## 12 MONTH LIMITED WARRANTY

MFJ Enterprises, Inc. warrants to the original owner of this product, if manufactured by MFJ Enterprises, Inc. and purchased from an authorized dealer or directly from MFJ Enterprises, Inc. to be free from defects in material and workmanship for a period of 12 months from date of purchase provided the following terms of this warranty are satisfied.

- The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money
  order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the
  original or machine reproduction of such proof-of-purchase to MFJ Enterprises, Inc. at the time of
  warranty service. MFJ Enterprises, Inc. shall have the discretion to deny warranty without dated proofof-purchase. Any evidence of alteration, erasure, or forgery shall because to void any and all warranty
  terms immediately.
- 2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warranty, provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashiers check, or money order for \$7.00 covering postage and handling.
- 3. MFJ Enterprises, Inc. will supply replacement parts free of charge for any MFJ product under warranty upon request. A dated proof-of-purchase and a \$5.00 personal check, cashiers check, or money order must be provided to cover postage and handling.
- This warranty is NOT void for owners who attempt to repair defective units. Technical consultation is available by calling (662) 323-5869.
- 5. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.
- 6. Wired and tested PC board products are co<sup>v</sup>ered by this warranty provided only the wired and tested PC board product is returned. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, or gables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unprepared.
- Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.
- 8. Out-of-warranty Service: MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
- 9. This warranty is given in lieu of any other warranty expressed or implied.
- 10. MFJ Enterprises, Inc. reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.
- 11. All MFJ products to be serviced in-warranty or out-of-warranty should be addressed to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, Mississippi 39759, USA and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-ofpurchase.
- 12. This warranty gives you specific rights, and you may also have other rights which vary from state to state.

# MFJ-186RC

## MFJ Radio Controlled Watch General Information and Operating Instructions

Thank you for purchasing the MFJ-186RC Radio Controlled Watch. Please read these instructions carefully before use.

The MFJ-186RC works by receiving the time radio signal generated by the US Atomic Clock located in Ft. Collins, Colorado. Anyplace that can receive the signal can use the MFJ-186RC. Any place that cannot receive

the signal will have to set the time manually. The Atomic Clock in Colorado is operated by the US Department of Commerce's National Institute Standards and Technology (NIST).

## Tips for improving reception:

- Avoid placing the watch near television sets, metal surfaces, computers, or any other electrical device that may interfere with the reception of the radio signal.
- Closed areas such as basements or metal buildings may also interfere with the reception of the radio signal.
- 3. It is strongly recommended to start the signal reception at night when interference is lowest.

#### FEATURES:

- WWVB receiver for automatic setting to Eastern, Central, Mountain, or Pacific US time zones
- LCD Display showing: hours, minutes, seconds, day of the week and date
- E.L. Backlight
- Alarm
- Chronograph
- Water Resistant up to 3 ATM
- 12 / 24 Hour format
- Calendar range from 1-1-2000 to 12-31-2049

## **BATTERY INSTALLATION:**

- The MFJ- 186RC already comes with the battery installed.
- To change the battery, follow these steps: 1. Remove the 4 screws on the back of the watch with a jeweler's screwdriver and remove the

cover.

- 2. Remove black plastic film from the back.
- 3. Release the catch on the metal bracket as shown below.
- 4. Remove the old battery and replace with a 3V, CR1620 coin battery or equivalent. 5. After replacing the battery, replace all parts & screws.



Pull tab down to release battery

NOTE: It is not recommended that the movement be removed from the case. The internal antenna is embedded in the case and the wires to the antenna will easily break if removed.

## SETTING THE MFJ-186RC

## **Setting the Time Zone**

- Press the set button to see the current time zone setting.
- Press the set button once to advance to the next time zone.
- When the desired time zone is displayed, wait a few seconds and the LCD will return to the normal time display.
- The time zone abbreviations are as follows: PA = Pacific, MO = Mountain, CE = Central, EA = Eastern

## **Initiating Signal Reception**

To initiate reception of the WWVB signal, press and hold the Light button until "OFF" appears under the time display. Press and hold the Light button again until the Radio Control Signal begins to pulse in the upper right corner of the LCD. When the Radio Control Signal is pulsing, the MFJ-186RC is searching for the WWVB signal. When the signal is received, the time, day, date, and year will automatically be updated. At this point the Radio Control signal will stop pulsing and remain solid.

