# **Beginner's Guide**



# **Collecting Slide Rules**

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## **Preface**

This booklet contains basic information for the beginning slide rule collector. The last item is a list, with images, of slide rules that are popular with collectors, divided into four categories ..... Inexpensive, Medium Priced, Higher Priced and Scarcer, and High Priced Rare Collector Items.



## Why collect slide rules?

People collect slide rules for many reasons. Perhaps they used a slide rule in the past. Perhaps they like old instruments. Perhaps a friend stirred their interest. Perhaps they want to learn more about this fascinating instrument that was the primary calculating tool for over 300 years.

## What slide rules to collect?

There are as many types of collections as there are collectors. You can expect that your focus will change as you gain experience and as your interests change over time. Known collections range from a few rules to several thousand.

Collecting objectives could be:

- Whatever interests me at the time
- Rules from the same maker
- As many different models as possible from the same maker
- Rules from as many makers as possible
- Rules from as many different countries as possible
- Rules with specific scales hyperbolic scales, log log scales, etc.
- Top of the line rules from different makers
- 19th Century or older rules
- Most popular models from many makers
- 10 cm (4") rules
- 12.5 cm (5") rules
- 25 cm (10") rules
- 50 cm rules (20")
- Classroom demonstration rules
- Circular rules
- Cylindrical rules
- Duplex rules
- Pocket watch rules



- Specialty rules chemistry, surveying, electrical, etc.
- Novelty rules tie clips, key chains, etc
- Variants of the same model
- Advertising give-away slide rules
- Slide charts
- New in box rules
- Historically significant rules
- Rules with color highlighted scales
- Wooden slide rules
- Slide rule literature

See end of this *Guide* for a starter list of specific slide rules, with photos, that are popular with collectors.

## What makes a slide rule valuable?

There are many factors which can affect a slide rule's value. Here are some key concepts to consider:

*Rarity.* Some slide rules were manufactured by the millions, while others were only made in short runs or for a short period of time. Some had such peculiar and limited applications that only a few were ever manufactured or sold. Rarer rules are generally considered to have a higher value than more commonplace ones.



*Quality.* Some slide rule manufacturers made beautiful high quality instruments designed to last more than a lifetime, while others made inexpensive low quality throw-aways. Like other types of ephemera, some of the throw-aways have gained value over time because, though once common, they are now rare. However, generally speaking, lower quality rules have less value than higher quality ones. High quality rules have accurate legible scales and are made from durable materials such as mahogany, boxwood, bamboo, plastic, and metal. They are designed to withstand temperature variations and hard use.

**Condition.** As with any antique, condition of the rule and its case really counts. Significant condition issues include broken cursors, scratches, blemishes, cracks, sticky slides, and extraneous writing.

*Complexity.* In general, the more complex a slide rule is, the more scales it will have and the higher its value will be.

*Visual Interest.* Some slide rules have great aesthetic appeal while others appear clunky and odd.



*Size.* Many collectors and users prefer rules small enough to fit in a pocket. These rules are commonly called 5 inch rules (although their scales are almost always 12.5 centimeters long, not exactly the same as 5 inches). The standard slide rule size is generally referred to as 10 inch, which represents the length of a single scale from end to end (although the actual length is almost always 25 centimeters).

*Historical Significance.* The development of slide rules paralleled other technological advances. Slide rules that reflect significant changes in calculating methodologies, or ones made or used by historically significant figures generally find greater popularity with collectors.



**Personal Significance.** Many users and collectors seek to replace their slide rule from high school or college. Others seek rules that were used in their specialized field of endeavor.

## Where to buy slide rules?

• **eBay** is by far the largest slide rule marketplace and is the leading source of slide rules. Search eBay USA for 'slide rule' and more then 5,500 listings will appear, both auctions and fixed price sales called 'Buy It Now'. Average listing duration is 7 days; thus almost 800 slide rule listing sales are either consummated or expire daily. Most listings are for slide rules, but some are for manuals, parts, wristwatches with slide rule bezels, and a few other items.

eBay search can be done by several basic methods. By default the search is for 'Best Match', which filters out most of the wristwatches in its first few pages of listings. Five alternative search options you can use are Ending Soonest, Newly Listed, Lowest Price, Highest Price, and Nearest First.

Recommendation: Go to <a href="www.ebay.com">www.ebay.com</a> Use Advanced Search; enter 'slide rule', select 'Exact words, exact order'; select 'Title and description'; click Search. If you wish, you can eliminate the wristwatch listings by entering their brand names in the 'Exclude words from your search' box.

