

DAVIS 

Vantage PRO2™

***Quick
Reference
Guide***

INTRO

This “Quick Reference Guide” will provide you with abbreviated instructions for all functions of the Vantage Pro2 console. For more detailed instructions, see *Vantage Pro2 Console Manual*.

Pages with:

CLEAR headings provide general instructions and information about the console.

BLACK headings provide instructions for using each key. They are presented in alphabetical order.

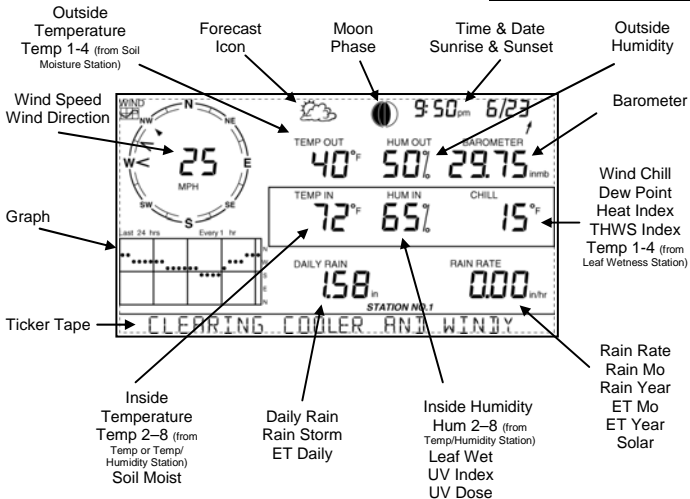
Whenever you see “Press **2ND** & **ANOTHER KEY**” in this booklet, this means to press and release **2ND** and then immediately press the other key.

REMEMBER: Press and hold **DONE** at any time to return to the current weather screen. See DONE.

For instructions about:

- LEAF WETNESS, see “HUM.”
- SOIL MOISTURE, see “TEMP.”

LCD



ICONS

Forecast Icons. See "FORECAST."

Moon Phase. The icons shown below are for the Northern Hemisphere. For the Southern Hemisphere, the orientation is reversed.



Alarm Bell. Appears when you are setting an alarm. Blinks on and off when an alarm is triggered.



Graph Icon. Appears next to a weather variable when you press that variable's key. On most screens, indicates that that variable is being shown on the graph. On the alarm screen, indicates that you are setting an alarm for that variable.

2nd

Second Function. Appears when you press **2ND**. Used to select the variable or function printed in white above each key.



Umbrella. Appears when it is currently raining.

TICKER TAPE

Press the appropriate key(s) to view these messages:

Forecast (within 48 hours) **FORECAST**

(10 Min Avg Wind Speed **WIND** (Wind Speed)

Last 15 Min of Rain **RAIN YR** (Rain Rate)

Last 24 Hrs of Rain **RAIN DAY** (Daily Rain)

Heat Index Warning **2ND** & **HEAT**

If $\geq 90^{\circ}\text{F}$ (32°C).

Wind Chill Warning **2ND** & **CHILL**

If $\leq 0^{\circ}\text{F}$ (-18°C) and 10-minute average wind speed ≥ 10 mph (16 km/h).

For wireless stations:

X flashing in the right corner means you are receiving data packets.

L means the signal has been lost.

R means the console is attempting to reacquire the transmitter.

SETUP

To enter setup mode: Press and hold **DONE** and then press **(-)**. Press **DONE** to advance or **BAR** to step back through the setup messages:

1. RECEIVING FROM. Displays available transmitting stations.
2. ON/OFF. To set reception for one of the available transmitting stations.
3. RETRANSMIT ON/OFF. To retransmit to another wireless console.
4. Press **(+)** or **(-)** to set the ON (to receive from that station) or OFF.
5. Press **GRAPH** to change station type: ISS, TEMP, HUM, TEMP/HUM, WIND, RAIN, LEAF, SOIL, LEAF/SOIL.
6. Press **(<)** or **(>)** to view the other station IDs.
7. Repeat steps 4-6 to set multiple stations.

To retransmit data to another wireless console:

1. To enter the setup screen, press and hold **DONE** and then press **(-)**.
2. Press **DONE** twice to advance to the RESTRANSMIT message in Setup Mode.
3. Press **(+)** or **(-)** to set the retransmit capability ON or OFF.
4. Press **(<)** or **(>)** to advance to the next free station ID.
5. Press and hold **DONE** to return to the current weather screen.

