# Modbus Router/B Release Notes

A-MBR/B

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Firmware Revision 2.001.014

### **CONTENTS**

| 1. | Pref | face                   | 2 |
|----|------|------------------------|---|
| :  | 1.1. | Compatibility          | 2 |
| :  | 1.2. | Notes                  | 2 |
| :  | 1.3. | Additional Information | 2 |
| :  | 1.4. | Support                | 3 |
| 2. | Imp  | rovements              | 3 |
| 3. | Ano  | malies Fixed           | 4 |
| 1  | ۷no  | wn Anomalias           | 1 |



## 1. PREFACE

### 1.1. COMPATIBILITY

Firmware revision 2.001.014 of the Modbus Router will require the following compatible versions:

| Software | Version         |
|----------|-----------------|
| Slate    | 1.074 and later |

### **1.2. NOTES**

The following should be noted:

- Firmware upgrades will be done using Aparian's Slate software.
- Aparian flash files have an .afb extension.
- Slate can also be used to set the initial network parameters using its DHCP server.
- Should any interruptions cause the module to not complete the firmware upgrade
  the module will return to Safe Mode. The user can then re-flash the module with the
  application firmware. See the user manual for more information regarding Safe
  Mode.

### 1.3. ADDITIONAL INFORMATION

The following resources contain additional information that can assist the user with the module installation and operation.

| Resource                  | Link  |
|---------------------------|---|
| Slate Installation        | http://www.aparian.com/software/slate                                 |
| Modbus Router User Manual |   |
| Modbus Router Datasheet   | http://www.aparian.com/products/modbusrouterb                         |
| Example Code & UDTs       |   |
| Eth amat wining standard  | www.cisco.com/c/en/us/td/docs/video/cds/cde/cde205 220 420/installati |
| Ethernet wiring standard  | on/guide/cde205 220 420 hig/Connectors.html                           |
| CIP Routing               | The CIP Networks Library, Volume 1, Appendix C:Data Management        |
| Modbus                    | http://www.modbus.org   |

### 1.4. SUPPORT

Technical support will be provided via the Web (in the form of user manuals, FAQ, datasheets etc.) to assist with installation, operation, and diagnostics.

For additional support the user can use either of the following:

| Contact Us web link | www.aparian.com/contact-us |
|---------------------|----------------------------|
| Support email       | support@aparian.com        |

# 2. IMPROVEMENTS

The following updates are included in this firmware revision.

| Revision  | Improvement         | Description   |
|-----------|---------------------|---|
| 2.001.014 | None                | -   |
| 2.001.012 | DHCP Address Assign | Updated method to assign a Static IP Address using the DHCP     |
|           |                     | Server Tool in Slate.   |
|           | LED Flash Discovery | Ability to discover the module by using the LED Flash           |
|           |                     | function.   |
|           | Ethernet Split Port | Added Ethernet split port option to the configuration that will |
|           |                     | block routing between the two Ethernet ports.                   |
|           |                     | This mode will also support dual IP addresses specific to each  |
|           |                     | Ethernet port.  |
|           | Modbus TCP Default  | Added off-subnet communication for Modbus TCP when              |
|           | Gateway             | operating as a Client.  |
| 2.001.010 | New Modes           | Added Enhanced, Bridge, and Concentrator modes.                 |
|           | Security            | Added module security with encryption and authentication.       |
|           | EIP Originator      | Added support for operating as an EtherNet/IP originator.       |
|           | All ports           | Support Modbus communication on all ports simultaneously.       |
|           | EIP Target          | Support up to 5 x Class 1 EtherNet/IP connections when          |
|           |                     | operating as an EtherNet/IP Target.                             |
| 2.001.009 | General             | Non-application specific update.                                |
| 2.001.008 | CPU Support         | Minor enhancements for series B of the CPU.                     |
| 2.001.007 | CPU Support         | Added support for series B of the CPU currently being used.     |
| 2.001.006 | Ground Connection   | Add parameter to config allowing the user to connect the        |
|           |                     | ground when required for DH485 networks.                        |
| 2.001.005 | ODVA                | Updates for required for ODVA certification                     |
|           | USB                 | Updates to allow USB to pass through CIP messages               |
| 2.001.002 | Modbus TCP          | When in scheduled mode, faster recovery of Modbus Slave         |
|           |                     | when connection was lost.                                       |

# 3. ANOMALIES FIXED

The following anomalies have been fixed in this firmware revision.

| Revision  | Anomaly        | Description   |
|-----------|----------------|---|
| 2.001.014 | Mapping        | Fixed issue which could cause a faulty startup when EIP     |
|           |                | Originator or Modbus Client has been configured without any |
|           |                | mapping items.  |
| 2.001.013 | Modbus TCP     | Fixed anomaly that would delay Modbus TCP Client            |
|           |                | communication startup.                                      |
| 2.001.011 | USB Startup    | Fixed anomaly where USB communication would not start if    |
|           |                | the module was powered up with USB communication            |
|           |                | configured.   |
| 2.001.002 | Modbus TCP Map | Increased the Modbus TCP client count to 100 from 40.       |
|           | Item Count     |   |

# 4. KNOWN ANOMALIES

The following known anomalies exist in this firmware revision.

| Revision  | Anomaly | Description |
|-----------|---------|-------------|
| 2.001.014 | None    | -           |