

February 3, 2017 MILLPWR^{G2} 2 & 3 Axis Release of Version R5SP1

For Use with Consoles (ID#1113777-NN) ONLY

NOTE: HEIDENHAIN Corporation recommends making a backup of the control with the USB Recovery Drive before updating the control software. Please refer to the manual included with the drive for the backup procedure. Reference compatibility chart below.

- R5 SP1 requires you first resize the hard drive partitions and have R5 installed. Due to the enhanced features since release 5, restructure the console's hard drive is required. USB Recovery Drive ID# 680480-04 includes an option for resizing the control's hard drive partitions. This can only be performed on consoles ID#1113777-NN that are running software release 4 service pack 4 (R4 SP4) or R5. Please insure the console is updated to one of these releases prior to restructuring the drive and installing release 5 (R5SP1).
- R5 cannot be installed unless you have R4SP4 installed first. If you have previous version of software such as R1, R2, or R3 SPx (release 1, release 2, or release 3 with any service pack) download and install R4 SP4 then proceed to update to R5.
- Recovery Drive Kit ID# 1127022-01 can be purchased from your local ACU-RITE distributor.

If a special PLC for AMI functions was created for your MILLPWR system. The PLC for R5SP1 may need to be modified in the same manner. Any OEM/User customizations to the PLC will need to be reintegrated into the new PLC project.

All users can verify your software version from the **DRO** screen by pressing SETUP. If one of your soft keys is labeled More Commands, you have release 1 (R1) software. If one of your soft keys is labeled Install Setup, press this key. Enter the password 8891 and press Enter. The installed software version will be displayed at the bottom left of your screen.

If any issues are encountered, please contact your service representative for assistance.

You can download the software release update free of charge from our web site at <u>www.acu-rite.com</u>. If you wish to purchase the software and operation manual from ACU-RITE, contact your authorized dealer to place an order.

Installing the software onto your MILLPWR^{G2} system:

Use a blank USB memory stick (1 GB or larger) to update the software. Do not use any memory stick with a smaller storage capacity. The software installation files are required for updating the software. When a USB memory device in placed in a USB port prior to boot up with the update files setup.zip, and setup.ini located within a folder named "**install**", at boot up your G2 control will detect the upgrade software files and proceed to install.

Procedure for downloading the update files and placing them on a USB drive.



Download the update from <u>http://www.acu-rite.com/software-updates.html</u> found under the Controls Tab.

- Unzip the downloaded archive insuring the target is the root level of your USB drive.
- Insure the files <u>setup.zip</u> and <u>setup.ini</u> are transferred to a folder at the root level of your USB drive named <u>install</u>, //MY USB DRIVE/install/



Procedure for updating the software

- Shut down the control software using the normal method of pressing the Shutdown soft key and then confirming the shutdown by pressing Yes.
- Wait for the screen message which indicates that it is safe to switch off power, or restart.
- Insert the USB memory device containing the folder named "install" on the USB memory device.
- Press ENTER to restart the system.
- The software update will now be done automatically, taking approximately 10 20 minutes.

! A confirmation box will appear. If necessary, use the LEFT or RIGHT ARROW keys to select Yes and then press ENTER.

When the update is complete, it will prompt you to remove the USB drive and restart. At this time, remove the USB drive and press ENTER to restart. If the USB memory stick used for installation is not removed, then the prompt to install the software will continue to appear on subsequent power cycles.

! After installation and upon restart, you may receive a message prompt to confirm a firmware update, accept the changes and RUN UPDATE.

- (Note: This particular NC startup screen can take several minutes to display. Please be patient. Do not shutdown control and reboot.)
- After the system has restarted, it will start up normally to the control software.
- Confirm that your count directions are correct.
- Press the SETUP hard key, then the "Install Setup" soft key, enter passcode 8891, press ENTER
- In the "Installation" dialogue, scroll down to the last option "Machine Functions" and press ENTER
- Configure the dialog to match your machine Note:(only required if special machine function options are installed like demo, ami, guards, etc.)
- Press the USE hard key, then press the "Save Changes" soft key
- After a moment, you will get a reboot prompt
- Acknowledge the reboot and you are all done at the next startup.



MILLPWR^{G2} Recovery Drive Compatibility

- Due to hardware differences the original MILLPWR^{G2} console and the current console require different software upgrade paths.
- Consoles can easily be identified by the color of the front bezel. The current design has a darker grey color than the original design.
 - The current G2 console will proceed to release 5 (R5) and all its service packs.
 - The original G2 console will remain with release 4 (R4) and all of its service packs.

