

Production Firmware History

## **NOTICE OF PROPRIETARY INFORMATION**

The equipment discussed herein is capable of causing great harm to life, limb, and/or property. Installation, maintenance, and/or repair of the equipment referenced herein must be performed by Eaton duly authorized and trained, certified personnel.

Notwithstanding the foregoing, Eaton assumes NO responsibility for any damage or injury to any persons or property which may be caused to any extent by reliance on the information provided herein except to the extent such damage or injury results solely and directly from the willful negligence of Eaton, its agents, or employees. Additionally, Eaton shall not be liable for any indirect, special incidental, or consequential damages, such as, but not limited to, loss of anticipated profits, good will, or other economic loss in connection with or arising out of the existence of, the furnishing of, or the use of the information provided for in this agreement, whether or not the possibility of damage was disclosed to or could have been reasonably foreseen by Eaton.

The information contained herein is proprietary to Eaton. It is unlawful to copy or reproduce this document or any part thereof in any media or to use or reference same except for those purposes in the means and quantities specified by written agreement with Eaton. Periodically, changes are made to the contents herein. Please contact Eaton or your original source for any modification, updates, or new additions. Due to the possibility of such changes, RELIABILITY ON THE CONTENTS HEREIN IS AT RECIPIENT'S/USER'S OWN RISK.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior written permission of the publisher, Service Documentation Department, Eaton.

Eaton reserves the right to change specifications without prior notice. Eaton is a registered trademark of Eaton. PDI, JCOMM, Quad-Wye, ToughRail Technology, and WaveStar are registered trademarks of Power Distribution Inc. All other trademarks are held by their respective owners. All other trademarks are property of their respective companies.

©Copyright 2023 Eaton, Raleigh, NC, USA. All rights reserved. No part of this document may be reproduced in any way without the express written approval of Eaton.

# Eaton PDI WaveStar Color BCMS Plus+ Production Firmware History

## Description

This document is intended for end-user informational purposes. It describes the changes between revision levels of the Eaton PDI WaveStar Color BCMS Plus+ Board firmware used in the Eaton PDI WaveStar Color Monitoring System product line. This document will be changing periodically and reposted on [www.Eaton.com](http://www.Eaton.com) to reflect new production level firmware changes. In all cases, the changes, enhancements, fixes, and new features listed under a given production release are automatically transferred into the next production release.

There are three different versions of software for the board mentioned in this document. Each version has a Main and Current software that go in different chips.

1. Current Only (aka. Normal Ver 6)
2. Power KWH (Ver 13)
3. Enhanced Subfeed (Ver 12)

## Current Only (aka. Normal Version 6)

### Main Software

#### Revision 6.31.3 (Released March 2023)

##### *Fixes*

- Optimized modbus code to prevent comm loss alarms on the display.

#### Revision 6.31.2 (Released March 2022)

##### *Fixes*

- Calibration of panel, total and subdistribution current

#### Revision 6.31.1 (Initial Released February 2022)

##### *Changes and Enhancements*

- This software was based on the BCMS software version Main 6.31
- Converted code to new microprocessor
- Recalculated values based on new clock speed
- Added variables to support two panels in one chip

## Current Software

### **Revision 6.12.3 (Released January 2023)**

#### ***Changes and Enhancements***

- Frequency calculation method
- Removed sampling startup from crossover
- Adjusted frequency constant

#### ***Fixes***

- Frequency startup function

### **Revision 6.12.2 (Released March 2022)**

#### ***Fixes***

- EEprom write location for current calibration

### **Revision 6.12.1 (Initial Released February 2022)**

#### ***Changes and Enhancements***

- This software was based on the BCMS software version Current 6.12
- Converted code to new microprocessor
- Recalculated values based on new clock speed
- Added variables to support two panels in one chip

## Power KWH (Version 13)

### Main Software

#### **Revision 13.22.6 (Released March 2023)**

#### ***Fixes***

- Optimized modbus code to prevent comm loss alarms on the display.

#### **Revision 13.22.5 (Released April 2022)**

#### ***Fixes***

- Optimized modbus code to prevent comm loss alarms on the display.

#### **Revision 13.22.4 (Released April 2022)**

#### ***Changes and Enhancements***

- Frequency calculation method
- Removed sampling startup from crossover
- Adjusted frequency constant

**Revision 13.22.4 (Released April 2022)*****Fixes***

- Frequency startup function.

**Revision 13.22.3 (Released March 2022)*****Changes and Enhancements***

- Checksum to 32 bits

***Fixes***

- Checksum for panel 2
- EEPROM write for settings
- EEPROM write for OV/UV

**Revision 13.22.2 (Released March 2022)*****Fixes***

- EEPROM write for breaker size

**Revision 13.22.1 (Initial Released February 2022)*****Changes and Enhancements***

- This software was based on the BCMS software version Main 13.22
- Converted code to new microprocessor
- Recalculated values based on new clock speed
- Added variables to support two panels in one chip

**Current Software****Revision 13.13.4 (Released January 2023)*****Changes and Enhancements***

- Frequency calculation method
- Removed sampling startup from crossover
- Adjusted frequency constant

***Fixes***

- Frequency startup function.

**Revision 13.13.3 (Released April 2022)*****Fixes***

- Frequency when one voltage not present

## Enhanced Subfeed (Version 12)

### **Revision 13.13.2 (Released April 2022)**

#### ***Fixes***

- EEPROM write location for current calibration

### **Revision 13.13.1 (Initial Released February 2022)**

#### ***Changes and Enhancements***

- This software was based on the BCMS software version Current 13.13
- Converted code to new microprocessor
- Recalculated values based on new clock speed
- Added variables to support two panels in one chip

## Enhanced Subfeed (Version 12)

### **Main Software**

#### **Revision 12.13.3 (Released March 2023)**

#### ***Fixes***

- Optimized modbus code to prevent comm loss alarms on the display.

#### **Revision 12.13.2 (Released March 2022)**

#### ***Changes and Enhancements***

- Checksum to 32 bits

#### ***Fixes***

- Checksum for panel 2
- EEPROM write for settings

#### **Revision 12.13.1 (Initial Release March 2022)**

#### ***Changes and Enhancements***

- This software was based on the BCMS software version Main 12.13
- Converted code to new microprocessor
- Recalculated values based on new clock speed
- Added variables to support two panels in one chip

## Current Software

### **Revision 13.13.4 (Released January 2023)**

#### ***Changes and Enhancements***

- Frequency calculation method
- Removed sampling startup from crossover
- Adjusted frequency constant

#### ***Fixes***

- Frequency startup function

### **Revision 13.13.3 (Released April 2022)**

#### ***Fixes***

- Frequency when one voltage not present

### **Revision 13.13.2 (Released March 2022)**

#### ***Fixes***

- Removed extra PF decimal

### **Revision 13.13.1 (Initial Release March 2022)**

#### ***Changes and Enhancements***

- This software was based on the BCMS software version Current 13.13
- Converted code to new microprocessor
- Recalculated values based on new clock speed
- Added variables to support two panels in one chip



P-164001149 01