

## ***Changing the Battery pack on a 3pin HR series logger***

### You will require:

1. Replacement Battery Packs and EPR O rings (supplied with battery packs)
2. Clamps to attach to HR logger and battery pack to break the existing pipe seal (we use the jaws of a small lath for our battery replacement in the factory)
3. Soldering iron and solder
4. Wire strippers
5. Loctite 577 Thread Sealant (High Pressure Pipe Sealant) or equivalent

### Procedure:

1. Strip 3mm of insulation from each of the four wires attached to a battery pack and tin wire ends (ensure bare ends of wires do not touch each other after stripping)
2. Break pipe seal between logger body and old battery pack using clamps (it is important that the clamping method used does not distort the stainless steel casing of the logger – the old battery pack can be damaged as it is not required).
3. Gently unscrew battery pack (approx 3 3/4 turns anti clockwise)
4. Note connection of Red Black Yellow and White wires
5. De-solder Red, Black Yellow and White wires from the logger end (these are soldered to pads on a circuit board that will be protruding from the black encapsulation material)
6. Clean up the solder pads with new solder
7. Solder on the new battery back starting from the right pad (Black Wire) then right center pad (Yellow Wire) then left center (White Wire) and finally the left pad (Red Wire).
8. Visually check that there are no solder bridges between pads
9. Connect to a computer to ensure that the logger is communicating
10. Disconnect from computer
11. Twist the Battery Pack 1 ½ turns anti clock wise (this pre twists the wires anti clockwise so that there is not too much pressure on them when the pack is screwed in clockwise)
12. Connect the Battery Pack Thread to the Logger thread
13. Turn Battery Pack Clockwise to get the thread started
14. Apply the Loctite 577 Thread Sealant right around the groove between the Battery Pack and the logger
15. Tighten up the thread (approx 3 3/4 turns clock wise)
16. Connect to a computer to ensure that the logger is communicating before the Thread Sealant has had time to dry
17. Wipe any excess Thread Sealant from the outside of the logger with a warm damp cloth
18. Fit new EPR O rings to battery pack and screw old cap on

Note: The Battery Pack contains a lithium battery. You may need to check local regulations for disposal.