

instructions:
999 high voltage probe

for any:
VTVM
20K ohms/V
10K ohms/V
5K ohms/V
meter
at 10KV
30KV



**an
engineered
product**

changeable tips
mechanically—
shockproof
multi-insulation
swivel mount

PRECISE

RESISTOR SELECTION CHART FOR THE PRECISE MODEL 999 HIGH VOLTAGE PROBE

MANUFACTURER	MODEL NUMBER:	DESIRED RANGE: (IN KV)	REQUIRED RESISTOR: (IN MEGS)	SET METER TO:	MULTIPLY READINGS BY:	REQUIRED END CONNECTOR:	TYPE OF INSTRUMENT
Electronic Design	100	10 30	100 320	1000 "	10 30	Phone Plug "	VTVM
Electronic Inst. Co.	221 " 555	10 30 30	240 740 500	" " 5000	10 30 6	" " " " Pin "	" " 20K Ω /v
Electronic Mfg. Co.	100-110	15 30	265 540	600 "	25 50	Mike Conn. "	VTVM
E.M.C.	104 300	30 "	533.3 869	3000 1000	10 30	Pin Plug Phone "	20K Ω /v VTVM
General Electric	UM-2 YMW-1	30 "	500 580	5000 1000	6 30	Pin Plug " "	20K Ω /v "
Heath Co.	V1, V2, V2A & V4 V6	10 30 25	100 320 540	" " 500	10 30 50	Phone " " " " "	VTVM " "
Hickok	125 " 203 " 209 " 215 435 534 538	10 25 12 30 12 30 " 25 " "	81 216 82.4 218.2 82.4 218.2 249 400 " "	" " 1200 " " 5000 " " 5000 " "	10 25 10 25 10 25 " 5 " "	Pin Plug " " Mike Conn. " " " " " " Pin Plug " " " "	" " " " " " " 20K Ω /v " "
Jackson	645	10	109	1000	10	Mike Conn.	VTVM
Philco	7001	30	450	1000	30	Mike Conn.	VTVM
PRECISE	907 " 5 " 10 " 7.5 " 15 " 30 909 " 2.5 " 5 " 10 " 7.5 " 15 " 30	2.5 5 10 7.5 15 30 2.5 5 10 7.5 15 30	240 " " 740 " " 240 " " 740 " " "	250 500 1000 250 500 1000 250 500 1000 250 500 1000	10 " " 30 " " 10 " " 30 " " "	" "	" " " " " " " " " " " "
Precision	EV-10 EV-20 10-54 85 654 850 852 854 856 858 954	30 30 30 30 " 15 25 30 " " "	533.3 320 480 480 " 270 400 480 " " "	6000 1200 6000 6000 " 1500 5000 6000 " " "	5 25 5 5 " 10 5 " " " "	Pin Plug Mike Conn. Pin Plug Pin Plug " " " " " " " " " " " " "	" " 20K Ω 20K Ω /v " " " " " " "
R.C.A.	WV-65A " 30 WV-75A " 30 WV-77A WV-87A WV-95A " 30 WV-97A 162A " B " C " 12.5 " 25 165A " 30 170A 195A "	10 30 10 30 30 50 10 30 " 12.5 " 10 12.5 25 10 30 10 30 "	100 320 100 320 320 1090 100 320 " 1090 " 210 1090 540 100 320 991 91 291	1000 " 30 " 10 " 30 " 500 1000 " 30 " 125 " 500 125 500 1000 1000 100 1000 1000 1000	10 30 10 30 " 100 10 30 " 100 20 100 50 10 30 100 10 30	Mike Conn. " " " " " " " " " " " " " " " " Phone Plug " " " " " " Mike Conn. " "	VTVM " " " " " " " " " " 20K Ω 20K Ω /v " " "

MANUFACTURER	MODEL NUMBER:	DESIRED RANGE: (IN KV)	REQUIRED RESISTOR: (IN MEGS)	SET METER TO:	MULTIPLY READINGS BY:	REQUIRED END CONNECTOR:	TYPE OF INSTRUMENT
Radio City	345	30	740	1000	30	Phone Plug	VTVM
	461	25	400	5000	5	Pin "	20K Ω /v
	462	"	"	"	"	" "	"
	488A	30	480	6000	"	" "	"
	662A	"	641.3	"	5	" "	VTVM
	664	10	100	1000	10	Phone "	"
	"	30	320	"	30	" "	"
	665A	"	641.3	6000	5	Pin "	"
Reiner	668	"	"	"	"	" "	"
	451	10	100	1000	10	Phone "	"
	661	30	1090	300	100	" "	"
" "	"	10	"	100	"	" "	"
Roller-Smith	500	30	570	1500	20	Pin "	20K Ω /v
Simpson	221	30	594	300	100	" "	R.R.
	250	"	580	1000	30	" "	20K Ω /v
	260	25	400	5000	5	" "	"
	266	"	800	"	"	" "	VTVM
	277	30	580	1000	30	" "	20K Ω /v
	303	"	240	1200	25	Mike Conn.	VTVM
	445	25	400	5000	5	Pin Plug	20K Ω /v
	1005	"	"	"	"	" "	"
Supreme	562	10	135.9	1000	10	" "	VTVM
	"	30	437.9	"	30	" "	"
	567	25	400	5000	5	" "	20K Ω /v
	574	10	120	2500	4	" "	VTVM
	"	25	360	"	10	" "	"
" "	584	"	400	5000	5	" "	20K Ω /v
Sylvania	134Z	10	154	1000	10	" "	VTVM
	"	30	494	"	30	" "	"
Triplett	625NA	25	450	2500	10	" "	20K Ω /v
	630	30	480	6000	5	" "	"
	650	"	320	1200	25	" "	VTVM
	2405A	"	580	1000	30	" "	20K Ω /v
	2541	"	1090	300	100	" "	VTVM
	"	10	"	100	"	" "	"
Vomax	900	30	1225				VTVM
Weston	772	30	580	1000	30	" "	20K Ω /v
	779	"	"	"	"	" "	"
	785	"	"	"	"	" "	"

