![GE MDS logo]

Upgrading OCR Firmware
OCR: 3.9.26
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This upgrade can be done over the air without opening the OCU.

NOTE: It is assumed that all OCRs to be upgraded are running 3.8.1 in image 1 and 3.8.4 in image 2.

NOTE: You need an IR dongle attached to your PC's serial port to do this process. GETS recommended an Actisys ACT-IR220LN57, available from http://www.actisys.com/price.html.

NOTE: Login as engr with either zonukh4x (zulu oscar november uniform kilo hotel four x-ray) or 0d3k9l7 (zero delta three kilo nine lima seven) as the password.

Setting Up the Upgrade Server

Set up a Packaged Remote Radio or OEM Radio as an upgrade server as follows:

1. Login to the radio to check the active image. It should be 2. If not, REBOOT OTHER.
2. Using the Remote Upgrade Utility, upgrade image 1 to 3.9.26, but do not boot to it.
3. Upgrade image 2 to 3.8.4 and boot to it.
4. This process will not work unless the upgrade server has: 1=3.9.26 and 2=3.8.4, with 2 active.
5. Once booted, login.
6. RADIO MODE=MAINT
7. PROGRAM MODE=RADIO_SEND
8. Attach an antenna or RF cable to the upgrade server radio.

The above steps only need to be done once. If the upgrade server is rebooted, perform steps 4-6 again.

Upgrading the OCR

NOTE: The 3.9.26 firmware remaps the flash and therefore requires a few manual configuration steps following the normal upgrade process.
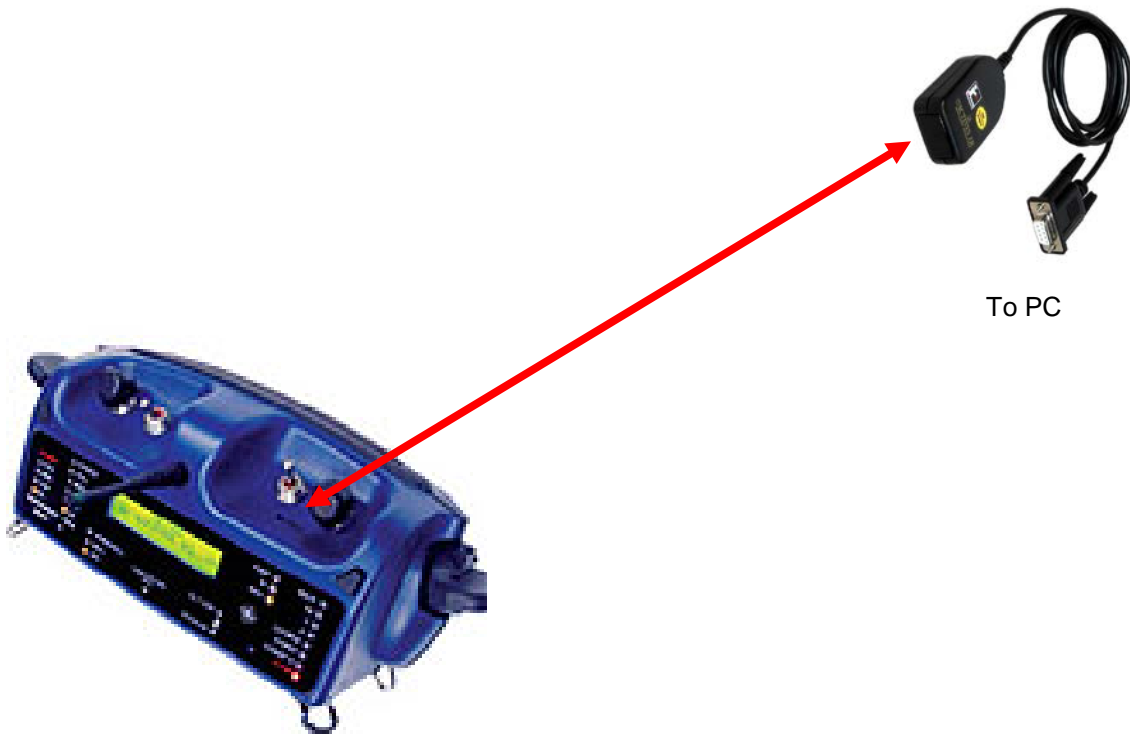
Before upgrading, get some settings out of the OCR as follows:

1. Turn on the OCU, then activate IR OCR console access by depressing the 5 buttons shown in Figure 1 simultaneously.
2. Use a serial to IR dongle to access the OCU's infrared serial port as shown in Figure 2. Use 57,600 baud rate.
3. Log in to the OCR.
4. Execute the DEVICE command and record the results.

Figure 1: Activating IR OCR Console Access

Figure 2: Accessing the OCU's Infrared Serial Port

To PC

To perform the over the air upgrade, proceed as follows:

1. If necessary, log in to the OCR. You are probably already logged in.
2. Using the VER command, verify that image 2 is active and that the versions are 1: 3.8.1, 2: 3.8.4. If not, the over the air upgrade will not be possible without additional manual steps.
3. RADIO MODE=MAINT
4. PROGRAM MODE=RADIO_RECEIVE

During the upgrade, check status like this:

1. PROGRAM STATUS
2. If START_COUNT does not increment from zero to one within one minute, the upgrade will not begin, and the OCR must be upgraded another way.

Once all three components (Application, DSP, and MCU) are at 100% (takes about 40 minutes), proceed as follows:

1. Reboot to the new firmware on the OCR with REBOOT OTHER. There will be a delay while the internal upgrade completes. The entraNET prompt will not appear until it is finished.
2. LOGIN as engr with password zonukh4x.
3. DEVICE SER=abcdefg (where abcdefg is the serial number captured in step 1).
4. DEVICE MODEL="220 REMOTE (x)" (with double quotes, and where x is the revision captured in step 1).
5. DEVICE OWNER=" " (double-quote, space, double-quote)
6. RADIO GROUPTIMEOUT=30
7. RADIO UNITADDR=2048.

Please make sure these settings are made correctly and the active version is 3.9.26 before units are returned to the field.

Once the upgrade and configuration are complete, you may turn off power to the OCU and return it to service.