



**AC-PRO-II - Version 2.0 Firmware: Release notes and FAQ**

rev 0 updated Nov 2017

**1. Which features and updates are included in the v2.0 update for AC-PRO-II?**

- Added Phase Loss / Reverse Protection feature \*\*\*
- Added "Test Mode" for testing convenience. (temporarily eliminates the need to enter the Security Code to change settings, and temporarily disables voltage-based protection. Test Mode times out after 60 minutes).
- Added Line-to-Line Voltage measurement, and removed Line-to-Neutral voltages (for AC-PRO-II with Voltage Divider Module).
- Improved UnderVoltage protection \*\*\*
- OverVoltage and UnderVoltage now have dedicated pickup settings and delay settings for both Trip and Alarm features.
- Improved Modbus Communications reliability
- Added Ground Fault Alarm feature
- Added Ground Fault Test trip function
- Added Frequency Measurement
- \*\*\*Phase Loss / Reverse feature and improved UnderVoltage require AC-PRO-II with VDM rev 2 hardware, which is present in AC-PRO-II with VDM units shipped 2016 & later

**2. Is the update mandatory?**

NO. The update is offered to provide new features and miscellaneous improvements. The update is recommended for AC-PRO-II with VDM, and for units where the Modbus Communications feature is being used.

**3. How is the update being released?**

Version 2.0 firmware is now provided in the present production AC-PRO-II.

Version 2.0 firmware can be provided via email to customers who would like to update existing units in the field.

**4. How is a field update performed and what do I need?**

Remove the AC-PRO-II (breaker) from service and use our free InfoPro-AC Software (latest version - v2.0 or higher), your Windows PC, and a mini USB cable.

The latest InfoPro-AC software (v2.0 or higher) should be downloaded from the following location:

[http://www.utilityrelay.com/Side\\_Bar/Downloads.html](http://www.utilityrelay.com/Side_Bar/Downloads.html)

After installing InfoPro-AC, use the InfoPro-AC Device Menu, choose the Upgrade Firmware option, and follow the prompts.

**5. How long does the update process take?**

Downloading the InfoPro-AC software (latest version - v2.0 or higher) from our website takes about 1 minute or less with a standard internet connection.

Installing InfoPro-AC on your Windows PC takes about 1-2 minutes.

Updating the AC-PRO-II firmware takes about 3-5 minutes.

**6. Will my existing settings remain after the firmware update?**

No. Since there are settings and feature changes, the unit will need to be recommissioned after this particular update is applied (i.e. UnderVoltage protection will now use Line-to-Line instead of Line-to-Neutral voltages).

Though the software will save a backup copy of settings and trip data on your PC for reference, *we strongly recommend documenting settings prior to performing the firmware update.*

**7. If I send my AC-PRO-II back to URC, will you update my firmware for me?**

Yes, though the update can easily be performed in the field, for this particular update from v1 to v2, URC will perform the update free of charge.

**8. How can I learn more about the new v2 features, how to set them, and how to test them?**

Additional information is included in the updated AC-PRO-II Instruction Manual. See link below.

[http://www.utilityrelay.com/PDFs/Product\\_Manuals/I-AC-PRO-II.pdf](http://www.utilityrelay.com/PDFs/Product_Manuals/I-AC-PRO-II.pdf)

**9. Do I need to test the AC-PRO-II after the update?**

A secondary injection test is recommended.

Also, a test of any new features being utilized is also recommended.

Once the unit has been recommissioned after the update, the settings should be re-verified for correctness.

**10. Important information and reminders about Phase Loss and UnderVoltage protection (with v2 firmware and VDM Rev2).**

- a. AC-PRO-II must be powered up to provide Phase Loss and/or UnderVoltage (UV) protection. Reminder: Although AC-PRO-II derives power from the system current (CTs) and from system voltage (VDM), there are some UV or Phase Loss circumstances (i.e. a total power loss, Phase Loss with no current, etc) where the AC-PRO-II is not powered by the CTs or the VDM. Therefore, if Phase Loss or UV protection is desired in these circumstances, reliable 24VDC Auxiliary power to AC-PRO-II is recommended.
- b. For fused breakers, where Phase Loss protection (for blown fuse condition) is desired, the VDM taps must be located on the load side of the fuses. (NOTE: in multi-source applications, the Phase Loss feature will NOT provide blown fuse protection where sources can be paralleled).

See Sections 8.0 and 8.1 in the AC-PRO-II Instruction Manual for more information.

[http://www.utilityrelay.com/PDFs/Product\\_Manuals/I-AC-PRO-II.pdf](http://www.utilityrelay.com/PDFs/Product_Manuals/I-AC-PRO-II.pdf)