

Scanner

Agenda

- Scanner
- Types of Scanners

Watch <https://www.youtube.com/watch?v=TrLVQnvOI1o>

To download slides, complete notes, lectures, test series and study material visit

<http://www.doorsteptutor.com/>

Image Scanner or Scanner

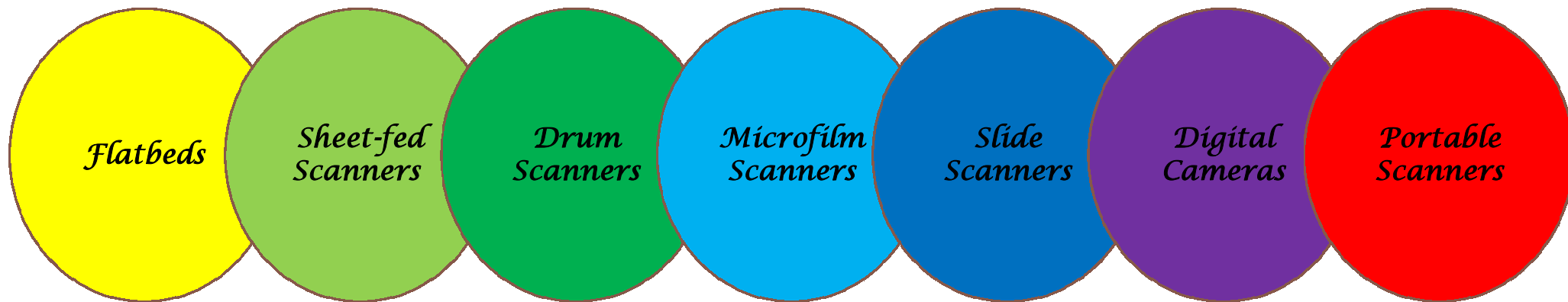
An Input Device that optically scans images, printed text, handwriting, or an object, and converts it to a digital image.

<https://www.youtube.com/watch?v=TrLVQnvOI1o>



Types of Scanners

<https://www.youtube.com/watch?v=TrLVQnvOI1o>



<https://www.youtube.com/watch?v=TrLVQnvOI1o>

Flatbeds

Largest selling scanner type

Versatile

Easy to operate

Widely available

*Variant of flatbed scanner - **overhead book scanner**. In this, scanner's light source, sensor array and optics are moved to an overhead arm assembly under which a bound volume can be placed face up for scanning.*

Scanner + Photocopy machine + ADF



<https://www.youtube.com/watch?v=TrLVQnvOI1o>

Sheet-fed Scanners

Same basic technology as flatbeds. But maximize throughput, usually at expense of quality. Generally designed for high-volume business environments, typically scan in black & white or gray scale at relatively low resolutions. Documents are expected to be of uniform size and sturdy so as to endure fairly rough handling, but transport mechanisms on some newer models reduces the stress. Important subclass are upright models specifically designed for oversize documents such as maps and architectural drawings.



Drum Scanners

Highest resolution, highest quality scans of any scanner type, but at a price

Drum scanners are slow, not suitable for brittle documents and require a high level of operator skill

Found in service bureaus that cater to the color pre-press market



<https://www.youtube.com/watch?v=TrLVQnvOI1o>

Microfilm Scanners

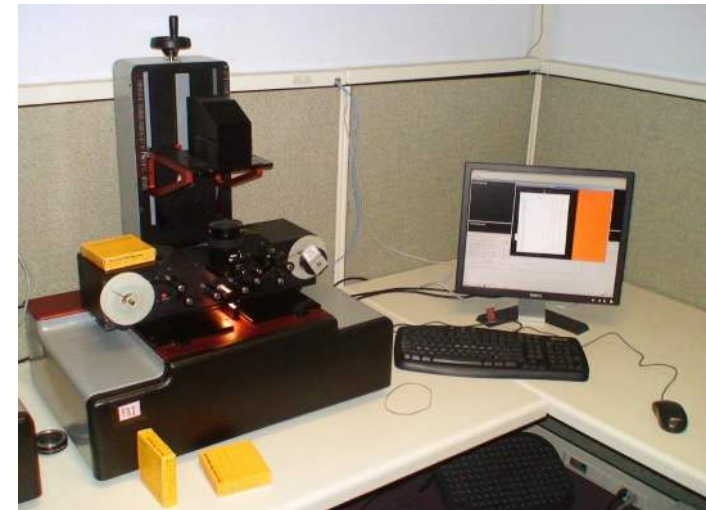
Highly specialized devices for digitizing roll film, fiche, and aperture cards

Can be operationally complex

Film quality and condition may vary

Offer minimal enhancement capability

Only a few companies make microfilm scanners, and the lack of competition contributes to the high cost of these devices.



<https://www.youtube.com/watch?v=TrLVQnvOI1o>

Slide Scanners

Used to digitize existing slide libraries & photo intermediates of 3-D objects and documents that are not well-suited for direct scanning.

Delivers an image with good dynamic range, but based on size of the original, resolution may be insufficient for some needs



<https://www.youtube.com/watch?v=TrLVQnvOI1o>

Digital Cameras

Combine a scanner with camera optics to form a versatile tool that can produce superior quality images

Slower and more difficult to use than flatbed scanners

Adaptable to a wide array of documents and objects

Most fragile materials can be safely captured

Need to provide external lighting means that light damage may be a concern

Continues to improve, helped along by the growing consumer market



<https://www.youtube.com/watch?v=TrLVQnvOI1o>

Portable Scanners



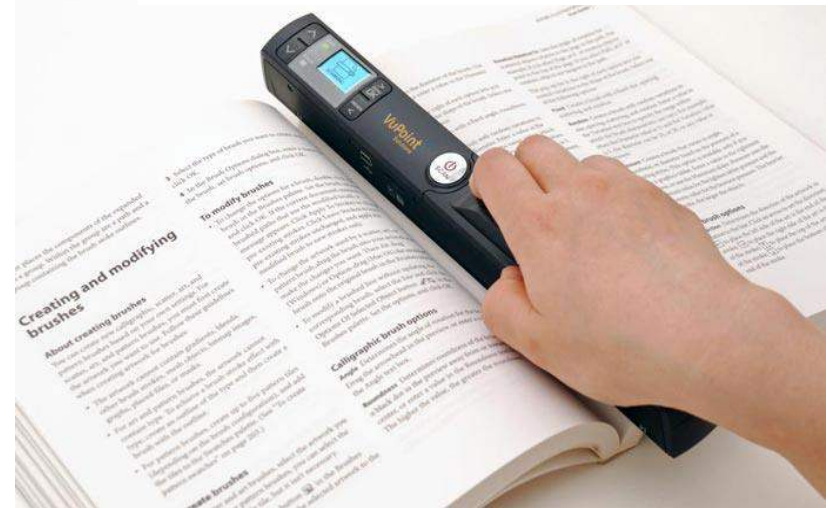
Small enough to bring on the road

Some are small enough to put in your pocket

Pen scanners are just a bit bigger than fountain pens and can scan the text of a document line by line

Some are as wide as a page & roll easily down the page

Do not give high-resolution scans and so aren't good for scanning photographs or other applications where you need a high-quality result



<https://www.youtube.com/watch?v=TrLVQnvOI1o>



Examrace