

EGCP-2

**Software Upgrade Kit Instructions
for field conversion of EGCP-2 controls:
8406-120 A to 8406-120 B
8406-121 A to 8406-121 B**

EGCP-2 Software Upgrade Kit

Download the latest software for controls 8406-120, -121

Woodward is releasing application software, 5418-149 B, to upgrade the EGCP-2 due to issues explained in Service Bulletin 01234. This application note explains how to download the software.

The software can only be upgraded in these existing controls.

- 8406-120 A can be upgraded to an 8406-120 B only (this converts software 5418-149 A to 5418-149 B).
- 8406-121 A can be upgraded to an 8406-121 B only (this converts software 5418-149 A to 5418-149 B).

Woodward is supplying this software kit to allow you to upgrade units in the field.

Woodward recommends that all existing stock be upgraded.

A Communication Cable, Woodward part number 5417-551, can be used to download the new software.

New EGCP-2 Part Numbers	Description	Installation & Operation Manual	Application Manual	Communications Manual	Security Levels Manual
8406-120	150–300 Vac PT	26174	26175	26181	26108
8406-121	50–150 Vac PT	26174	26175	26181	26108

Additional Software Changes

1. Configurable Timer Accuracy
 - This issue has been resolved. Application Note 51202 explains in detail.
2. Contactor Closure
 - When in the “Contactor” mode, changes were made to allow more time for the circuit breaker aux signal to be received by the control, before failing the sync attempt and removing the Gen Breaker Close Relay.
3. Synchronizing – Voltage Matching
 - When Voltage Matching is enabled, the EGCP–2 will now try to correct the voltage error to 0%. Previously the EGCP-2 would only adjust the generator voltage until the voltage error was within the Voltage Window setting in the Synchronizer menu.

Compatibility with Existing Controls

The new EGCP-2 control will operate with all existing EGCP-2 and EGCP-1 controls.

Download Instructions

This section provides instructions for downloading 5418-149 B software needed to upgrade the 8406-120 or -121 controls.

Loading the software will not affect any Configuration or Calibration setpoints.

Loading the software will take about 12 minutes.



An unsafe condition could occur with improper use of these software tools. Only trained personnel should have access to these tools.

Downloading the 5418-149 B Software

This section provides instructions for downloading 5418-149 B software needed to upgrade the 8406-120 or -121 controls.

Requirements

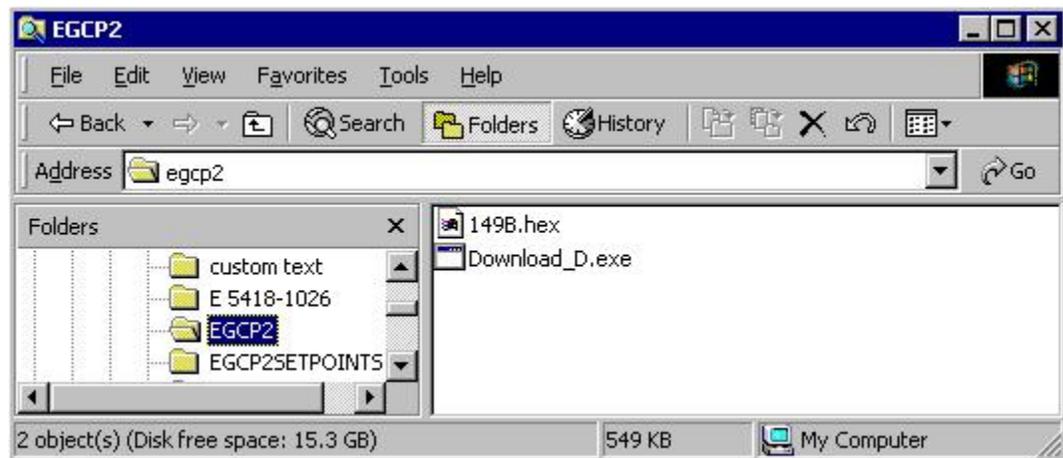
- EGCP Download Cable, Woodward part number 5417-551 (includes RS-232—RS-422 converter)
- download_d.exe, part number 9926-113 Rev B or greater (download_d is a DOS-based freeware program that can upload and download configuration files through the RS-422 serial port on the EGCP-2. This program is available on the Woodward website at www.woodward.com/ic/software).

