CASIO to Release New PRO TREK Smart That Supports Personalized Pacing in Exercise

Heart Rate Monitor Enables Users to Pace Themselves when Road or Trail Running

WSD-F21HR-RD

Norderstedt, August 20, 2019 — CASIO announced today that it will release a new addition to the PRO TREK Smart series for outdoor enthusiasts. The new WSD-F21HR, to be released September 13, 2019, is an outstanding smartwatch for efficient, effective fitness training, as well as mountain climbing and trekking. The heart rate monitor is great for pace management during activities such as road running, trail running and cycling.

CASIO entered the smartwatch market in 2016 and released the WSD-F20 in 2017. Featuring GPS technology and offline maps, this and subsequent models allowed users to easily check their current location from their wrist, even in locations without cell phone service, and they have been especially popular.

The new WSD-F21HR offers a new heart rate monitor together with the wearable map technology, enabling wearers to continually check their physical condition, or navigate unfamiliar routes. Running and Trail Running menus have been added to the Activity app, which displays measurement data in real time. The user can optimize the data displayed by choosing three types of information such as heart rate, pace, and distance[*1] to display on the watch. Furthermore, because up to four screens can be set, the user can easily switch between them and check the desired information during the activity.

*1: The information that can be displayed includes Heart rate and zone / Heart rate / Heart rate graph/ Total time / Running time /Expected time / Goal ETA / Lap / Average lap / Pace / Average pace / Maximum pace / Total distance / Distance remaining to goal / Speed / Average speed / Maximum speed / Speed graph / calories consumed /Barometer / Barometer graph / Altitude / Altitude change graph / Target altitude / Altitude remaining to goal / Elevation gain / Elevation loss / Current time / Battery level

Certain types of information can only be shown in the upper, middle, or lower parts of the display.

In addition, it comes with a new Heart Rate watch face. Using an accelerometer, the WSD-F21HR automatically switches to the heart rate monitor screen when motion is detected. The heart rate information is expressed as five heart rate zones,[*2] allowing the user to see this data at a glance.

*2: By setting the maximum and resting heart rates, current fitness and training results can be shown as five levels. The target exercise intensity can be checked with the heart rate zone screen, allowing the user to determine the ideal heart rate for the target training, or the user's current fitness level.

As with other PRO TREK Smart models, the new WSD-F21HR can use Google App services, the trekking app ViewRanger, the cycling app BIKEMAP, the running app STRAVA, and other outdoor sports apps compatible with Wear OS by Google. The WSD-F21HR is a wrist device for all kinds of activities.

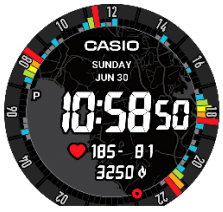
Model	Color
WSD-F21HR	Red / Black

Main Features of the WSD-F21HR

First heart rate monitor in a PRO TREK Smart model

The new model is equipped with an optical sensor that measures heart rate by flashing LED light into the wrist. A new Heart Rate watch face automatically switches to the heart rate monitor screen when motion is detected by the accelerometer. The measured heart rate information is expressed as one of five heart rate zones, allowing the user to see at a glance the elapsed time and heart rate information.

Optical sensor



New Heart Rate watch face（left:Standard / right:Activity）

New activities: Running and Trail Running menus

The displayed data (upper, middle, and lower sections of the screen) for road and trail running in the Activity app can be customized by the user. Information choices include heart rate, pace, and distance, and up to four screens can be set. The user can easily switch between the preset screens and check the desired information while engaged in the activity. Since a map and current location can also be shown, users can enjoy taking an unfamiliar route, or running when they are traveling away from home.

Map

Sample color screen displays

Route import and data upload for greater device enjoyment

Since the WSD-F21HR can import GPS log data, the user can check running, trekking and cycling routes they or friends have used in the past. In addition, data measured by the Activity app is automatically saved to Google Drive, and activity history can be viewed on Google Calendar.

Durable for broad outdoor applications

As with other PRO TREK Smart models, the new WSD-F21HR is designed for outdoor use. It is water resistant to 50 meters and built tough enough to meet United States Military Standards.

Design with a focus on outdoor sports

Featuring a front bezel that looks bold and sporty, the exterior design combines flexibility and durability. A soft urethane band and a double pin buckle ensure a very comfortable fit. The WSD-F21HR offers practical performance designed to delight everyone who loves outdoor sports.

WSD-F21HR-RD　　WSD-F21HR-BK

Specifications

Water Resistance	50 meters[*1]
Environmental Durability	MIL-STD-810 (United States Military Standards issued by the U.S. Department of Defense)[*2]
Display	1.32-inch dual layer display Color TFT LCD and monochrome LCD Color: 320×300 pixels
Touchscreen	Capacitive touchscreen (anti-fouling coating)
GPS	Compatible (including GLONASS and MICHIBIKI (QZSS))
Color Maps	Compatible (supports offline use)
Sensors	Pressure (air pressure, altitude) sensor, accelerometer, gyrometer, compass (magnetic) sensor, optical sensor (PPG Heart Rate)
Microphone	Yes
Vibrator	Yes
Wireless Connectivity	Bluetooth® V4.2 (Low Energy) Wi-Fi (IEEE 802.11 b/g/n)
Buttons	MAP button, Power button, APP button
Battery	Lithium-ion battery
Charging Method	Magnetic charging terminal
Recharging Time	Approx. 2.5 hours at room temperature
Battery Life (When GPS Not in Use)	Normal use (color display): 1.5 days, roughly Multi Timepiece Mode (timekeeping and sensors only)[*3]: 1 month, roughly (Varies according to use)
Size of Case	Approx. 61.7mm×57.7mm×16.8mm (H×W×D)[*4]
Weight	Approx. 81g (including wristband)
OS	Wear OS by Google
Operating Environment	Wear OS by Google works with phones running Android 4.4+ (excluding Go edition) or iOS 10 or later. Supported features may vary between platforms and countries.

*1 Based on in-house test by CASIO.
*2 Nine items tested under military specification MIL-STD-810G at National Technical Systems:
• Shock: Tested to meet MIL-STD-810G Method 516.7 Procedure IV. • Vibration: Tested to meet MIL-STD-810G Method 514.7 Procedure I. • Humidity: Tested to meet MIL-STD-810G Method 507.6 Procedure II. •Solar radiation: Tested to meet MIL-STD-810G Method 505.6 Procedure II. • Low pressure transport: Tested to meet MIL-STD-810G Method 500.6 Procedure I. • Low pressure operation: Tested to meet MIL-STD-810G Method 500.6 Procedure II. • Low temperature transport: Tested to meet MIL-STD-810G Method 502.6 Procedure I. • Temperature shock: Tested to meet MIL-STD-810G Method 503.6 Procedure I-C.
• Ice accretion: Tested to meet MIL-STD-810G Method 521.4 Procedure I.
(The device has been tested to perform under test conditions, but is not guaranteed to operate under all conditions in actual use. Not guaranteed against damage or accidents.)
*3 Wear OS by Google disabled. Battery life may vary depending on use of sensors.
*4 19.1 mm in depth including the optical sensor