

PENTAX

**Android
Total Station**

V-100NA Series

V-101NA | V-102NA

**'TURBO X' The Newly
Enhanced EDM System**

**Advanced Touch Interface
for Professional Surveying**

TI Asahi Co., Ltd.
Focusing on true performance



V-100NA SERIES ANDROID TOTAL STATION KEY FEATURES

V-100NA is an Android OS total station designed to enhance efficiency and productivity in the field. It features fast EDM measurement, a large and bright touchscreen for smooth operation, and a comprehensive field data collection software suite. An integrated guide light supports accurate prism movement during stakeout, while the dual hot-swappable battery system enables extended operation. Together, these practical features help reduce workload and improve overall field performance.”

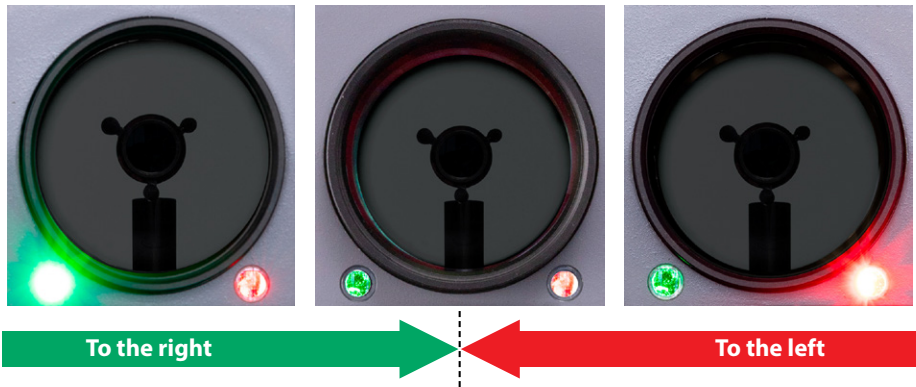


Long operation time

The dual lithium-battery design with hot-swap support and a total capacity of 6700 mAh, combined with modern ARM processors, enables users to operate continuously for up to 50 hours on a single charge. The battery is also compatible with a wide range of other PENTAX surveying products.

Guide Light

The Guide Light improves stakeout efficiency by showing with simple light signals whether the prism is left or right of the sight line. The operator can adjust position quickly by checking the light.



Trigger Key

A light touch on the capacitive trigger key enables measurement without looking away from the telescope and reduces movement from button pressing.

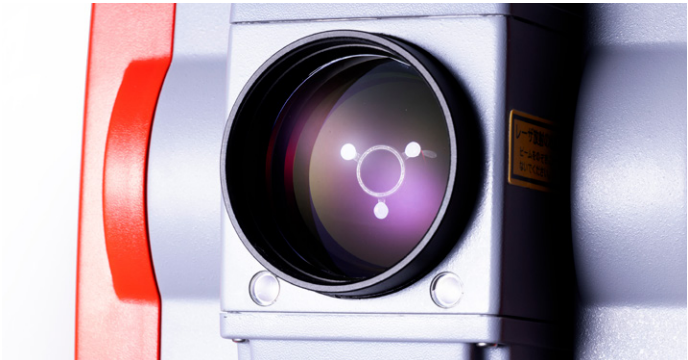


Solid Aluminum Handle

Rugged aluminum handle ensures safe carriage of the instrument.

TURBO X: The Newly Enhanced EDM System

Achieve longer range, higher accuracy, and faster distance-measurement speed. The TURBO X EDM system is engineered and developed to maximize the key capabilities required for efficient and precise measurement tasks.



Advanced Optical Technology

The V-100N's telescope delivers excellent light-transmission performance, allowing users to obtain clear visibility even in dark environments. It provides high-resolution, high-contrast images that enable precise targeting, even in challenging lighting conditions.

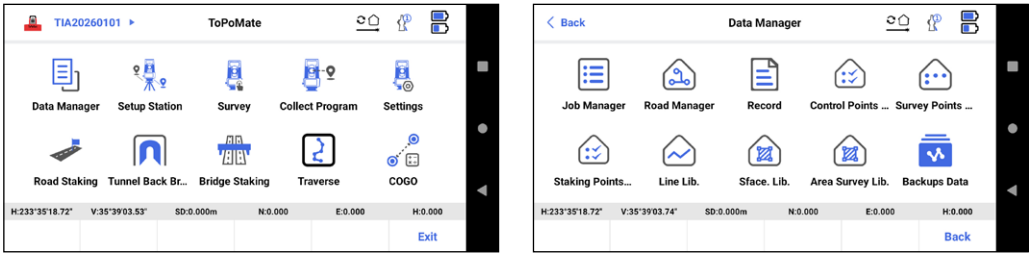


Bright Dual 5.5-Inch Touchscreens

Dual wide 5.5-inch bright touchscreens provide clear visibility and smooth fingertip operation in various field conditions. Their responsive, intuitive interface supports efficient task handling, enabling users to operate the device quickly and accurately with minimal effort

TopoMate: Advanced Touch Interface for Professional Surveying

V-100N's powerful onboard software package features an easy-to-use operator interface that guides users through all types of applications required in contemporary surveying fields.



