

# IMPORTANT VR3 ADVISORY

When the VR3 enters a reset condition (e.g. as a result of battery replacement/reconnection or upon recovering from some internal error) it reads the date and time from an internal real-time clock circuit (RTC). VEMCO has become aware of a “Calendar Roll-over” error that occurs in specific circumstances when the VR3 attempts to read the date and time from the RTC after a reset has occurred. This error only happens after a reset has occurred and does not occur during normal operation of the VR3. VEMCO has resolved this issue in receivers that have been manufactured or upgraded with receiver firmware version 13 or greater but the Calendar Roll-over issue will be present in VR3 receivers with earlier versions of receiver firmware. VR3 users are advised to plan the upgrade of their VR3 receivers at the earliest convenient point in their study schedule.

Data files that have been impacted as a result of the Calendar Roll-over error can be post-processed by VEMCO or the user to correct this problem.

## **Known Issues:**

If a VR3 encounters a reset condition after January 1, 2010 and is not subsequently initialized with the proper time and date, events (including detections) will be recorded as having the year 2016. Although the month, day and time-of-day values will be recorded properly, special consideration for Leap Year instances must be provided.

When the VR3’s time is updated via the VR3 PC Host Software, the real-time clock is properly set and subsequent reset events will cause the VR3 to read the correct date and time from the real-time clock. However, the issue will re-occur in 2016 if a reset event is encountered and the VR3’s time is not subsequently updated via the VR3 PC Host Software.

## **When the problem occurs:**

The problem occurs when a VR3 encounters a reset after a critical calendar year roll-over (2009 roll-over to 2010, 2015 roll-over to 2016) and the VR3’s time is not subsequently updated via the VR3 PC Host Software. The VR3 will enter a reset conditions when:

- The battery is disconnected and reconnected
- The battery is nearing its end-of-life or is malfunctioning
- An internal VR3 error or malfunction occurs within the VR3.

## **Who needs to take particular note:**

All VR3 Users using VR3s running firmware version 12 or lower.

## **What occurs:**

Whenever the VR3 encounters a reset after a critical calendar year roll-over AND the VR3's time is not subsequently updated via the VR3 PC Host Software, events subsequent to the reset event will be recorded as the actual year +6 years. Although the month, day and time-of-day values will be recorded properly special consideration for the extra days resulting from leap-years must be provided.

## **Proposed solution:**

In early 2009, VEMCO began a program of upgrading receivers with new firmware that is capable of detecting new coding techniques from VEMCO. The new coding techniques have been developed to enable hundreds of thousands of unique tag IDs. As part of this upgrade for the VR3s, several enhancements have been made to improve the user experience with the receiver. Receivers that have been manufactured or upgraded to firmware version 13 or higher will not experience this issue so users are strongly advised to upgrade as soon as possible. In the meantime, the following provides solutions for working around the issue:

1. After reconnecting a battery to the VR3, update the VR3's time using the VR3 PC Host Software.
2. When uploading from each VR3, update the VR3's time using the VR3 PC Host Software.
3. Whenever customers encounter data in their files tagged with dates containing the year 2016, contact VEMCO Support for assistance with post-processing to correct the issue.
4. VEMCO has modified and released updated firmware for the VR3 to correct the problem. This firmware requires that the VR3s have been upgraded by VEMCO to the new Global standard prior to being able to install the new firmware.

Please contact VEMCO Customer Support at [support@vemco.com](mailto:support@vemco.com) or by telephone at +1-902-450-1700 if you wish assistance with correcting data files, discussing options for upgrading your VR3s or if you have any other questions.