DEEPSOUND

Go Beyond The Limits

DEEPSOUND B1 LCD 7” Display Portable PAUT

DEEPSOUND B1 Made in Korea

Product Description

DEEPSOUND B1

The DEEPSOUND B1 has all the advantages of a portable NDT device such as portability, convenience, cost-effectiveness, and more.

It weighs under 2kg even with the batteries installed, making it incredibly easy to carry in complex environments.

Futhermore, the B1 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.

Product Description

The program of B1 is built into the equipment free of charge.

There are no restrictions on the program, and continuous research is being conducted so that users do not have any inconvenience.
(However, TFM/FMC is an exception)

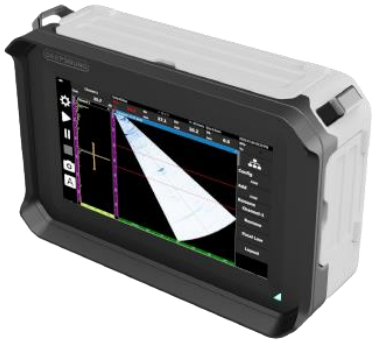
Collected data and images can be stored inside the PC or stored separately on an external hard drive using the USB port.

RIGHT PORTS

TOP PORTS

Features

Incredible **Portability**



Polished and **Feature-Packed**

A Lightweight and Compact Product

The DEEPSOUND B1 features a 7" display, giving it the smallest form factor compared to other portable NDT devices.

Weighing under 2kg, it is easy and comfortable to carry around in one hand in any type of work environment.

Quick-Change

Increased Capacity

*Only use 18650 batteries that have built-in protection circuits

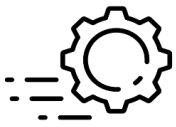
Portable, Quick-Change Batteries

The DEEPSOUND B1 does not use a battery pack. Instead, it uses 18650 batteries which are easy to find on the market.

Carry fully charged 18650 cells to make replacing them a quick and effortless process and extend the operation time of the B1.