Select **EGCP-2 Tools** and then select **EGCP Download Program**. The EGCP-2 Download Program contains the download_d.exe file. The 149B.hex file will be provided by email.

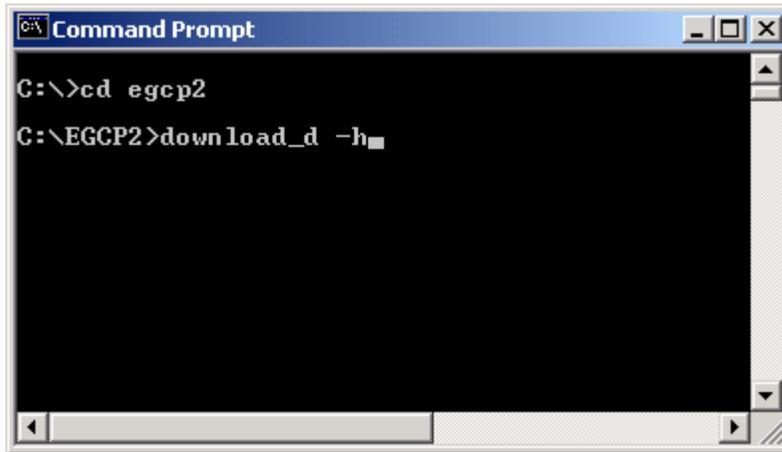
Instructions

Save the download_d.exe file to the computer. In the following example, this file is saved in a directory called EGCP2 on the C:\ drive. Store the EGCP-2 software files in the same location. There is one file:

Software – **149B.hex**



Then using a DOS command prompt, go to the directory where the download_d.exe file is stored and type "**download_d -h**" (or **-?**) for a complete list of the command-line options (see below).



```
Command Prompt
C:\>cd egcp2
C:\EGCP2>download_d -h
```

Establishing a Connection:

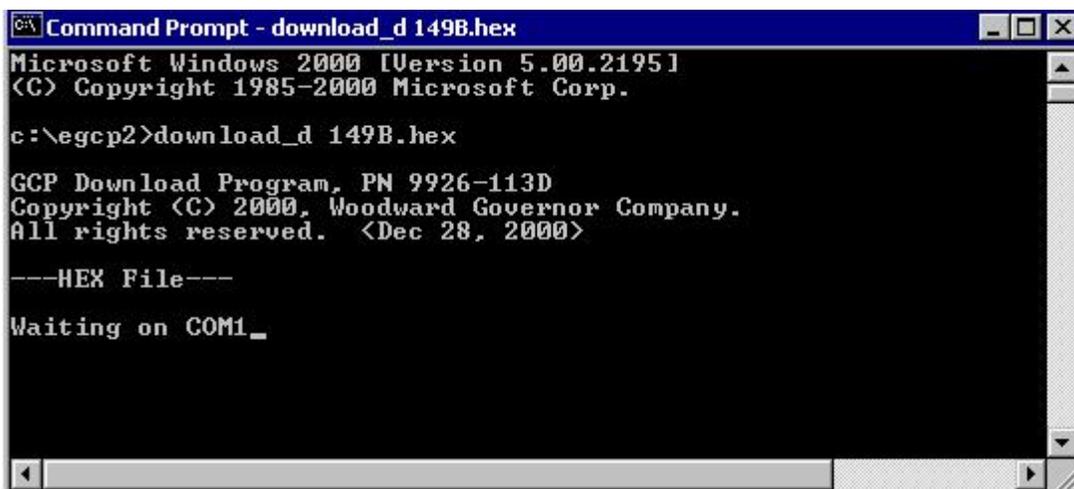
Connect the RS-232 / RS-422 cable between the EGCP-2 and the computer. Communications manual 26181 (Chapter 3) provides detailed information for this cable interface.