• German eBay (www.ebay.de) has about 1700 slide rules for sale. Search for 'rechenschieber' or 'rechenstab' (linear) 'rechenscheibe' (circular), and 'rechenwalze' (cylindrical). You will need to learn to filter out the children's bead toys, abaci, watches, etc. You can use Google translator to read the auctions and to communicate with sellers. Favored method of payment is 'Uberweisung' which means direct bank transfer. Use Xoom.com, who has low fees and excellent service. Some sellers accept PayPal and will ship internationally.

- *United Kingdom eBay* (www.ebay.co.uk) has several hundred slide rules for sale. Most sellers take PayPal.
- *Etsy.com* has several hundred slide rules for sale at fixed prices.
- *Slide rule dealers* are an excellent and dependable source. We are fortunate to have several excellent dealers who are very fine folks.

<u>Slide Rule Universe</u> is a very large dealer, operated by Walter Shawlee in Kelowna, British Columbia, Canada. His website is the largest slide rule site on the internet and contains a vast amount of slide rule information.

Slide Rule Trading Co. has new in box Hemmi rules for sale and specializes in slide rule parts for K&E, Hemmi, and Relay/Ricoh brands. It is operated by Paul Ross in Missouri. Paul's site also has his Hemmi Slide Rule Catalogue Raisonne and his Post Catalogue Raisonne, which list all known Hemmi and Post models.

• Auctions at Oughtred Society meetings.



- *Antique stores*, thrift stores, flea markets, and garage sales will produce a few slide rules.
- *The Internet.* Searching the Internet may locate additional small sellers.



## How to find more information about slide rules?

• The Oughtred Society is a good place to find information about slide rules. <a href="https://www.oughtred.org">www.oughtred.org</a>

## THE OUGHTRED SOCIETY



DEDICATED TO THE PRESERVATION AND HISTORY OF SLIDE RULES AND OTHER CALCULATING INSTRUMENTS

Its publication <u>Oughtred Society Slide Rule Reference Manual</u> is available for viewing And down-loading. It includes a variety of information about slide rules, including chapeters on:

- What Is a Slide Rule
- How a Slide Rule Works
- History of the Slide rule
- Common Types of Slide Rules
- Learning Your Way Around a Slide Rule
- Performing Basic and Advanced Calculations
- Tricks and Time Savers
- List of 24 Common Slide Rule Scales and Their Functions
- Slide Rules for Special Applications
- Major Slide Rule Makers and Some of Their Common Models
- Books, Manuals, and Articles more than 100 references
- Cleaning and Care for Your Slide Rule
- Slide Rules on the Internet
- The Oughtred Society website includes:
  - <u>The OS Rarities Gallery</u>, which contains over 275 rare slide rules with images and data for each.



- <u>Classic Slide Rules</u>, a collection of 147 slide rules with images and descriptions, in four categories: Historic Design, Most Popular, Top of the Line, and Specialty.
- Archive of Collections

This Archive is a service of The Oughtred Society where we present the collections of members, including images and descriptive information for all items in the collections. These collections will be preserved on the Oughtred Society web site for use by slide rule enthusiasts and for posterity. There are currently 5 collections in this Archive.

- Slide Rules of the Major Makers

The objective of this collection of slide rule records is to make available in one location lists of all the slide rules of the eight major makers

- <u>Five sample articles</u> from past issues of the Journal of the Oughtred Society. Published twice annually, this internationally acclaimed journal is the most authoritative source on slide rules and other calculating devices, with each issue containing 64 pages of information about makes and makers, models, uses, history, and more.
- <u>Slide Rule History</u>, from Galileo's sector at the end of the 16th century to present day.



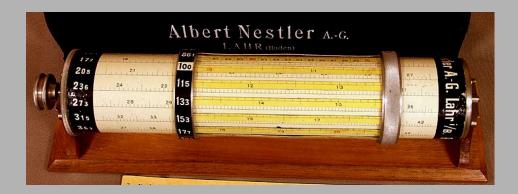
- <u>Links Library</u> with links to many websites that contain information about slide rules.
- The Oughtred Society also has slide rule books for sale:
  - The Oughtred Society Slide Rule Reference Manual. 102 pages, 109 photos. This is the printed version of All About Slide Rules described above.
  - K&E Salisbury Products Division Slide Rules, by Joseph Soper
  - Calculating with Tones The Logarithmic Logic of Music, by Klaus Kühn and Rodger Shepherd
  - Pocketbook of the Gauge Marks, by Panagiotis Venetsianos
  - Specialized Slide Rules for Electronic Engineers A Collection of Articles Edited by Richard Smith Hughes
  - The Inventor of the CURTA Calculator Curt Herstark
  - Pencil Slide Rules and Their Successors, The Calculator Pens and Pentop Computers Edited byRodger Shepherd
- The United Kingdom Slide Rule Circle has numerous slide rule publications for sale and publishes its own Slide Rule Gazette and Skid Stick.

