User's Manual

GS820 Firmware Update Procedure

This manual contains instructions on how to update the GS820 firmware.
Be sure to follow these instructions when updating the firmware.

CAUTION

- Do not turn the power OFF after you select FirmwareUpdate by step 5 in "Updating the Firmware" until the system is completely written. If you do, the GS820 may malfunction.
- If the system firmware is updated, all of the data files stored on the GS820RAM (volatile disk) will be cleared. Be sure to move important data files to a different directory in advance.

Before Updating the Firmware

Uncompress the file.

Uncompress the file that you downloaded. The file contains the following three files.
- System file: b8502xeXXXXXX.srec
- This manual: IM765601-91E_020.pdf

Change the GS820 USB interface mode to USB storage.

1. Press **SHIFT+SETUP (MISC)** to display the MISC menu.

   | Remote I/F | External I/O | LineFreq Auto | Display 4 | CSV Setting | Next 1/2 |

2. Press the **Remote I/F** soft key to display the Remote I/F menu.

   | GPIB 1 | RS232 | LAN | USB Storage | | VISA Info |

3. Press the **USB** soft key to display the USB menu.

   | | | | ─── USB Mode ─── Storage USB-TMC | | |

4. Press the **Storage** soft key.

Updating the Firmware

1. Using a USB cable, connect the GS820 to the PC that contains the uncompressed system file.

2. Copy the system file to the GS820RAM (volatile disk). For details on the GS820RAM (volatile disk), see section 4.6 in the GS820 User's Manual (IM765601-01E).

3. Press **SHIFT+SETUP (MISC)** to display the MISC menu.

```
| Remote |External|LineFreq| Display |  CSV   | Next |
|  I/F   |  I/O   |  50Hz  |    4    | Setting|  1/2 |
```

4. Press the **Next 1/2** soft key.

```
| Beep  | Time  |      | Disk  |Firmware| Next |
| On Off| Adjust| Test |Format | Update |  2/2 |
```

5. Press the **FirmwareUpdate** soft key.

   The system file automatically opens and the update operation is carried out.

   An error will occur if there is no system file in the GS820RAM.

6. When the update operation is completed, a message prompting you to powercycle the GS820 appears. If the message is displayed, cycle the GS820 power.

Checking the Updated Firmware (After restarting the GS820)

1. Press **SHIFT+ERROR (INFO)**.

```
Instrument :      GS820 MULTI CHANNEL SMU ──── Product name
SerialNo :        12345678 ──────────────────── Serial number
Firmware Revision : 1.01 2007/07/12 16:33:59 ─ Most recent firmware revision and update date/time
Logic Revision :  1 ─────────────────────────── Most recent logic revision
Model :           765601 ────────────────────── Model
Calibration Date : 2007/07/30 09:08:50 All Cal ─ Calibration date
```

2. Check that the Firmware Revision value is the same as the firmware version that you installed.

3. To set the USB interface back to USB-TMC, carry out steps 1 to 3 in "Before Updating the Firmware" and press the USB-TMC soft key.