MULTIMETERS
GENERAL:

RANGE	FOR 30,000 VOLTS			FOR 10,000 VOLTS		
	5K Ω /v	10K Ω /v	20K Ω /v	5K Ω /v	10K Ω /v	20K Ω /v
1	148.75	297.5	595	49.5	99	198
2.5	"	"	"	"	"	"
3	"	"	"	"	"	"
4	"	"	"	"	"	"
5	"	"	"	"	"	"
100	"	"	"	"	"	"
250	"	"	"	"	"	"
500	"	"	"	47.5	95	190
1000	145	290	580	45	90	180
1500	142.5	285	570	42.5	85	170
2500	137.5	275	550	37.5	75	150
5000	125	250	500	25	50	100
6000	120	240	480	20	40	80

Resistors may be supplied to match practically any instrument with at least a 5K Ω /v input impedance. The voltage range may thereby be increased up through 30,000 volts. In special cases a slight delay may be necessary and/or a slight extra charge.

999 high voltage probe

The **PRECISE Model 999 High Voltage Probe** was designed for high voltage measurements with special emphasis on *safety, operational simplicity and rugged construction.*

This instrument more than accomplishes its purpose and is another example of *An Engineered Product* by **PRECISE.**

The **PRECISE** High Voltage Probe is the first in the industry to include any one or more of the following exclusive features:

- 1— Multiple Insulation:** At least three individual media must be penetrated before a voltage breakdown could occur. As an example, consider the path from the resistor to the outside wall: 1—the air insulation; 2—the plastic insulation; 3—another layer of air insulation and finally; 4—the outside plastic insulation must be penetrated. The possibilities of a voltage breakdown are very slight even when approaching voltages in the neighborhood of 100,000 volts.
- 2— Mechanically Shockproof Construction:** In order to protect the Ceramic high wattage multiplier resistor, a double spring suspension system is incorporated. Excellent electrical contact is insured by stainless steel springs while maintaining vertical and horizontal shock resistant characteristics.
- 3— Interchangeable Tips:** Two tips are supplied: one the conventional type for probing and the other, an alligator clip, for connecting permanently to the circuit.
- 4— Swivel Lead Connection:** A special fixed slip-ring arrangement is provided which prevents the test lead cable from snagging or developing high strains at the junctions of the cable and probe handle.

Multiplier Resistor Selection: The enclosed chart lists the resistors required for various instruments. If the instrument in question is not mentioned, please contact us, supplying the following information:

- 1—The name, type and model number of the instrument.
- 2—The voltage range desired.
- 3—The present voltage ranges of the instrument.
- 4—The DC input resistance both with and without the DC probe connected.

If all of the above information is not known send a schematic, if possible, which will aid us in locating the proper multiplier.

DC Connector: Inasmuch as the type of DC Connector required varies in different instruments, it was necessary to omit it with your probe. The proper connector is listed on the enclosed **PRECISE** chart and is also available at your jobber.

CAUTION: Every possible design consideration was made to safeguard the operator of this **PRECISE** High Voltage Probe and to further insure safe operation, we make the following suggestions:

- 1—Whenever you permanently attach the probe to a high voltage circuit make certain the power is off and the circuit has been properly discharged.
- 2—Dust and moisture being conductors, it is also suggested that the probe be kept clean and dry.
- 3—Never allow any part of your body to extend beyond the three flashguards provided.
- 4—Make certain your V.T.V.M. or multimeter is properly grounded.

Operation: 1—Remove the original DC test lead from the VTVM or Multimeter and substitute your **PRECISE** Model 999 High Voltage Probe.

2—Set the meter to the range shown on the enclosed chart.

3—Multiply all measurements shown on the meter scale by the Multiplying Factor also included on the enclosed chart.

If for any reason you are not completely satisfied with your probe, please write us and include your recommendations.

There are many other **Engineered Products** by **PRECISE** available in both Kit or Wired forms. Your jobber will be pleased to show them to you.

The **PRECISE DEVELOPMENT CORP.** cannot assume any liability for any accidents incurred: including misuse, careless handling or misinterpretation of instructions.

PRECISE DEVELOPMENT CORP. Oceanside, L. I., N. Y.