

# Instructions

**Tektronix**

**067-1314-00**

**Calibration Head for 11800 and CSA 800 Series  
Digital Sampling Oscilloscopes**

**063-0318-00**

**Please check for change information at the rear  
of this manual.**

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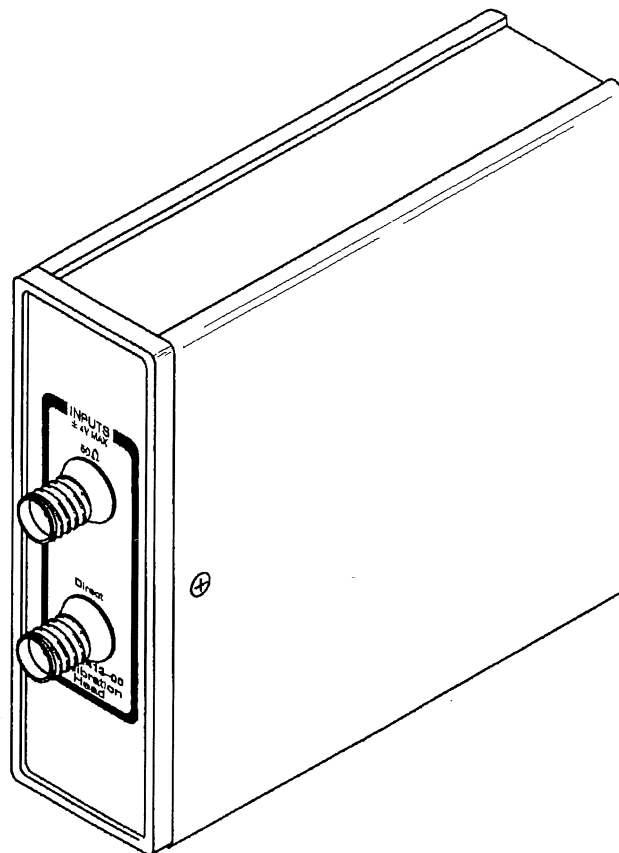
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## 067-1413-00 Calibration Head for 11800 and CSA 800 Series Digital Sampling Oscilloscopes



### PRODUCT DESCRIPTION

The 067-1413-00 Calibration Head is designed for installation in the sampling head compartment of both 11800 Series Digital Sampling Oscilloscopes and CSA 800 Series Communications Signal Analyzers. The calibration head is used primarily to check the accuracy of vertical gain and DC offset settings during servicing of these instruments. Inputs on the front panel are designed to accept direct or 50  $\Omega$  terminated connections from a precision voltage source.

Full descriptions of calibration applications are contained in the 11800 and CSA Service Reference manuals. This item is designed as a non-serviceable product. No calibration or adjustment is necessary. If the item becomes defective for any reason, a product re-order will be necessary.

Note that insertion of the calibration head will cause an initial time base error indication. To clear this, exit diagnostics. You will then see a message indicating that a time base calibration failed. This message may be ignored. System identification of the calibration head can be achieved by pressing the UTILITY button and selecting the Identify pop-up menu. The resulting data should indicate "-1413" followed by the unit serial number.

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# Specifications

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## *Electrical Characteristics*

<b>Characteristic</b>	<b>Performance Requirement</b>
Maximum Signal/DC Voltage	$\pm 4$ V
Input Resistance	1. $50 \Omega \pm 0.5 \Omega$ 2. Direct – Typically $> 1 \text{ M}\Omega$

## *Mechanical and Environmental Characteristics*

<b>Characteristic</b>	<b>Performance Requirement</b>
Module Size	
Height	71.05 mm (2.9 in)
Width	23.28 mm (0.95 in)
Depth	91.39 mm (3.8 in)
Module Weight	314 grams (11 oz)
Ambient Temperature	
Operating	0° to 50° C (32° to 122° F)
Non-Operating	-40° to 75° C (-40° to 167° F)

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# Verification Procedures

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## Equipment Required

- 11801, 11802, or CSA 803 Mainframe
- DMM, 3<sup>1</sup>/<sub>2</sub> digit min.
- Test Leads for DMM

## Procedure

- Step 1: Connect DMM leads to center contact and ground of the 50  $\Omega$  input.
- Step 2: *Check* that input resistance is between the limits of 49.5  $\Omega$  and 50.5  $\Omega$ .
- Step 3: Connect DMM leads to center contact of the 50  $\Omega$  input and pin 20 of the rear connector.
- Step 4: *Check* for continuity.
- Step 5: Connect DMM leads to center contact of DIRECT input and pin 29 of the rear connector.
- Step 6: *Check* for continuity.
- Step 7: Install the Calibration Head into one of the sampling head compartments of the mainframe.
- Step 8: Turn the mainframe on. Note that error reports in the Self Test and Extended Diagnostics (time base error; missing strobe sense), are normal for this operation.
- Step 9: Exit diagnostics and go to the UTILITIES major menu. Press **Identify**.
- Step 10: *Check* that the slot with the Calibration Head in it, is identified as "-1413", followed by a serial number.

