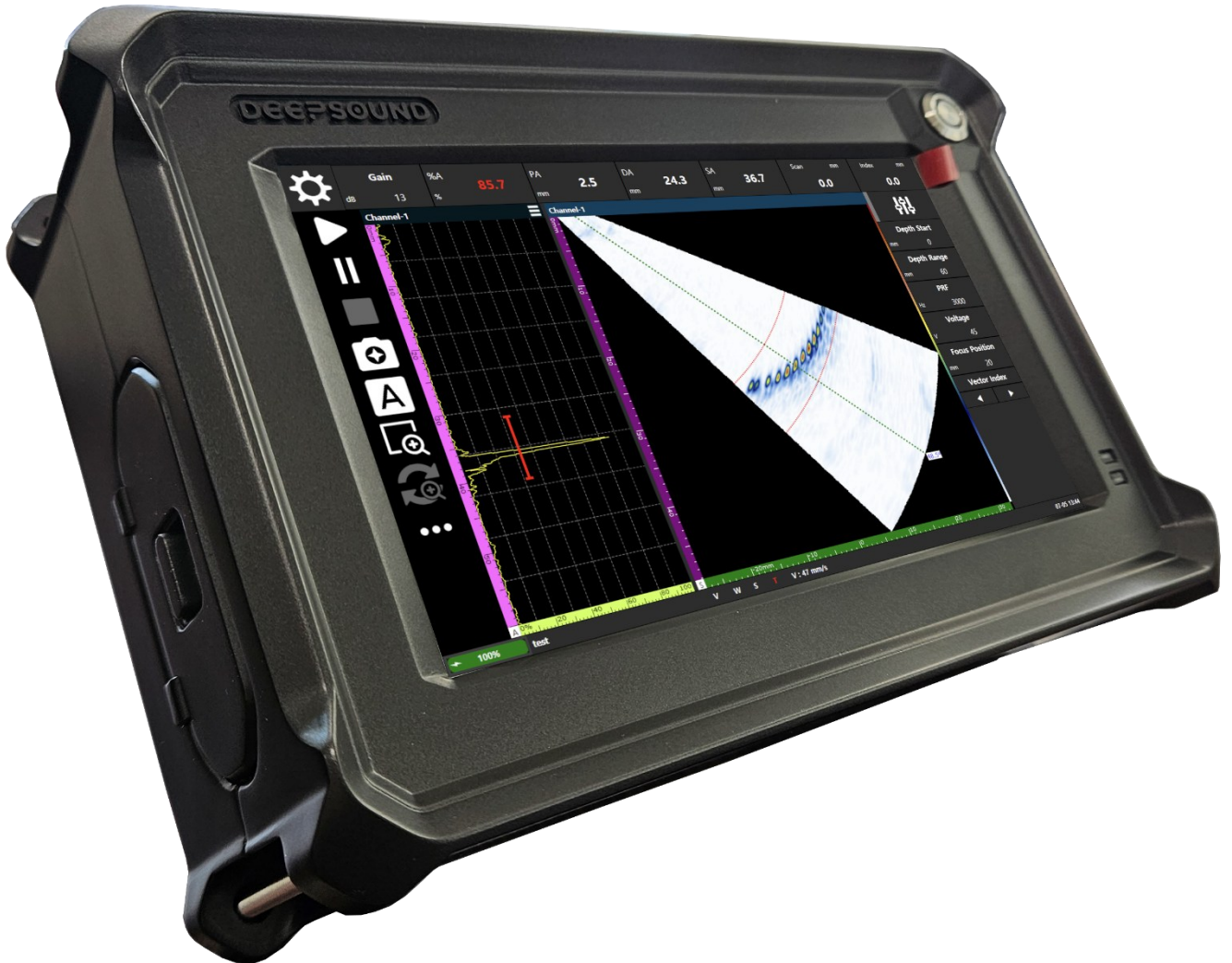




# Go Beyond The Limits

High-End PAUT Performance in a Lightweight Design

DEEPSOUND B3 LCD 7" Display Portable PAUT



# Product Description



Good cost-effective price

7" Screen and Below 1.5kg



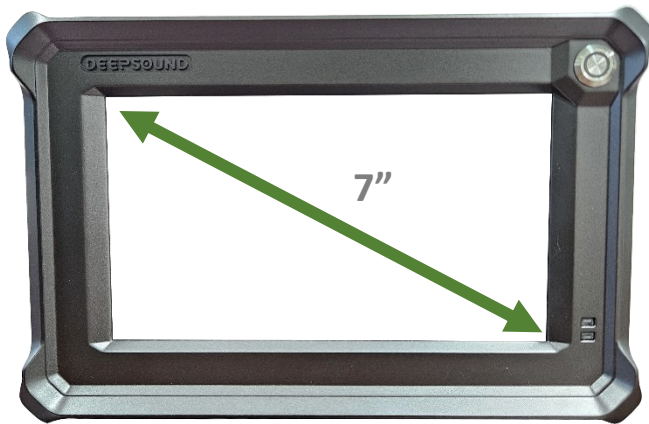
## DEEPSOUND B3

The DEEPSOUND B3 has all the advantages of a portable NDT device such as portability, convenience, cost-effectiveness, and more.

It weighs under 1kg even with the batteries installed, making it incredibly easy to carry in complex environments.

Futhermore, the B3 runs the same software used by the higher-end P5 model without any compromises to performance such as beam focusing, making it exceptionally cost-effective.

# External Design



Front



Rear



RIGHT PORTS



TOP PORTS

The program of the B3 equipment is provided free of charge.

The Probe Port is composed of MiniDLP IPEX 160p, and there are 2 UT Ports.

Additionally, it has a 7" display screen and a capacitive touch screen.

The external ports include power, USB, and Encoder, and there is a battery case and stand on the back.

# Operation Speed



RESPONSIVE



POWERFUL  
PROCESSING



FAST DATA  
COLLECTION

## Instantaneous Operation Speed

Maximize efficiency with the B3 incredible operation speed, unlike other typical NDT devices.

