



LAD WEATHER

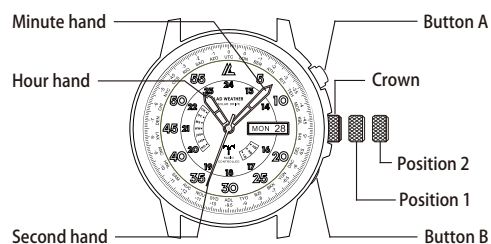
Instruction Manual

Here's LAD WEATHER
official site!
lad-weather.com



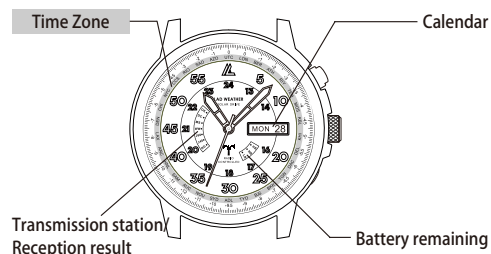
1 Buttons and Display

Buttons



*Please use something thin to press button B. Please be careful not to hurt yourself or scratch the case.

Display



Display	Description	Result
Reception result	OK	Successful
	NG	Failed
Transmission station	DC	Germany
	M5	U.K.
	WW	U.S.
	J60	Japan
	J40	
Battery remaining	HB	Fully charged
	NB	Enough charged
	LB	Low Battery

2 How to set up

This watch receives radio wave information to correct time automatically.

In order to receive properly, please see how to initialize.

IMPORTANT: If you pull out the crown to the position 2, you need to calibrate the zero position of hands. Please see [3 Zero calibration] how to calibrate.

① Day and Date

1. Pull the crown to the Position 1. Please note the crown may be already in Position 1 (not pushed fully).
2. Turn the crown to the front/back to set date/day.
3. Push the crown and proceed to step ②.

Day of the week	
Day	Display (English/Spanish)
Sunday	SUN / DOM
Monday	MON / LUN
Tuesday	TUE / MAR
Wednesday	WED / MIER
Thursday	THU / JUEV
Friday	FRI / VIER
Saturday	SAT / SAB

② Battery recharge

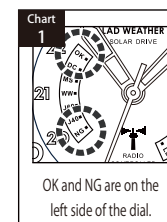
This watch needs to be charged enough to adjust time automatically.

Expose the watch to light source at least 1 and a half hours to have it enough charged.

*When the battery is low, second hand moves once in 2 seconds to save battery.

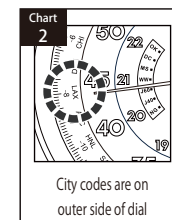
③ Zero position confirmation

1. Due to some reasons, the hands may be out of zero position. Please confirm hands are in proper position, when you find the watch is not accurate.
2. Press button A, and see red hand shows either OK or NG (Chart 1).
3. If the hand shows somewhere else, zero calibration is needed. Please see [3 Zero calibration].



④ Time zone confirmation

1. At time of factory shipment, time zone is set to LON, LAX or TYO. (It depends on the marketplace.)
2. Press button B and see where red hand shows (Chart 2).
3. Please see [4 Time zone] to change time zone.



⑤ Radio wave reception

After this watch receives radio wave, time will be adjusted automatically.

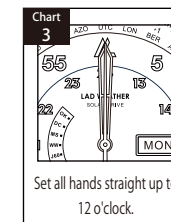
Radio station will be chosen automatically, according to the time zone set up.

If you want to start reception soon, please see [5 Radio wave reception].

3 Zero calibration

IMPORTANT: Please try zero calibration when the watch shows wrong time.

1. Pull the crown to Position 1. The watch is still working.
2. Set the date/day to the '1 day prior to today'. (For example, when you calibrate on '25th Tuesday', please set '24th Monday'.) Turn the crown to the front/back to set date/day.
3. Pull the crown to Position 2. The watch stops.
4. Press button A to move second hand forward. Please set it up straight.
5. Turn the crown away from you to move minute and hour hands forward. Please set them up straight, too. (Chart 3)



6. When all 3 hands reach to 12 o'clock position, please see date changes to today. (In the example of 25th Tuesday, the watch will temporary show 25th Monday.) If the date is not changed, please move minute and hour hands forward and set them up straight again.
7. Push the crown to the normal position.
8. The watch adjusts itself. Please do not press any buttons until it's finished. *Hands may keep rotating up to 12 minutes.

Note: Please try radio wave reception again, after zero calibration is fully finished.

Please see [5 Radio wave reception].

4 Time zone

When you change time zone, you can check the time of another city.

*Radio transmission station will be automatically selected according to the time zone. Please see [9 Radio wave stations].

[How to confirm time zone]

1. Press button B. Red hand rotates and shows time zone.

*Please press button B while the crown is in normal position.

