

CAL TP17 INSTRUCTION MANUAL

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TO-Y0082

SPECIFICATIONS

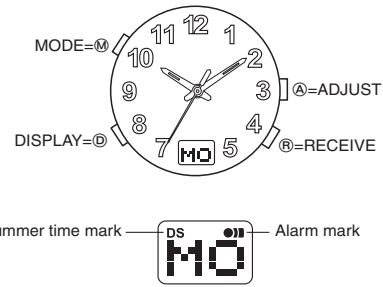
Reception

- Reception frequency
 1)GERMANY.....77.5KHz(DCF77)
 2)U.K.....60KHz(MSF)
 3)U.S.A.....60KHz(WWVB)
 4)JAPAN.....60KHz(JJY)
 Automatic reception (maximum two times a day)
 Manual reception

Basic functions

- Analog part.....Hour/Minute/Second
 Digital part
 Calendar
 Alarm
 5 languages display
 Battery life.....About 2 years
 Battery.....CR2016x1

NAMES OF PARTS



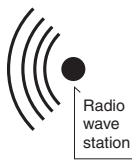
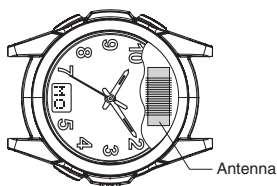
CAUTION!

Before using, be sure to set the "TIME ZONE".
 For setting of the "TIME ZONE", see "5.TIME ZONE SETTING"
 at right.

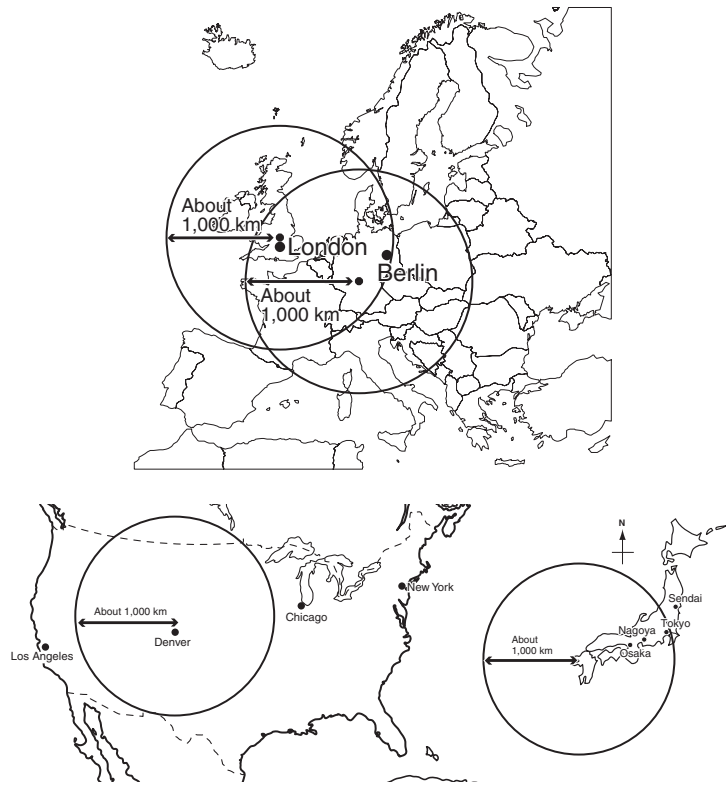
RADIO WAVE CONTROLLED WATCH

- About this radio wave controlled watch
 This watch receives calibration signal and automatically updates the time and date.
 - Transmitter
 GERMANY
 Signal code : DCF77
 Location : Mainflingen Germany (located 25 Km southeast of Frankfurt)
 - U.K
 Signal code : MSF
 Location : Rugby city (located near from London)
 - U.S.A
 Signal code : WWVB
 Location : FortCollins in Colorado (located 100Km north of Denver)
 - JAPAN
 Signal code : JJY
 Location : Mt.Haganeyama (located 45Km southwest of Fukuoka)
- The signal usually operates 24 hours of a day, but it may be temporarily interrupted for maintenance and lightning countermeasure.
- Radio wave reception zone
 This watch can receive radio waves within a radius of about 1,000km from the standard radio wave station. However, the coverage can vary depending on time, season, weather conditions, local environmental conditions, etc.

