



NIWA Stream Traveller Quick Start Guide

The NIWA ADCP traveller is designed to traverse and tow an unmanned gauging boat such as the StreamPro, from Teledyne RD Instruments, across a measurement cross section at a steady speed.

Operation

Preliminary Checks

1. Ensure that the traveller battery is fully charged.
2. Check that a spare battery for the remote is available.

Field Operation

1. Setup the survey rope/tape so that it is tight and approximately level and at a height of 0.3m to 0.7m above water level. This may require long stakes and pegs on each side.
2. Mount the traveller on the line by removing the outer retaining pins and threading the line. See users manual for details. Attach or adjust the counterweight, as required in low velocity water, to stop rotation of the bottom of the traveller.
3. Link the traveller to the boat either with the snap carabiner through the top bridle connection or with a length of rope.
4. On a StreamPro remove the two \ locking pins on the outer edge of the StreamPro bridle.
5. Slide the control box on top of the pontoon and position this so the boat sits level. It is designed to slide over solar shield locking thumbscrews from the front.
6. Plug the traveller cable into the control unit in order to turn on the power.
7. Determine where the edge positions (2 good bins) are by moving the traveller and StreamPro (pinging) to each edge. Mark these by placing the supplied clip on the line on the bank side of the traveller. Note down the offset from the centre drive wheel of the traveller to the bank (traveller centre-line to outer edge of clip = 300mm).
8. Set and test the speed on the control box so each traverse is greater than 3 minutes.
9. The motion and direction can be controlled with either the remote control or buttons on the control box. The LED's on the side change with motion and direction so this is visible from distance.
10. On completion disconnect the traveller cable from the control unit to power them down.

Indicators

Left	Green – direction set to travel to the left when viewed upstream.	Slow flash – stationary
Right	Red – direction set to travel to the right when viewed upstream.	Fast flash – moving.
Battery	Orange – control unit battery is low.	On – low battery