

February 3, 2017 MILLPWR^{G2} 2 & 3 Axis Release of Version R4SP5

For Use with Consoles (ID# 745604-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.

- R4SP5 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 R4SP5.
- Consoles with ID# 745604-NN <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.

If required contact your authorized ACU-RITE dealer to purchase the USB recovery drive 1201909-01 includes a compatible USB Recovery Drive ID# 680480-03 for original G2 consoles (ID#745604-NN).

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/

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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# and Software Revision	Recovery Drive ID# 1114023-01	Recovery Drive Kit ID# 1201909- 01 USB ID# 680480-03	Recovery Drive Kit ID# 1127022- 01 USB ID# 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:

- Improved the visibility of shutdown messages by using a dark text color.
- The following functionality has been restored to the "Graphics Only" run option. 1. "Graphics Only" button added to Run Options menu. 2. Pause and display OIM messages. 3. Support limited VIEW dialog functionality.
- Added ability to edit values for addresses R, D, U & W in drilling cycles; previously, it was not possible to edit the values for addresses.
- A Redraw (F6) softkey has been added when in the View form dialogue. Redraw performs the same as the decimal point hot-key. In addition, both methods now re-start the graphics if in progress when executed.
- Added fields to Change Steps dialog to change Z Pass and Z Peck.
- Programming of the "staging" point is now optional for custom pockets. If a "staging" point is programmed the control will move to this location at start and end of custom pocket step execution.
- Added support for setting a datum during single cycles.
- Improved the visibility of shutdown messages by using a dark text color.

These errors have been corrected:

- When starting a program, the rendering of the tool path (and tool) was delayed if the program had previously been stopped at the tool prompt.
- Fixed an intermittent issue in Program Functions in which the system may create a software failure while attempting to overwrite files during a Copy or Move operation.
- Handling of unit conversions is corrected in step dialog, bottom finish fields.
- Use of the Zero hard key now works in the Quick Save dialog when entering a name for a new program.
- When updating from pre-R4 software to R4-SP3 or later versions, an error was displayed on every startup in regards to the touchprobe.tp system file. This issue has been corrected, such that the error is no longer displayed.
- 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.
- The shutdown timeout was adjusted to prevent a possible software failure during shutdown.
- 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.
- 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.



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.