

## Pundit Live Array

The Pundit Live Array is the ultimate version of Ultrasonic Pulse Echo equipment from Proceq. This unit combines an 8-channel shear wave transducer array with WIFI connection to any iPad tablet.

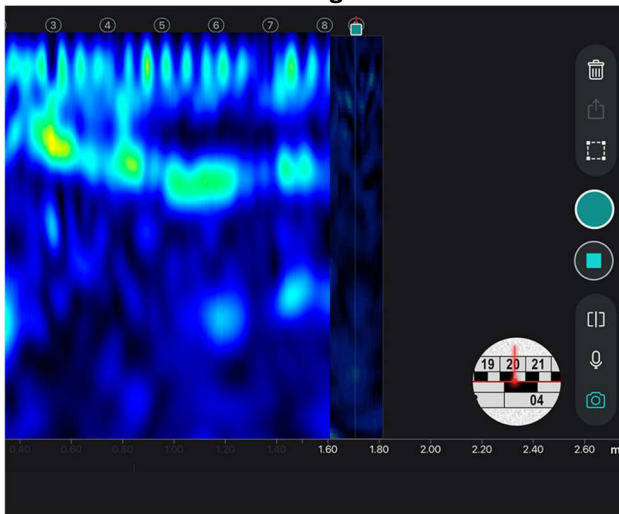
The Pundit Live Array is available as a dedicated system, or existing Pundit 250 Arrays can be upgraded to connect as a Pundit Live Array.

### Ultrasonic Pulse Echo Method

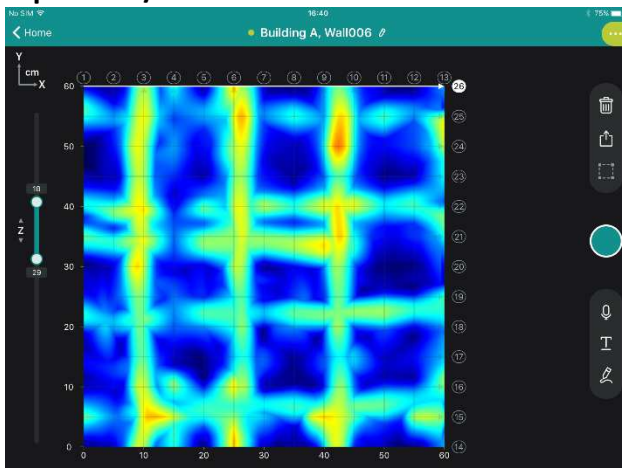
Pulse Echo technology is widely regarded as the most appropriate method for locating voiding, delamination and defects within concrete elements. The Live Array is a multichannel array that can produce immediate images of the internal structure of a concrete element.

### Scan Modes

#### Line Scan with AI Positioning



#### Depthslice / Timeslice



## Applications

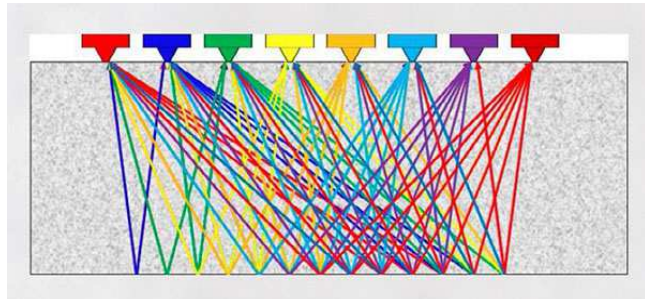
- Thickness measurement of elements up to approximately 1m
- Location of defect such as honeycombing, voiding and the depth and extent of concrete delamination.
- Detection of embedments such as pipes, tendon ducts beneath a layer of rebar
- Location of objects and defects in fibre reinforced concrete

## Features

- Logbook Recall of Geolocation, Operator, notes, photos and more from site
- Operates with all iPad models, WIFI connect
- Durable ceramic contact points on dry contact transducers
- Superior near field performance [Detection of objects and embedments close to test subject's surface]
- Upgradeable to a 16 channel array with 2 probe units
- Single or double handle configurations
- System control buttons on handles and probe for quick single operator use
- Raw data or image export
- Report creation using Webtool or App
- AI backwall detection
- AI Positioning with Camera and QR tape
- Automatic estimation of the Pulse Velocity or calibration to a known thickness

## Pundit Live Array

### Transducer Specifications



The Pundit Array transducer is a rugged and lightweight 8 channel array of shear wave transducers. One channel will transmit a sonic pulse the remaining 7 receive, this measurement is repeated for each channel transmitting in turn. The 56 A-Scan signals are mapped using Synthetic Aperture into a B-Scan Image like the examples above, showing information on changes in material such as the back surface of a slab, embedments or internal defects.

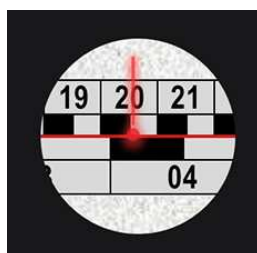
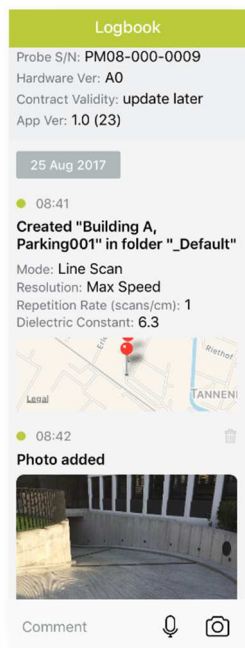
### Logbook

The Logbook, controlled within the Pundit Live Array application records critical information about each scan:

- Each measurement
- Probe used
- Operator identity
- Geolocation
- Operator Comments
- Pictures
- Audio Notes

### AI Positioning

The AI Positioning camera automatically joins single measurements into line scans. Operator just places test tape to complete scan.



### Form Supplied



- Pundit Live Array Transducer
- Single Handle
- WIFI Dongle
- Test Plate

## Technical Specifications

### Pundit Live Array Transducer

<b>Gain</b>	0 to 80 dB
<b>Analog bandwidth</b>	15 to 100 kHz
<b>Nominal transducer frequency</b>	50 kHz shear wave
<b>Range / resolution</b>	0 to 1000 us / 1 us
<b>Pulse voltage</b>	± 150 V
<b>Pulse shape</b>	Square wave
<b>Pulse delay</b>	8 to 200 ms
<b>Number of channels</b>	8 [Upgrade to 16]
<b>Battery lifetime</b>	> 7 hours
<b>Dimensions (mm)</b>	240 x 273 x 153
<b>Weight</b>	3 kg approx.

## About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training.

PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.