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Development of Ultrasounf Probe Holder for Automatic Scanning Asymmetric Reflector

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Abstract : Ultrasound equipment or machine is capable to scan in two dimensional (2D) areas. However there are some limitations occur during scanning an object. The problem will occur when scanning process that involving the asymmetric object. In this project, the ultrasound probe holder for asymmetric reflector scanning in 3D image is proposed to make easier for scanning the phantom or object that has asymmetric shape. Initially, the constructed asymmetric phantom that construct will be used in 2D scanning. Next, the asymmetric phantom will be interfaced by the movement of ultrasound probe holder using the Arduino software. After that, the performance of the ultrasound probe holder will be evaluated by using the various asymmetric reflector or phantom in constructing a 3D image

Keywords : ultrasound 3D images, axial and lateral resolution, asymmetric reflector, Arduino software
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