OPERATION

The Traceable Clock© contains a pre-tuned internal radio receiver that receives a 60 kHz frequency signal generated by the U.S. Atomic Clock. The U.S. Atomic Clock is located in Boulder Colorado and is operated by NIST (National Institute of Standards and Technology).

Upon installing batteries, unit automatically activates its receiver. Upon successful reception of signal from the US Atomic Clock, it then attempts to receive the signal every four (4) hours and make any necessary changes to the display.

Unit might not receive a signal immediately. It may take as long as 72 hours to receive a complete signal from the US Atomic Clock. While the unit is attempting to receive a complete signal for the first time, the clock may be set manually (see "Manual Clock Setting" section). Best reception often occurs between midnight and 4 a.m.

Successful reception of the Atomic Clock signal is dependent upon positioning and location of the unit. Insufficient signal strength or external electrical interference may prevent unit from receiving a complete signal. Main causes for poor reception are heavily reinforced concrete and steel structures and/or placement of unit close to video or PC monitors. Certain areas of Eastern United States may experience urban interference from United Kingdom's Atomic Clock that distort or interfere with the signal from U.S. Atomic Clock.

GETTING STARTED

1. Remove the battery door.
2. Insert two new AA size battery according to the polarity information marked on the battery compartment, press the "RESET" key by using a metal wire to reset the clock.
3. Replace the battery door.
4. Once the battery is inserted, all the segments of LCD will be shown before entering the radio controlled time reception mode.
5. The RC clock will automatically start scanning for the radio controlled time signal in 8 seconds.

Note: Solar panel on unit can absorb light to power clock, but the solar power provided is limited and batteries should be inserted first. The solar panel can reduce the power consumption of batteries and may prolong battery life.
Due to the atmospheric disturbance, the best reception often occurs during nighttime.

QUICK REFERENCE

SNOOZE/LIGHT Press it to turn on the backlight for 5 seconds. Press to stop the current alarm when sounding.

TIME SET Press and hold for 2 seconds to enter time setting mode. In setting mode, press to step the setting items. In setting mode, press and hold for 2 seconds to save and exit setting mode.

ADJUST In setting mode, press to change the setting values.

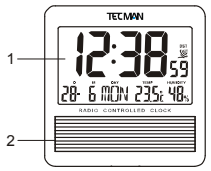
ALARM ON/OFF Press to turn on/off the alarm and snooze. Press and hold for 2 seconds to enter alarm time setting mode. In setting mode, press to step the setting items. In setting mode, press to save and exit the setting mode.

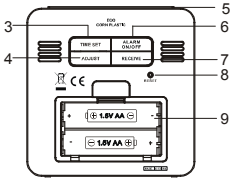
RECEIVE Press to switch between °C/°F. Press and hold for 3 seconds to receive the RC signal for reception testing.

RECEIVE Press to return all values to default values. In case of malfunction, the unit may be required to reset.

PRODUCT DESCRIPTIONS

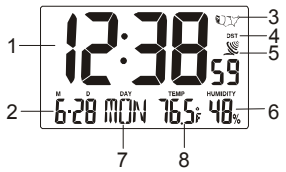
1. LCD display
2. Solar panel
3. TIME SET key
4. ADJUST key
5. SNOOZE/LIGHT key
6. ALARM ON/OFF key
7. RECEIVE key
8. RESET key
9. Battery compartment





DISPLAY SYMBOLS
NORMAL TIME MODE

1. Time
2. Month & Date
3. Time zone map
4. Daylight saving time
5. Signal strength indicator
6. Humidity
7. Day of the week
8. Temperature



DAYLIGHT SAVING TIME (DST)

The clock has been programmed to automatically switch when daylight saving time is in effect. Your clock will show "DST" during the summer.

SETTING THE TIME ZONE

1. In the Normal Time Display, press and hold the TIME SET key for 2 seconds to enter the time setting mode.
2. Press the ADJUST key to set the desired time zone. Refer to the Time Zone map on the display, P=Pacific, M=Mountain, C=Central, and E=Eastern.
3. Press the TIME SET for 2 seconds to return to normal time mode.

