TempMinder® MRI-213MX Wireless Weather Station

Congratulations on having purchased (or received) this fine MRI-213MX TempMinder®. If you have any questions or concerns, feel free to contact us at any time (information below). These instructions are purposely non-technical (written by Minder's "non-engineering" staff members only).

Specifications:

- Remote Temperature Range: -30°C to + 60°C (-22°F to +140°F)
- Remote transmission Distance: Max 65 meters (210 ft)
- Temperature Accuracy: +/- 1°C (2.0°F)
- Humidity Accuracy: +/- 5%
- Power Supply: 5 "AAA" batteries (not incl.)
  Or 4.5v AC/DC adaptor **(incl.)** +2 "AAA" batteries (not incl.)
- RCC Auto Set Clock w/5.5 zones (P/M/C/E/A/N)
- Wireless frequency:434MHz

Functions:

- 12 to 24hr weather forecast (A8)
- Ultra BLUE LED backlight
- Receive remote temp and humidity from up to 3 locations w/trend arrow (A5)
- Three comfort level icons (A11)
- One RS211/213 remote transmitter included (C)
- Calendar (Days in 7 languages) (A12)
- Indoor temperature & Humidity (°C or °F) w/trend arrow (A2)
- 12/24 hr auto setting (atomic) clock w/alarm/snooze (A1)
- RCC Clock has 5.5 time zones (see Auto Setting clock for details)
- Hi/Lo temperature alert on 3 channels (A14)
- Min/Max temp/humidity memory (B2)
- 8 Moon Phases (A13)

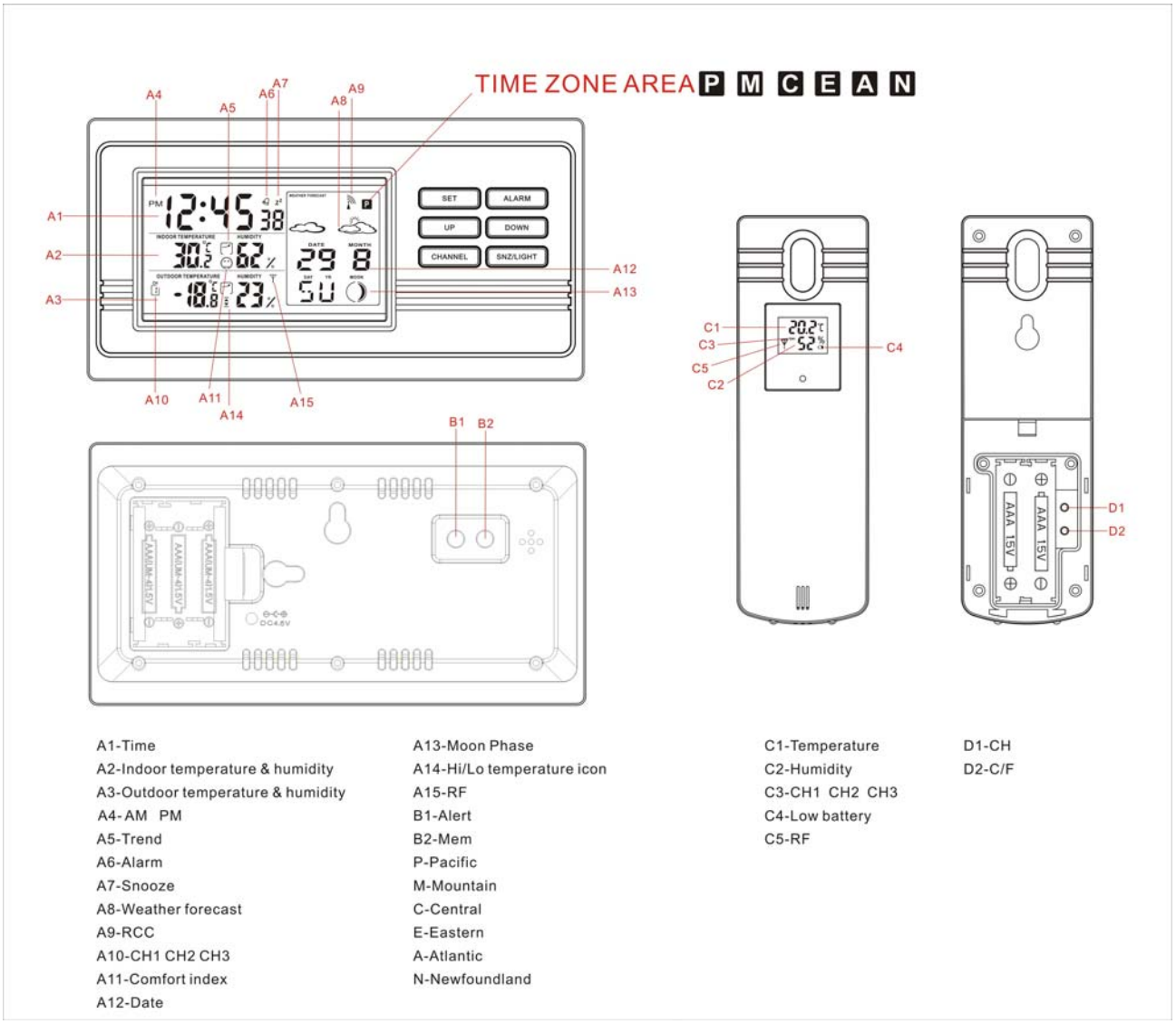
➢ KNOW YOUR TempMinder® TMG-213MX CONTROLS!!!

