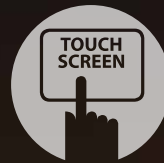


PENTAX | W-800

A TRULY INTEGRATED SYSTEM



PENTAX

W-800

SIMPLE OPERATION MODULAR SOFTWARE



Long Range
Extended EDM Performance

Ergonomic grip



Large easy to use
Color graphical
touch display,
alphanumeric
keyboard



CF-Card slot

Triple axis
compensator on
the W-821NX (1"),
the W-822NX (2")
and W-823NX (3")
models



Auto Focus



Standard
Ni-MH Battery



Advanced connectivity
USB, SD-Card slot,
RS-232C Data port

Incorporated
date clock



W-800 BENEFITS

- Customization is now a breeze
- Modular software upgrading path grows with you and your applications
- From Entry Level: for the occasional user to the more demanding survey tasks of the advanced users



PENTAX SOLUTION PARTNER

MANY SURVEY CHALLENGES, ONE LOGICAL SOLUTION: OPEN PLATFORM

By collaborating with selected Software Solution Partner, MicroSurvey, Pentax can offer a broad range of functionalities to cover almost every specific task.



EXTENDED EDM PERFORMANCE

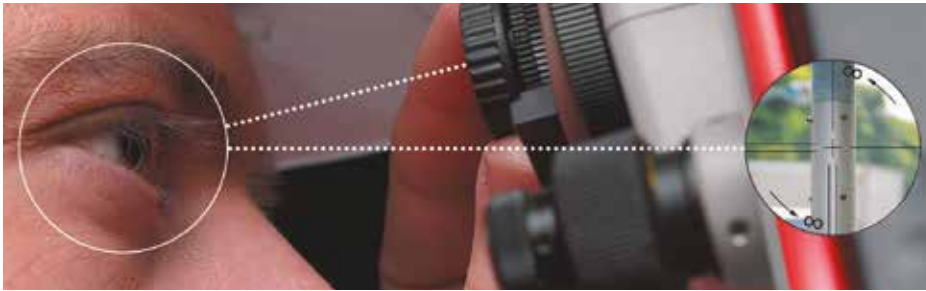
Measures distances in reflectorless mode over 550m and over 7000m to a single prism while maintaining the same high level of accuracy.

Benefits: Its extended measuring range prevents you of making additional instrument setups.



PENTAX'S EXCLUSIVE AUTO FOCUS SYSTEM

Benefits: Always an instant razor sharp image.



MORE FLEXIBILITY FASTER TURNAROUND

Connectivity: In its standard configuration, the Pentax W-800 is equipped with multiple data-interfaces (mini-USB data port, CF-card slot and SD-card slot, RS-232C data port) providing seamless data-transfer to a PC or laptop for further data processing.



TRI-AXIS CORRECTION

The W-821NX, W-822NX and W-823NX models feature a unique precision Tri-axis correction to provide automatic error compensation, in addition to dual-axis correction. The error occurs where the vertical, horizontal and sight axis intersect.