Experience DSVision's enhanced hardware features such as depth control, PRF, and focal law angle change paired with increased processing speeds.

Furthermore, DEEPSOUND devices support PRF values up to 30kHz by default.

Run DSVision with an encoder to clearly observe the significant difference in data collection speed.

# Features

## Incredible Portability



## A Lightweight and Compact Product

The DEEPSOUND B3 features a 7" display, giving it the smallest form factor compared to other portable NDT devices.

Weighing under 1kg, it is easy and comfortable to carry around in one hand in any type of work environment.



Quick-Change



Increased Capacity

## Portable, Quick-Change Batteries

The DEEPSOUND B3 device comes with one smart battery.

Provides quick battery removal and replacement.

Continuous improvement of equipment through application of large-capacity battery packs

# Axial Resolution

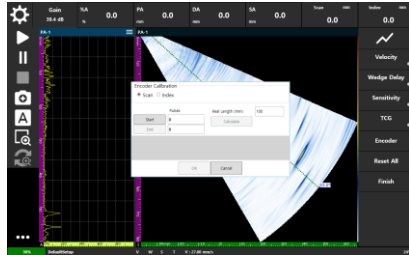
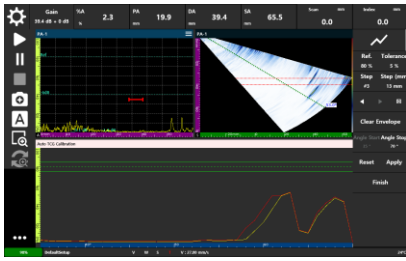


## Difference in Beam Focusing

Clearly differentiable/high resolution/high image quality. Unlike other typical NDT instruments, DSVision demonstrates **visible differences in beam focusing** of detected flaws. The high-resolution images it generates allow users to clearly differentiate between even the smallest groups of adjacent defects.

