



Dear Class Measurer,

To help with class rules decision-making, this letter summarises the various functions of the Tacktick product range.

Product	Micro Compass	Silva	Suunto	Plastimo	Race Master	KVH	Sunto Watch	Ritchi	Casio Watch	Ultimate Timer
	T060				T040					
Heading display	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Race timer	Y	N	N	N	Y	Y	Y	Y	Y	Y
Wind shift bar graph display	N	N	N	N	Y	Y	N	N	N	N
Tactical Scale	Y	Y	Y	Y	N	N	Y	N	N	N
Memory arrows for Headers and Lifts	N	Y	Y	Y	N	N	N	N	N	N
Wind shift numerical display	N	N	N	N	Y	Y	N	N	N	N
Permanent memory	N	N	N	N	Y	Y	Y	Y	Y	Y
Programmable	N	N	N	N	Y	Y	Y	Y	Y	N
Works in Southern Hemisphere	Y	N	N	N	Y	Y	Y	Y	Y	Y
Calibration	N	N	N	N	Y	Y	Y	Y	Y	N
Backlight	N	Y	Y	Y	Y	Y	Y	Y	Y	N
Compass correction (Deviation)	N	Y	Y	Y	Y	Y	Y	Y	N	N
Solar power source	Y	N	N	N	Y	N	N	N	N	N
GPS Facility	N	N	N	N	N	N	N	N	Y	N
Interconnect capability	N	N	N	N	N	Y	N	N	N	N

Explanation of terms

- **Heading display:** is the LCD (liquid crystal display, the display type found in digital watches) of the boat's heading, or can be a glass ball traditional display.
- **Race timer:** count down to the start, then count up from the start
- **Wind shift bar graph display:** a graphical display, which indicates differences between the current heading and the average heading on the tack. The average heading: in the conventional way, the sailor must spend time prior to the start and establish the average port and starboard headings for the race. This is done by watching the compass for a number of minutes and "feeling out" the averages. The electronic compass can then be programmed with these two averages (the sailor must sail the average heading, which has been established, then press a button to set the compass accordingly). This is analogous to writing the average headings on the deck with a china-graph pen, or by using rolling counters that store the heading for you.
- **Tactical Scale:** This is a scale that does not read a true magnetic reading but is either an adjustable scale or fixed that displays numbers that are the typical boats tacking angle

divided by two and then deducted from the boats heading. This can be adjustable by having moving lubber lines on a glass ball compass, or different internal scales on the card, or by having changeable digital numbers.

- **Memory arrows for Headers & Lifts:** These are found on Glass Ball compasses and are fixed or moving arrows that show which way the numbers need to move in order for it to be a header or a lift.
- **Wind shift numerical display:** this is a numerical display that shows weather or not you have been lifted or headed by a set number of degrees.
- **Permanent memory:** information is not lost when the compass is taken home and switched off between races. This means that the average headings for the previous race will remain in the compass memory, should they be of use for the next race. This is also used in start watches for starting sequences and in GPS watches for way points or specific locations.
- **Programmable:** The facility to adjust calibration, damping, GPS way points, Headings, and other inputs.
- **Southern Hemisphere:** Glass Ball compasses need to be changed for the Southern Hemisphere where as flux gate compasses do not.
- **Calibration:** the facility to adjust, for example the damping (or response time) of the heading display.
- **Back Lighting :** Self Explanatory
- **Compass correction:** the facility to compensate for deviation and variation. This is achieved electronically, with no need for external corrector magnets.
- **Solar Powered:** Self Explanatory
- **GPS:** Has the facility to receive GPS for use as a navigational aid.
- **Interconnect capability:** the facility to take data from other sources or to transmit data to other devices.
- **Price:** This is a comparison of the various items, and is approximate for the UK, this is for the single items and to truly compare you need to understand that some products have compass and timer as one.

Possible ruling (used by Lightning Class Association)

A racing Lightning may use an electronic digital compass with chronograph (timer and/or click). The compass must be entirely self-contained with either an internal battery and/or solar power. The compass shall have no external connections. This includes power supply and data inputs, such as wind information, boat speed or navigational features. It shall not have the ability to compute correlation's between time, compass and VMG.

Possible ruling (used by Flying Dutchman Class Organisation)

The type and material of all fittings is optional except that hydraulic, pneumatic and electrical devises (including instruments) are prohibited, But electronic watches and magnetic and electronic compasses are permitted providing they have no data correlation capabilities.

Possible ruling (used by International H-Boat Class)

"Devices transmitting or correlating data relative to wind direction or speed or boat speed and location by means such as, but not limited to electronic, mechanical, hydraulic or pneumatic are prohibited from use whilst racing. Boats fitted with this type of equipment shall have the display and the mast unit disabled to satisfaction of the race committee. The use of an electronic digital compass with chronograph (timer and/or clock) is permitted. The compass must be entirely self-contained with an internal battery and/or solar power. The compass shall have no external connections. This includes power supply and data inputs."

Possibly ideas from ISAF for simple rules that they could foresee.

Option 1.1

Digital devices shall be prohibited unless they display only time information.

Option 1.2

Digital compasses and/or devices displaying heading and time are permitted, provided they do not have directional memory features.

Option 2.1

Digital compasses and/or devices, which offer functions not exceeding timing, heading and directional memory, which may include a user programmed reference heading, are permitted.

Option 2.2

Electronic digital compasses with a chronograph (timer and/or clock). The compass must be entirely self-contained with either an internal battery and/or solar power. The compass shall have no external connections.. It shall not have the ability to compute correlation's between time, compass and VMG.