PENTAX W-800 Series Technical Specifications

Model	W-800	W-821NX	W-822NX	W-823NX	W-825NX	W-835NX	
Telescope	Magnification	30 x					
	Effective aperture	45 mm (EDM 45 mm)					
	Resolving power	3.0"					
	Field of view	2.6 % (1°30')					
	Minimum focus	1.0 m					
	Focus	Auto focus / Power focus / Manual					
Distance measurement	Laser class	Visible laser: Class III a (3R) (Reflectorless) / Class II (2) (Prism, sheet)					
Measurement range (Good conditions) (*3)	Reflectorless (*1)	1.5 ~ 550 m					
	Reflector sheet (*2)	1.5 ~ 600 m (800 m)					
	Mini prism	1.5 ~ 2500 m (3000 m)					
	1P	1.5 ~ 7000 m (9000 m)					
	3P	1.5 ~ 9000 m (9999 m)					
Accuracy (*4)	Prism / Reflector sheet	± (2 + 2 ppm x D) mm					
	Reflectorless	1.5m ~ 150m : ±(3+2ppm x D)mm / 150m ~ : ±(5+2ppm x D)mm / 300m ~ : ±(7+10ppm x D)mm					
	At Auto-ATM. Correction						
	Prism / Reflector sheet	± (2 + 10 ppm x D) mm					
	Reflectorless	1.5 ~ 300 m : ± (5 + 10 ppm x D) mm / 300 m ~ : ± (7 + 18 ppm x D) mm					
Measuring time (*5)	Repeat meas.	Normal (1 mm)	Prism / Reflector sheet 2.0 sec - Reflectorless 2.0 sec				
		Quick (1 mm)	Prism / Reflector sheet 1.2 sec (*6)				
		Track (10 mm)	Prism / Reflector sheet 0.4 sec - Reflectorless 0.4 sec				
	Initial meas.	Normal (1 mm)	Prism / Reflector sheet 2.5 sec - Reflectorless 2.4 sec				
		Quick (1 mm)	Prism / Reflector sheet 1.7 sec (*6)				
Angle measurement	Track (10 mm)	Prism / Reflector sheet 2.5 sec - Reflectorless 2.5 sec					
	Measurement method	Absolute rotary encoder					
	Detection method	Vertical / horizontal angle: 2 sides					
	Minimum count	0.5"/1"/5" selectable					
	Accuracy (ISO 17123-3)	1"	2"	3"	5"		
Compensator	Axis	3 Axis (*7)			2 Axis		
	Range	± 3'					
Target screw	2 speed			1 speed			
Sensitivity of vials	Plate level (electronic)	30" / 1 div.					
	Circular level	8' / 2 mm					
Laser Plummet	Visible laser: ± 0.5mm (instrument height: 1.5m) (Optical Plummet is optional)						
Base	Detachable				Shifting		
Dust & water resistance	IP54 (instrument only)						
Ambient temperature	-20°C ~ +50°C / -4°F ~ 122°F (working range)						
Tripod thread	5/8" x 11				35 mm P2		
Dimensions / Weight	Dimensions	197 (W) x 347 (H) x 217 (L) mm					
	Weight (incl. battery)	6.3 kg				6.2 kg	
	Carrying case	380 (W) x 292 (H) x 475 (L) mm / 3.2 kg					
Battery pack BP02	Power source	Ni-MH 4300 mAh (rechargeable) DC 6.0 V					
	Operation time	Approx. 5.5 hrs (ETH+EDM / Single Reflectorless measurement every 60 seconds)					
	Weight	380 g					
Battery charger BC03 and AC adapter AC01	Input Voltage (AC01)	AC 100 ~ 240 V					
	Output Voltage (BC03)	DC 7.5 V					
	Weight	280 g					
Data Process	CPU, Clock frequency	Intel® - XScale, 400 MHz					
	OS	Microsoft® - Windows® CE 4.2					
	Application software	Selectable					
	Internal memory	SDRAM = 64 MB / FLASH = 128MB (built-in)					
	Memory card	2GB (Max) (*8)					
	I / F	RS-232C or Bluetooth(Optional), CF Type II, SD CARD, USB					
Display / keyboard	Display type	3.7 inch - Color LCD, 640 x 480 pixels (*9) with back light and touch panel function					
	Quantity	2			1 (2nd optional)		
	Keys	33 each (12 numeric / 11 function / 10 special)					
	Display back light	Intensity settings: 10 steps					
Laser Pointer	Yes						
Date clock	Yes						

*1 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.

*2 Reflector sheet: PENTAX genuine Reflector sheet

*3 The measurement range may vary by conditions of the environment. Normal conditions: 20 km visibility with slight shimmer. Good conditions: 40 km visibility, overcast, no heat, no shimmer and moderate wind.

*4 When automatic atmospheric correction is on, the EDM error is 10 ppm in prism and reflector sheet mode.

Remarks: 1) Microsoft and Windows are a trademark or a registered trademark of Microsoft Corporation in the United States and other countries.
2) Intel is a registered trademark of Intel Corporation in the United States and other countries.

*5 EDM measuring time is determined in good conditions. It may take longer than usual to measure the distance exceeding 4000 m in prism mode and 300 m in reflectorless mode.

*6 Quick mode, which functions with prism and reflector sheet, is effective only under normal mode (1 mm) and up to 500 m.

*7 In addition to dual-axis correction in the (X) and (Y) direction, mechanical error in the instrument is corrected.

*8 Memory card is not supplied with the instrument.

*9 Depending on application software.

You should be able to use any SD card in your camera. While Pentax does not guarantee compatibility with any particular manufacturer or model, we have seen consistent compatibility with SD cards from Panasonic (1GB, 2GB), SanDisk (1GB, 2GB), and Toshiba (1GB, 2GB)

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



DANGER
 LASER RADIATION - DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENT INTO SUNLIGHT
 620-690 nm/4.75mW 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



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