Marker Tag User Guide

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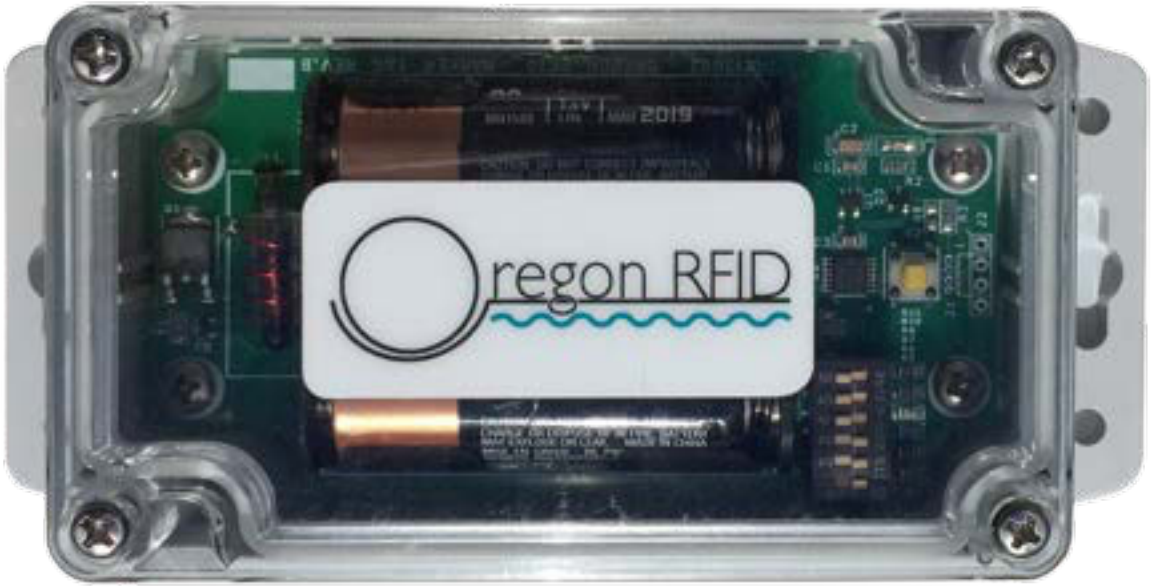
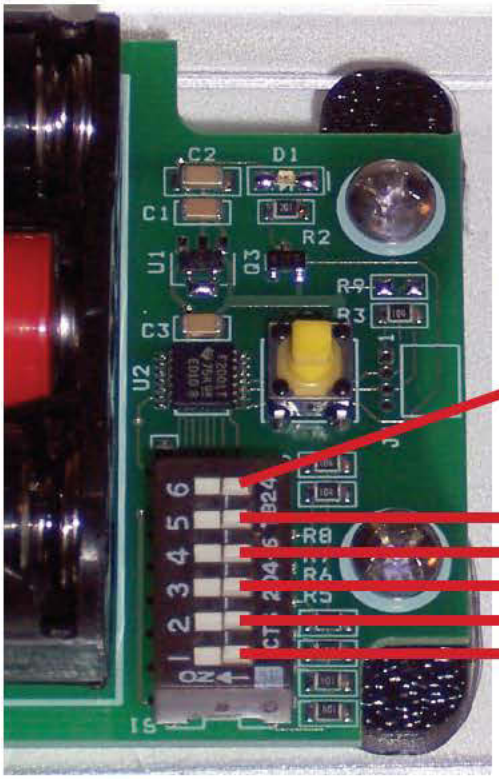
Marker Tag

The Marker Tag is a battery operated circuit that hides and reveals an HDX RFID tag at timed intervals. These periodic events are recorded by a reader and datalogger to verify continuous operation. Any gaps in the record will indicate a problem.



Setting the Interval

The time interval can be adjusted between 1 and 31 minutes. The duration of the tag visibility can be 1/4 or 1 second.



Switch 6 sets the visibility duration
ON = 1 second
OFF = 1/4 second

16
8
4
2
1

Turn on switches
to 5 to add minutes
to the interval.

5 minutes is 1+4
15 minutes is 1+2+4+8

When all switches are off the reader is in a special test mode that reveals the tag every 3 seconds.

Press the yellow Reset button after changing the DIP switch settings to restart the timer.

Mounting

The Marker Tag needs to be mounted within the detection field of the antenna. When evaluating placement locations, press and hold the yellow button to continuously reveal the tag.

The tag can be mounted close to the wire or somewhere within the detection zone. It is important to properly orient the tag axis to the antenna loop.

The tag could also be mounted in the read zone at the minimum required distance. The tag axis should point towards the middle of the loop.

When placing the Marker Tag next to the wire the tag axis should be perpendicular to it.

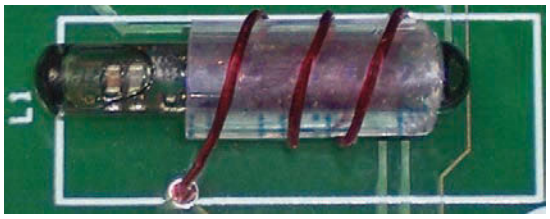
Enclosure

The enclosure is NEMA 4 and will seal against wet weather but is not waterproof enough to be mounted underwater. However a wrap of vinyl electrical tape is sufficient to seal the box.

How it Works

A coil is wound around the tag to form a Faraday shield which blocks radio signals when the ends are touching. An ultra low power timer circuit opens and closes a switch to hide and reveal the tag. The batteries will last for many months.

After the batteries are exhausted, the tag will remain hidden.



The Marker Tag does not work with FDX tags which requires a different type of shielding.