SIGNAL STRENGTH INDICATOR

The signal indicator displays signal strength in 4 levels. The wave segment flashing means time signals are being received. The signal quality could be classified into four types:



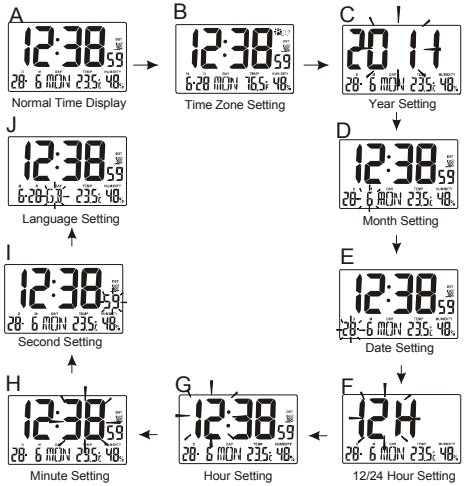
If the RC clock receives signal successfully, a sync-time symbol " " will appear on the LCD. The unit has already synchronized with the time signal transmitter. Otherwise the antenna segment will disappear from the LCD.

NOTE: You may use the "RECEIVE" key to receive the time signal manually. Be caution of using the RECEPTION mode, which will consume more battery power and thus may reduce the battery lifetime. The RECEPTION mode will be off automatically in 6-12 minutes.

TIME AND CALENDAR SETTING

If out of reach of Radio Controlled transmitter or if reception is not reachable, the time and calendar can be set manually. As soon as the signal of transmitter is received again, the clock will automatically synchronize with the exact time and calendar.

1. In normal time mode, press and hold the "TIME SET" key for 2 seconds until the Year digit flashes.
2. Press the "ADJUST" key to change its value.
3. Repeat the above operations to set time and calendar in this order: A> C> D>E >F >G > H>I>J(DCF/MSF),A>B >C> D>E >F >G > H>I>J(WWVB).
4. Press the "TIME SET" key to save and exit the setting mode, or let it exit automatically 30 seconds later without pressing any key.



ALARM TIME SETTING

1. Press and hold the "ALARM ON/OFF" key for 2 seconds until the Hour digit flashes.
2. Press the "ADJUST" key to change its value.
3. Repeat the above operations to set the alarm Minute.
4. Press the "ALARM ON/OFF" key to save and exit the setting mode, or let it exit automatically 30 seconds later without pressing any key.



NOTE: The alarm will be turned on automatically when you set the alarm time.

USING THE ALARM AND SNOOZE FUNCTION

1. Set the alarm time as described in the previous section.
2. Press the "ALARM ON/OFF" key once to turn on the alarm until the bell icon " " appears.
3. Press it twice to turn on the snooze until the icon "Zz" appears.
4. Press it again to turn off the alarm and snooze until both icons disappear.

NOTE:

1. If alarm and snooze are turned on, press the "SNOOZE/LIGHT" key to stop current alarm and enter snooze mode.
2. Press "ALARM ON/OFF" key to turn off alarm and snooze function.
3. Once Snooze function is turned on, the alarm will sound 4 times in 4-minute interval. The alarm duration is 60 seconds.

SUGGESTION

For the best reception:

1. It is strongly recommended to start clock at night and let clock receive signal automatically during midnight.
2. Always place unit away from interfering sources such as TV set, computer, etc.
3. Avoid placing unit on or next to metal plates.
4. Closed area such as airport, basement, tower block or factory is not recommended.
5. Do not start reception in moving articles such as vehicles or trains.

ALL OPERATIONAL DIFFICULTIES

If this Traceable Clock does not function properly for any reason, please reset the unit. To reset the unit, depress the **RESET** button located in the battery compartment. If the unit still does not function properly, please replace the batteries with new high quality batteries (see "Battery Replacement" section). Low battery power can occasionally cause any number of "apparent" operational difficulties. Replacing the batteries with new fresh batteries will solve most difficulties.

BATTERY REPLACEMENT

Erratic readings, a faint display, no display are indicators that the batteries must be replaced. Open the battery cover as indicated in the illustration. Remove the exhausted batteries and install new AA Alkaline batteries. Close the battery cover.

WARRANTY, SERVICE, OR RECALIBRATION

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Control Company is ISO 9001:2008 Quality-Certified by DNV and ISO/IEC 17025:2005 accredited as a Calibration Laboratory by A2LA.

Control Company Cat. No. 5003

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TRACEABLE® ATOMIC CLOCK INSTRUCTIONS