Which way to point the watch during reception



Flatten the wristband so it doesn't curl under the antenna.



* The indicated reception area is for your reference only. Sometimes you cannot receive radio waves even within the zone shown in the figure.

- How to successfully receive radio waves
- It may be difficult to receive radio waves when metal shielding blocks the watch. When inside a ferroconcrete building etc., try to place the watch near a window that is as close as possible to facing the radio wave station.
- Try not to move the watch during radio wave reception.
- Good reception can be achieved if you aim the reception antenna (on the upper side of the watch) toward the radio wave station.
- You can check signal strength by looking at the reception mark that is displayed during radio wave reception. If you find a place and a direction to aim the watch in advance that has stable reception, that will help to get a good connection.



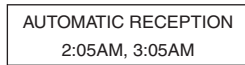
* The watch may fail to receive radio waves or may receive them inaccurately near (within 10km from) the standard radio wave station. In this case, change the direction of the antenna by 45 - 90 degrees or receive radio waves again at a place far (10km or farther) from the standard wave station.

* Sometimes when the watch indicates strong radio wave reception, it still may not be able to receive a signal due to surrounding environmental interference such as electrical noise.
 * The maximum time required to receive a complete signal can be up to 13 minutes. It may change depending on distance from the standard radio wave station, time, season, weather, etc.

- Places where it may be difficult to receive radio waves
 - Places with extremely high or low temperatures.
 - Inside ferroconcrete buildings, underground, inside high-rise buildings, in valleys between mountains, etc.
 - Inside vehicles, trains, and airplanes.
 - Places that tend to have electrical noise such as near high voltage cables, electric train cables, and near airports.
 - Near home appliances such as televisions, refrigerators, computers, fax machines, inverter fluorescent lights, OA machines, and operating cellular phones.
- * The watch operates using its built-in quartz accuracy under conditions of poor reception. When it returns to a reception area and receives radio waves, the watch displays the correct time. The watch operates using its built-in quartz accuracy between signal reception cycles.

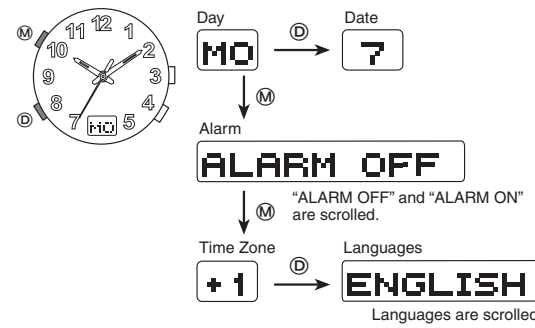
AUTOMATIC RECEPTION

If you receive radio waves properly, the time and date are adjusted automatically.
 • The watch automatically receives radio waves a maximum of two times a day.



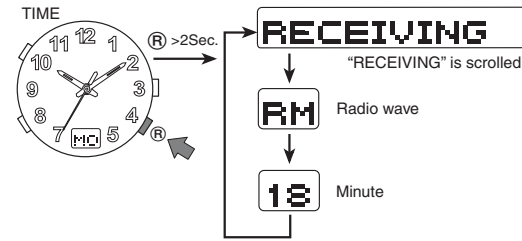
- If one of the two reception attempts is successful, automatic reception won't be attempted again until the next day.
 During the daylight saving time period, if the watch receives the radio waves normally, it automatically displays the SUM. If it receives the radio waves normally after the DST period, it automatically displays the ordinary time.
- Since the DST is automatically corrected, you do not need to correct it, as long as the watch receives radio waves. In a district where the DST is not applied, however, you are required to correct the DST manually.

