## 5 CALIBRATION ADJUSTMENT PROCEDURE

## 5.1 GENERAL INFORMATION

The following information provides the complete Calibration Adjustment Procedure for the ScopeMeter. Because various control functions are interdependent, a certain order of adjustment is necessary. The procedure is therefore presented in a sequence that is best suited to this order. Before you make calibration adjustments, always use the Performance Verification Procedure in chapter 4 to check the ScopeMeter performance.

The Calibration Adjustment Procedure, described here, consists of the following three parts:

- CONTRAST Calibration Adjustment Procedure
- SCOPE Calibration Adjustment Procedure
- METER Calibration Adjustment Procedure

Almost all Calibration Adjustments can be done without opening the instrument. Only the first four steps of the SCOPE Calibration Adjustment Procedure require disassembling of the ScopeMeter (see section 5.6.1).

NOTE: Every year use the Performance Verification Procedure in chapter 4 to check the ScopeMeter. If the ScopeMeter fails the Performance Verification Procedure, Calibration Adjustments must be made. If the ScopeMeter also fails the Calibration Adjustment Procedure, repair is necessary (see chapter 7). (After repair, it is sometimes also necessary to do also a Hardware Calibration Adjustment, see section 5.6.1)

Sections 5.5, 5.6 and 5.7 describe the calibration process in detail. Section 5.8 contains a summary of all calibration adjustments as a reference for more frequent users.

## 5.2 RECOMMENDED CALIBRATION ADJUSTMENT EQUIPMENT

The equipment recommended for the Calibration Adjustment Procedure is listed in table 5.1.

All calibration adjustments must be done in ambient temperatures between 18  $^{\circ}$ C and 28  $^{\circ}$ C. The ScopeMeter can be used immediately: there is no warm-up time specified.

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Instrument Type	Recommended Model
Multifunction Calibrator	Fluke 5100B
Square Wave Calibration Generator	Tektronix PG 506
Function Generator	Philips PM 5134
*) Personal Computer	Any IBM compatible PC, running MS-DOS
*) Optical to RS-232 Interface Cable	PM9080/001
*) Flash ROM Refresh software	Contact your Service Center
*) +12V (± 2.5%) Programming voltage	

<sup>\*)</sup> These items are required after two or three calibrations, see note paragraph 5.3, page 5.3 for details.