SETUP

To continue through the setup mode:

1. ENTER TIME. To change the time and date. See "TIME."
2. ENTER LATITUDE. Press (+) or (-) to change the flashing digit. Press (<) or (>) to move between fields. Press **2ND** & **UNITS** to change from north to south.
3. ENTER LONGITUDE. Press (+) or (-) to change the flashing digit. Press (<) or (>) to move between fields. Press **2ND** & **UNITS** to change from west to east.
4. TIME ZONE. Press (+) or (-) to view time zones. Press **2ND** to enter GMT offset instead of time zone. Press (+) or (-) to change GMT offset.
5. DAYLIGHT SAVINGS AUTO/MANUAL. Press (+) or (-). To change the setting.
6. DAYLIGHT SAVINGS OFF/ON. If daylight savings setting = AUTO, displays the current status. If daylight savings setting = MANUAL, press (+) or (-) to change the current status.
7. ENTER ELEVATION. To correct barometric pressure. See "BAR."
8. WIND CUP SIZE SMALL/LARGE. Press (+) or (-) to change the setting.
9. RAIN COLLECTOR .01 IN/.2 MM/.1 MM. Press (+) or (-) to change the setting.
10. RAIN SEASON BEGINS. Press (+) or (-) to change the month.

To exit the setup mode: Press and hold **DONE**.

DIAGNOSTICS

The diagnostic screen is used by our tech support staff to help diagnose problems. If you are experiencing difficulties call us at **(510) 732-7814**, Monday through Friday, 7:00 a.m. to 5:30 p.m., Pacific Time.

To check reception and/or change antenna gain:

1. To enter the diagnostic screen, press and hold **TEMP** and then press **HUM**. You will see console battery voltage in the ticker tape.
2. Look for the number with the % sign in the middle of the top row. A number $\geq 70\%$ is good or excellent. If the number you see is $< 70\%$, try changing the gain or relocating the console. Sometimes moving the console just a few feet can make a big difference.
3. Press **2ND** & **CHILL** to toggle between diagnostic screen displays.
4. To exit the diagnostic screen, press **DONE**.

Press **2ND** to select the second key function (printed in white type above each key).

The **2nd** icon will appear in upper right corner of screen, below the time and date. After you press another key, the icon will disappear. If you wish to select another second key function, you must press **2ND** again.

The icon will also time out and disappear from the screen if you do not press another key within a few seconds.

Whenever you see "Press **2ND** & **ANOTHER KEY**" in this booklet, this means to press and release **2ND** and then immediately press the other key.

ALARM

To set an alarm: See "SET." (NOTE: Not all alarms are available for all weather variables. See *Vantage Pro2 Console Manual* for details.)

When an alarm is triggered, you will hear an audible alarm:

- Until conditions change (i.e., they rise above or fall below the alarm thresholds you have set) or you clear the alarm, if the console is being run on AC power.
- For two minutes, if the console is being run on battery power.
- For one minute, if you have set a time alarm.

And you will see visible alarms:

- The alarm bell icon will blink on and off.
- A message will appear in the ticker tape.

To silence an alarm: Press **DONE**.

To clear all alarm settings: Press **ALARM** to enter the alarm screen. Press and hold **ALARM** until dashes appear in all the fields. Press **DONE** to exit the alarm screen.

To clear individual alarm settings: See "CLEAR."

Press **BAR** to select:






- Barometric Pressure (0.00 in, 0.0 mm, 0.0 hPa, 0.0 mb)

Press **2ND** & **UNITS** to change unit of measure.

To correct for elevation change:

1. Press and hold **DONE** and then press **(-)** to enter the setup screen.
2. Press **DONE** nine times or until you see ENTER ELEVATION.
3. Press **2ND** & **UNITS** to change from feet to meters, if desired.
4. Press **(+)** or **(-)** to change the flashing digit. Press **(<)** or **(>)** to move between fields.
5. Press and hold **DONE** to return to the current weather screen.

Barometric Trend Arrow shows change over the last three hours:

-  Increase of 0.06" Hg (2.0 hPa, 1.5 mm Hg) or more.
-  Increase of 0.02" Hg (0.7 hPa, 0.5 mm Hg) or more.
-  Change of less than 0.02" Hg (0.7 hPa, 0.5 mm Hg).
-  Decrease of 0.02" Hg (0.7 hPa, 0.5 mm Hg) or more.
-  Decrease of 0.06" Hg (2.0 hPa, 1.5 mm Hg) or more.

CHILL

Press **2ND** & **CHILL** to display:

- Wind Chill (°F, °C)

Press **2ND** & **UNITS** to change unit of measure.

