


Probo

VETERINARY

MINDRAY ANIMAL VETUS M11 QUICK GUIDE



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 **mindray**
animal care

Preparing a Patient

To get the best from your machine it is advisable to prepare the patient before the scan. We recommend carrying out this process outside the ultrasound room to reduce the chance of clipped hair entering the machine.

- 1) Clip as needed and clean the skin with a mild soap to degrease the skin before applying gel. It can take few minutes for the gel to soak in before you achieve the best image. Degreasing may not be required in all patients.
- 2) Apply more gel to the probe, and patient if necessary, when ready to scan.
Warm gel is absorbed faster.
- 3) If using alcohol, for example when performing a FAST scan or sampling, it is recommended to cover the probe. Use a glove or specific transducer cover with gel inside then apply alcohol to the patient.

Performing an Exam

Before turning the system on, ensure the probes are connected and locked in place, the power cable is inserted, and the socket switched on at the wall.

- 1) Press Power button at the top left of the console to turn the system on.
- 2) Press Patient button on the mid left of the console to enter patient details. Make sure to select the correct species. Use the mouse cursor to click OK to start the exam.
- 3) Press Probe button on the mid left of the console to bring up presets on the screen. Select the relevant preset, you are now ready to begin your exam.
- 4) Please see below console diagrams to find image optimisation controls, measurements, and save buttons for still images and cine loops.
- 5) Once you have completed the exam, press the End Exam button on the middle left of the console.

Reviewing Exams

- 1)** To access previous exams for review or export, select iStation from the Patient screen or on the keyboard.
- 2)** Double click on a patient to open the exam for review.
- 3)** You will see a thumbnail overview of the images of the exam. Double click on any to reopen the exam.
- 4)** You can navigate through the images by selecting the thumbnails at the side of the screen or the up and down arrows on the keyboard.

Exporting Images via USB

- 1)** Insert the USB device into one of the ports on the left hand side of the console.
- 2)** To access previous exams for review select iStation from the Patient screen or on the keyboard.
- 3)** Single click to highlight the exam for export.
- 4)** Choose Send Exam from the drop down menu or the side of the screen to export.
- 5)** You will be given the option to choose the send location e.g. a USB memory stick, the image format and whether or not to export a report.
- 6)** Click OK to send the exam.
- 7)** If transferring files to a USB device, make sure to safely eject it by clicking the USB icon at the bottom of the main screen before removing it from the port.

Console Overview



- 1) **Power button** - Press to turn machine on. While powered on, press for power options including shut down.
- 2) **Patient info** - Animal info screen to enter patient details. Ensure you select the correct species as this will determine the presets you can choose.
- 3) **Probe/Exam** - Change probe and/or preset.
- 4) **Review** - Review stored images.
- 5) **End Exam** - Press to end exam and confirm on screen.
- 6) **User Programmable Buttons** - P1 typically set to save a cine loop.
- 7) **Body mark** - Press to activate body mark mode. Not typically used in the UK.
- 8) **Cursor** - Show/hide mouse cursor.
- 9) **Baseline** - Adjust baseline in spectral Doppler modes.
- 10) **Scale** - Adjust scale in spectral Doppler modes.
- 11) **Steer/Invert controls** - See indicator lights below arrows for current function.
- 12) **Standby status**
- 13) **Hard disk read indicator**
- 14) **Cine** - Press to enter Cine Review.
- 15) **Clear** - Single press to remove comments, annotations and measurements in reverse chronological order. Long press to clear all.
- 16) **Angle** - Rotate for angle correction or to change arrow annotation orientation.

