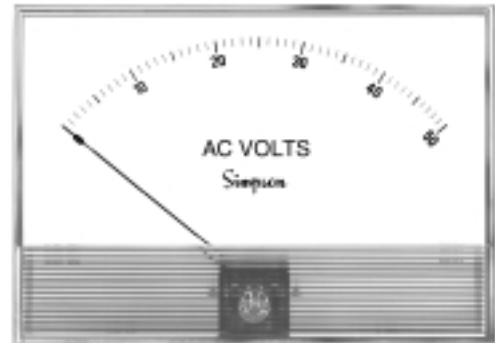




# AC Voltage

## True-View Style

- Clear, Acrylic Windows
- Optional Bezel Kits
- Special Colored Scales or Logos Available
- $\pm 2\%$  Full Scale Accuracy ( $\pm 3\%$  F.S. For Rectifier)
- Five Popular Sizes: 1-1/2", 2-1/2", 3-1/2", 4-1/2", and 4x6"



Model Number	Size	Meter Movement
941	1-1/2"	Rectifier
942	2-1/2"	Rectifier
943	3-1/2"	Rectifier
953	3-1/2"	Iron-Vane
944	4-1/2"	Rectifier
954	4-1/2"	Iron-Vane
946	4x6"	Rectifier

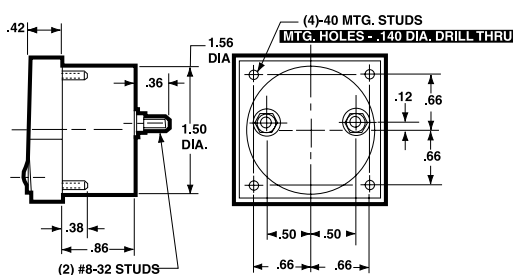
Simpson's Tru-View family of analog panel meters offers a modern, clear acrylic front lens, and a clean, open scale to update your panel design. Tru-View panel meters provide reliable measurement of AC volts with five popular sizes to choose from. Simpson AC meters measuring voltage inputs between 1 and 300 volts are self-contained units. Voltage inputs of 500 volts or higher must be used with an external multiplier. Iron-vane units have  $\pm 2\%$  full scale (F.S.) ( $\pm 3$  F.S.

for rectifier) accuracy and meet American National Standards Institute specification ANSI C39.1. Attractive black satin, die cast bezels are available in 3-1/2 and 4-1/2 inch sizes for behind-panel mounting. The movement construction provides excellent readability under severe conditions where shock and vibration would destroy or limit the life of a standard movement.

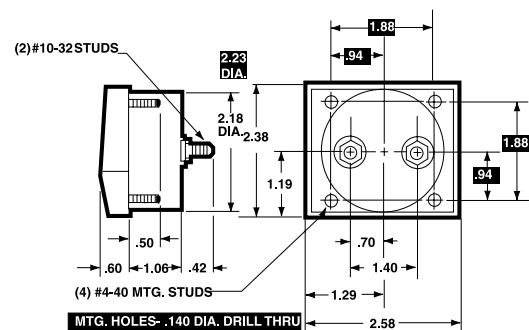
### Dimensions and Compatibility

1 = Panel Meter Cut-out Dimensions

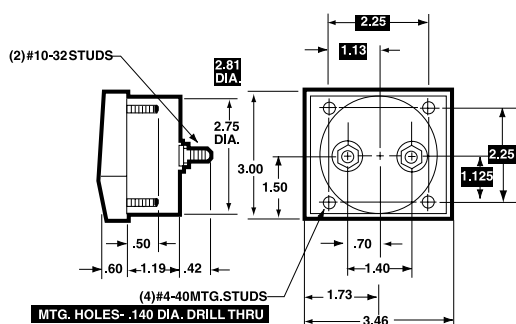
#### 1-1/2"-Model 941



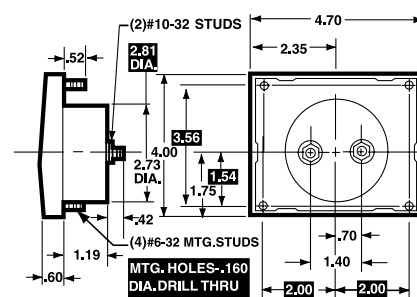
#### 2-1/2"-Model 942



#### 3-1/2"-Models 943 & 953

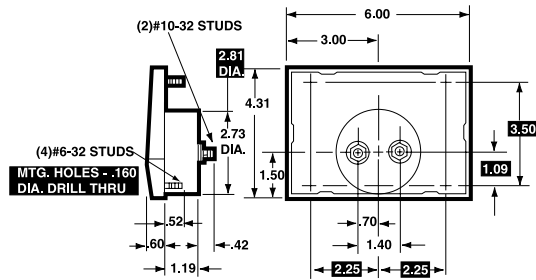


#### 4-1/2"-Model 944 & 954



## Dimensions and Compatibility (Cont'd)

### 4x6"-Models 926 & 946



## Compatibility Reference Table

Manufacturer	Size/Model		
	2-1/2"	3-1/2"	4-1/2"
Crompton			
Celebrity	223	225	227
Challenge	362	363	364
Clearvu	233	235	237
Hoyt			
3100	3126	3136	3146
Custom	2026	2036	2046
Window	3126W	3136W	3146W
Modutec			
S Series	2S-	3S-	4S-
PB Series	2PB*	3PB*	4PB
Triplett G Series	230-G	330-G	430-G
Weston 2000 Series	2024	2034	2044
Yokogawa Horizon	251-210	251-310	251-410

\*Modutec uses a three-stud mount.