SELECTION OF DISPLAY

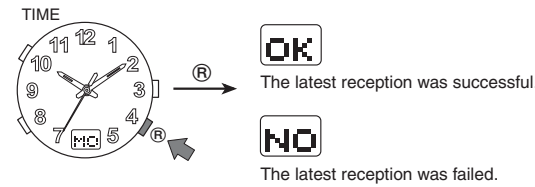


1. MANUAL RECEPTION

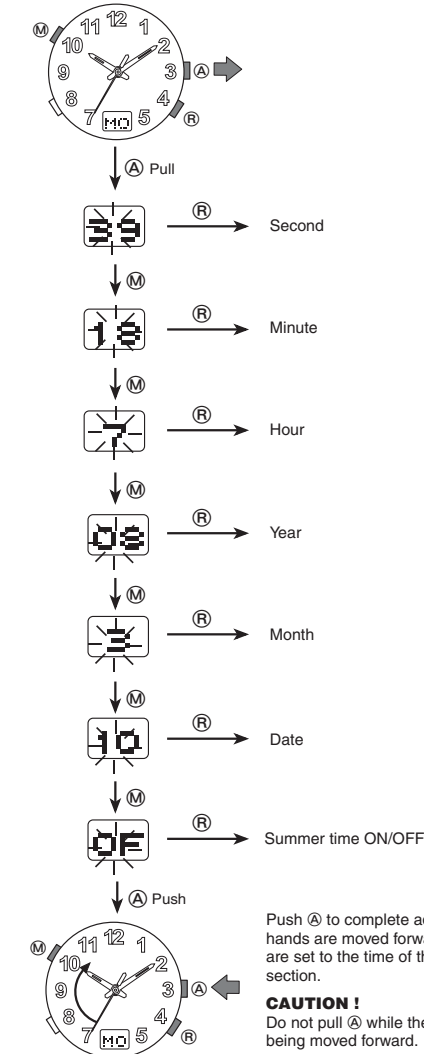
Signal reception takes 2~13 minutes.



2. CONFIRMING RECEPTION RESULTS



3. MANUAL ADJUSTMENT TIME AND CALENDAR

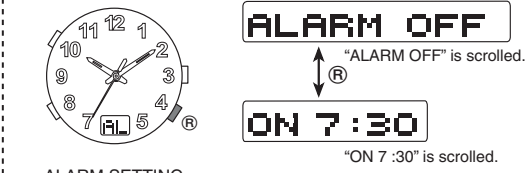


Push A to complete adjustment. The hands are moved forward until they are set to the time of the digital section.

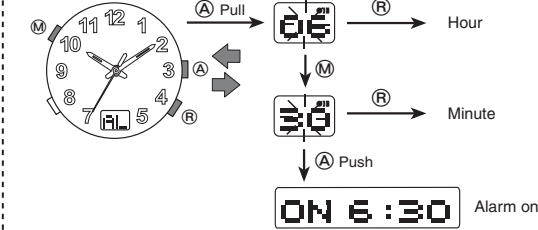
CAUTION!
 Do not pull A while the hands are being moved forward.

4. ALARM

ALARM ON/OFF

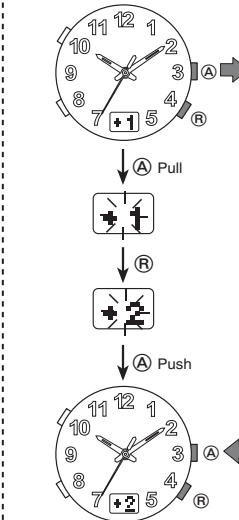


ALARM SETTING



5. TIME ZONE SETTING

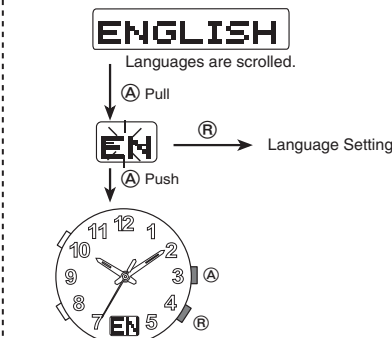
Select a country and a time zone where you will use this watch. If the country is selected, the radio wave is decided. The relationship between the countries and radio waves is shown in Table below.



