

Channel Master Clock Default

Date: March 15, 2006

Abstract

A power failure can reset the Channel Master clock to the default value of January 1, 2004. This can possibly cause a CS command to not start data collection.

Instrument/Program Affected

Channel Master with Product version 2.05

Description

After the power has been removed from the Channel Master for some period of time, the clock may reset back to the default time of January 1, 2004. The TF command (Time of First Ping) will also be reset. If this happens, these times must be initialized with the TS and TF commands.

If you issue a TF command without correctly setting the Real-time clock with a TS command, the Channel Master may wait a very long time (possibly months) before beginning to ping after a CS command is sent. This time delay is due to the difference in time between the TF value and the clock value being so large. For example, if the current date is March 15, 2006, then the difference in time would be approximately 27 months (March 2006 minus January 2004).

There is also an issue of data collection not starting if you do not use the TF command, but simply send a CS command. The problem is caused by the TF command not being set to a value.

Solution/Action

1. If you have access to the Channel Master unit, download and install the Channel Master Product version CM02.06 firmware. This corrects a problem with the TF command. With the fix, the Channel Master will ping immediately on receiving a CS command unless:
 - The TF command is explicitly set to a future date; or
 - SDI-12 communication protocol is being used.
2. If the Channel Master Product Version CM02.05 is still being used, do the following each time data collection is started.
 - Set the Channel Master clock to the correct time with a TS command.
 - Set the Time of First Ping to the same time (or a desired start time) with a TF command.