DRAWING BOARDS · PARALLEL MOTION

Connecting the wires

Counter-weight parallel motion

COUNTER-WEIGHT PARALLEL MOTION

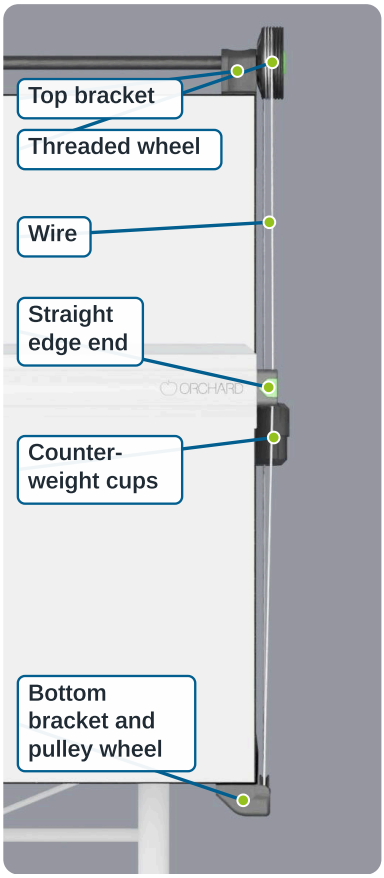
ACKWORTH COUNTER-WEIGHT | PRIORY COUNTER-WEIGHT

A counter-weight parallel motion uses a weighted mechanism to stop the straight edge sliding to the bottom of the board when the board is at an angle. It gives a floating, feather-light action for long drawing sessions.

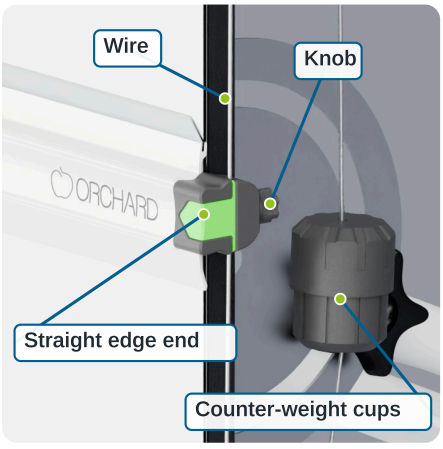
How the wire runs

Each side of the board has its own wire. The drawing on the right shows the right-hand side; the left-hand side is a mirror image.

1. At the top corner the wire is wound onto the **threaded wheel**, which is held in the **top bracket**. The threaded wheels on each side are joined by a shaft along the top of the board.
2. One run of wire goes down the edge of the board, around the **pulley wheel** in the **bottom bracket**, and back up to the **inner cup**. The wire end is held by a **ferrule** and **collet**.
3. The other run comes straight down from the threaded wheel to the **outer cup**.
4. The **weight** sits inside the cups. Together they balance the straight edge.
5. The straight edge is clamped to the wire at each end (see *Setting up your drawing board* for how to fit and square the straight edge).



A1 Ackworth counter-weight, right-hand edge, front view. Priory counter-weight boards use the same parts.



Straight edge end on the wire, with the counter-weight cups just below.

STRAIGHT EDGE STIFF AFTER DELIVERY?

For transport, the wires are tightened to prevent damage, which makes the straight edge stiff to move.

1. Unscrew the counter-weight cups a little, on both sides of the board.
2. Take care not to undo the two halves of the cups completely. If they do come apart, the weight and wire end will need refitting as shown above.

STRAIGHT EDGE SLIPPING?

If the straight edge loses its grip on the wire it will slip. Slacken the knob at each end of the straight edge (the counter-weights will drop to the bottom of the board), line the blade up with the top of the board, then firmly retighten both knobs.

> **Need a replacement wire?** You can fit a new wire yourself. We supply replacement wires ready-made, with the ferrules already crimped on. To order, call +44 (0)1924 291333 or email info@thebigorchard.com.