Receiver Rear

"ALERT" used only when programming Hi/Lo temperature ALERTS (B1)
"MIN" used to review and clear temperature and humidity Minimum & Maximum history (B2)

Receiver Front

SET – to enter and confirm programming
ALARM – to enter, confirm or cancel clock alarm
UP – to raise numbers during programming
OR change the time zone to your location (P/M/C/E/A/N)
OR switch languages during programming
DOWN – to lower numbers **OR** switch between °C and °F **OR** force RCC search (2 second hold)
CHANNEL – to change channels (1, 2 or 3) **OR** start a new search (2 second hold)
SNZ/LIGHT – Blue light for 5 seconds (w/o AC plug) **OR** cancel alarm for a wonderful 5 min. snooze



A1-Time
A2-Indoor temperature & humidity
A3-Outdoor temperature & humidity
A4- AM PM
A5-Trend
A6-Alarm
A7-Snooze
A8-Weather forecast
A9-RCC
A10-CH1 CH2 CH3
A11-Comfort index
A12-Date

A13-Moon Phase
A14-Hi/Lo temperature icon
A15-RF
B1-Alert
B2-Mem
P-Pacific
M-Mountain
C-Central
E-Eastern
A-Atlantic
N-Newfoundland

C1-Temperature
C2-Humidity
C3-CH1 CH2 CH3
C4-Low battery
C5-RF

D1-CH
D2-C/F

Important Note for "Button Pushers":
If you have not read the following instructions and have started pushing buttons, you may find that none of them are working (example pressing the "DOWN" button does not change the temperatures from °C to °F). That is because the unit is searching for a signal from Colorado (A9 icon is flashing)! To rectify this, you may simply wait for 2 or 3 minutes (after which time the unit temporarily stops searching) or press and hold the "DOWN" button for 2 seconds. Either way, you will then have full control of all the buttons. Happy pushing but please read the rest of the instructions!
Please do not return the unit to the store because the buttons are not working! If the above does not make sense, call us (Minder Research 772-463-6522). We have secret ways of fixing stuff over the phone!!!

➢ Operating Directions (Powering up):

