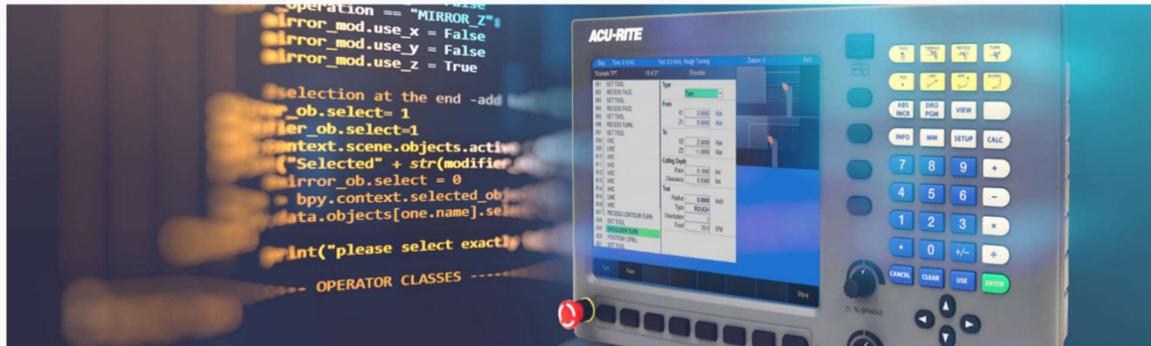


Updates for Console ID# 1280434-NN and ID# 1280435-NN

TURNPWR



These release notes include corrections/enhancements for R2.
Please see list below.

NOTE: HEIDENHAIN Corporation recommends making a backup image of the control with the **USB Recovery Drive** (ID# 1127022-02) before updating the control software.

- For additional information refer to the **USB Recovery Drive User's Manual** (ID# 1313217-2X).

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

All users can verify software version from the **DRO** screen by pressing **SETUP**, then press **Install Setup**. 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, refer to the **Technical Manual** (ID 1034383-2x) or please contact your service representative for assistance.

Download the Software-Release update free of charge from our website 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 **TURNPWR** 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 required folder structure for the software update on the USB drive is as follows: <DRIVE>:\install\setup.zip.

The software installation files are required for updating the software. When a USB memory device is placed in a USB port prior to boot up with the update files, at boot up your 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.
- Unzip the downloaded archive ensuring the target is the root level of your USB drive.
- Ensure 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” into an available USB connection on the console.
- After stating the control, the Software Update screen will appear with a conformation box.
- If necessary, use the **Up Arrow** or **Down Arrow** key to select the language (e.g.English) and press **ENTER**.
- A confirmation box will appear.
- If necessary, use the **Left Arrow** or **Right Arrow** key to select **Yes**, then press **ENTER**.
- The software update will now be done automatically, taking approximately 10 - 20 minutes.
- When the update is complete, it will prompt you to remove the USB drive and restart.
- Remove the USB drive at this point and press **ENTER** to restart.
- 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 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.*

The following **corrections** were made:

The press/release operation of the **Select** soft key under **Program Functions** is consistent with other soft keys.

Additional axis option is not needed for handwheel input. Removed from SIK options.

The following modifications have been made to the tapping cycle.

1. Feed override is set to 100% during the tapping cycle.
2. When pressing the STOP button during a tapping cycle it will cancel the program, stopping the tool motion and spindle.

Created new Offline Software which includes a new Keypad application that uses COM interface to communicate with the virtual machine.

When the hardware detects a "frequency too high" error, the system will generate an e-stop to safely stop any operation in progress.

While in motion, during tracking, motion will stop when the handwheel permissive button is released.

The **X axis** key may be pressed to open the **Datum** form, but it will not zero the **Datum** value when the dialog is open. The second axis key consistently applies to the **Z axis**.

If the handwheel is activated during a program pause, the soft keys to control which axes are restored are displayed. The order is controlled by disabling the axis that should not be restored until after the other.

In step forms like **LINE** and **ARC**, the values calculated by the system are correct when the **X** values are displayed in diameter.

