


TempMinder® WIRELESS COLOUR WEATHER STATION MRI-177AN

Owner's Manual

Thank you for purchasing the new generation colour TempMinder® weather station. Designed and engineered with state of the art technology and components. This TempMinder® features accurate and reliable measurement of barometric pressure, weather forecast, in / out humidity and temperature, heat index, dew point as well as Atomic clock. Read this manual carefully to fully explore the features and functions of the new product.

Overview of set-up:

We have attempted to make the following instructions as user friendly as possible. Please note the list of controls (buttons) as well as their location on the TempMinder®. Some buttons have dual functions and it is important to understand what they do and when to use them.

Function	OR	
<u>Button Name</u>	<u>Press and Release to:</u>	<u>Press and hold for 3 seconds</u>
CLOCK	Read time, calendar and day-of-week	Set Clock & Calendar
ALARM	Read alarm time; enable/disable alarm	Alarm time setting
▲ UP	Single number increase	Rapid Increase
▼ Down	Single number decrease	Rapid Decrease
CHANNEL	Select indoor, Channel 1,2,3, auto scroll ↻	Search for remote sensor
MEMORY	Read max/min temperatures, humidity	Clear memory record Heat index & Dew point
HEAT INDEX/ DEW POINT	Read Heat Index & Dew Point	
PRESSURE	Toggle pressure unit hPa, inHg & mb	Altitude setting
SNOOZE/LIGHT	Trigger snooze alarm & extend backlight	
ZONE	Set one of 4 North American time zones	Set Daylight Saving Time
C/F	Select temp display in °C or °F	
 Slide Switch	Search for Atomic Clock signal BACKLIGHT (AUTO/ HIGH / LOW / OFF) Display brightness setting	

AC Power and Battery Installation

MRI-177AN Receiver Unit:

For continuous backlight (on), plug the 6.0V AC/DC transformer into a power source as well as into the rear of the receiver.

Back-up Power: Install 3 AAA alkaline batteries according to the + and – symbols. This will retain all programs should the unit be unplugged or experience a power outage.


RS193 Remote Transmitter: Loosen the two screws on the center rear of the remote transmitter, remove the battery compartment cover, insert 2 AAA alkaline (or Lithium) batteries according to the + and - symbols. Leave the battery cover off until completing the “Setting up the Remote Wireless Transmitter” section below.

SETTING UP THE REMOTE WIRELESS TRANSMITTER (RS193):

- Slide the black 3 position switch inside the battery compartment of the remote sensor to position (channel) 1.
- On the Receiver, press and hold the “CHANNEL” button on the front of the unit for 3 seconds. This will instigate a “search” for a remote signal.
- Press the “TX” button (left side in the battery compartment of the transmitter) to force a signal to the receiver.
- The remote temperature and humidity will appear on the receiver within 3 minutes.
- Pressing the center button on the remote transmitter allows you to change the display to °C or °F.
- At this point you may reattach the rear cover on the remote transmitter.

NOTE: If adding a second or third remote transmitter, simply follow the above procedure but select channel 2 or 3.

Automatic Setting Atomic Clock

This is a feature that may or may not work in your location. If you do not need to have the correct time and date set immediately, we suggest you simply go on with reading the rest of these instructions. It is likely that by tomorrow morning, the unit will have the correct time and date displayed (like magic!!!). The antenna icon with full signal strength  will appear on the screen if the reception is successful.

If the correct time does not register within 24 hours, you are out of range of the signal coming from Colorado and will have to set the time and date manually. Likewise, if you wish to set the correct time and date immediately, go to the section labeled “MANUAL CLOCK & CALENDAR SETTING”.

A more detailed explanation of the Atomic Clock function can be found at the end of these instructions.

MANUAL CLOCK & CALENDAR SETTING

Press and Hold the “CLOCK” button to enter the clock setting mode. 12 or 24hr will flash. Use the “▲” or “▼” button to adjust then press “CLOCK” button to confirm. After adjusting each value to your desired number, press “CLOCK” to confirm and move to the next setting.

Sequential Setting Order:

12/24hr format > Hr > Min > Yr > D/M or M/D format > Month > Date > Weather Forecast > EXIT

In normal operating mode, press [CLOCK] to toggle between time, calendar and day of the week.

WEATHER FORECAST & BAROMETRIC PRESSURE

The TempMinder® MRI-177AN predicts weather conditions 12 – 24 hours in advance based on changes in the atmospheric pressure. Coverage is approximately 30 – 50 km and is relatively accurate (70 to 75% of the time). Obviously this should not be relied upon or expected to replace your usual source of information (like the Weather Channel®, etc). It should be looked upon as a quick reference tool only. We all know weather conditions cannot be 100% correctly forecast. Therefore, Minder Research Inc cannot be held responsible for any loss incurred by an incorrect forecast.



