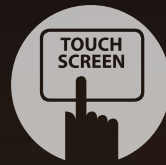


# PENTAX | W-800

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-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 .....



# PENTAX | W-800 OUTSTANDING FEATURES

## 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 PARTNERS



### MANY SURVEY CHALLENGES, ONE LOGICAL SOLUTION: OPEN PLATFORM

By collaborating with selected Software Solution Partners, such as SierraSoft and Carlson, 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-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
<b>Telescope</b>	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		
<b>Distance measurement</b>	Laser class		Visible laser: Class III a (3R) (Reflectorless) / Class II (2) (Prism, sheet)			
<b>Measurement range (Good conditions) (*3)</b>	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)			
<b>Accuracy (*4)</b>	Prism / Reflector sheet		± (2 + 2 ppm x D) mm			
	Reflectorless		1.5 ~ 300 m: ± (5 + 2 ppm x D) mm / 300 m ~: ± (7 + 10 ppm 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			
<b>Measuring time (*5)</b>	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)			
<b>Angle measurement</b>	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"	
<b>Compensator</b>			3 Axis (*7)			2 Axis
<b>Target screw</b>			2 speed			1 speed
<b>Sensitivity of vials</b>	Plate level (electronic)		30" / 1 div.			
	Circular level		8' / 2 mm			
<b>Plummet</b>			Visible laser: ± 0.5mm (instrument height: 1.5m)			
<b>Base</b>			Detachable			Shifting
<b>Dust &amp; water resistance</b>			IP54 (instrument only)			
<b>Ambient temperature</b>			-20°C ~ +50°C / -4°F ~ 122°F (working range)			
<b>Tripod thread</b>			5/8" x 11			35 mm P2
<b>Dimensions / Weight</b>	Dimensions		197 (W) x 347 (H) x 217 (L) mm			
	Weight (incl. battery)		6.3 kg			
	Carrying case		380 (W) x 292 (H) x 475 (L) mm / 3.2 kg			
<b>Battery pack BP02</b>	Power source		Ni-MH 4300 mAh (rechargeable) DC 6.0 V			
	Operation time		Approx. 7 hrs (single measurement every 30 seconds)			
	Weight		380 g			
<b>Battery charger BC03 and AC adapter AC01</b>	Input Voltage (AC01)		AC 100 ~ 240 V			
	Output Voltage (BC03)		DC 7.5 V			
	Weight		280 g			
<b>Data Process</b>	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)			
<b>Display / keyboard</b>	I / F		RS-232C, CF Type II, SD CARD, USB			
	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			
<b>Laser Pointer</b>			Yes			
<b>Date clock</b>			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.

\*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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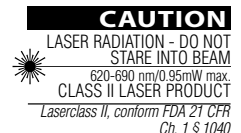
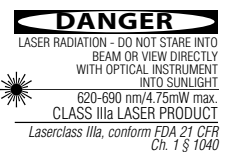
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