IMPORTANT

Only one EGCP-2 can be connected to the RS-422 communication network when uploading or downloading setpoints. If a multidrop network has been set up (linking more than one EGCP-2 on the RS-422 communication port network), it will be necessary to separate the control from the network in order to upload or download.

Downloading 149B.hex file from the Computer to the Control:

Using a DOS command prompt, go to the directory where the download_d.exe file is stored and type "**download_d 149B.hex**" at the DOS command prompt (see below).



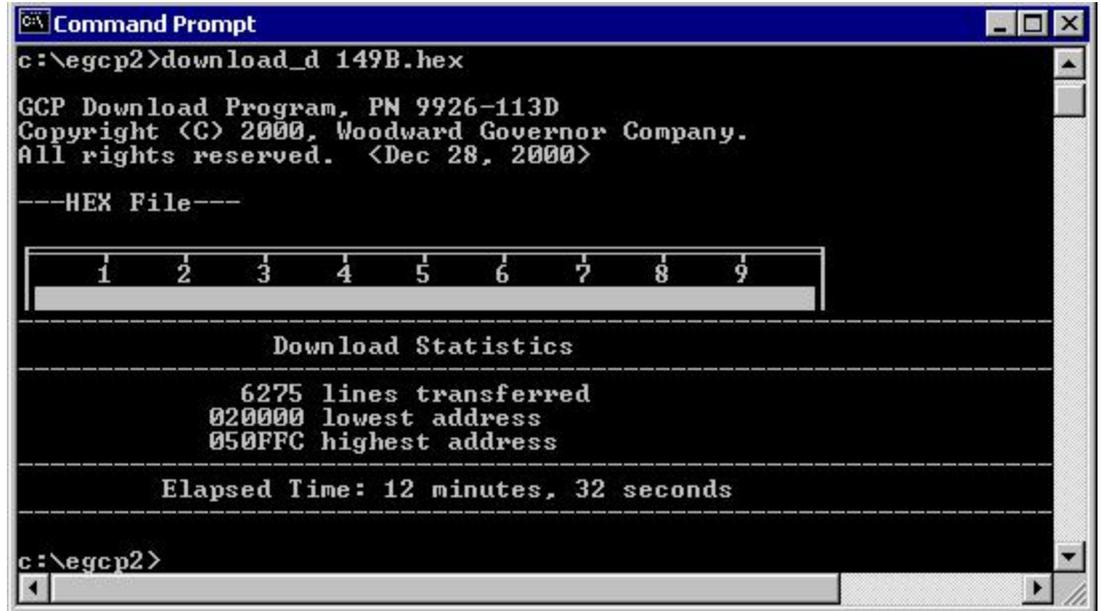
```
Command Prompt - download_d 149B.hex
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

c:\egcp2>download_d 149B.hex

GCP Download Program, PN 9926-113D
Copyright (C) 2000, Woodward Governor Company.
All rights reserved. <Dec 28, 2000>

---HEX File---
Waiting on COM1_
```

1. Cycle power to the EGCP-2.
2. When the power is restored to the control, the download will begin.
3. On the EGCP-2 screen the text "APPLICATION" will be displayed.
4. A scroll bar will appear on the computer screen showing the progress of the download (see below).



```
Command Prompt
c:\egcp2>download_d 149B.hex

GCP Download Program, PN 9926-113D
Copyright (C) 2000, Woodward Governor Company.
All rights reserved. <Dec 28, 2000>

---HEX File---

 1  2  3  4  5  6  7  8  9
-----
Download Statistics
6275 lines transferred
020000 lowest address
050FFC highest address
-----
Elapsed Time: 12 minutes, 32 seconds
-----
c:\egcp2>
```

5. After the download is complete, the control is ready to operate. The setpoints and calibration adjustments do not change.

We appreciate your comments about the content of our publications.

Send comments to: icinfo@woodward.com

Please reference publication **51209**.



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