

Figure 1.1 - Model 1991 Universal Timer/Counter

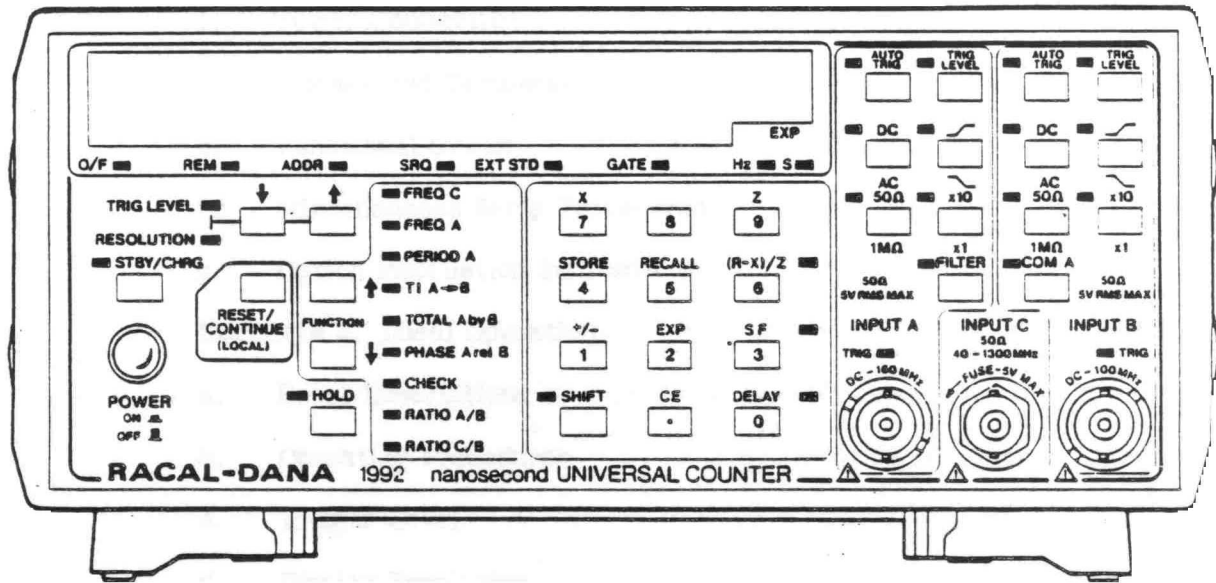


Figure 1.2 - Model 1992 Universal Timer/Counter

Table 1.1 - 1991/1992 Specifications

INPUT CHARACTERISTICS (MODEL 1991)	
Inputs A and B	
Frequency Range:	
Input A:	DC to 160 MHz DC-coupled 10 Hz to 160 MHz AC-coupled
Input B:	DC to 100 MHz DC-coupled 10 Hz to 100 MHz AC-coupled
Sensitivity:	
Sine Wave:	25 mV rms DC to 100 MHz 50 mV rms to 160 MHz
Pulse:	75 mV p-p, 5 ns min. width
Dynamic Range: (x1 attenuation)	75 mV to 5V p-p to 50 MHz 75 mV to 2.5V p-p to 100 MHz 150 mV to 2.5V p-p to 160 MHz
Signal Operating Range:	
x1 attenuation:	± 5.1V
x10 attenuation:	± 51V
Input Impedance (nominal): (x1 and x10 attenuation)	
Separate Mode:	50 ohms or 1 Megohm // ≤ 45 pF
Common Mode:	50 ohms or 1 Megohm // ≤ 55 pF
Maximum Input (without damage):	
50 ohms:	5V (DC + AC rms)
1 Megohm: (x1 attenuation)	260V (DC + AC rms), DC to 2 kHz Decreasing to 5V rms, at 100 kHz and above
1 Megohm: (x10 attenuation)	260V (DC + AC rms), DC to 20 kHz Decreasing to 50V rms at 100 kHz and above
Coupling:	AC or DC
Low Pass Filter:	50 kHz nominal (Input A selectable)
Trigger Slope:	+ve or -ve
Attenuator:	x1 or x10. In Auto Trigger mode, attenuator selected automatically if necessary

Table 1.1 - 1991/1992 Specifications (Cont'd)

Trigger Level Range:	
Manual:	
x1 attenuation:	± 5.1V in 20 mV steps
x10 attenuation:	± 51V in 200 mV steps
Automatic:	
	± 51V
Trigger Level Accuracy:	
Manual and Automatic:	
x1 attenuation:	± 30 mV ±1% of trigger level reading
x10 attenuation:	± 300 mV ±1% of trigger level reading
Auto Trigger:	
Frequency Range:	DC and 50 Hz to 100 MHz (Typically 160 MHz)
Min. Amplitude (AC):	Typically 150 mV p-p*
x10 attenuator	Automatically selected if input signal exceeds ± 5.1V or 5.1V p-p*
Trigger Level Outputs:	
(Rear Panel)	
Range:	± 5.1V
Accuracy (Relative to true trigger level)	
x1 attenuation:	± 1% V output ±10 mV
x10 attenuation:	± 1% V output ± 100 mV
Impedance:	10 kohm nominal
MODEL 1992: Specification for input characteristics is identical to that for the 1991 except for the following addition:	
<u>Input C</u>	
Frequency Range:	40 MHz to 1.3 GHz
Sensitivity:	
Sine Wave:	< 15 mV rms, 40 MHz to 1 GHz < 75 mV rms to 1.3 GHz
Dynamic Range:	
	15 mV rms to 5V rms to 1 GHz 75 mV rms to 5V rms to 1.3 GHz
Input Impedance:	50 ohms nominal AC-coupled
VSWR:	≤ 2:1 at 1 GHz
Maximum Input:	7V rms (fuse-protected) Fuse located in BNC connector
Damage Level:	2.5W

*See Definitions