Operation Speed

RESPONSIVE



POWERFUL PROCESSING

FAST DATA COLLECTION

Instantaneous Operation Speed

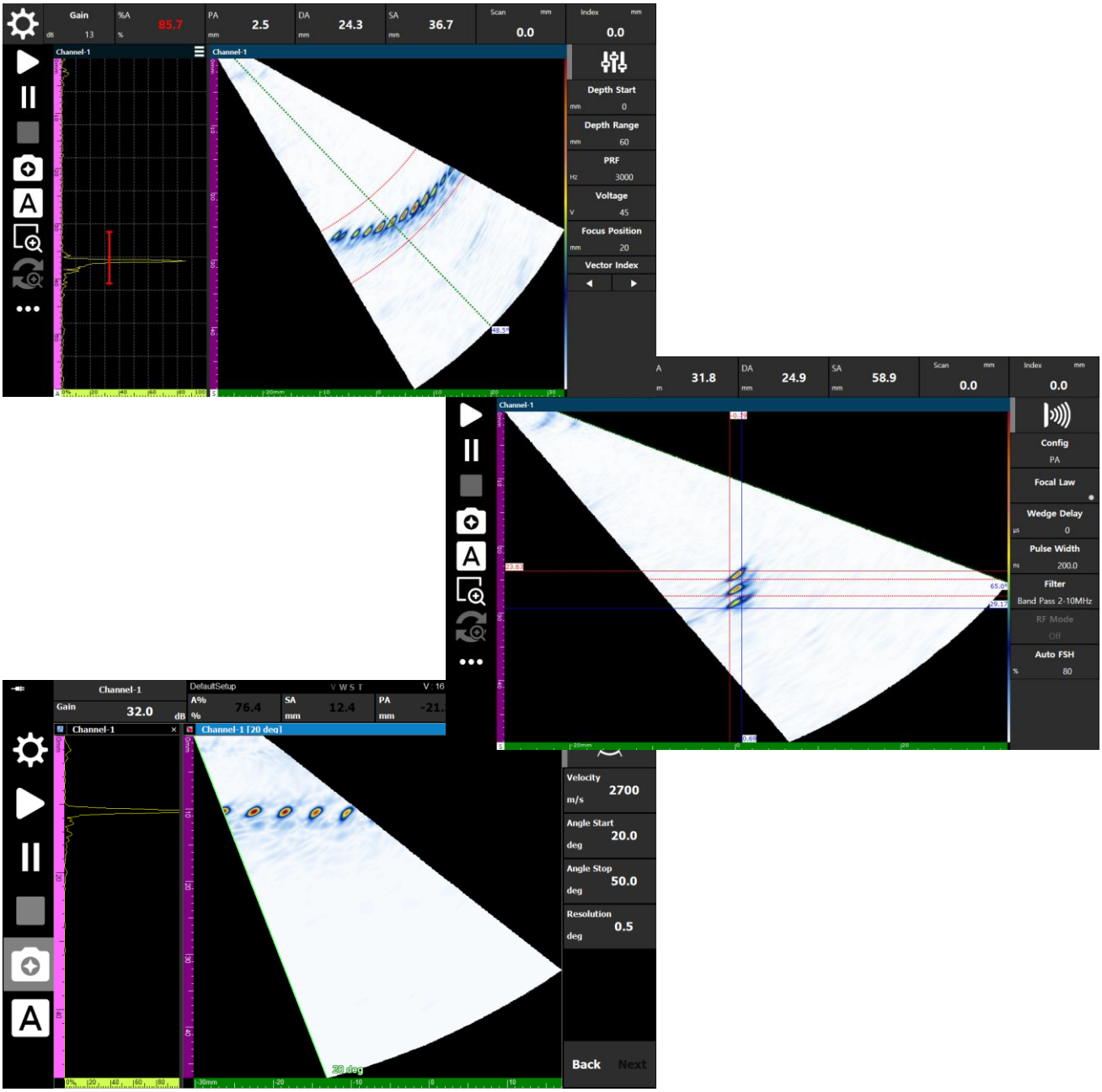
Maximize efficiency with the B1's incredible operation speed, unlike other typical NDT devices.

Experience PAVision'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 PAVision with an encoder to clearly observe the significant difference in data collection speed.

Axial Resolution

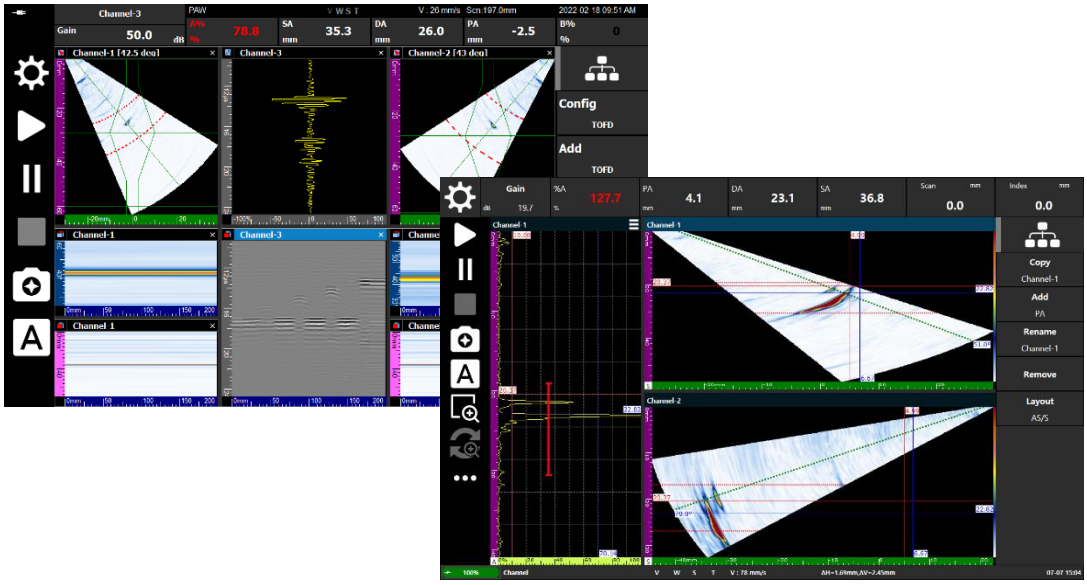


Difference in Beam Focusing

Clearly differentiable/high resolution/high image quality. Unlike other typical NDT instruments, PAVision 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), PAVision is a powerful and versatile tool that will be suitable for any task at hand.

