

## **Firmware Revision Info:**

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# **RIO-47xxx Remote I/O Controller**

### ***New features for Rev 1.0d May 19, 2010:***

- RT,RY,RO added for Realtime Clock support
- IH modified to support TIME protocol synch
  - The RIO-471x2 can synchronize its internal time via the TIME protocol:  
[http://en.wikipedia.org/wiki/TIME\\_protocol](http://en.wikipedia.org/wiki/TIME_protocol)
- ME added for Modbus Array read/write access
  - Modbus masters now have the entire RIO array table to read/write in integer or float
- MB updated to allow Raw Modbus packet receive (MBh=-1....)
  - Raw feature is now bi-directional
- PM,FQ,DY Added for PWM
  - Outputs 14 and 15 now support 8 bit programmable PWM. -PWM hardware rework necessary for high frequency
- II updated for OR capability
  - "Any" input pattern true is now supported.
- DB enhanced for PID flow control
  - Flow control keeps the DAC the same when the deadband is entered, instead of zeroing it

### ***New feature for Rev 1.0c Feb 6, 2009 :***

- RIO-47xx2 support added

### ***New features for Rev 1.0b August 25, 2008 :***

- MI command added to set modbus analog register transactions as integer
- MV command added to reverse modbus functions 3 and 4
- Modbus function code 15 slave support added

### ***New feature for Rev 1.0a May 20, 2008 :***

- Rev 1.0a firmware released