



## Using the COM300/310 Voice Modem with MultiLogger

### Application Note #16

#### Overview

The COM3xx series modems manufactured by Campbell Scientific enable voice capable Campbell dataloggers, such as the CR510, CR10X and CR23X, to use the telephone to announce data stored in Input Locations, the status of control ports and the status of user flags. The COM3xx series modems also support data communications so MultiLogger can be used for data collection, monitoring and program updates. **Note: You will need MultiLogger v3.0.3 or higher to use the COM3xx Voice Modems.**

There are 3 steps to configuring the COM3xx for use in your system:

- First, use MultiLogger to finalize the system configuration, this includes configuration of all multiplexers, channels, the measurement interval, the storage interval and the alarm action.
- Second, use Campbells LoggerTalk to modify the program created by MultiLogger to include the modem programming.
- Third, download the modified program to program the datalogger.

#### MultiLogger Configuration

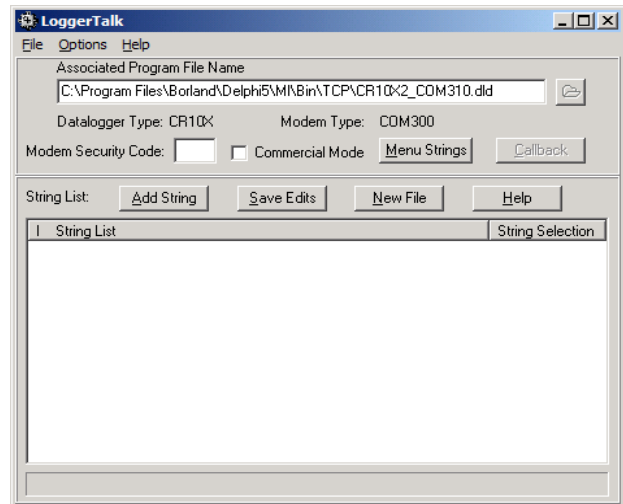
Note on the Logger form the **Download File** name on the Configuration tab, an example is shown below.

By default the **Download File** name matches the Configuration File root name, as shown CR10X2.dld shares the same root name as CR10X2.cfg. When the Start/Update button is pressed the Download File is downloaded to the system to program it based on the various configuration options. Please see the MultiLogger User's Guide for more information on the programming options. When the configuration is complete press the Info button, this will re-generate the Download File. Locate this file in your Project Path and rename it, use COM300 or COM310 as a suffix to help identify it.

## LoggerTalk Configuration

Now the voice modem programming must be finalized. Use the Campbell Scientific software LoggerTalk to do this. Note when starting LoggerTalk the edit for Associated Program File Name, use the file open button on the right to browse to and select the **Download File** created and then renamed in the previous step, the example name is shown in the edit.

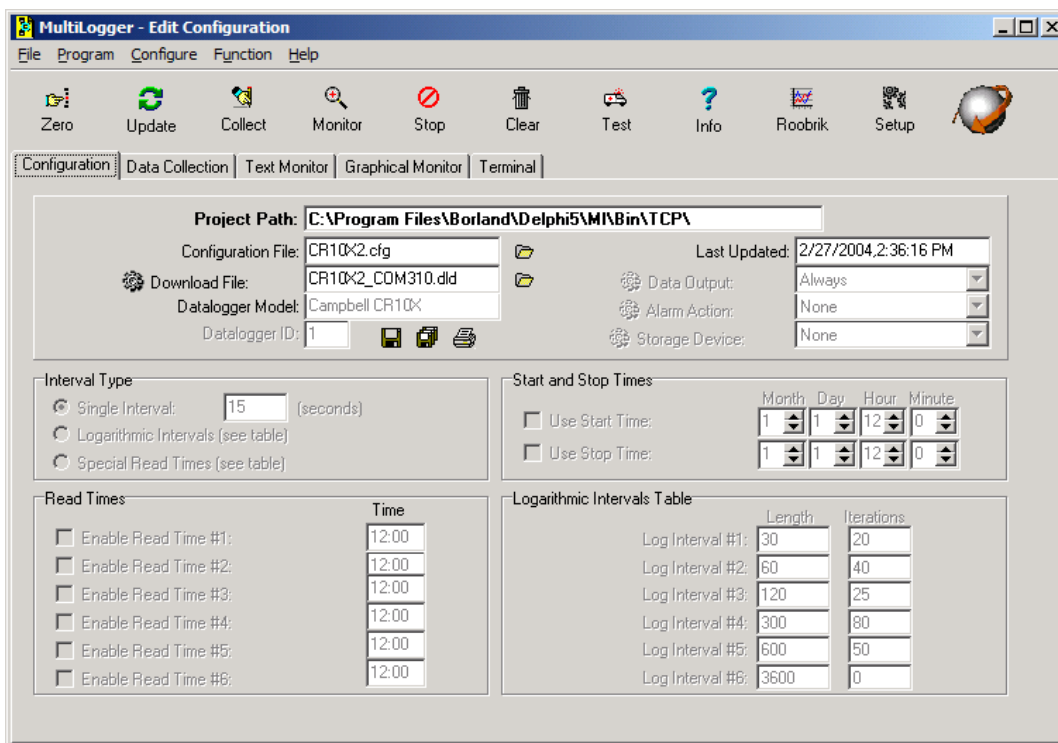
Configure all the prompts and greetings and then save your changes. See the Campbell COM300 or COM310 Voice Communications Modem Instruction Manual for more information on using LoggerTalk.



Note: If you would like the Input Storage labels to be shown in LoggerTalk for referencing Input Storage locations then prior to generating the program in the previous step you must check the MultiLogger option **Program | Advanced | Output Labels to DLD**.

## Program Download

The third step involves downloading the modified program. This will program the system based on the MultiLogger measurement configuration and the LoggerTalk configuration. To do this you will need to change the name of the **Download File** shown on the Configuration tab to the name that you have selected in the first step, see the example below.



Now press Start/Update to download the program. This programming can be done over the phone line as well, see the following section for an important detail regarding this feature.

Note: When the Download File does NOT match the configuration file root name MultiLogger assumes that it does not need to manage the Download File, this also means certain functions will not be available, such as the Zero mode and any options related to the system programming, such are found on the Configuration tab and from the Program drop-down menu. To change the measurement programming you will need to change the Download File back to the original name and repeat steps 1-3.

### **Data Communications**

To use the COM3xx voice modems for data communications you must put the modem into “data” modem after making the connection, this is done by sending a “9” (the equivalent of pushing the 9 button on your handset) during the voice announcement. Precede the “9” with commas to provide proper time spacing, each comma usually (it depends on the modem being used) represents about 2 seconds of delay. You will need to test various delay configurations to obtain the proper delay for your connection. The screenshot below illustrates using the COM3xx in Data mode.