## Specifications

**Accuracy:** ±2% F.S. (iron-vane), ±3% F.S. (rectifier)  
**Movement:** Models 941, 942, 943, 944, 946: Annular, rectifier  
Models 953, 954: Iron-vane, magnetically damped  
**Suspension:** Pivot and jewel  
**Tracking:** ±3%  
**Repeatability:** 2%  
**Shielding:** Calibration unaffected by stray magnetic field or mounting.  
**Response Time:** 1.5 seconds maximum

**Overload (1 sec.):** 10 times F.S.

**Overload**

**(Continuous):** 1.5 times F.S.

**Dial:** Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used.

**Operating**

**Temperature:** -4°F to +149°F (-20°C to +65°C)

**Resistance:** ± 15%

**Case:** Plastic

**Pointer:** Knife-edge, black finish

**Scale Length:** Model 941: 1.56" (39.62mm); Model 942: 2.40" (60.96mm)

Model 943: 3.27" (83.06mm); Model 953: 2.94" (74.68mm)

Model 944: 3.92" (99.57mm); Model 954: 3.53" (89.66mm)

Model 946: 5.45" (138.43mm)

**Net Weight:** Model 941: 1.5oz (0.04kg); Model 942: 4oz. (0.11kg)

Model 943 & 953: 6oz (0.17kg)

Models 944 & 954: 8oz (0.23kg)

Model 946: 12oz (0.34kg)

## Ordering Information

TV	SIZE	FUNCTION	RANGE	≈ ohms
1	1-1/2"	AVV	005	0-5 ACV 33
2	2-1/2"	AVV	010	0-10 ACV 133
3	3-1/2"	AVV	015	0-15 ACV 300
4	4-1/2"	AVV	025	0-25 ACV 833
6	4 x 6"	AVV	050	0-50 ACV 3333
		AVV	100	0-100 ACV 16666
		AVV	150	0-150 ACV 25000
		AVV	250	0-250 ACV 41166
		AVV	300	0-300 ACV 50000
		AVV	† 500	0-500 ACV 25000
		AVV	ITH	0-1000 ACV 25000
		RVV	001	0-1 ACV
		RVV	005	0-5 ACV
		RVV	010	0-10 ACV
		RVV	015	0-15 ACV
		RVV	020	0-20 ACV
		RVV	025	0-25 ACV
		RVV	050	0-50 ACV
		RVV	100	0-100 ACV
		RVV	150	0-150 ACV
		RVV	200	0-200 ACV
		RVV	250	0-250 ACV
		RVV	300	0-300 ACV

**Voltage Meter  
(Iron-Vane  
Movement)**

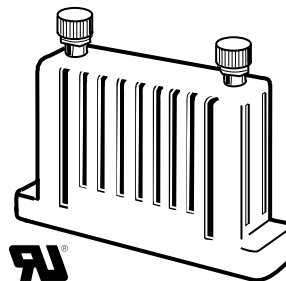
(Available in 3-1/2" &  
4-1/2" sizes only)

**Voltage Meter  
(Rectifier  
Movement)**

†External multipliers  
(not included), Model  
183, required with AC  
meters 500 volts or  
higher.

## Accessories

### Model 183 Multiplier



The Model 183 external multiplier enables an iron-vane voltage meter to monitor up to 1000 AC volts. An external multiplier is used with a 150 AC voltage meter that is scaled proportionally to your measurement range. Simpson's AC meters having a range of 500 volts or higher require the Model 183. Simpson's external multipliers are available for immediate delivery from your local distributor. Other intermediate ranges are available on special order.

### Ordering Information

#### AC Volts 166 Ohms/Volt

Range	Approx. Impedance (ohms) @ 60 Hz	Volt Drop	Meter Volt Drop	Catalog Number
0-500	58,333	350	150	08562
0-600	75,000	450	150	08563
0-750	100,000	600	150	08564
0-1000	141,666	850	150	08565

### Tru-View Bezel and Illumination Kits

Behind panel bezels are available for Tru-View style meters to give your equipment a modern appearance. Bezel kits include all mounting hardware and can be ordered with meters or separately. Illumination Kits are available for the 4-1/2" meters. The kit includes a pair of 6.3 volt bulbs, .25 amps. The bulbs are mounted above the meter, and are designed to be used with the bezel kits. The kit illuminates the meter for ease of reading in dark areas.

### Ordering Information

Model Number	Catalog Number
953 (3-1/2")	TV3BK
954 (4-1/2")	TV4BK
Illumination Kits	01165

## Function Reference Table

For your convenience, the table below lists Tru-View models for other electrical monitoring functions with page number reference.

Function	Section	Page
AC Current	E	13
DC Current	E	53
DC Voltage	E	73