

# The truth about interactive whiteboard resolution

Why bigger isn't always better

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Bigger usually means better, right? Not necessarily – when it comes to the resolution of interactive whiteboards, *higher resolution* does not equate to *greater accuracy*. From time to time, teachers and technology coordinators ask us about the resolution of our interactive whiteboards. They've heard that the higher the resolution, the greater their ability to touch and select small items on the interactive whiteboard screen.

## Getting clear about resolution

The definition of resolution varies, depending on what exactly you're talking about. If people tell you that their interactive whiteboard has a higher resolution than the one you own or want to purchase, you can wow them by asking if they mean touch resolution or projector resolution.

### 1) Touch resolution

Interactive whiteboard resolution is measured by the number of contact, or touch, points that the screen can potentially register. For example, a SMART Board™ 600 series interactive whiteboard has a touch resolution of 4096x4096. Multiplied together, those numbers represent more than 16 million unique points on the interactive whiteboard's surface that can interpret inputs when you touch the screen with a finger or pen.

### 2) Projector resolution

Digital projectors have a resolution measured in pixels. These are the number of tiny dots that together form an image on a screen. Most modern projectors have XGA resolution, which is represented as 1024x768 for a total of 768,432 pixels. An SXGA projector offers 1280x1024 or approximately 1.3 million pixels. The resolution of the projector is further determined by the resolution information received from the computer to which the projector is attached. If you set your computer resolution to 800x600, and your projector is capable of processing 1024x768, the projected image will be 800x600. If you set your computer resolution to 1400x1050 and your projector is capable of processing 1024x768, the projected image will be 1024x768.

Here's the important point: the interactive whiteboard is a projection surface, not a monitor. It displays only what is projected onto it by another device, a projector.

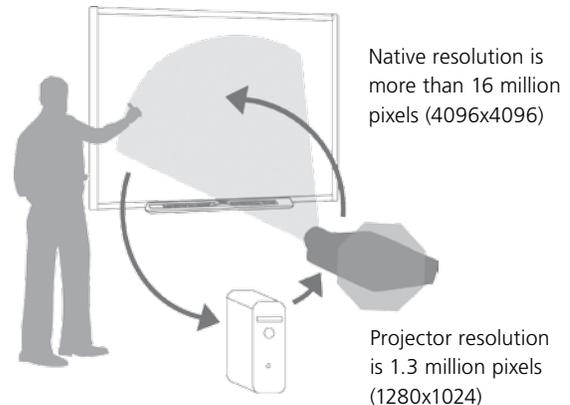
A quick calculation shows how the SMART Board 600 series interactive whiteboard provides resolution that more than meets your needs – today and in the future:

	Product	Resolution	Total points
A	SMART Board interactive whiteboard	4096x4096 points	16.78 million
B	Average high-resolution projector (SXGA)	1280x1024 pixels	1.3 million
A minus B	Extra points of resolution	16.78 million – 1.3 million	= 15.48 million

## What's the conclusion?

The SMART Board interactive whiteboard is capable of handling 15 million more bits of information than a typical projector can deliver. Accuracy and touch precision are not influenced by the resolution of the interactive whiteboard.

### Projector resolution is the limiting factor – not the interactive whiteboard



## Technology for today and the future

When thinking about resolution, remember that as long as the interactive whiteboard's native resolution is greater than projector resolution, it has no impact on the performance of your interactive whiteboard. With the resolution of SMART Board interactive whiteboards 15–20 times greater than today's standard projectors, the product is adequately future-proofed to meet your needs today and in the future.