

Release notes for CANCAB version 2d

These notes document changes not yet included in the DCC system Technical Bulletin

I have made the following changes to the MERG DCC cab firmware written by Mike Bolton:

Version 2d:

As with the previous release, there are no operational changes but there are further internal changes in connection with multiple language support. Use this version or later if you are downloading standalone language files via FCU.

The only functional change is that if you press Prog twice with no loco selected, you enter a test mode where you can step through all of the messages by repeatedly pressing Prog. To exit this mode press loco.

Version 2c:

This version is functionally the same as version 2b, but has internal changes to support different languages for the messages on the LCD. See the comments at the top of the source file for details of the internal changes.

Version 2b:

1. Fixed bug (introduced with 2a) that after carrying out a service mode read, the display shows "Prog" although it is correctly still in read mode – now shows read correctly
2. With no loco selected, if a cab receives emergency stop all, it displays "STOP ALL". In previous versions, if you moved the knob, the display would go blank (although still waiting for a loco to be entered). It now returns to the loco prompt.

Version 2a:

1. When selecting service mode programming, the initial default is now read CV rather than prog as before, toggle between Read and Prog using the CV R/W button.
2. Version 2a now reports node parameters (module type and version number) to Roger Healey's FLiM configuration utility.
3. Version 2a now supports reprogramming the PIC via the CBUS from Roger Healey's FLiM configuration utility.

Compatibility

Version 2b will run with earlier versions of the command station firmware, including version `cancmd_j` uploaded in Sep 2010.

However, a train that you have released whilst running from the cab will only be stopped by the "emergency stop all trains" if you are running command station revision p (`cancmd_p`) or later.

If you are also using JMRI controlled trains with your `cancmd`, then you need to be running command station revision p (`cancmd_p`) or later with JMRI version 2.11.2 or later for full emergency stop all functionality. This affects trains controlled by JMRI on screen throttles, withrottles and script controlled trains.

If you find that, when you press "Stop!" twice on a `cancab`, JMRI trains decelerate to a stop (rather than immediately emergency stopping) and/or the stopped trains immediately start moving again, then you need to update JMRI and the command station firmware as described above.

You can also create an “emergency stop all” button on a JMRI panel, by having it issue the CBUS “Request stop all” packet. Trains controlled by cancabs will stop correctly in response to such a command issued from JMRI.

To be able to read node parameters and re-program the cab PIC using Roger Healeys FliM configuration utility (FCU), you need FCU version 1.3.3.3 or later.

It is known that to successfully program Tsunami decoders in service mode, you require command station firmware cancmd3b or later.

Apart from the changes I have made to implement the new features, the remainder of the code remains as written by Mike Bolton.

Pete Brownlow, 2nd May 2011.