

Specifications

Inspection mode	Ultrasonic pulse reflection and pulse transmission (Single crystal probe, Double crystals probe)
Display method	A-scan, B-scan
Standard probes	0 degree, 45 degree, 70 degree
Target flaws	0 degree: Horizontal fissure, Shelling, Bolt hole crack 45 degree: Transverse fissure at the rail web 70 degree: Transverse fissure at the rail bottom, Bolt hole crack 70 degree: Transverse fissure at the rail head
Display	5.7 inch color LCD with touch panel function.
Image storage	1,000 images
Image transfer	Connect to a PC via the special USB cable.
Power	Li-ion rechargeable battery
Operating time	About 4 hours
Charging time	About 4 hours
Operating environment	-5~40℃ / 10~90%RH
Ingress Protection	IP64 equivalent *When using connector cap
Dimensions	W197×H131×D73mm *Excluding protrusions
Weight	About 1.3 kg

Standard package

No.	Description
1	SM-5R
2	Charger
3	USB cable
4	Soft cover
5	Hard case
6	LCD protection sheet

Optional order

No.	Description
1	Probes and cables
2	Sono-Ruler (Encoder unit for B-scan)
3	FG series (Transverse fissure measuring device)

The contents of this publication are subject to change and improvement without prior notice.



Warning

Read the instruction manual carefully before using this equipment.



TOKYO KEIKI RAIL TECHNO INC. <URL> <https://www.tokyokeiki.jp/products/rail/>

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Portable Ultrasonic Rail Flaw Imager

Sono Checker

SM-5R



TOKYO KEIKI RAIL TECHNO INC.

- The best solution for rail inspection

Compact, simple and convenient.
SM-5R is a portable ultrasonic digital flaw imager specialized for railway industry.
It supports A-scan and B-scan.
Sufficient performance for rail flaw detection.

Equipped with both hard buttons and touch panel function.
Easy to take screen shots.
Hand strap fits on our palm.



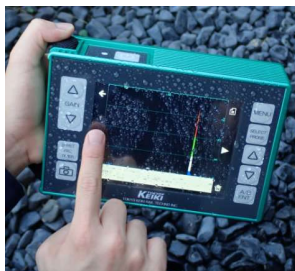
A-scan waveform



Soft cover and Hand strap

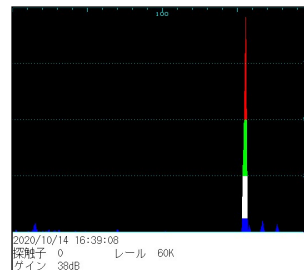


Adjustable rear stand.

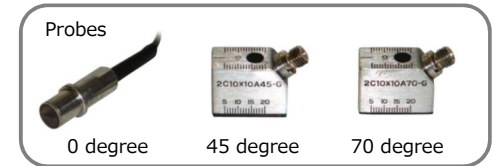


IP64 equivalent

Some information
at the bottom of the screen.

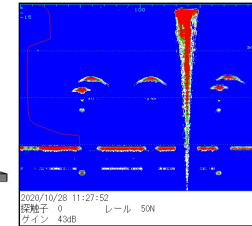
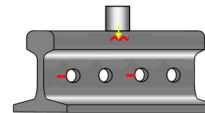


Compatible with probes required for rail inspection.
When you select a probe on the screen, SM-5R instantly restore optimum setting.

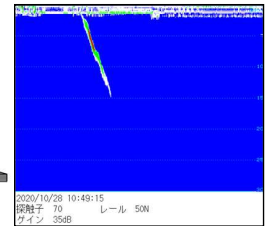
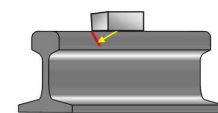


Sample pictures

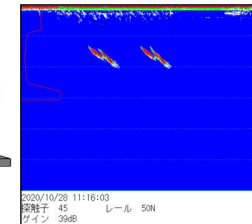
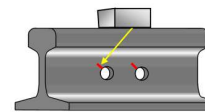
Horizontal fissure
(0 degree probe)



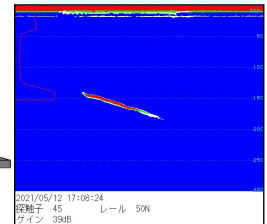
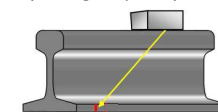
Transverse fissure
(70 degree probe)



Bolt hole crack
(45 degree probe)



Transverse fissure
(45 degree probe)



By using the optional device 'FG-55EA', you can measure the depth of the Transverse fissure at the rail head hidden under the Horizontal fissure.

Transverse Fissure Measuring Device
FG-55EA



Can use the 'Sono Ruler' to draw accurate B-scan.



Sono Ruler