The current weather forecast is the one highlighted by a black-outlined square box.

To obtain an accurate weather forecast & barometric pressure reading, you need to adjust your current altitude. Press and release “PRESSURE” button to select pressure unit readings between hPa, inHg & mb. Note, hPa and mb units will later allow for altitude changes in Meters. If you chose inHg, the altitude settings will be in feet.

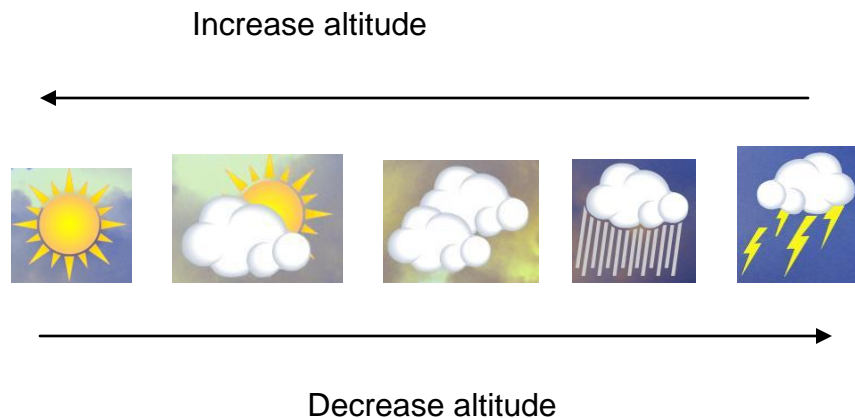
ALTITUDE ADJUSTMENT:

To now adjust the altitude, press and hold the “PRESSURE” button for 3 seconds. Then press “▲” or “▼” to enter your current altitude in meters or feet. Press “PRESSURE” to confirm and exit the setting. This allows the unit to provide a more accurate barometric pressure & weather forecast reading. At this point, we suggest allowing 24 to 48 hours for the unit to “acclimatize” itself to your location. Should you wish to adjust the forecasts, please read the following.

IMPORTANT NOTE:

Different geographic locations (plains, mountains, coasts, etc.) create different weather forecasting responses. If the TempMinder® MRI-177AN shows the same forecast, over a long period of time and does not reflect the actual weather condition, it may be necessary to fine tune the system.


- 1) Determine the current local weather forecast from a reliable source. For more accuracy, find the current barometric pressure for your location. You may adjust the barometric pressure reading of the TempMinder® by raising or lowering the altitude setting within the unit. This will also change the position of the forecast icon.
- 2) Enter altitude setting mode (see ALTITUDE ADJUSTMENT above) and adjust altitude accordingly. Increase or decrease altitude settings by 20m (or 60ft) each time and exit. This will raise or lower the barometric pressure readings within 30 to 60 seconds. The weather forecast icon may not change immediately. We suggest leaving the unit for an hour or two. If the icon has not reached your desired forecast, repeat the above steps until it does.



IN/OUT TEMPERATURE & HUMIDITY

Temperature readings are located on the upper left of the display and humidity is on the right.

Press "C/F" button to select °C or °F.

Press CHANNEL button to select indoor, Ch1, Ch2, Ch3 and auto-channel scrolling  display modes. When set to auto scrolling, the graph displays will rotate every 15 seconds. If set on a single channel, the graphs become animated.

ANIMATED COLOUR GRAPHS

The circular colour graphs are designed as an intuitive way to gauge the weather at a glance.

The left colour graph represents the respective In/Out temperature, heat index or dew point of the current display mode.

The right graph represents the respective In/Out humidity.

The higher the temperature & humidity, the more colour is visible. Lower temperature & humidity readings show less colour.

IN/OUT HEAT INDEX

Heat Index combines the effects of heat and humidity. It is the apparent temperature of how hot the heat-humidity combination feels (humidex).

Press "Heat Index/Dew Point" button **once** to show the respective indoor or outdoor heat index on the upper left display. If conditions are such that caution is recommended, the following alerts will appear. These alerts are most relevant when exercising or under moderate physical exertion.

HEAT INDEX ALERT INDICATORS

Caution	Exercise more fatiguing than usual
Extreme caution	Heat cramps, exhaustion possible
Danger	Heat exhaustion likely
Extreme danger	Heat stroke imminent

IN/OUT DEW POINT

Dew point is the saturation point of the air, or the temperature to which the air has to be cooled in order to produce condensation.

Press the HEAT INDEX / DEW POINT button **twice** to show the respective indoor or outdoor dew point reading on the upper left display.

