

## Application Note

### RANGER Rescue Bootloader Mode

Product Family	Hardware Revision	Firmware Revision	Applicable Firmware	Applicable Toolkit Software
RANGER	ALL	ALL	ALL	v1.0.0.4 and up

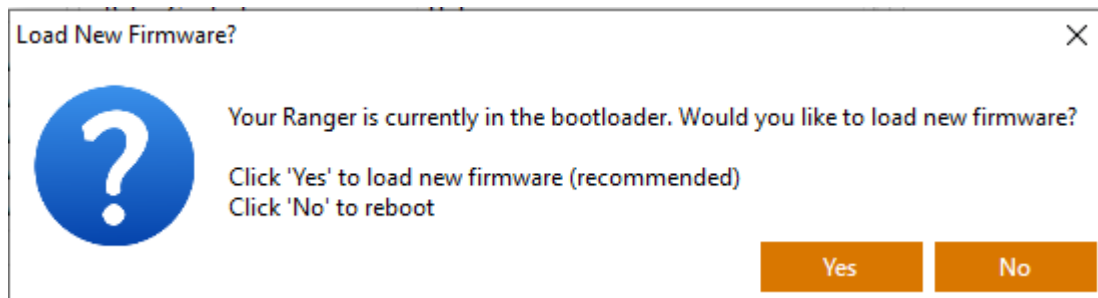
#### OVERVIEW

In accidental or unforeseen circumstances, the micro-USB wire attached to the RANGER may be detached from its port in the middle of a firmware update. In which case, it will have deleted its prior firmware and stuck with an incomplete firmware, making it incapable of any expected functionality. To resolve this, the RANGER was designed with bootloader mode to correct this.

#### REQUIREMENTS

To enter bootloader mode:

- 1- Disconnect the power supply from the RANGER
- 2- Hold Down the CHECK IN button
- 3- Connect the power to the RANGER while holding down the CHECKIN button until the green STATUS LED flashes.
- 4- Release the CHECK IN button
- 5- Open the RANGER toolkit and open its respective COM port. The RANGER should be detected followed by a window displaying the following:



- 6- Click "Yes". You will be directed to the update firmware table as shown on the next page

Update Firmware ×

Firmware File  Browse


Hardware Revision:  PCB Revision 1.x (-v1) Start Firmware Update  
 PCB Revision 2.x (-v2)

Firmware Variant:  Standard (optional A2D1 Sensor Daughtercard)  
 Modbus (-modbus, RS485 Interface Daughtercard)  
 HART (-hart, HART Interface Daughtercard)  
 SDI-12 (-sdi12, SDI-12 Interface Daughtercard)  
 Pressure Ranger (-3v, Built-in 3.3V Pressure Sensor)  
 DIN Mount (-din, DIN Mount Enclosure and Bracket)

Release Notes:

7- Select the correct hardware revision for your RANGER and firmware variant, and then click on Start Firmware Update. It will detect the RANGER and then update the selected firmware to it. A successful rescue boot load will cause the following window to appear:

Firmware Update Successful ×

 Ranger Firmware Updated Successfully to v0.1.23-v1

OK

8- Click on OK and the RANGER will be detected successfully.

## *Revision History*

Revision	Date	Changes/Updates
1.0	08/17/2022	Initial Release for RANGER Rescue Bootloader Mode