Console ID#		Recovery Drive Kit ID# 1201909-	Recovery Drive Kit ID# 1127022-
and Software	Poopyony Drivo	01 #חו קפו ו	01 1198 ID#
Revision	ID# 1114023-01	680480-03	680480-04
745604-NN	Yes	Yes	No
R1	Yes	Yes	No
R2	Yes	Yes	No
R3	Yes	Yes	No
R4	Yes	Yes	No
R4 SP4	Yes	Yes	No
1113777-NN	No	Yes	Yes
R1	No	Yes	Yes
R2	No	Yes	Yes
R3	No	Yes	Yes
R4	No	Yes	Yes
R4 SP4	No	Yes	Yes
R5	No	No	Yes
Post R5	No	No	Yes





Console ID # 1113777-NN



G2 consoles (ID#745604-NN)

- These consoles <u>cannot be upgraded to R5</u> and will continue to receive service packs under the R4 release. Please do not attempt to install release 5 (R5) onto these consoles.
- System drive restructuring on this original design consoles will cause the console to become un-operational and require in house service to correct the issue. <u>Do</u> <u>not restructure the drive on these consoles.</u>
- Not all software enhancements will be included in future R4 releases. We will continue to support console ID# 745604-NN with service packs through the R4 released software that will mainly include minor enhancements or fixes.
- USB Recovery Drive Kit 1201909-01 includes a compatible USB Recovery Drive ID# 680480-03 for original G2 consoles (ID#745604-NN) and should be ordered when replacing a recovery drive for these consoles. This drive does not include the restructuring option, so the unit cannot be restructured accidentally.

G2 consoles (ID#1113777-NN)

- **R5 cannot be installed unless you have R4SP4 installed first**. If you have previous version of software such as R1, R2, or R3 SPx (release 1, release 2, or release 3 with any service pack) download and install R4 SP4 prior to updating to R5.
- Due to the enhanced features of release 5, it has become necessary to restructure the console's hard drive. USB Recovery Drive ID# 680480-04 is now included in Recovery Drive Kit ID# 1127022-01 which supports all G2 consoles and all software versions to date or planned for the near future. This new recovery drive includes an option for resizing the control's hard drive partitions. This must only be performed on current consoles (ID#1113777-NN) that are running software release 4 service pack 4 (R4 SP4). Please insure the console is updated to this release prior to restructuring the drive and installing release 5 (R5). Hard drive restructuring is required on these consoles prior to the upgrade to release 5 (R5).



These enhancements/changes were made:

- When a DXF file is imported and saved, the save dialog is prefilled with the original DXF file name.
- Improved the visibility of shutdown messages by using a dark text color.
- To enhance safety, the spindle no longer automatically resumes motion after the machine guards are closed. Spindle and coolant operation now resume after pressing the GO key.
- The base NcKernel was updated to Milestone 10 SP7.

These errors have been corrected:

- When a step is selected in the Geometry Calculator, it was not always highlighted in the graphics window in some consoles.
- Machine Guards are now disabled on startup if the AMI type is set to Disabled in Machine Functions.
- The finish feedrate specified in the advance custom pocket cycles (Bottom and Side Finish cycles) takes precedence over the finish feed value specified in the custom pocket step.
- The block form is no longer resized once values are manually entered.
- Z INC position is reset to 0 when Z datum is set. This was not being reset if the current tool had a length offset.
- Corrected an issue in which the Paused and Running status messages were not displayed correctly during Single Cycle execution.
- Attempting to rename the currently loaded MPT program could in some isolated scenarios cause a system software failure.
- Corrected an issue with the Machine Functions dialogue which made it impossible to utilize the full 10VDC range of the Spindle DAC output. Existing systems should re-enter all four RPM values and re-calibrate their spindle inverter to ensure correctly matched programmed-to-actual RPMs.
- Fixed minor issues in Program Functions: 1) The Files/Directories in Program Functions were not refreshed consistently to display the updated file/folder names. 2) Renaming a File/Folder with the same name and different case pattern was not possible. 3) If a file was selected in one directory and if another directory had a file with the same name, it was automatically highlighted.
- Clear program in Program Functions did not reset the graphics if the simulation was still running.
- The Spindle override percentage values displayed on the DRO were sometimes not exact (for example showing 39% instead of 40%).

If any issues are encountered, please contact your service representative for assistance or contact technical support at <u>millpwrservice@heidenhain.com</u> if you have any questions.