

# **Err-lectronics** Corrections, Updates and Feedback to published articles

## BL600-eBoB (1)

### Elektor 2/2015, p. 42 (140270)

UPDATE. The manufacturer of the Laird BL600 Bluetooth Low Energy Module which was featured in the original March & April 2015 article has since updated its software (firmware and libraries). Unfortunately the earlier version seems to be no longer available. The example given in the 2015 article was based on version 1.5.7.0 revision 5 of the firmware and its associated libraries. It could be that this example is not compatible with the latest version of the firmware and its libraries. In any case, it is important to use only the library that matches the BL600 firmware and revision version. If you see a 'BL600: Cross Compiler not found' error message, your module firmware and downloaded library are not compatible.

The AT commands for identifying the firmware and revision of the BL600 (first connect the module via the serial interface to the PC) are:

• firmware: AT I 3<Enter>

• revision: AT I 0<Enter>

See the 'eBoB BL600 (2)' (www.elektormagazine.com/150014) article for further information on the firmware.



## Welcome to the Share section

Elektor 1/2017, p. 114 (160252)

In this piece Elektor Netherlands editor Thijs Beckers wondered why the "polarity" of the AC line connection to a hot water boiler should be important. This generated lots of feedback for which we are grateful! Below is a selection.

Readers should be aware that 230 VAC line outlets in Holland are earthed in wet rooms, or non-earthed in dry rooms. Neither type is polarized, i.e. the connection of the Live (L) and Neutral (N) pins in the outlet is not regulated. The Protective Earth (PE) pins are connected to a local earthing pin and to central earth at the power station and/or the substation.

FEEDBACK. The Live and Neutral connections are important when a single-pole switch is used to switch equipment on and off. One example I have noticed, with fluorescent tubes. The ballast is a sort of auto-transformer wired in series with the filaments at either end of the tube. When the on/off switch is in the Neutral wire the filament is at AC mains potential even when switched off and this voltage is sometimes sufficient to cause a low-level glow discharge in the gas around the filament to the earthed fitting. With the switch in the Live wire, the filament will be at AC neutral potential which is much closer to earth and no discharge or glow is visible.

#### Lothar Freißmann, Germany

FEEDBACK. The problem is probably caused by electrolysis. There is always some DC component on the (AC) power line and this causes deposits to form on electrodes which can be remedied to a certain extent by grounding the device. Reversing the plug reverses this effect; but deposits will then be formed on the other electrode in the heater. I have a similar problem here in Canada, namely a buildup of lime scale in my instantaneous water heater. Running a solution of vinegar through the pipe work for a couple of hours is effective in removing the lime scale. To make the