Time zone list

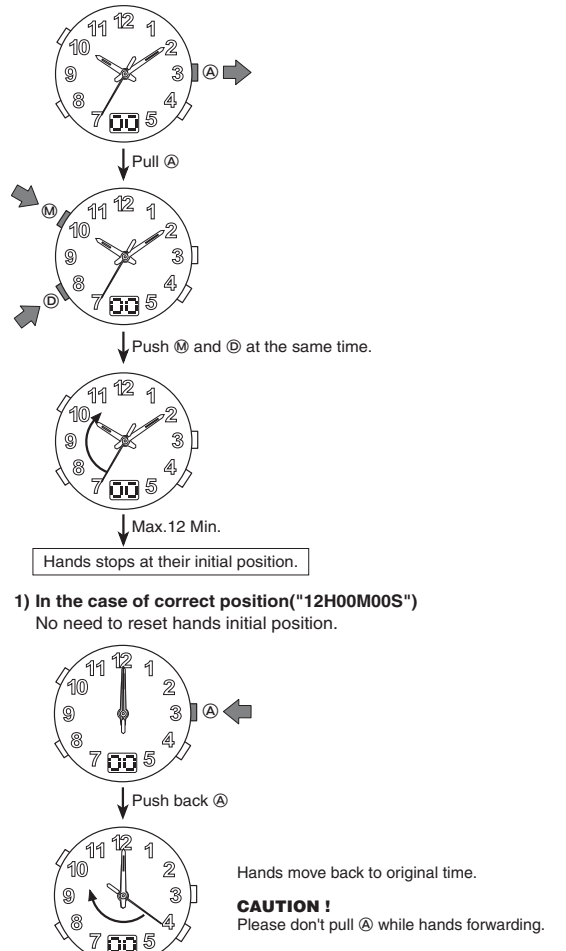
TIME ZONE	CITY.	RECEPTION WAVE
-12		
-11		
-10	Honolulu	
-9	Anchorage	
-8	Los Angeles	
-7	Denver	WWVB(60KHz)
-6	Chicago	
-5	New York	
-4	Santiago	
-3	Rio de Janeiro	
-2		
-1		
+0	London	MSF(60KHz) DCF77(77.5KHz)
+1	Paris	MSF(60KHz) DCF77(77.5KHz)
+2	Cairo	
+3	Jeddah	
+4	Dubai	
+5	Karachi	
+6	Dhaka	
+7	Bangkok	
+8	Hong Kong	
+9	Tokyo	JJY(60KHz)
+10	Sydney	
+11	Noumea	
+12	Wellington	

6. LANGUAGES SETTING

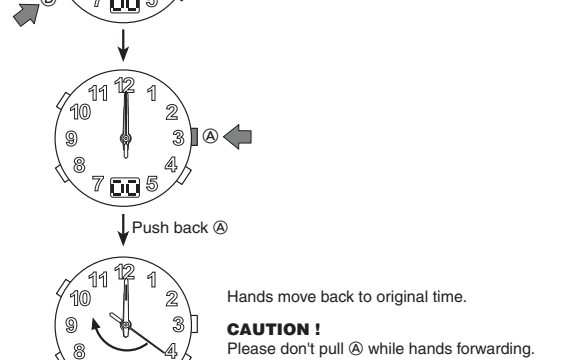
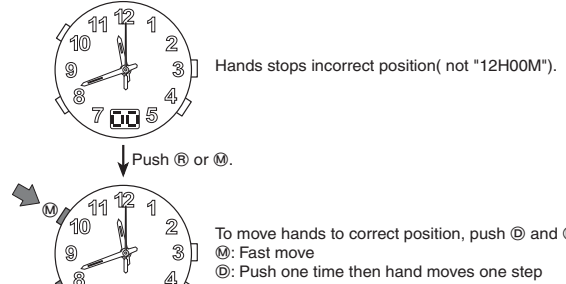


7. CHECK AND RESET HANDS INITIAL POSITION

It may happen that hands slip and change to incorrect position, because of hard shock, static electricity and after battery replacement and so on. In this case, we cannot adjust to correct time, even we receive the wave, because hands initial position is not correct. Please check and reset hands initial position as following operation. Correct hands initial position is "12H00M00S".
 * Please don't do following operation, when you don't have any problem.



1) In the case of correct position("12H00M00S")
 No need to reset hands initial position.



8. BATTERY REPLACEMENT

When the display dims, replace the battery as soon as possible. After battery replacement, please make sure to short two pattern on module, and reset hands initial position referring to "7.CHECK AND RESET HANDS INITIAL POSITION".