HERITAGE WATCH MANUFACTORY

HWM - The Firmamentum

The Firmamentum is a unique measurement and navigation instrument. Fully in the tradition of the historic watches used for observation, it not only measures the earth's rotation, thus giving the classic measurement of time, but with the aid of the hour angle it permits measuring the movement of the sun and planets in our solar system as well as that of the stars.

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Firmamentum therefore not only permits the simultaneous observation of two heavenly bodies within our solar system, but also the observation of the sun or a planet in our solar system as well as a star external to it. Both displays have been designed such that they not only show angular degrees directly, but also the solar and sidereal hours and minutes as used by astronomers. At the same time, the hours, minutes and seconds can be read off just as in a normal watch, while in addition the fixed solar time display has been conceived such that it can be used for a second time zone with a 24-hour display accurate to the minute. The various methods of navigation can be directly read off from the dial of the Firmamentum in a truly unique fashion.

The Firmamentum also has a second pushbutton integrated at the 4 o'clock position that synchronizes the time in accordance with a time signal. The power reserve indicator brings the underlying data of the watch to the fore. A stop lever halts operation of the watch movement after a running time of 56 hours.

TECHNICAL SECIFICATIONS:

Type:

Hour angle instrument for the observation of heavenly bodies by means of 13 hands with two additional displays

Hands

Hour angle variable for either sidereal and solar time, arcdegrees, arcminutes, 5 / 100 arcseconds Solar time hour angle display in arcdegrees, arcminutes, 5/100 arcseconds Power reserve display with balance wheel stop mechanism Status display for basic regulation of Vivax balance wheel Display of solar time as astronomical time Second time zone settable to one minute of accuracy Time in solar or sidereal time Status of sidereal or solar time with variable hour angle, synchronisation mode

Movement

Independent manufacture Calibre: Cal. 870
Hand bevelled plates
3 patents pending
Fully hardened parts
483 components
92 jewels
Swiss lever escapement; capillary phase to improve oil retention
Mass-regulated Vivax balance / 16 mm / patent pending
Over-coil hairspring (Breguet)
Tenere fine adjustment / patent pending
18 000 vib/h
56-hour power reserve

Case:

Polished satinised steel, 50 m Domed sapphire glass crystal Flat sapphire glass caseback