



Professional Ultrasound Services

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Ultrasound System Controls

1. Gain Compensation

- a. TGC, DGC
- b. Overall gain
- c. Depth selective amplification (slide pots)
- d. Gain curve: not currently used in clinical practice.
 - i. Near gain
 - ii. Delay
 - iii. Slope
 - iv. Knee
 - v. Far gain
 - vi. Reject

2. Receiver Functions

- a. Frequency tuning
- b. Output power
 - i. Output gain, acoustic power, energy output, transmitter output.
 - ii. Hydrophone: device used to measure the acoustic output of an ultrasound device.

3. Image Processing Techniques

- a. Dynamic range

4. Pre-Processing

- a. Log compression
- b. Edge enhancement
- c. Fill-in interpolation
- d. Image updating
- e. Write zoom

5. Post-Processing

- a. Grayscale assignment
- b. Thresholding
- c. Black and white inversion
- d. Freeze frame
- e. Read zoom