[Time zone setup]

1. Press and hold button B. Red hand rotates and shows 'UTC'.
*If it shows somewhere else, it needs calibration. Please see [3 Zero calibration].
2. Press button A to select time zone. City code table is in [9 Radio wave stations].
3. Press button B to determine time zone.
4. The watch adjusts itself. Please do not press any buttons until it's finished.
*Hands may keep rotating up to 12 minutes.

Note: After time zone setup, second hand may move once in 4 seconds. This indicates day/date is not correct. Please wait until it fixes day/date in the midnight.

5 Radio wave reception

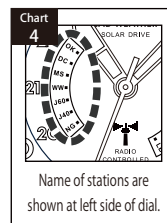
[Automatic reception]

This watch automatically attempt reception at 3 and 4 am.
Put the watch at good place to receive radio wave (by the window, for example.)
When reception succeeded, it adjusts itself automatically.

[Manual reception]

You can start reception anytime you want.

1. Put the watch at good place to receive radio wave.
2. Press and hold button A. Red hand rotates and shows transmission station.
*If the transmission station is not where you want, please keep holding button A.
Please see [9 Radio wave stations], there's a table of station code.
3. Please do not press any buttons until reception and adjustment is finished.
*It will attempt reception up to 1minute. And the hands may keep rotating up to 12 minutes for adjustment.



6 Solar battery

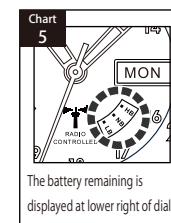
This watch works with solar rechargeable battery. You need to expose the dial to light source to charge battery.
On cloudy days or in winter, it may take longer to recharge.
Estimated charging time is shown on the table below.

The watch tends to be lack of power under situation such as:

- The watch is hiding under your clothing.
- You keep to use/store the watch in the dark place.

[How to check battery remaining]

1. Press button A. Red hand will rotate and show result of reception at first.
2. Please wait and see for 5 seconds. Red hand will rotate again and show battery remaining. (Chart 5)



HB : Fully charged.
NB : Enough charged.
LB : Low battery
*If the hand shows somewhere else, it needs calibration. Please see [3 Zero calibration].

When the battery is low, second hand moves once in 2 seconds.
The watch doesn't attempt radio wave reception. Please recharge battery soon.

Charging time			
Light	Brightness (Lux)	Needed time to work for 1 day	Needed time to become 'NB' from 'LB'
Direct sunlight	10,000 - 100,000	10-20 minutes	6-8 hours
Sunlight (cloudy)	3,000	80 minutes	60 hours
30W fluorescent light within 20cm (7.9")			
Interior light	500	4 hours	200 hours

7 Power saving mode

When the battery is exhausted, this watch will be in power saving mode and stop.
To recover from power saving mode, expose the watch into strong light source.

After recovery, please recharge battery fully. Calibration may be needed after recovery. Please see [3 Zero calibration].

8 Water proof

- This watch has 10 ATM (10 bars, 100 meters) water resistant.
- Water resistant performance will deteriorate over time. To maintain the performance, the watch needs professional inspection once in 2-3 years.
- Water resistant performance is not necessarily corresponding to the water pressure.
- Please do not leave the crown pulled. It may be cause of water penetration.
- Please do not move the crown or push any buttons under water.
- When the watch is wet, please carefully wipe water off before you move the crown or push any buttons.
- Please do not take this watch into hot and humid place, such as shower room or sauna.
- Depending on circumstances, glass may be beaded with condensation. Temporary condensation is not always a serious problem. But if it continues for a long time, please take contact to the watch/jewelry shop around you.

Hand-wash	Swimming	Snorkeling	Diving	Shower	Sauna
○	○	○	×	×	×

[Result of reception]

1. Press button A. Red hand rotates and shows the result of reception.

OK : Succeeded NG : Failed

*This shows 'the last attempt' was succeeded or failed. It doesn't show current environment is good for reception or not.

9 Radio wave stations

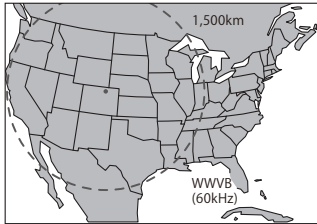
Transmission station in United States (WW)

Time signal radio station called WWVB is located on Fort Collins, Colorado.

NIST (National Institute of Standards and Technology) manages it.

Signals are on 60kHz.

Radio wave can be received within 1,500km (932 miles) radius.



Transmission stations in Germany (DC) and United Kingdom (MS)

Time signal radio station called DCF77 is located on Mainflingen.

T-Systems Media & Broadcast manages it.

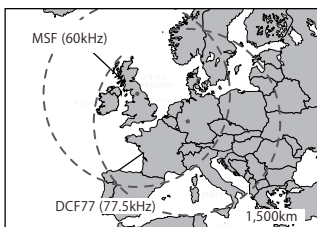
Signals are on 77.5kHz.

