

## Instrument Security Procedures

**Model:**

Fluke 192B, Fluke 196B, Fluke 199B, Fluke 192C, Fluke 196C, Fluke 199C,  
Fluke 215C, Fluke 225C

**Product Name:**

190B and 190C Series ScopeMeter

**Instrument Description:**

High-performance Oscilloscopes

**Memory Description:**

The 190B/C series ScopeMeter Test Tools have the following memory devices:

1. D3500 Controller “Spider”. This contains a mask ROM 4kx32 with a initial program with the operating code for the product and a RAM 1kx32 to temporarily store stack values for computing actions.
2. D3502 SRAM 512k x 8 or 256k x 16 - SRAM memory to store:
  - the actual screen and instrument setup
  - saved screens and instrument setups
3. D3503 SRAM 512k x 8 - SRAM memory to store:
  - the actual screen and instrument setup
  - saved screens and instrument setups
4. A201 module with the following memory devices:
  - D101, D202 : 1M x 16 Flash EEPROM or D101, D202 : 512k x 16 Flash EEPROM.  
  
Non-volatile memory used to store operating code (instrument firmware) for the product, and to store calibration constants.
  - D201, D202 : 256k x 16 SRAM - SRAM memory to store:
    - the actual screen and instrument setup
    - saved screens and instrument setups

## Security Summary:

The operating code (instrument firmware) stored in D101-D102 on the A201 module can be read using special remote interface commands. The instrument firmware can be loaded using a dedicated Fluke software program.

Calibration constants stored in D101-D102 on the A201 module can be read using special remote interface commands. The calibration constants are generated when the meter is sent through its calibration process and are fundamental to the test tool operation.

## Memory Cleaning Instructions:

The procedure to clear all saved screens and instrument set-ups differs per the firmware version held in the ScopeMeter Test Tool. The version can be read by pressing 'USER', then 'F3 = VERSION & CAL'.

Firmware releases up to and including V6.xx	Firmware release V7.00 and beyond
<ol style="list-style-type: none"><li>1. Press the SAVE_PRINT button</li><li>2. Push the softkey F1 = SAVE</li><li>3. Push the softkey F3 = DELETE ALL</li><li>4. Press the softkey F4 = YES</li></ol>	<ol style="list-style-type: none"><li>1. Press the USER key</li><li>2. Press F1 = OPTIONS</li><li>3. Move the cursor to the field 'Factory Default'</li><li>4. Press F4 = ENTER to confirm this selection</li><li>5. Press F4 = YES</li></ol>
<p>The effectiveness of either of these procedures can be verified by checking the status of the memories:</p> <ol style="list-style-type: none"><li>1. Press the SAVE_PRINT button</li><li>2. Press F1 = SAVE</li></ol> <p>The memory contents will show as '0 memory locations used' or with all memory number fields unfilled, confirming that all memories have been erased as intended.</p>	

For all instrument versions mentioned and independent of the firmware release that is installed, the test tool will also lose all data stored in SRAM in case the instrument is not powered through its Power Adapter/Battery Charger and the battery is removed for 10 minutes or longer.