#### **Setting the Time Manually**

If the WWVB signal cannot be received, the MFJ- 186RC must be et manually. Follow these steps for manual setting:

- In normal time display mode, press and hold the SET Button for about 3 seconds.
- The hour digits will begin to flash. Press the ADJ. Button to adjust the hour.
- Press SET Button again and the minutes digits will begin to flash.
- Press the ADJ. Button to adjust the minutes.
- Press SET Button again and the seconds digits will begin to flash.
- Press the ADJ. Button to reset the seconds to 00.
- Press SET Button again and the Year digits will begin to flash.
- Press the ADJ. Button to adjust the year.
- Press SET Button again and the month digits will begin to flash.
- Press the ADJ. Button to adjust the month.
- Press SET Button again and the day digits will begin to flash.
- Press the ADJ. Button to adjust the day.
- Press SET Button again and the time format (12 H or 24 H) will flash.
- Press the ADJ. Button to toggle between 12H or 24H time display.
- Press the SET or MODE Button to exit manual setting mode.

#### Notes:

- To exit the manual setting, you can press the MODE Button at any time.
- In the manual setting mode, if no buttons are pressed for 30 seconds, the MFJ-186RC will revert
  to normal time display mode.
- Once the year, month, and day are set, the day of the week will be set automatically.

#### Setting the alarm

Follow these steps for setting the time when the alarm will sound:

- In the normal time display mode, press the MODE button to enter the alarm display mode. The alarm time and "ALM" will appear on the LCD.
- Press and hold the SET Button for 2 seconds until the hour digits begin to flash.
- Press the ADJ. Button to adjust the hour.
- Press SET Button again and the minutes digits will begin to flash.
- Press the ADJ. Button to adjust the minutes.
- Press the MODE Button to exit the alarm time setting mode.
- While in the alarm display mode, press the ADJ. Button to enable or disable the alarm. A small bell will
  appear by the time when the alarm is enabled. The bell will disappear when the alarm is disabled.
- To return to normal time display mode, press the MODE button twice.
- When the actual time reaches the alarm time and the alarm is enabled, the alarm will sound. After the alarm has sounded, press any button to turn off the sound.

## STOP WATCH OPERATION

In normal time display mode, press the MODE button twice to enter the Stopwatch mode. "STW" will appear on the LCD. The stopwatch can be used several ways.

#### **Standard Measurement:**

- Press the ADJ. Button to start the time.
- Press the ADJ. Button again to stop the time.
- Press the SET Button to reset the time to "00".

## Accumulated Time Measurement:

- Press the ADJ. Button to start the time.
- Press the ADJ. Button again to stop the time.
- Press the ADJ. Button again to re-start the time.
- Press the ADJ. Button again to stop the time.
- Press the SET Button to reset the time to "00".

## **Split Time Measurement:**

- Press the ADJ. Button to start the time.
- Press the SET Button for split time.
- Press the SET Button again to release the split time.
- Press the ADJ. Button to stop the time.
- Press the SET Button to reset the time to "00".

## Measurement between 2 competitors:

- Press the ADJ. Button to start the time.
- Press the SET Button for split time.
- Press the ADJ. Button to stop the first time.
- Press the SET Button to stop the second time.
- Press the SET Button to reset the time to "00".

## BACKLIGHT

Press the LIGHT button briefly and the E.L. Backlight will illuminate the LCD for about 3 seconds. Please note that the backlight feature will drain the battery faster than in normal use.

#### OTHER FEATURES

In normal time display mode, the ADJ. Button can be pressed to display the year, month and day. Press the ADJ. Button again to return to normal time display mode.

## CARING FOR YOUR MFJ-186RC

- The recommended operating temperature range for the MFJ-186RC is 32°F to 122°F.
- If the watch is left for an extended period of time at a temperature outside of the normal operating range (32°F to 122°F) may stop functioning and fluid may leak from the battery. This will considerably shorten the life of the battery and may result in internal damage to the movement.
- Do not leave a dead battery in the watch for extended periods of time. This may also result in fluid leaking from the battery.
- Avoid rough use or dropping the watch.
- Do not press any buttons when the watch is wet. Water may penetrate into the watch causing deterioration of water resistance.
- To clean the face of the watch, use a dry soft cloth or a soft cloth moistened in a solution of
  water and a mild neutral detergent. Never use solvents to clean the face.

P17375WWVS10