- Remove the blue overlay on the receiver (if you don't, the numbers will never change – ha!!!)
- Remove the battery compartment doors from the receiver and the RS211/213 remote transmitter. Press "in" and push "down" on the RS211/213 remote rear cover. It should slide off easily.
- Insert 3 "AAA" alkaline batteries in the indoor receiver (FIRST). Alternatively, plug in the 4.5v AC/DC adaptor. When using the AC adaptor you may either leave the batteries in the receiver for backup purposes (recommended) or not. After "powering up" the receiver, it will search for a remote signal for 3 minutes.
- Insert 2 "AAA" alkaline batteries in the RS211/213 remote transmitter. The temperature will appear on the upper half of the screen and humidity on the lower half. "CH 1" will appear just to the left of the humidity number. If/when you add a second and/or third remote, press the "CH" button inside the battery compartment to choose either channels 2 or 3. You will probably need a magnifying glass if you really need to see "CH2" or "CH3". Suffice it to say, "CH1" is at the top left corner of the Humidity number, "CH2" is in the middle and "CH3" is in the lower left. See "C3" on the illustration page.
- Within three minutes, the remote temperature will appear on the receiver. Be sure the receiver is also set on channel 1. Note: if you prefer your temperatures in °F, press and release the DOWN button (quite logical, yes?).
- So, you now have two temperature and humidity readings showing on the receiver (in and out). Please understand that at this point even though the receiver and the remote are close together, the temperatures will not match exactly. Due to electronic tolerances, it could take up to 48 hours for them to come within 1°C (2°F). Don't bother waiting (there is no point). You may relocate the RS211/213 at any time. For location hints, see "Locating the Remote" at the end of these instructions.
- If you are **adding a second or third** RS211/213 transmitter, install the batteries and set the channel (on the remote) to either channel 2 or 3 (D1). On the receiver, press and hold the "Channel" button for 2 seconds. A small (tiny?) antennae icon will flash to the right of the word "Humidity" (A15). All remote information will be cleared and the TempMinder® will search for new information. You should see this new remote information within 3 minutes. Press the channel button (on the receiver) to scroll through all active transmitters.

TempMinder® exclusive 5.5 time zones

Setting the Date & Time <u>Method A</u>

Auto Setting (RCC Atomic) Clock

The MRI-213MX is the first ever Weather Station with an auto setting clock capable of adjusting to 5.5 North American time zones. The zones are "P" – Pacific, "M" – Mountain, "C" – Central, "E" – Eastern, "A" – Atlantic, "N" – Newfoundland (half hour!!!!).

This TempMinder® is equipped to receive a radio wave signal (RCC) from the WWVB radio station located in Boulder Colorado USA. This signal covers most of North America. Unfortunately there are some distant areas which it does not reach. These include Alaska, Yukon, Northwest Territories and Hawaii. In the past, areas such as Maine, Labrador, Newfoundland as well as parts of Quebec, New Brunswick, Nova Scotia and PEI were also out of range. Recently we at Minder Research have been notified of atomic signals being received as far away (from Colorado) as Nova Scotia Canada.

It would appear that either the signal emanating from Boulder has strengthened or some other factor (like global warming???) has improved its reach. With this knowledge and in anticipation of the signal spreading even farther, Minder Research has developed software allowing for 5.5 time zones. These then would cover the correct times from Alaska (ex. 12:00 PM noon) to Newfoundland (5:30 PM).

So, if you live in one of those extreme locations and the auto setting clock does not yet function in your area, please go to the next section and simply set the date and time manually.

If you do not need to have the correct time and date set immediately, we suggest you simply go on with your life. It is likely that by tomorrow morning, the unit will have the time and date displayed. The antenna icon (A9) will show full signal strength  if the reception is successful. The default time zone is “P” for Pacific. Depending on where you live, simply press and release the “UP” button to scroll to your time zone (upper right corner of the receiver display). At the same time, by pressing the “UP” button, you will notice the time changing one hour at a time (until you get to “N” which will increase by 30 minutes). Instead of straining your eyes trying to read “P/M/C/etc”, you may simply press the “UP” button until you see your correct local time. Remember, this is in the morning after the TempMinder® has received a strong enough signal to set the “Pacific” time. If for some reason the unit has not received the RCC, you may simply wait for another overnight cycle (strongest transmissions run from 1:00AM through 5:00AM), or you can go to the next section and enter your current time and date manually.

For more information and complete technical details on the Atomic Clock, as well as coverage maps go to the NIST (National Institute of Standards and Technology) website.

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

➢ Setting Time and Date Manually Method B:

Note #1: If you proceed to the following programming directions and none of the buttons seem to work, it is because the unit is currently searching for the Colorado time signal. To shut this off (temporarily), press and hold the DOWN button for two seconds. The flashing “search” icon (see A9 on illustration page) will disappear and you will have complete control of all buttons.
Note #2: In order to set the time and date, you will need to go into the PROGRAM SETTING MODE by pressing and holding the SET button for two seconds. You will then have 8 seconds to input each piece of information (hour or minute or month, etc.). If you take (need) longer, the unit will return to the normal STANDBY MODE. **You will then simply need to go back into the PROGRAM SETTING MODE** (press and hold “SET” button for 2 seconds again). Previously entered information will still be there and can be skipped over by pressing and

releasing the SET button. Sounds complicated, but you will understand once you get started. Whatever happens, do not get frustrated – patience is the key!