SPECIFICATIONS TOTAL STATION V-100NA SERIES

Model		V-101NA	V-102NA
Telescope	Magnification	30 X	
	Effective Aperture	48 mm	
	Resolution Power	3"	
	Field of View	1°30'	
	Minimum Focus	1.7 m	
Distance Measurement	Laser Class of Laser Pointer	Prism mode Class 1, Reflectorless mode: Class 3R	
	Measurement Range (Good Conditions) *1		
	Reflectorless *2	1000 m	
	Mini-Prism	2000 m	
	1P Prism	3500 m	
	Measurement Accuracy		
	Prism 2 ~ 3500 m	±(2+2ppm×D) mm	
	Reflector sheet 2 ~ 5 m	±(10+2ppm×D) mm	
	5 ~ 200 m	±(2+2ppm×D) mm	
	200 m ~	±(5+2ppm×D) mm	
	Reflectorless *2 2 ~ 5 m	±(10+2ppm×D) mm	
	5 ~ 200 m	±(3+2ppm×D) mm	
	200 m ~	±(5+3ppm×D) mm	
	Minimum Count	1 mm / 0.1 mm	
	Measurement Count		
	Initial Reflectorless	Approx. 0.3 sec.	
	Prism/Refl. Sheet	Approx. 0.8 sec.	
	Continuous Reflectorless	Approx. 0.7 sec.	
	Prism/Refl. Sheet	Approx. 0.3 sec.	
	Laser Pointer (red mark)	Available	
	Trigger Key	Available	
Angle Measurement	Measuring Method	Absolute Rotary Encoder	
	Detection Method	Code image Detection (Dual direction)	
	Minimum Count	1" / 5" / 10" Selective	
	Angle Accuracy (standard deviation)	1"	2"
	JIS B 7912-3 (ISO 17123-3)		
Display Type		5.5 inch semi-refractive, semi transparent touchscreen (Dual) 740 x 1440	
Guide light	Visibility Range	5°	
	Center Alignment Range	30'	
Automatic Compensator	Compensator Type	Photoelectric compensation	
	Compensator Axis	2 Axis	
	Compensator Range	± 3 '	
Surveying Program	TopoMap	Data Manager, Setup Station, Survey, Collect Program, Settings, Road Staking, Tunnel Back Break, Bridge Staking, Traverse, COGO, etc.	
Data Process	External Memory *3	USB Memory	
	Capacity (Coordinates Data / Raw Data)	64 GB	
Sensitivity of Vials	Tubular Level	30" / 2 mm	
	Electrical Level	1"	
Laser Plummet		Class 2	
Base		Detachable	
Dust & Water Protection		IP65 (instrument only)	
Operating Temperature Range		-20 °C ~ +50 °C	
Dimensions		237 x 360 x 207 mm	
Weight (incl. Battery)		6.4 kg	
Battery Pack (BP07)	Power Source	Li-ion 7.4 V 3350 mAh, equipped with 2 batteries as standard, Hot-Swappable	
	Operation time per full charge (with 2 batteries)		
	Continous Measurement	15 hours	
	Angle Measurement only	17 hours	
	Battery Charging Time	1 battery: approx. 2 hrs. / When charging 2 batteries at the same time: approx. 4 hrs.	
Android *4	Communication Bluetooth	Bluetooth 5.0	
		Wi-Fi	
		802.11 a/b/g/n/ac 2.4G / 5G dualband	
		4G	
	Interface	FDD-LTE: B1/B2/B3/B5/B7/B8/B20/B28AB - TDD-LTE: B38/B39/B40/B41	
		Nana SIM	
		Micro SD (Max 128GB)	
		USB Type-C	

*1 Normal or good weather conditions are based on the following conditions: 20km visibility with slight shimmer, weak sunlight and moderate wind.

*2 The measurement range and accuracy of reflectorless, and time required to measure may vary by the shape, size of surface area and reflection rate of the target and its environment.

The measurement range of reflectorless is determined by the white side of the KODAK Gray Card (KODAK is a registered trademark of Eastman Kodak Company).

*3 Please use the USB flash drive provided with the product. If you choose to use a commercially available USB flash drive, note that some models may not be compatible. Be sure to check compatibility in advance before use.

*4 Android™, Google Play, and the Google Play logo are trademarks of Google LLC.

TI Asahi Co., Ltd.
International Sales Department
 4-3-4 Ueno Iwatsuki-Ku, Saitama-Shi
 Saitama, 339-0073 Japan
 Tel.: +81-48-793-0118
 Fax: +81-48-793-0128
 E-mail: International@tiasahi.com

www.pentaxsurveying.com/en/

Designs and specifications are subject to change without notice, configuration is subject to changes per country, please contact your local dealer.



The CE marking assures that this product complies with the requirements of the EC directive for safety.



ISO 9001: 2015 Certified

DANGER
 LASER RADIATION - DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENT INTO SUNLIGHT
 620-690 nm/0.95mW max.
CLASS IIIa LASER PRODUCT
 Laserclass IIIa, conform FDA 21 CFR Ch. 1 § 1040

CAUTION
 LASER RADIATION - DO NOT STARE INTO BEAM
 620-690 nm/0.95mW max.
CLASS II LASER PRODUCT
 Laserclass II, conform FDA 21 CFR Ch. 1 § 1040

JSIMA
 Japan Surveying Instruments Manufacturers' Association

Member symbol of the Japan Surveying Instruments Manufacturers' Association representing the high quality surveying products.