

MODEL #1— Presenter, Laser Pointer Test

Tested Components

Brand: #1

Model: #1

Packaging: Retail box

Individual components: Presenter - Laser Pointer, User Guide, AAA battery

UPC: *omitted*



Benchmark Product

Brand: Brand #2

Model: Model #2

Packaging: Retail clamshell

Individual components: Presenter - Laser Pointer, User Guide, AAA battery

UPC: *omitted*



The following functions are those that were extensively examined, tested and compared between the Brand #1 and competitor's benchmark products.

Claimed Functionality (as per Brand #1 retail packaging):

1. *Compatible with Windows 2000, XP and Windows Vista, Mac 10.1.X or later*

Variance detected ¹

2. *plug-n-play, no synching needed*

Confirmed

3. *ideal for Microsoft® PowerPoint® & Apple® Keynote®
includes all commands needed to give dynamic presentations: next/previous slide, page up/down, black/white screen and more*

Variance detected ²

¹ Mac issues were observed.

² Mac experienced navigation issues probably related to the Mac's desire to identify pointer as a keyboard.

The following tables presents findings for 360°'s detailed examination and testing. Variances noted above are discussed in cells with **red highlight**; other possible issues that we found are highlighted with a **yellow background**.

Brand	Brand #1	Brand #2
Model	Model #1	Model #2
Packaging	Retail Box	Retail Clamshell
Individual Components	• Presenter - Laser Pointer • USB Wireless Receiver • 1 AAA battery • User Guide	• Presenter - Laser Pointer • USB Wireless Receiver • 1 AAA battery • User Guide • Carry Pouch
UPC	<i>omitted</i>	<i>omitted</i>
Initial Impressions	Product has an exceptional and functional design, including its stowable USB receiver. Also, sleek with a modern color scheme (black and silver).	Basic no frills design. Color scheme, plastic-y build material, and design look dated though.
Pre-Installation Setup	Excellent and easy! Simple plug-n-play with the receiver.	Simple plug-n-play with the receiver.
Installation, W2K	Plug and play. No additional software is required. Buttons and functionality worked right out-of-the-box.	<i>Packaging claims OS supported - not confirmed.</i>
Installation, XP	Plug and play. No additional software is required. Buttons and functionality worked right out-of-the-box.	Simple plug and play. No additional software is required. Note: Unlike the Brand #1, the receiver and presenter were not synced initially out of box. Testers needed to follow documented instructions to sync by pressing the sync button on the receiver, followed by the sync button on the presenter.
Installation, x32	Plug and play. No additional	Plug and play

Brand	Brand #1	Brand #2
Model	Model #1	Model #2
Vista	software is required. Buttons and functionality work right out-of-the-box.	
Installation, x64 Vista	Plug and play. No additional software is required. Buttons and functionality worked right out-of-the-box.	
Installation, Mac	Once plugged in, the Mac thought it was a USB keyboard. There should probably be some mention of this in the User Guide, because once the user hits continue, the following dialogs are steps to calibrate a keyboard (i.e. pressing certain keys, etc) The specific dialog displayed: <i>"Keyboard Setup Assistant</i> <i>Introduction</i> <i>Your keyboard cannot be identified and will not be usable until it is identified. To identify this keyboard click Continue.</i> <i>If your keyboard is working properly and you have an additional USB input device connected to your computer that is not a keyboard, you can skip this step."</i> Tester exited the keyboard installation screen instead by pressing "X". The USB presenter is plug-n-play, however, there were some issues with the keys	

Brand	Brand #1	Brand #2
Model	Model #1	Model #2
	themselves on the Mac. • "<" and ">" keys - work as advertised to toggle slides left and right within the application and in slideshow • "alt-tab" key - When within the application, it toggles between the sections of the slide (i.e. header, slider, footer, etc). When in the slide show, it does nothing. It does not toggle between applications, as specified in the manual • "play/pause" key - When within a section of the slide in application, it acts like a space bar and enters spaces. When in a slideshow, it causes the application to exit the slideshow. In all other situations, it makes a beep sound and does nothing. It does not start/stop the slide show, as specified in the manual. • "black/white" key - When within a section of the slide in application, it acts like a keyboard and inputs the letter "B". Otherwise, when not within the slide show, it just makes a beep sound and does nothing. However, in the slide show, it does act as specified in the manual and toggles between a black screen and the current slide.	

