MILL**PWR**^G2
SOFTWARE
UPDATE

ACU-RITE®

December 19, 2017
MILL**PWR**^G2 2 & 3 Axis
Release of Version R4SP7

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.

- R4SP7 cannot be installed unless you have R4SP6 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 SP6 prior to updating to R4SP7.
- **Consoles with ID# 745604-NN cannot be upgraded to R5** 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 R4SP7 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 www.acu-rite.com. 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.
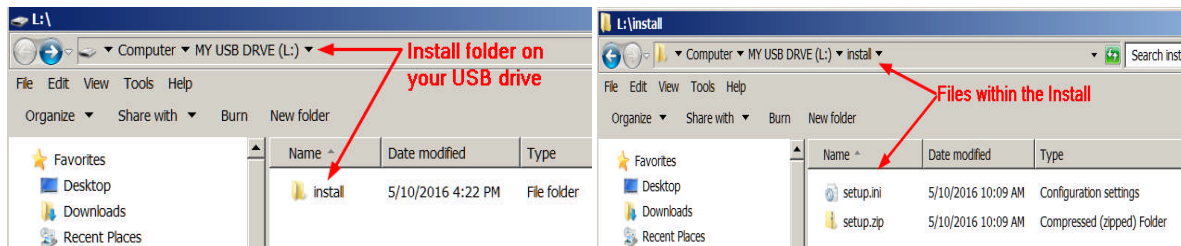**Procedure for downloading the update files and placing them on a USB drive.**
Download the update from http://www.acu-rite.com/software-updates.html found under the Controls Tab.

MILL**PWR**^{G2}
SOFTWARE
UPDATE

ACU-RITE®

- Unzip the downloaded archive insuring the target is the root level of your USB drive.
- Insure the files setup.zip and setup.ini are transferred to a folder at the root level of your USB drive named install, //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. . *(These values should not change when upgrading software.)*
- If special machine functions were active, Press the SETUP hard key, then the "Install Setup" soft key, enter passcode 8891, press ENTER
- In the "Installation" dialogue, arrow 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.

MILL**PWR**^{G2}
SOFTWARE
UPDATE

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MILLPWR^{G2} Recovery Drive Compatibility

- Due to hardware differences the original MILL**PWR**^{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 6 (R6) 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

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SOFTWARE
UPDATE

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Console ID # 745604-NN

Console ID # 1113777-NN

G2 consoles (ID#745604-NN)

- These consoles **cannot be upgraded to R5** 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. **Do not restructure the drive on these consoles.**
- **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.

MILL**PWR**G2
SOFTWARE
UPDATE

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These enhancements/changes were made:

- The Bottom Finish will now take the value of 0 if it is not specified. Previously, if Bottom Finish was blank, it would use the same value as the Side Finish field.
- A consistent terminology "Software Travel Limit" is used now instead of 'Table Limit' or 'Software Limit'.
- The tool retract between Z passes for Rectangle pocket, Rectangle slot and Circle pocket is now set to Z begin.
- The amount of motion allowed in the W-Axis while running a program or Single Cycle is now configurable via Advanced Configuration. The default of 2mm can be changed at Axes->ParameterSets->PW->CfgControllerAuxil->checkPosStandstill. A value of "0" disables the monitoring and allows any amount of motion in the W-Axis without error.
- The Helix step now defaults to CW to represent a more common right-handed thread.

- Fixed an issue where the PNG file was not updated when a loaded MPT file was modified and saved.
- Fixed an issue where the file text preview was not updated when a modified program was saved.
- Fixed an issue where the Helix function was available in the two axis mode.
- Fixed an issue in Program Functions where the file view location was not automatically switched to the USB drive when inserted.
- Fixed an issue where the program step popup was not automatically closing when switching from PGM to DRO mode.
- Fixed an issue where the blend fails to calculate in certain scenarios when a rotated, repeated or mirrored geometry was exploded.
- Fixed an issue where the blockform calculation is off when the offset is different.
- Z-retract error message is now updated to be at least 0.01" (or 0.2mm) higher than the programmed values for consistency.

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