

Setting BIOS configuration after battery failure on FW Bell 8000 Series Gaussmeters

If the CMOS battery on the Single Board Computer (SBC) is drained several BIOS settings will be lost. This may result in a blank white screen at power-on or perhaps other error messages if the CAN bus settings are corrupted or lost. Setting the BIOS requires an adapter cable to connect a standard computer monitor with 15 pin high density D-sub connector to the 14 pin header J14 on the SBC. This adapter cable is AAEON p/n 1701160201 and may be obtained from the TF-PER-K004 cable kit for AAEON PCM-5895. Information:

<http://www.aaeon.com/en/p/tf-per-k004/>

- a) Remove 2 screws from rear of top cover and carefully lift the cover off the meter.
- b) The battery is located on the SBC near the front center of the meter. It is a standard CR2032 type as found in many personal computers and other devices. Replace the battery.
- c) Configure SBC BIOS settings as follows:
 - Connect a USB keyboard to one of the front panel USB connectors.
 - Connect a VGA monitor to CN14 at the rear of the SBC using the special VGA to ribbon cable adapter and power up the VGA monitor.



Figure 35: Keyboard & VGA Connections

- Press front panel **Standby** button to turn on the unit then while watching the VGA monitor press the DEL key when the system begins to boot up. (Look for the message at the bottom of the screen about pressing DEL key as soon as the unit beeps at power on). If meter does not boot, check red jumper on SBC JP2.
 - Once the BIOS setup screen appears scroll to Integrated Peripherals menu.
 - Scroll to CAN BUS IRQ 1 SELECT and change to 10.
 - Scroll to CAN BUS IRQ 2 SELECT and change to 11.
 - Scroll to CAN BUS SELECT ADDRESS and set to DA00.
 - Press ESC key to return to main menu, then to Advanced Chipset Features.
 - Scroll to Output Display and set to Panel & CRT.
 - Scroll to TFT/LVDS RESOLUTION and set to 640 x 480.
 - Press F10 key to save and exit, then “Y” to save changes.
 - Remove the VGA adapter cable from CN14 and remove the keyboard.
 - Verify that the fan is operating and that airflow direction is blowing out the back of the meter. Also make sure no cables were accidentally loosened or disconnected.
- d) Replace the top cover onto the meter being careful to avoid scratching the side rails.
 - e) Meter should now power on and function properly.