

## Basic CTS-3300V+ Ultrasound Workflow

### Initial Settings

1. Try to shade the monitor to bring out the sharpest image. (Set your brightness and contrast for best clarity using the controls just under the right side of the screen.)
2. **Preset:** Enter your ranch name and choose your animal type (on 2nd screen).
3. **ID:** Enter any Name or ID info if you like (then press Esc).
4. **Mode:** You will want to be in B mode at all times.
5. **Orientation:** Make sure the little arrow at top right points in the direction (left or right) corresponding to how you will be holding the probe. (If it is pointing the wrong way, press the 3rd button from left on the top row of keys to switch the image from left to right.)
6. **Zoom:** Start at a zoom setting of 1.5x. (Orient yourself with the centimeter markings along the top and side of the screen.)
7. **Frequency:** Start at 5.0 MHz for equine work, or 7.5 - 10.0 MHz for anything requiring shallower penetration. Use the **Position** keys to move the whole image up or down.
8. **Focus:** Start with either N & M selected if you are concentrating on the top of the image, or with M & F1 if focusing on the middle, or F1 & F2 if focusing on the bottom.
9. **Gain Settings:** Adjust your master Gain knob to control your overall gain, and then adjust the TGC sliders to feed more or less gain exactly where you need it in the image. Ideally, minimize gain with these sliders in the parts of the image you are not concerned with.

### Adjusting & Capturing the Image

1. **Adjust Frequency and Focus and Zoom settings ...** if necessary.
2. **Adjust your Gain ...** Try to dial more or less B Gain into the overall image, then adjust the sliders as needed. Remember that too much gain will wash out the image, too little gain will leave you with too faint an image.
3. **Grayscale:** Press the **GSC** button repeatedly to scroll through the various Grayscale settings. This can have a very significant effect depending on what you are looking at and your other settings. Early on, experiment with Grayscale often. Also try tweaking the Smoothing (**SCC**) and Enhancement (**ENH**) settings directly beside it.
4. **Hit Freeze** to capture the image.
5. **Cine:** Pressing the **Cine** button will play back the loop of captured frames. Pressing Cine Speed will speed up and slow down the loop. By then **pressing Cine a second time**, you switch into frame-by-frame mode, enabling you to use your trackball to move left and right, backward and forward, through the captured loop, to find the best frame.

### Processing the Image

1. **Annotations:** Make your annotations using the **Annot** button, trackball, and keyboard.
2. **Measurements:** Make your measurements using **Dis** and then **Enter** to select points.
3. **Storing Images:** Press **Save**, choose either to save on the Local system or on your USB drive (UDISK), select a location number with trackball, press **Enter**, give the file a short name, and press **Enter** again. (Use **Recall** to pull up your saved images.)