Brand	Brand #1	Brand #2
Model	Model #1	Model #2
USB Receiver	Excellent. Stowable USB receiver is a great idea that makes it very practical for travel use.	Not a stowable USB receiver, although the vendor does include a carrying pouch to keep the components together for travel.
Ergonomics	Excellent. Build material is very comfortable and facilitates good grip. Great handle, great button and key placement for the multiple options (left/right slide, play/pause, laser points, toggle slideshow, alt-tab)	Good. A more functional than aesthetical design. Not as comfortable as the Brand #1 in the hand, and the build material feels somewhat cheap.
Wireless Connection and Range	Works from over 20+ ft away (Line-of-Sight)	Works from over 20+ ft away (no obstructions in between)
Weight	Extremely light weight.	Extremely light weight.
Other Features and Comments	Excellent. Very well thought out design. Great build material. Smart placement of buttons that provide the user with many options and is functional right out of the box. The button functionality has some quirks on the <u>Mac</u> that need to be resolved and/or documented for the user.	Inferior product to the Brand #1 comparable in both design and functionality. Lack of a slide show play/pause button is disappointing. Lack of sync out-of-box may be inconvenient for user.

The following are comments and measurements from 360°'s mechanical engineering experts.

Vendor	Brand #1	Brand #2
Description	2.4 GHz wireless presenter	Wireless Presenter with Laser Pointer
Model	Model #1	Model #2
Benchmark	N/A	Model #1
Packing	RETAIL	RETAIL
Fit / Finish / Durability	Small & tuff. Firm surface finish	Sturdy under normal interior conditions.

Vendor	Brand #1	Brand #2
Description	2.4 GHz wireless presenter	Wireless Presenter with Laser Pointer
Ergonomics	Good.	Medium
3ft drop test	No Damage.	No Damage.
Connectors / Plugs	Yes. Standards compliant with no visible flaws.	Yes. Standards compliant with no visible flaws.
Comments	Convenient location for USB receiver storage. Power switch.	Power switch. Must usually be synched before it will work.

The following tabulates various features of the Brand #1 Model #1 and its Brand #2 benchmark mouse for easy comparison.

Product Characteristics	Subj. Grade 1 (poor) to 5 (excellent)		Comments	
	Brand #1	Comp.	Brand #1 Model #1	Brand #2 Model #2
Markings on Product (not package, SW or Manual)			Prototype product	
Identification markings	N/A	3	Brand #1 on front	Brand #2 on front
Logos, model, etc.	N/A	3	None although what may be a SN sticker is inside the battery compartment	Logo on front, model on label on rear with other reg. auth. Logos
Warnings or instructions (if necessary)	N/A	2	Laser warning label on rear cover	Very small laser warning on rear label
Overall grade of product markings	N/A	3	Prototype	Fair
Documentation			Prototype	
Type of documentation included	3	4	Retail box rear panel lists features	Small 10-page booklet gives instructions, warnings, troubleshooting tips, regulatory compliance statements, etc.
Appearance of documentation	4	4	Good	Good
Clarity of documentation	N/A	4	Panel does not contain instructions, only lists features	Quite good documentation of the product including troubleshooting instructions; no specifications