IN/OUT COMFORT LEVEL

In/Out Comfort indicator combines the effect of temperature & humidity and displays in 3 levels:

COMF: Comfortable - ideal range for both temperature & humidity

WET: Excess moisture (too humid)

DRY: Inadequate moisture (too dry)

MAXIMUM / MINIMUM MEMORY

Press the "MEM" button repeatedly to view the maximum & minimum histories of temperature, humidity, heat index or dew points. To clear the memory record and start a new recording period, press and hold "MEM" button while the respective values are displaying on the screen.

TEMPERATURE & HUMIDITY TREND INDICATOR

The arrow icons will indicate Rising, Steady or Falling if the temperature or humidity changes more than 1 degree C (or 2 degree F) within an hour.

CLOCK & CALENDAR

Press and Hold "CLOCK" button to enter the clock setting mode. The 12 or 24hr will flash. Use the + or -/Zone button to adjust and "CLOCK" button to confirm. After adjusting each value to your desired number, press "CLOCK" to confirm and move to the next setting.

Sequential Setting Order:

12/24hr format > Hr > Min > Yr > D/M or M/D format > Month > Date > Weather Forecast > EXIT

In normal operating mode, press "CLOCK" to toggle between time, calendar and day of the week.

DUAL TIME SETTING

In addition to displaying your normal (local) time, the TempMinder® MRI-177AN is capable of displaying a second "world" time. To enter a second time, press and hold "ZONE" button to enter world (dual) time setting mode. Press "▲" or "▼" button to enter the desired hour offset value from -12 to +12 hours. Press "ZONE" to confirm and exit.

During normal operating mode, press "ZONE" button to toggle between home and world (dual) time. The "ZONE" icon appears when world (dual) time is selected.

ALARM SETTING

Press and hold "ALARM" to enter alarm time setting mode. Press "▲" or "▼" button to enter the desired Hr/ Min values. Press "ALARM" to confirm setting.

In normal operating mode, press "ALARM" to show the set alarm time. "AL" icon will appear. Press again to enable or

disable the alarm. A bell icon  appears when the alarm is enabled.

SNOOZE & BACKLIGHT

When the alarm is going off, press "SNOOZE/LIGHT" button to trigger snooze alarm and "Zz" icon will appear. To stop alarm for one day, press "ALARM" key.

Press "SNOOZE/LIGHT" button for an extended backlight (20 seconds) if the AC adaptor is not being used.

DISPLAY BRIGHTNESS CONTROL

Select display brightness mode with the slide switch on the back casing.

- AUTO:

Display brightness is adjusted automatically according to the surrounding brightness detected by the light sensor located on the left of the Snooze/Light button. In a bright environment, display brightness will increase. As the environment turns dark, display brightness will reduce. Avoid obstructing the light sensor window as the display will remain dim even in a bright environment.

- Auto Recommended
- High: Constant highest brightness
- Low: Constant lowest brightness
- Off No backlight display

LOW BATTERY INDICATION

A Low Battery icon will appear if any batteries need replacing. This includes the main indoor unit as well as any RS193 remote transmitter being monitored.

BATTERY DISPOSAL

Replace only with new alkaline batteries (or lithium in the RS193 remotes if monitoring extremely low temperatures. Please dispose of old, batteries in an environmentally friendly manner in accordance with your local regulations.

SPECIFICATIONS

Indoor Temperature: 0 C to + 50 C (+32 F to +122 F)
In/Out Humidity : 20% - 99% RH
Remote sensor : -40 C to +60 C (-40 F to +140 F) Use lithium batteries if below -20C
Channel : max. 3 remote sensors (model # RS193)
Transmission : up to 65M to 100M (213 ft. to 328 ft.) in open area, RF433.92 MHz
Resolution : 0.1 degree C for temperature, 1% for humidity
Clock : WWVB Atomic Clock w/manual Digital back-up
Elevation : -50M to 1200M (-164 ft. to 3,937 ft.)
Power : 6.0V adapter & AAA x 3 pcs for main unit
AAA x 2 pcs for remote sensor

ATOMIC CLOCK FUNCTION

The TempMinder® MRI-177AN is equipped to receive a radio wave signal from the WWVB radio station located in Colorado USA. This signal is strongest at night and covers most of North America. Unfortunately there are some distant areas which it does not reach. These include Alaska, Maine, Yukon, Labrador, Newfoundland as well as parts of Quebec, New Brunswick, Nova Scotia and PEI. You will find complete technical details as well as coverage maps at the NIST (National Institute of Standards and Technology) website.

www.boulder.nist.gov/timefreq/stations/wwwvb.htm .

WARRANTY: This product is guaranteed against manufacturing defects for a period of one year. Should it fail, return it to the address below (with a copy of your receipt). If you drop it, or your dog chews it up, please just buy a new one!??
ENJOY

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