## United Kingdom Slide Rule Circle

- The German Slide Rule Group (<u>Rechenschieber-Sammler-Treffen</u>) maintains a recommended book list on their RST Web site.
- <u>The Dutch Circle of Slide Rule Collectors</u> maintains a recommended book list on their Circle Web site.



- Well known general information slide rule books are:
  - Slide Rules: Their History, Models and Makers, by Peter Hopp
  - Slide Rules A Journey Through Three Centuries, by Dieter von Jezierski
- Specialized books are:
  - Joint Slide Rules, by Peter Hopp
  - Pocket Watch Slide Rules, by Peter Hopp
  - Otis King Calculators, by Colin Barnes and Tedford White
  - Rechenschieber Slide Rules A.W. Faber A.W. Faber-Castell, by Peter Holland
- <u>Rod Lovett</u> maintains a searchable database of slide rule literature published in:
  - The *Journal of the Oughtred Society*.
  - The United Kingdom Slide Rule Circle's *Skid Stick* and *Slide Rule Gazette*
  - *Proceedings* of the International Meetings of Slide Rule Collectors His website also provides a search of all eBay slide rule auction results back to 1999 and is very useful for determining the market value of slide rules.
- Slide Rule Meetings:
  - <u>The Oughtred Society</u>
    Displays, an auction, and slide rule talks are the scheduled highlights, plus visiting with other collectors.
  - The International Meeting of Slide Rule and other Math Instruments Collectors and Researchers is held in September, with groups in England, The Netherlands, and Germany, and the Oughtred Society alternating as host.





## Slide rules that are popular with collectors

Click **HERE** to view list of thumbnail images, detailed images, and descriptions.

## **Phase 1 Inexpensive slide rules** (less than \$30, many less than \$15.)

There are many models available from the following makers and others. This is an abbreviated beginning list.

#### USA:

Dietzgen 1765P, 1771 RediRule, 1776 RediRule

K&E 4058 Student, 4053-3, 4081-3 Log Log Duplex Decitrig, 4181-1

Pickett N500ES, N600ES, N1010ES, 120

Post 1441, 1444, 1447, 1460 Versalog

Gilson Binary, Midget

#### Germany:

Aristo 0968 Studio, 0901 Junior, 0903 Scholar, 89 Rietz



Faber-Castell 1/87 Rietz, 2/82, 52/82

Nestler 11, 23R, 0210

#### Japan:

Hemmi 32, 34RK, 40, 45K

#### **United Kingdom:**

Thornton P271

Unique Universal 2&II, 5/10

#### France:

Graphoplex 612, 615, 620, 640

#### Phase 2 Medium priced, often more advanced slide rules (\$30 to \$100)

Aristo 0869 Studio Log, 0969 Studio Log, 0971 Hyperbolog

<u>Dietzgen N1725 Microline, 1734, 1741</u>

Faber-Castell 2/83N Novo Duplex, 8/10 circular

Faber-Castell with Addiator on back 1/87A + others

Gilson Atlas

Hemmi 149A, 255, 259

K&E 68 1100 Deci-Lon



Nestler 0130, 0232, 0291, 0292

Otis King (pocket cylindrical)

Post 1461 Pocket Versalog

Pickett N3pES, N4ES

Thornton AA010

Fowler, Halden, and other pocket watch slide rules

50 cm (20 inch) slide rules by various makers

#### **Phase 3** Higher priced scarcer slide rules (\$100 to \$250)

Aristo 0972 Hyperlog

Hemmi 257 Chemistry, 260, 266



K&E 68 1130 Pocket Deci-Lon, models with column cursor

Post 1451 pocket Versatrig, 1490 Frequency Response, 1491 Chemistry

Pickett X3, 110ES circular

Small (circular)

Fowler, Halden, and other pocket watch slide rules

Tavernier-Gravet and other 19th Century makers

50 cm (20 inch) slide rules by various makers

## Phase 4 High priced rare collector items (\$250 and up)

Charpentier Calculimetre (circular)

Dempster RotaRule (circular)

Faber-Castell 2/84 and 2/84N Mathema

Faber-Castell with electronic calculator on back TR1 + others

Fuller (cylindrical)

K&E 68-1400 Analon, 4160 Chemistry, Cox duplex

Loga, Nestler, Billeter and other cylindrical rules

Soho slide rule – by many makers

Thacher (cylindrical)



Lord's and other pocket watch slide rules

Historically significant slide rules

18th and 19th Century slide rules

50 cm (20 inch) slide rules by various makers

Click **HERE** to view list of thumbnail images, detailed images, and descriptions.