Product Characteristics	Subj. Grade 1 (poor) to 5 (excellent)		Comments	
	Brand #1	Comp.	Brand #1 Model #1	Brand #2 Model #2
Completeness of documentation	N/A	4	Prototype, N/A	Good
Installation time (from CD, floppy or web download)	N/A	N/A	None required	None required
Languages of documentation	3	3	English	English
Overall grade of documentation	N/A	4	Prototype; N/A	Good
Cord/harness			Wireless, 2.4 GHz single channel, no cord/harness	Wireless, 2.4 GHz single channel, no cord/harness
Connector			Connector only on Receiver	Connector only on plug-in receiver, larger than Brand #1 receivers
Connector type	5	5	USB type A	USB type A
Connector quality	4	4	Good	Good
Overall grade of connector	4	4	Good	Good
Product physical characteristics excluding cord/harness				
Case material	4	4	Plastic, rubberized plastic	Hard black plastic
Case color	4	3	Non-slip rubber-feeling coating, attractive	Dull black plastic with silver buttons
Case finish	4	3	Excellent	Fair
Case material thickness	4	4	Good	Good
Case robustness	4	4	Good	Good
Case molding quality	4	4	Good	Good
Case half fit	4	4	Good	Good
Case half assembly tightness	4	4	Good	Good
Indicators/LEDs	3	2	1, bright blue at top front	None other than laser
Switches/electrical controls	4	3	1 slide power switch; 6 pushbuttons	1 slide power switch, 5 pushbuttons
Interior PC board	4	4	PC board is G-10 epoxy-glass, SMD components	PC board is G-10 epoxy-glass, SMD components
Overall grade of Product	4	2	Excellent	Fair, has clunky toy feel and appearance
Electrical				
Operating voltage	4	4	1 AAA battery	1 AAA battery

Product Characteristics	Subj. Grade 1 (poor) to 5 (excellent)		Comments	
	Brand #1	Comp.	Brand #1 Model #1	Brand #2 Model #2
Current draw	4	3	Idles at 19 uA; pressing a button draws 2.5 mA then drops to 900 uA; laser draws 59 mA; USB receiver draws 3.7 mA; excellent low current draw for notebook use	Idles at 30 uA; pressing a button draws 2.75 mA; laser draws 60 mA; USB receiver draws 29 mA; fair low current draw for notebook use
Range	3	4	30 to 35 feet; is somewhat directional at extreme range due to antenna design	Slightly more than the Brand #1 at just over 35 feet
Overall grade of electrical	4	4	Good	Good
Product-Specific				
Product features (list individually for each)	5	5	1. "Plug-n-play, no synching needed..." insert the mini USB receiver into your computer's USB port and you're ready to go without synching the presenter and the receiver....2.4 GHz frequency provides you with an instant and secure connection without interference from other electronic devices up to 30 ft.". Confirmed	1. "Wireless control..." Remotely control your PowerPoint presentations from up to 30 feet away": Confirmed
Product features (list individually for each) (cont.)	5	5	2. "stowable USB receiver...." mini USB receiver stores inside the presenter making packing and traveling convenient" Confirmed	2. "Built-in laser pointer:" presenter also includes a convenient built-in laser pointer" Confirmed

Product Characteristics	Subj. Grade 1 (poor) to 5 (excellent)		Comments	
	Brand #1	Comp.	Brand #1 Model #1	Brand #2 Model #2
Product features (list individually for each) (cont.)	5	5	3. ...built-in laser pointer allows you to point at specific information in your presentation enabling the audience to easily see in a dark environment" Confirmed	3. " Plug and play: No hassle setup; simply plug receiver into your computer's USB port" Confirmed
Performance	4	4	Worked as advertised although range was slightly iffy; would sometimes not follow a command without turning the presenter or moving a little closer, probably due to antenna design	Worked as advertised with slightly more reliable tendency to follow commands at the same extreme range as the Brand #1
Overall grade of product-specific characteristics	4	4	Good	Good
Operation of Product				
All hardware features in documentation are present	5	5	Yes	Yes
All features in doc. work as claimed	5	N/A	Yes	Yes
Overall grade of Product operation	2	3	Excellent	Fair
Software			No driver needed	No driver needed
Help (F1)	N/A	N/A	N/A	N/A
File location	N/A	N/A	N/A	N/A
Features	N/A	N/A	N/A	N/A
Overall grade of Software	N/A	N/A	N/A	N/A