download user manuals.

If you have comments about the user documentation, please write to us at [info@bkultrasound.com](mailto:info@bkultrasound.com). We would like to hear from you.

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