



8000-Series Sampling Oscilloscope Optical Modules Technical Report

Date: August 10, 2011

Subject: Memory Erasure for 80C01, 80C02, 80C07B, 80C08C, 80C10, 80C10B, 80C25GBE, 80C11, 80C12, and 80C14 (including all options for each module type)

Turn power off for at least 20 seconds to clear volatile memory.

The non-volatile memory in these products contains no waveform data.

The non-volatile memory in these products contains a single user storable instrument parameter – User Wavelength(s), composed of both a wavelength value and an associated scale factor value. Restoration to factory defaults is only necessary if either of the values have been altered from their factory defaults.

The following procedure provides instructions on how to check to see if the values have been altered from their factory defaults. This procedure requires the use of one of the programmable interfaces to the instrument (e.g. GPIB) and the use of programmable interface commands. Connectivity and programmability information is provided within the on-line Help of the oscilloscope application.

To Check Module for Factory Default Settings:

1. Power down the instrument and insert the optical module into the upper left large slot. Note: the upper right large slot may also be used, adjusting the channel parameter in the table below appropriately for the mainframe in which the module resides, i.e. within an 8000 or 8000B mainframe, the upper right slot is CH2, whereas for the 8200 or 8300 mainframe, it is CH3.
2. Power up the instrument and wait for the oscilloscope application to become active.
3. From the table below for the applicable module(s), send each of the programmable interface query commands to the instrument and verify that each returned response matches the listed factory default User Wavelength or User Wavelength scale.

Optical Module User Wavelength Table (Factory Defaults) – Query Commands

Module Type (all options)	Programmable Interface Query Commands	User Wavelength (factory default)	User Wavelength Scale (factory default)
80C01	TEKPHW:CH1:LONG? "OPTWAVEL",2 TEKPHW:CH1:DOUBLE? "OPTSCALE",2	1000	18
80C02	TEKPHW:CH1:LONG? "OPTWAVEL",2 TEKPHW:CH1 DOUBLE? "OPTSCALE",2	1000	18
80C07B	TEKPHW:CH1:LONG? "OPTWAVEL",4 TEKPHW:CH1:DOUBLE? "OPTSCALE",4	1550	780
80C08C	TEKPHW:CH1:LONG? "OPTWAVEL",4 TEKPHW:CH1:DOUBLE? "OPTSCALE",4	1550	315
80C10, 80C10B, 80C25GBE	TEKPHW:CH1:LONG? "OPTWAVEL",1 TEKPHW:CH1:DOUBLE? "OPTSCALE",1 TEKPHW:CH1:LONG? "OPTWAVEL",3 TEKPHW:CH1:DOUBLE? "OPTSCALE",3	1550 1310	15 10
80C11	TEKPHW:CH1:LONG? "OPTWAVEL",2 TEKPHW:CH1:DOUBLE? "OPTSCALE",2	1550	30
80C12	TEKPHW:CH1:LONG? "OPTWAVEL",3	1550	



Module Type (all options)	Programmable Interface Query Commands	User Wavelength (factory default)	User Wavelength Scale (factory default)
	TEKPHW:CH1:DOUBLE? "OPTSCALE",3		315
80C14	TEKPHW:CH1:LONG? "OPTWAVEL",3 TEKPHW:CH1:DOUBLE? "OPTSCALE",3	1550	425

The following procedure provides instructions on how to restore values that have been altered from their factory defaults. It is recommended that the check procedure above be performed first so that the restoration procedure is only performed when necessary in order to reduce risk of accidental corruption of calibration data in the module. This procedure requires the use of one of the programmable interfaces to the instrument (e.g. GPIB) and the use of programmable interface commands. Connectivity and programmability information is provided within the on-line Help of the oscilloscope application.

To Restore Module to Factory Default Settings:

1. Power down the instrument and insert the optical module into the upper left large slot. Note: the upper right large slot may also be used, adjusting the channel parameter in the table below appropriately for the mainframe in which the module resides, i.e. within an 8000 or 8000B mainframe, the upper right slot is CH2, whereas for the 8200 or 8300 mainframe, it is CH3.
2. Power up the instrument and wait for the oscilloscope application to become active.
3. From the table below for the applicable module(s), send each of the programmable interface commands to the instrument.
4. After all commands for all applicable modules have been issued to the instrument, send the command TEKPHW:CH1:EEPROMUPDT to the instrument. Wait at least 30 seconds before performing any other instrument command or operation (including powering off the instrument).

Optical Module User Wavelength Table (Factory Defaults) – Restore Commands

Module Type (all options)	Programmable Interface Commands
80C01	TEKPHW:CH1:LONG "OPTWAVEL",2,1000 TEKPHW:CH1:DOUBLE "OPTSCALE",2,18
80C02	TEKPHW:CH1:LONG "OPTWAVEL",2,1000 TEKPHW:CH1:DOUBLE "OPTSCALE",2,18
80C07B	TEKPHW:CH1:LONG "OPTWAVEL",4,1550 TEKPHW:CH1:DOUBLE "OPTSCALE",4,780
80C08C	TEKPHW:CH1:LONG "OPTWAVEL",4,1550 TEKPHW:CH1:DOUBLE "OPTSCALE",4,315
80C10, 80C10B, 80C25GBE	TEKPHW:CH1:LONG "OPTWAVEL",1,1550 TEKPHW:CH1:DOUBLE "OPTSCALE",1,15 TEKPHW:CH1:LONG "OPTWAVEL",3,1310 TEKPHW:CH1:DOUBLE "OPTSCALE",3,10
80C11	TEKPHW:CH1:LONG "OPTWAVEL",2,1550 TEKPHW:CH1:DOUBLE "OPTSCALE",2,30
80C12	TEKPHW:CH1:LONG "OPTWAVEL",3,1550 TEKPHW:CH1:DOUBLE "OPTSCALE",3,315
80C14	TEKPHW:CH1:LONG "OPTWAVEL",3,1550 TEKPHW:CH1:DOUBLE "OPTSCALE",3,425

If you have any questions, contact the Tektronix Technical Support Center at 1-800-833-9200.