Time signal radio station called MSF is located on Anthorn.

NPL (National Physical Laboratory) manages it.

Signals are on 60kHz.

Radio wave can be received within 1,500 km radius from each station.

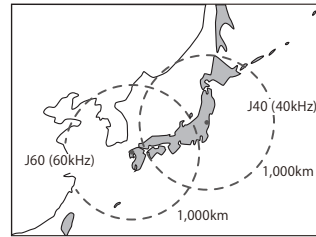


Transmission stations in Japan (J40, J60)

Two time signal radio stations are located on Mt. Ohtakadoya and Mt. Hagane.

Signals are on 40kHz (from Mt. Ohtakadoya) and 60kHz (from Mt. Hagane).

Radio wave can be received within 1,000 km radius from each station.



Time Zone			
On dial	Name of City	Time difference from UTC	Radio wave
UTC	Coordinated Universal Time	0 hour	-
LON	London	0 hour	DC/MS
BER	Berlin, Paris	+1 hour	DC/MS
ATH	Athens	+2 hours	DC/MS
RIY	Riyadh	+3 hours	-
THE	Tehran (Iran)	+3.5 hours	-
MOS	Moscow	+4 hours	-
KBL	Kabul (Afghanistan)	+4.5 hours	-
KHI	Karachi	+5 hours	-
DEL	Delhi (India)	+5.5 hours	-
DAC	Dacca	+6 hours	-
YGN	Yangon (Myanmar)	+6.5 hours	-
BKK	Bangkok	+7 hours	-
BJS	Beijing (China)	+8 hours	-
TYO	Tokyo (Japan)	+9 hours	J60/J40
ADL	Adelaide (Australia)	+9.5 hours	-
SYD	Sydney	+10 hours	-
NOU	Noumea	+11 hours	-
AUC	Oakland	+12 hours	-
SAM	Samoa	-11 hours	-
HNL	Honolulu	-10 hours	-
ANC	Anchorage	-9 hours	-
LAX	Los Angeles (U.S.)	-8 hours	WW
DEN	Denver (U.S.)	-7 hours	WW
CHI	Chicago (U.S.)	-6 hours	WW
NYC	New York (U.S.)	-5 hours	WW
CCS	Caracas	-4.5 hours	-
RIO	Rio de Janeiro	-3 hours	-
SAO	South Atlantic Ocean	-2 hours	-
AZO	Azores Islands	-1 hour	-

Trouble shooting

■ The watch is showing wrong time despite reception is succeeded.

Please try zero calibration and time zone setup. Please see [3 Zero calibration] and [4 Time zone].

■ Hands keep turn around and won't stop.

When the watch is on adjustment, please wait up to 12 minutes until it's finished.

■ Red hand doesn't move when I press buttons.

The battery may be low. Please recharge. Please see [6 Solar battery] for more information.

■ Second hand moves once in 2 seconds.

It indicates low battery.

Please see [6 Solar battery] for more information.

■ Second hand moves once in 4 seconds.

This may happen after you change time zone on this watch.

Please wait until midnight. It will adjust the day/date automatically.

■ The watch doesn't receive radio wave.

Time zone should be set one of U.S. time zones, when you want to receive radio signal from U.S. station.

This is the same in Europe and in Japan. Please also see a table in [9 Radio wave stations].

■ I set time zone in my hometown. But it still doesn't receive radio wave.

Unlike radio wave of mobile phones, time signals are difficult to receive properly.

Please note that night is much better to receive. And please avoid situations like below listed.

[Difficult places to receive radio wave]

- Near electronic devices (e.g. TV, PC, or mobile phones).

- Near or on the furniture made of metals.
- Near or at the construction site.
- Near or on the road with huge traffic.
- Inside or between tall building.
- Under ground floor.
- Near high-voltage cable or television tower.
- Inside vehicles (e.g. cars, trains, or airplanes).

■ The watch doesn't move at all.

When the battery is exhausted, this watch will automatically be in power saving mode.

To recover from power saving mode, expose the watch to enough light source.

Please also see [7 Power saving mode].

Guarantee

A guarantee of six months from the date of purchase is granted on this watch. Within this period, any production defects will be removed free of charge. Should this in our estimation will not be possible or proves to be uneconomical, a replacement will be provided in the form of a watch of the same model or, at our discretion, a similar model. Any damage caused to watches by incorrect use or undue strain is not covered by the guarantee. The strap, glass and if applicable battery are likewise not covered. The same applies if the production rendered illegible. The value of any replacement is limited to the cost of the original model. No liability is accepted for any secondary or consequential damages or losses. Failure to follow the instructions for using or looking after the watch shall be deemed as incorrect use. When making any guarantee claim, please send your watch together with your receipt and properly filled out guarantee card to the retailer from whom you bought the watch.

GUARANTEE

Date of purchase: _____

Product No. _____

Customer's name: _____

Customer's address: _____