

**Model 353 Process Automation Controller  
Design Level “B”  
MPU Controller Board Firmware Version 4.01 and  
Kernel Firmware Version 2.10**

**PRODUCT(S) INVOLVED**

Model 353, Design Level B<sup>1</sup>, Process Automation Controller (e.g. TGX:353\_\_\_\_\_B\_)

**INTRODUCTION**

This Software Release memo discusses the enhancements and operational considerations for version 4.01 of MPU Controller board firmware and kernel firmware 2.10. This firmware is intended for a Design Level “B” Model 353 with 4.00 firmware.

Firmware is installed using the Controller Firmware Upgrade Utility, version 4.00, available for download from <http://www.usa.siemens.com/353firmware>. The download includes the Upgrade Utility and controller firmware. *For more information about the utility and firmware installation steps, refer to Software Release memo SR15939-71-4.*

Optionally, a CD-ROM with the Upgrade Utility, SR15939-71-4, MPU Controller board firmware, and kernel firmware can be ordered; order part number 15939-71V400.

**ENHANCEMENTS**

The following enhancements are included in version 4.01 firmware:

TH\_ - Track & Hold – When rotating the pulser knob to set the HOLD value, that value will now remain within the range limits.

FCO101 – With the controller off line and in configuration mode, loading FCO101 by way of the front port will no longer cause a rare controller reset.

CLOCK - Real Time Clock – The Year can now be set from the front panel (faceplate).

ATD\_ - Analog Trend Display Block – With a configuration containing one or more ATD blocks, the controller will now power up in Hot Start to preserve trend data.

“E LAST E” Displayed – UNK ERR will now display when an error is encountered for which no other message is programmed. Previously, some error conditions incorrectly displayed as E LAST E.

FCO101 or FCO102 – The default trip for an ALARM 3, dEV (deviation type) is now 100%. Previously the alarm tripped at 110%.

ALARM - Alarm – A priority 5 alarm message will now self clear when the cause of the alarm is removed.

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<sup>1</sup> The design level is indicated by the next to last character in the model number. The characters shown are those required to identify an involved instrument. See the Siemens Process Instruments catalog or the instrument’s User’s Manual (UM353-1B) for complete model designation information.

BATOT - Batch Totalizer – A batch total will now be retained after a HOT, WARM, or COLD start. Previously the batch total was lost during COLD start.

Modbus –The controller will now continue to operate when a Modbus command is sent to its front port at a baud rate that does not match the controller’s configured baud rate. Previously a manual reset was needed after a Modbus command was sent at a baud rate that differed from the configured value.

Ethernet communications – Status parameters, for example, block quality status QS, have been optimized to reduce nuisance messages.

## OPERATIONAL CONSIDERATIONS

Faceplate keys UNITS and TAG may require more than one press to update the faceplate display. These buttons are not involved in direct control of a process.

In the STATN - Station Parameters function block, parameters CONFIG LO and PARAM LO can have a value of either 0 or 1, 2, or 3: a 0 allows writes, a 1, 2, or 3 prevents writes. (There is no difference in operation in selecting a 1, 2, or 3.) The User’s Manual lists write values as YES/NO. Reads are always enabled.

## UPGRADE CONSIDERATIONS AND MATERIALS

None. Note that this firmware release is for use with Design Level B Model 353 controllers only.

## INSTALLING VERSION 4.01

Refer to Software Release memo SR15939-71-4 for a brief list of needed hardware and the firmware installation steps.

## CUSTOMER/PRODUCT SUPPORT

For support and the location of your local Siemens representative, refer to the table below for the URL of the Process Instrumentation (PI) portion of the Siemens public Internet site. Once at the site, click **Support** in the right column and then **Product Support**. Next select the type of support desired: sales, technical (see the table below), documentation, or software.

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Technical Support	1-800-333-7421; 8 a.m. to 4:45 p.m. eastern time, Monday through Friday (except holidays)
Customer Service & Returns	1-800-365-8766 (warranty and non-warranty)
Public Internet Site	<a href="http://www.usa.siemens.com/pi">http://www.usa.siemens.com/pi</a>
Technical Publications in PDF	Click the above link to go to the PI home page. Click <b>Support</b> , then <b>Manuals</b> . Under “Additional Manuals,” select the product line (e.g. Control Solutions).

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