# Manual Double Drum Winch

**WATER FLOW** 

## General Description

HyQuest Solutions' double drum traveller DDT1000 Riverina Winch is a **hand-operated double drum winch** capable of handling gauging weights up to 110 kg (242 lb). The design offers these advantages:

- It enables the operator to change from sounding mode to traversing mode very quickly by engaging the drive gears on each drum.
- The double drum concept eases traversing, as the forces exerted by the gauging weight are largely cancelled out.

The drum capacity on each (i.e. traversing and sounding drums) is 150 metres of cable.

The winch is designed for ease of operation and serviceability in the field and can be operated easily and safely by one person.

Special attention is paid to **safety**. An automatic Weston Brake locks the drum if the handle is released. This holds the load in any position to ensure **safe and smooth operation**. The unit is equipped with a breakaway kit rated @ 272 kg for the safety of the user during operation. Attention: Failure to use this device may cause severe injury or death.

The sounding drum is fitted with an amergraph cable. The special construction of this cable offers these advantages:

- It allows the suspension in the stream of the sensing device (e.g. current meter and large Columbus weight).
- It serves as a medium for transmission of current meter signals to a counting device attached to the winch.

The winch counters are protected within the frame and can be ordered to display either **metric or imperial units**.

## Use with current meter

Some elaborate features support current metering. A silver-plated slip ring conducts the signal from the sounding drum to the current meter counter. The counter can be connected to terminals provided on the winch itself. The single layer of the amergraph signal cable on the drum prevents damage of the internal conductor and premature replacement.

## **Applications**

The Riverina Winch is used for the deployment of mechanical current meters with gauging weights, sediment samplers and other suitable hydrometric equipment for

- Water Quality Analysis
- Stream Discharge Measurement
- Sediment Sampling

### Features

- Type: double drum winch (single drum version available on request)
- Safety: Weston brake, breakaway kit (standard component)
- Adjustable manual drum handle
- Portable (allows for use on multiple sites with the reduced risk of vandalism)
- Low-maintenance
- Counters housed within the frames, protected from external damage









## Technical Specifications **Load Capacity** Designed for weights up to 110 kg (242 lb) **Sounding Drum** Cast aluminium, 1000 mm circumference Silver plated slipring Sounding counter: mechanical, five digit resettable, registering metric (1 cm resolution) or optional: registering imperial (1/10 of a foot resolution) Capacity: - 118 m (387 ft) for 3.2 mm (1/8") amergraph cable - 150 m (492 ft) for 2.5 mm (1/10") amergraph cable **Traversing Drum** Cast aluminium. 1000 mm circumference ■ Traversing counter: mechanical, five digit resettable, registering metric (either in centimetres (1 cm resolution) or decimetres (10 cm resolution)) or optional registering imperial units (resolutions of either 1 ft or 0.1 ft) Capacity: - 93 m (305 ft) for 4.0 mm (5/32") wire rope - 118m (387 ft) for 3.2 mm (1/8") wire rope - 150 m (492 ft) for 2.5 mm (1/10") wire rope Frame Robust aluminium, powder coated, stainless steel shaft components, corrosion resist. fasteners Scope of Delivery DDT1000 Riverina Winch with: ■ Traveller block to suit up to 32 mm (1 1/4") diameter main cable ■ Banana style connections to suit most current meter counters Winch to counter connecting lead ■ 4 x 10 mm mounting bolts ■ Not included (optionally available): Operating side post head sheave asssembly,

## **Dimensions and Mass**

## Accessories



Current Meter Counters (various models): Features: waterproof enclosures, simple button controlled menus, embedded LCDs and beepers to make counts audible. Pre-set

or manually stopped sampling period. Improved accuracy due to signal conditioning. Bluetooth interfaces for use with HydroTab Stream Gauging Computer available.



Various models, e.g. OSSB1 (universal current meter) and Red Back (cup-type current meter) with advanced contact switching system

**Mechanical Current Meters**:

far side post head sheave asssembly, metal carry case

L x W x H: 735 mm (29") x 800 mm (31.5") x 700 mm (27.6"); weight: 70 kg (154 lb)

that allows the measurement of water flow in streams, open canals, pressure pipes and sea to a fine degree of accuracy and repeatability.



Gauging Weights: Columbus weights with hanger bar and nose mounted

ground feeler weights with optional carrying case available. The weight positions the current meter correctly in fast flowing water with the streamlined shape reducing resistance to flowing water.





Sediment Samplers: Modular equipment (choice of samplers and accessories) for depth integrating and bedload sediment sampling.

Please ask for details.

## **HyQuest Solutions Australia**

- ✓ sales@hyquestsolutions.com.au
- www.hyquestsolutions.com

## **HyQuest Solutions New Zealand**

- ≥ sales@hyquestsolutions.co.nz
- www.hyquestsolutions.com

## **HyQuest Solutions Europe**

- ✓ info@hyquestsolutions.eu
- www.hyquestsolutions.eu

