

ADCP Introduction

Duration: 2 days

Synopsis

The course is for users of the RD Instruments ADCP and WinRiver software application, both the Rio Grande and StreamPro variants are covered, as required. The course considers all aspects of their use, both practically in the field and theoretically in the office. Users learn techniques of data collection, validation & processing with these systems. The development and use of ADCP's for measuring discharge has become a standard in many organisations. This course assists users in the correct deployment of these devices and a range of techniques for getting the best out of their equipment and software.

Prerequisites

None, although some prior experience of gauging would be an advantage.

Outcomes

After taking this course, delegates should be able to use Rio Grande and/or StreamPro equipment to determine discharge on a river.

Content

The course content may be adjusted to focus on the needs of participants but would normally include all of the following:

- Basic theory behind how the technology works.
- Setting up the equipment for field use and checking its correct operation on site.
- Performing field tests to prove operation and to select the best location for a measurement, including the best method of deployment under particular site conditions.
- Development of a configuration file that suits the section to be measured and that will provide the best quality data.
- Correct operation of the provided WinRiver software.
- Data processing to ensure that the data collected is to the highest possible standard. This includes the ability to review data from other sources or colleagues to confirm that operation is optimal.
- Exporting data to a third party system, such as a time series database.
- Care and maintenance of the instrumentation and associated ancillaries.
- Health and Safety.

Tuition uses a hands-on approach, and is normally given with no more than six participants per tutor. The main features of each topic are explained using a projector, normally given in two half-day sessions. Delegates will spend the remaining two half-day periods at suitable sites, using the instruments under a variety of field conditions. Exercises are used for extension and consolidation, so participants can work through a sequence of tasks that are typical of the sort of thing they may need to do with their live equipment and data.