When the spindle is turned on, a program will be delayed allowing the spindle sufficient time to ramp up to speed. The time is specified in the **Delay** field of the **Spindle Control** dialog found under **Installation Setup**.

When a gear change is necessary, the **new gear number** and **speed range** are displayed in **red** on the **DRO** display.

The "PLC remanent data ..." error can no longer be cleared automatically on startup. The end user will need to contact their distributor for information on how to manually clear the error.

When a **Rough** or **Finish Turning tool** step has blank values for **tool or point angle**, the undefined angles will **default to 107.5 (tool) and 55 (point) degrees** regardless of whether program execution begins from the tool step or a step after the tool step.

<software_update>

Exiting **Move Table/Tool** with table or tool still in motion will cancel any motion in effect and with subsequent activation of **Move Table/Tool** (at program pause), the system will not resume the previous motion.

The following **enhancements** were made:

When the **Move Tool** soft key is pressed, the **Handwheel** soft key is available. The **Handwheel** soft key must be pressed to enable handwheel use. **Arrow Keys** are not active when handwheel is in use.

There are now two folders under servicelac; namely, **SMA9115** containing the soon-to-be legacy amp files and **SMD9A15** containing the new amp files; plus, the recovery file. More info will be provided in the AC Installation Manual. Note: old amp files not overwritten.

The **Table** and **NC Guide** folders now show when **Program Type = All Files**. This allows copy to/from these folders. Files in the **Table** folder cannot be deleted because they are required by the software. Errors are generated if a required file is missing. The NC must be rebooted for the newly copied file to take effect.

Tool data is maintained in the **toolturn.trn** file. Copy this file as needed to the target destination and reboot for the new file to take effect. Note that both files have a correspond "sim" version which should be ignored since the control internally overwrites the file with the content of the non "sim" version when **Program** mode is accessed. This is required to keep both NC and SIM synchronized. Copying to the **NC Guide** folder may be necessary to use a newer chm (help) file.

The **X axis** values in the **View / Block Form** are displayed and entered as **radius** or **diameter**, depending on the current setting.

Moved **Recess Contour** and **Turn Contour** under the **Contour** soft key.

The **default feed units** were changed to **in/rev** (or mm/rev). It is still possible to select in/min (or mm/min) via the soft keys. The **default feed is 0.01 in/rev** (0.254 mm/rev).

Added **Tool Wear** columns **X Tool Wear** and **Z Tool Wear** to the **Tool Table**. These fields are also added to the **Tool Form**.

Added speed selection soft keys, **Low**, **Medium**, **High**, when using dual hand wheels and the **Handwheel** soft key is pressed.

When **CSS** mode is selected in the **Set Tool** dialogue, a **Max Speed** field is displayed for specifying upper speed limit. **Max CSS** speed is no longer set from **Job Setup**.

A gear selection may be specified in the **Set Tool** dialogue in **RPM** mode. If not specified, the system will use the current gear, provided the programmed **RPM** falls within the gear's speed range. The programmed gear's speed range will be displayed on the message bar when focus is on a speed field.

The direction of cutting of contours may be specified within the dialog. With a setting of **Forward**, the tool machines the contour in the direction it is programmed. With a setting of **Reverse**, the tool machines in the opposite direction.

The following changes were made to the thread cycle:

1. Thread pitch entry of **rev/inch** (TPI) or **inch/rev** is selectable by soft key. Metric threads are limited to **mm/rev**.
2. The **infeed angle** may be entered within the dialog. With positive angles, the cut will feed in from the right. With negative angles, the cut will feed in from the left. The **default is 29.5 degrees** from the right.
3. The tool is positioned to the starting point for the thread at the beginning and end of the step, including **lead-in**. Note that the infeed angle may result in slight motion from the starting point.
4. A finish cut depth may be specified in the thread dialog, this amount will be the pass at final depth.

The Thread step may be used to repair an existing thread. A **Teach** soft key is available from the **Start Angle** field to teach the location of any known good thread which is used to determine the starting angle.

The **Recess cycle** allows the inside corners to be specified as elements like start and end corners. The types of corner elements are **none**, **chamfer** or **round**, the size is specified independently.

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.