With high-quality images paired with the option to inspect with different scan types (sectorial/linear), DSVision is a powerful and versatile tool that will be suitable for any task at hand.

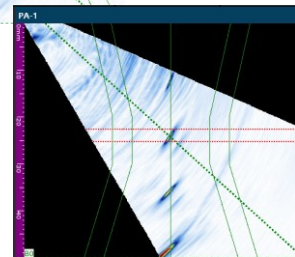
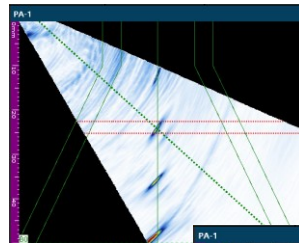
# Additional Features



## Calibration Tool

The B3 provides built-in calibration functions to ensure accurate and reliable inspection results.

Built-in calibration tools include Velocity, Wedge Delay, Sensitivity, TCG, and Encoder calibration, ensuring accurate and reliable inspection results across various inspection conditions.



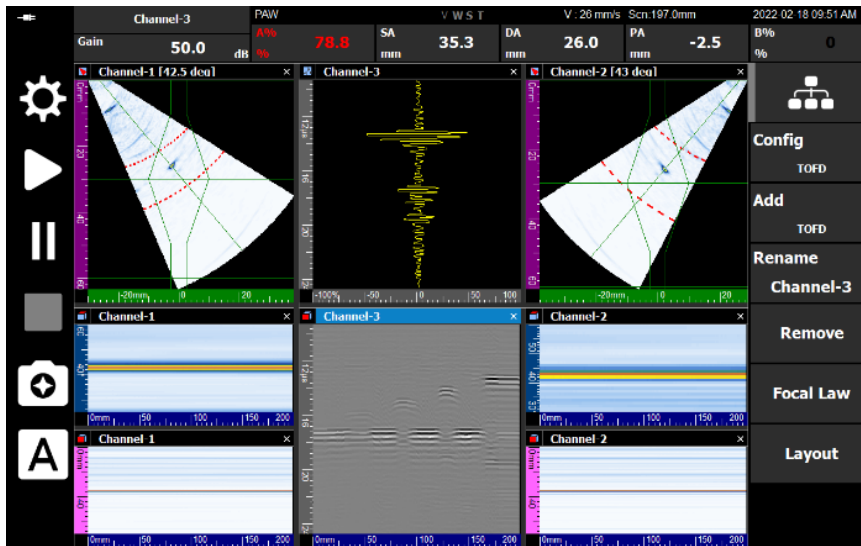
## Weld Drawing

The B3 includes a weld visualization tool that allows users to draw and configure weld profiles directly within the software.

Standard weld shapes such as V, Reverse V, and Double V can be easily selected and applied, enabling accurate representation of actual weld geometry.

In addition, the software supports HAZ (Heat Affected Zone) width visualization, allowing users to clearly define and display heat-affected areas around the weld.