- 17) Set** – Mouse click. May change function depending on active mode. See bottom of main screen for current function if different.
- 18) Measure** – Labelled measurement and calculation packages. Select from touch screen or main screen.
- 19) M** – M Mode. Press once to activate M mode cursor, use trackball to adjust position and press again to enter M mode. Rotate main gain dial to change M mode gain.
- 20) TDI** – Tissue Doppler Imaging. Press to activate. Rotate main gain dial to change TDI gain.
- 21) PW** - Pulsed Wave Doppler. Press once to activate sample volume, use track ball to position and press again to enter PW Doppler. Rotate main gain dial to change PW gain.
- 22) CW** – Continuous Wave Doppler (phased array probes only). Press once to activate cursor, use track ball to position and press again to enter CW Doppler. Rotate main gain dial to change CW gain.
- 23) Update** – Switch live mode e.g. toggle between live spectral Doppler and live B mode.
- 24) Trackball** – Used to control cursors and region of interest position and size.
- 25) Caliper** – Generic measurement tools with two point caliper as default. Select other options from touch screen or main screen.
- 26) C** - Colour Doppler. Press to activate Colour Doppler window. Rotate main gain dial to change Colour Doppler gain. Press set (click) button to change trackball function between changing window position and size.
- 27) P** - Power Doppler. Press to activate Power Doppler window. Rotate main gain dial to change Power Doppler gain.
- 28) B** - B mode. Press to return to B mode from any other mode.
- 29) Gain/iTouch** – Controls gain on current active mode. Rotate to change overall brightness of the image in B mode. Press button in centre of dial to optimise the current image, press again to re-optimize. Double press or long press to deactivate.
- 30) Freeze** – Press to freeze/unfreeze the image. Use trackball to scroll through frame buffer while frozen.
- 31) Battery indicator** – When connected to AC power: Orange = Charging, Green = fully charged. When running on battery power: Orange = Low Power, Green = Sufficient Power.
- 32) AC power indicator** – Green if connected to AC power.
- 33) Save** – Save image in configured way. Default is a still image.
- 34) Depth**– Press up/down arrows to change depth.
- 35) Focus position** – Press up/down arrows to change focus position.
- 36) Dual screen** – Press to activate, press again to change active side, press B or single screen button to exit.
- 37) Single screen** – Press to enter active window in dual/quad screen.
- 38) Zoom** - Press then rotate to zoom, press again to exit zoom.
- 39) TGC** – Time gain compensation controls. Change the gain at different levels.
- 40) Soft menu controls (Frequency)** – Current function indicated at bottom of screen. Image quality is leftmost in B mode imaging, this controls frequency. Pen = Low, Gen = Mid, Res = High and if there is a H prefix it indicates harmonic mode is on.
- 41) Soft menu controls** – Switch between soft menu options.

Keyboard Overview



- 1) **ESC** – Cancel current function.
- 2) **Help** – Opens the manual.
- 3) **iStation** – Database of all past exams.
- 4) **Report** – Report editor.
- 5) **User Programmable Buttons**
- 6) **Stress echo** – Press to enter Stress Echo.
- 7) **Physio** – Press to show/hide ECG trace.
- 8) **Setup** – Press to enter/exit Setup menu. CAUTION: Do not make changes without consulting Probo Medical/Veterinary.
- 9) **Biopsy** – Activate biopsy guide lines, for use with biopsy guide.
- 10) **Set home** – Set home position for comments cursor.
- 11) **Quad screen** – Press to activate.
- 12) **iZoom** – Enter/exit full screen scanning.
- 13) **Arrow keys** – Move text cursor and cycle through saved images. Press Fn to change screen brightness and contrast.
- 14) **ABC (comment)** – Press to activate comment mode. Select from touch screen or main screen. You may also type on the keyboard without pressing this button to add custom annotations.
- 15) **Home** – Move comments cursor to home position.
- 16) **Arrow** – Enter/exit arrow annotation mode. Use confirm (click) buttons to set arrow.
- 17) **Alphanumeric buttons** – Start typing to free annotate image.

**In need of a service for
your Vetus M11 system?**

**Or need to get in touch
with us about a fault?**

Our knowledgeable and friendly
ultrasound servicing experts are happy to
help...



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