BDS Firmware Release Notes

Version 2.13   BDS Controller

– Changed time out during resistance test to accommodate extended cool down times during resistance averaging testing.

Version 2.12   BDS Controller

 – Added support for float current.
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Version 2.11   BDS Controller

– An alarm event queue has been changed from one event to sixteen events. This eliminates multiple calls to the central PC if multiple alarms occur at the same time.

– Manual or automatic resistance test is disabled if a discharge occurs.

– The firmware upgrade protocol now supports old and new protocols, so now it does not matter which protocol is running in the DCM when performing a DCM firmware upgrade.

– Controller no longer requires reboots after setting up the system to obtain correct battery status. In previous versions, it was possible to get the wrong string status after setting up a new string because some of the status registers were not being cleared on power up.

– Can now enter diagnostics before any strings are set up. This allows the DCM addressing to be checked during commissioning of system before setting up strings.

– Improved speed of diagnostics by checking only the string being viewed. Previously, data was polled for all strings even though it was not being viewed.

– Eliminated some DCM communication errors during diagnostics.

– Improved Telco multiplexer operation when using modem combinations. Previously, alarms events would not get reported properly or the telephone connection would disconnect prematurely. The Telco multiplexer must have the firmware upgraded to version 1.04 or later.

– When accessing different strings on a controller via a network connection, it was possible to get the wrong readings on the PC. This no longer occurs.

– Added discharge summary for up to 40 discharges. This allows the PC to poll for discharge data and compare to see if it already exists in database. This increases the speed when auto extracting data during auto polling and eliminates multiple discharges being stored in database.

– No longer get "not responding" status if multiple PC's were connected to the same controller. Specific conditions would have to take place for this to occur.

– Dial out attempts have been increased from three to sixteen times. This was done in case multiple alarms occur on large systems using multiplexers.

– When clearing alarms, all the control outputs will not be cleared. Only the control outputs assigned to the string that is being reset will be cleared.

– All alarm events are now cleared when the reset alarm function is used.

– Added support for an alternate modem. Controller PCB must be revision B or later.

– Now supports internal network cards. DIP switch 1/pos 5 (bit 4) is used to identify if an internal network card is installed. When this switch is off, the card is installed. This changes the data byte structure when communicating to COM3 to 8, N, 1 instead of 7, N, 2.

– Now supports netmask and gateway setup for WAN operation.

– A telephone number is no longer required under the battery setup for the alarm events to be reported during polling from a PC.

– If controller is connected via the Telco line and no communications occur over a period of time, the controller automatically hangs up. Previously, it was possible for the controller to stay off hook if software did not initiate hang up. This could occur if the Telco link became broken.

– During a resistance test, the communication errors no longer accumulate. Previously, if a PC was auto polling during this time, the string status indicated DCM communication errors.

– Added support for Monitor Load Control Option.

– Controller no longer loses communications due to a wrong frame received.

Version 2.01

– Disable DCM communication interrupt during automatic resistance test.

– Implemented new communications protocol between Controller and DCM's. This will improve the reliability of the communications.

– Extend Resistance test waiting time from 10 minutes to 20 minutes. This is to allow larger systems to complete the resistance if performing an averaging test.

Version 1.23

– Intertier assignments no longer duplicate themselves to unassigned intertiers when sending battery setup to the controller.

– After a discharge occurred, the ending time always advanced one month. This no longer occurs.

Version 1.22

– If an alarm is latched, the parameter is no longer checked for alarms until the alarm is reset.

– On BDS systems, it was possible for the cell voltages to become frozen on the display. The display now always updates.

– It was possible to get duplicate discharges stored in the controller memory on BDS systems. This is now resolved.

– Resistance test no longer can get corrupted in Controller memory on large UPS systems. When getting resistance data from the controller and more than one test exists in memory, it was possible to get corrupted data with a date of 1899. This would occur when the total cell number was greater than a certain number (around 100).

– Controller no longer stops scanning the rest of the DCMs if it finds the total cell number of current DCM is zero. This occurred when a Check Settings was performed and the DCM did not respond. During the Check Setting request, it will overwrite the DCM configuration in the controller with the information received from the DCM. If the DCM did not respond, it will overwrite controller information with 0's, causing the configuration to change without notice.

– In last release, the ability to dial out through a multiplexer was broken. This now works properly.

– If no phone number exists in the Battery Setup for BDS controllers, it will not attempt to call out.

Version 1.20

– Cell voltage and OV discharge thresholds now work for detecting problem discharges.

– Modem diagnostics are now performed on power up. This checks for response of modem.

– A separate command is now in place for battery setup and calibration. It is no longer required to disconnect fiber optics from controller when initially setting up a controller.

– Implemented new method for confirming firmware upgrade to Controller was successful.

– The Alarm Events under Current Alarms now get cleared when the Alarm Reset button is pressed.

– Selecting DIP switch 1, position 3 in the off position disables checking of alarms, discharge and dial out. This will eventually be tied to a key switch on the front panel of the controller to allow global disable of these functions during a maintenance interval.

– Up to 16 digital inputs are now supported with optional Digital I/O interface. Older controllers may need an update for this feature to work.

– Up to eight control outputs are now supported with the optional digital I/O interface. Older controllers may need an update for this feature to work.

– Warning status is now reported to software for displaying in Historical Events.

– Previously, scanning would not resume after a resistance test was performed in Diagnostic mode (one individual DCM). Now releases Diagnostic mode after this test.

– If Historical tests are set for the same time interval on multiple strings, the data would not be stored. This is now resolved.

– If controller does not call out on alarm successfully on the first time, it will attempt up to three times before stopping.

– Sometimes the String View screen would not update. This was due to the Controller getting stuck in a calibration or diagnostic mode.

– When calibrating cell voltage, the actual cell voltage selected was one higher. For example, if Cell 1 was selected, Cell 2 was actually selected.

– Selecting DIP switch 1, position 2 to the off position now completely clears all parameters for DCM setups in the controller when rebooting. This previously only cleared total cell number.

– Self tests on DCM's now reflect proper status when no DCM's are connected.

– After a discharge, the Critical Alarm LED will flash, indicating the data is being transferred from the DCM's to the Controller.

– The Get button will not become active prematurely when doing a resistance test.

– Modem diagnostics are now performed on power up. This checks for dial tone.

– The % of warning for resistance alarms is now functioning

– A string number can now be defined to identify which string will trigger a control output. This is defined under Battery Setup for String ID 1.

– Current alarms are now cleared on power up and when alarms are disabled.