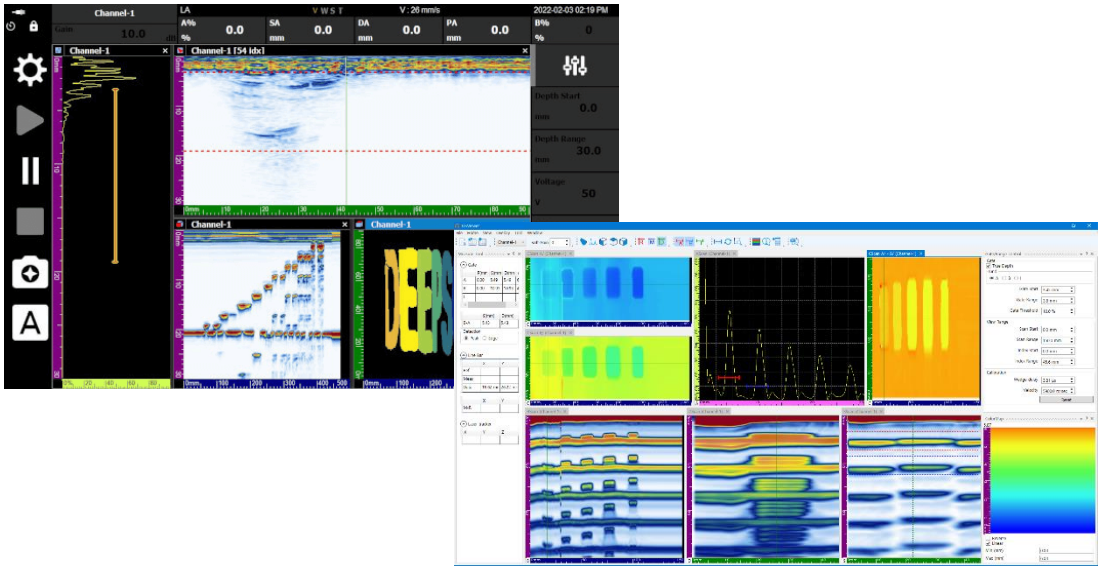
Additional Features



Utilizing Channel Groups

PAVision supports customizable Channel Groups.

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



Thickness Measurement

PAVision 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)	214 x 140 x 75mm(With Case)
Weight (With Battery x 6)	1.8kg (With Battery) / 1.5kg (With out Battery)
Power Supply	12V, 5A
Batteries	18650 93Wh Li-ion, Size (18.5 x 69mm), 48g x 6
Hot swappable batteries	Yes
Operation time	Up to 4 hours
Display	7” Wide Monitor [1024 x 600]
Storage	32GB

Connectivity

USB Port	USB x1
Probe Port	Minidock 160p Connector x1
UT Port	Lemo 00 UT Connector x2
Encoder Port	3-axis Encoder input

ENVIRONMENTAL

Operating temperature	0 – 60℃
Storage Temperature Range	-20 – 80℃

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

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.
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.

SEONGSAN
(주) 성산연구소

SEONGSANLAB Co.,Ltd
NDT Ultrasound Equipment Development
Acehightechcity 13f 1318, 52 Gongdan-ro 140 beon-gil,
Gunpo-si, Gyenggi-do, 15847. Rep.Korea
Tel. 02-2039-5725 Fax. 02-2039-5726
E-mail. admin@dspaut.com
Home page : www.dspaut.com
YouTube : DSPAUT - YouTube