By the way, if step one below does not work, please read "Important note for "Button Pushers" at the beginning of these instructions!

- **Press and hold "SET" button for 2 seconds:**
- Press UP OR DOWN button for the correct **YEAR** then press SET to confirm.
- With the **MONTH** flashing, press the up or down button then SET to confirm.
- Repeat the above for: **DAY – LANGUAGE – HOUR – MINUTE – ON/OFF FOR DST* - 12/24 HR**
- Note: When the day of the week flashes (EN on first set up), press the UP button until you see your language of choice. (EN/GE/FR/IT/DU/SP or DA). If English is your language of choice, simply press SET.
- *DST = Daylight Saving Time (leave "ON" if your time zone changes with the seasons).

- **Congratulations** – that's it!! If you did it in one pass, you must be the engineer who wrote the software. If you did it in two tries, you are probably under 10 years old! Whatever the case, it's done. Keep these instructions as you will need them in about a year when the batteries require replacement.

➢ Alarm Clock Setting:

- Press & hold ALARM button for 2 seconds
- Press UP or DOWN for desired hour then press ALARM to confirm
- Repeat for minutes setting
- Press ALARM to activate (bell icon appears above the seconds) press again to de-activate.
- When the alarm sounds, press the SNZ/LIGHT button for another 5 minutes of sleep OR press any other button to turn it off.

Temperature Alert Setting (channels 1, 2 or 3):

The order is UPPER LIMIT > LOWER LIMIT > EXIT. Starting values are +70C / 158F (upper) and -50C / -58F (lower).

- Select the CHANNEL you wish to program with a Hi/Lo temperature alert.
- Press ALERT button (B1) for 2 seconds.
- The **upper temp** will flash (+70C/158F). Press DOWN button until desired **UPPER** temp alert is reached. HINT - Press and hold the down button for high speed!!!
- Press and release the ALERT button one more time. At this point the **LOWER temp** will flash (-50C/-58F when new). Press and hold the UP button until the desired **LOWER** temp alert is reached. Press and release the alert button to confirm.
- Press and release the ALERT button to activate or deactivate the Temperature ALERT setting (up/down arrows between outdoor Temp & humidity). When the Temperature ALERT is "alerting" (temp flashes & beeps), press any button to cancel the beep (temp keeps flashing until problem is corrected) OR press the ALERT button to cancel the flashing temp and beep.

➢ MEM Button (B2):

- Press and release to see the Maximum indoor + outdoor temperatures and humidity since last cleared. Press it again for the corresponding Minimum information.
- To clear the memory and start a new monitoring time frame, press and hold the button for 3 seconds.

➢ Miscellaneous Information/Hints:

- **Locate the Transmitter** out of direct sunlight. Even though the unit is "weather proof" try to keep it out of direct rain or snow as much as possible. Under an eave, window sill or overhang is ideal.
  If temperatures in your area drop below -20°C/-4°F use Lithium batteries in the transmitter.
- **IF: you lose the signal from the remote transmitter.**

  Press and hold the CHANNEL button for 2 seconds. This will initiate a 3 minute search. If still not found, read below.

  If your TempMinder has been functioning for 6 months or longer, you will likely resolve the problem by replacing the batteries in both the transmitter(s) and the receiver.

  If the problem persists, the cause is probably electronic interference from another device. This is very difficult to determine and all we can suggest is moving the receiver and transmitter to various locations. Quite often a move of even a few feet (meters) in one direction or another will resolve the issue.
  It is interesting to note that RF (Radio Frequency signals) will transmit better through a concrete wall than glass!

  Weather Forecast:

  This function mainly considers the change in atmospheric pressure and is fairly accurate within a 10 mile (16 km) radius. This accuracy will be greatly reduced if the TempMinder® is constantly located in an enclosed environment (air conditioned or heated well sealed home). This can be modified somewhat by temporarily placing the receiver near an open window, in the garage or even outside on a protected porch or balcony. Understand that this forecast is not meant to replace the Weather Channel or your local weather man!!!

FCC Statement:

This equipment has been tested and found to comply with the limits for Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does

cause harmful interference to radio or television reception, which can be determined by turning the equipment

off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: Modifications to this product will void the user's authority to operate this equipment.

IC déclaration

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Remarque: Toute modification de ce produit annule l'autorité de l'utilisateur à utiliser cet équipement.