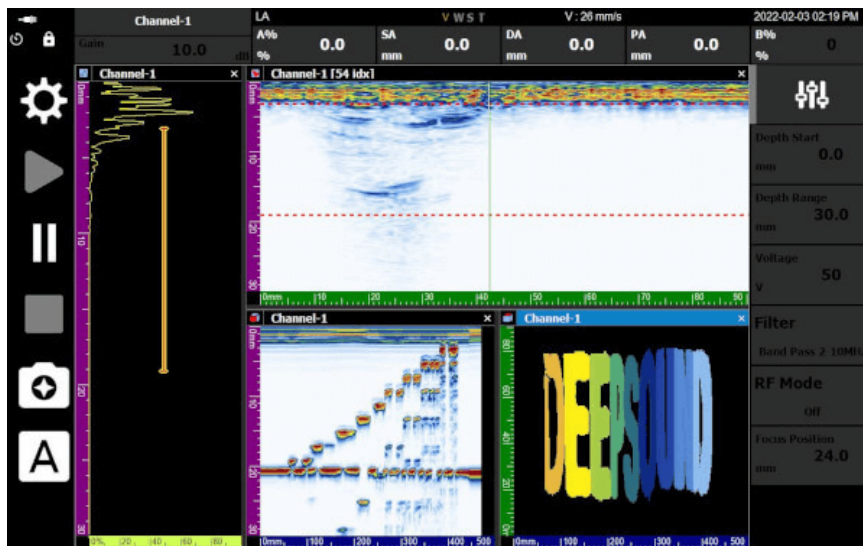
# Additional Features



## Utilizing Channel Groups

DSVision supports customizable Channel Groups.

The program also includes TOFD, enabling users to create various configurations, including the **PAUT + TOFD configuration**.



## Thickness Measurement

DSVision is capable of detecting **differences in corrosion thickness**.

These differences, which are distinguished by color, **allow for intuitive evaluation**, and the inspected data can be further examined by using DEEPSOUND's analysis program DSViewer.

# Specifications

## General

Dimensions(W x H x D)	215 x 140 x 72mm(With Case)
Weight (With Battery x 1)	1.4kg
Power Supply	12V, 5A
Batteries	Li-ion, 7.2V/9900mAh/71.28Wh x 1ea
Operation time	Up to 4 hours
Display	7" Wide Monitor [ 1024 x 600 ]
Storage	16GB

## Connectivity

USB Port	USB 3.0 x1
Probe Port	Minidock 160p Connector x1
UT Port	Lemo 00 UT Connector x2
Encoder Port	2-axis Encoder input
HDMI Port	Type D Micro

## ENVIRONMENTAL

Operating temperature	0 – 60°C
Storage Temperature Range	-20 – 80°C

## PA/UT Configuration

Effective Digitizing	100MHz
Max PRF	30kHz
Refresh Rate	30Hz
A-scan Height	300%

## PHASED-ARRAY

PAUT Channel Configurations	16:64PR
Scan type	Linear, Sectorial, Conventional, TOFD
Focal Law	Unlimited
Channel Group	Up to 4
Focusing mode	True-depth, Sound path

## Data Specifications

Maximum Number of A-scan Data Point	Up to 16384
Rectification	RF, Full wave
Filtering	Selection of low-pass, Band-pass, High-pass
Video Filtering	Smoothing
Image export	Yes

## Acoustic Specifications

Pulser	Voltage	25V ~ 160V ( 5V Step )
	Pulse Shape	Bipolar Pulse
	Pulse Width	50nsec ~ 2,000nsec
Receiver	Gain Range	0dB ~ 90dB
	Band Width	0.5 ~ 20MHz
	Sample Resolution	16bit
	Dynamic Sample Focusing	Yes

## FAQ

Do you have a Corrosion Mapping function?	Based on the defect signal in the gate range, the thickness difference is expressed on the C-scan screen.
What display layouts are supported?	A,S,C,D Scan Display Support
Do you have TFM/FMC function?	We have the TFM/FMC function, but we are selling it separately. However, only the P5 equipment is supported.
What is the purchase price of the TFM/FMC function?	Please inquire by e-mail.
Is there a multi-channel function?	It is provided by default.
Is there a TOFD function?	It is provided by default.
Can I configure PA, TOFD using multi-channel function?	Yes. Users can configure various channels.
Accessories (Probe / Wedge, etc.) How do I make a purchase request?	Please inquire by e-mail.
Is there a calibration function?	Yes, it consists of Velocity, Wedge delay, Sensitivity, TCG, and Encoder.
How do I update the program?	We plan to upload each program to the download list on our website.
Do you have a YouTube channel?	The channel name is DSPAUT.  We will continue to upload videos about manuals and techniques in the future.



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