All temperature-related readings (inside and outside temperature, wind chill, heat index, and dew point) will read in the same unit of measure. Changing one from °F to °C (or vice versa) changes all others.

On the ticker tape:

WIND CHILL WARNING . . . will appear on the ticker tape when you are displaying wind chill if the reading is $<0^{\circ}\text{F}$ (-18°C) and the 10-minute average wind speed is ≥ 10 mph (16 km/h).

CLEAR

To clear a daily, monthly, or yearly amount:

1. Select the variable you wish to clear.
2. Press **2ND** then **CLEAR**, holding **CLEAR** down until the digits stop flashing and zeroes appear in the field.

To clear an alarm setting:

1. Press **ALARM** to enter the alarm screen.
2. Select the alarm setting (see "ALARM" for detailed instructions).
3. Press **2ND**, then **CLEAR**, holding **CLEAR** down until the digits stop flashing and dashes appear in the fields.
4. Press **DONE** to return to the current weather screen.

To clear highs & lows:

Follow the directions above for clearing alarms, except press **HI/LOW** to enter the high/low screen.

To clear ALL (including highs and lows, alarm settings, and daily, monthly, and yearly amounts):

1. Press **WIND**, then **2ND**, then **CLEAR**, holding **CLEAR** down for the entire 6-second countdown until you see CLEARING NOW in the ticker tape.

DEW

Press **2ND** & **DEW** to display:

- Dew Point (°F, °C)

Press **2ND** & **UNITS** to change unit of measure.

All temperature-related readings (inside and outside temperature, wind chill, heat index, and dew point) will read in the same unit of measure.

Changing one from °F to °C (or vice versa) changes all others.

Press **DONE** to:

- Accept an alarm setting.
- Exit the alarm screen.
- Silence an alarm.
- Exit the graph screen.
- Exit the high/low screen.
- Go to the next screen in the Setup Mode.

Press and hold **DONE** and then press **(-)** to:

- Enter the Setup Mode.

Press and hold **DONE** to:

- Exit the Setup Mode.

ET

If you have a solar radiation sensor, press **2ND** & **ET** to toggle between:

- ET Day (0.00 in, 0.0 mm)
- ET Month (0.00 in, 0.0 mm)
- ET Year (0.00 in, 0.0 mm)

Press **2ND** & **UNITS** to change unit of measure.

All rain and ET readings will read in the same unit of measure. Changing one from 0.00 inches to 0.0 mm (or vice versa) changes all others.

Update interval:

ET is updated once an hour, on the hour.

Update Interval:

The forecast is updated once an hour, on the hour.

Forecast Icons:

The forecast icons predict the weather within the next twelve hours.



Mostly
Clear



Partly
Cloudy



Mostly
Cloudy



Rain



Snow

If rain or snow is possible (but less certain than "likely"), you will see the partly cloudy icon along with the rain or snow icon.

Ticker Tape:

Press **FORECAST** to view a detailed forecast in ticker tape. The ticker tape messages predict the weather up to 48 hours ahead.

GRAPH

To enter the graph screen: Press a variable and then press **GRAPH**. You will see the graph and the min & max readings for the selected weather variable. The reading in the weather variable field corresponds to the flashing dot on the graph. To view another weather variable, press the key(s) for that variable.

To view a selected data point: Press (**<**) or (**>**) to move right or left on the graph. The selected data point will flash, and the reading in the weather variable field will change. The time and/or date will also change as you move back and forward on the graph.

To graph highs & lows: Press (**+**) or (**-**) to change the graph to the highs and lows for the last 24 days, months, or years. Press **HI/LOW** to switch between highs and lows. The time and date will change as you move back and forward in time. (NOTE: Not all highs and lows are available for all weather variables. See *Vantage Pro2 Console Manual* for details.)

To exit the graph screen: Press **DONE**.

Press **2ND** & **HEAT** to toggle between:

- Heat Index (°F, °C)
- THSW (Temp-Hum-Wind-Sun) Index (°F, °C) if you have solar radiation sensor.

Press **2ND** & **UNITS** to change unit of measure.

All temperature-related readings (inside and outside temperature, wind chill, heat index, and dew point) will read in the same unit of measure. Changing one from °F to °C (or vice versa) changes all others.

On the ticker tape:

HEAT INDEX WARNING . . . will appear on the ticker tape when you are displaying heat index if the reading is $\geq 90^{\circ}\text{F}$ (32°C).

HI/LOW

To enter the high/low screen: Press **HI/LOW**. You will see the time & date of the DAY HIGHS for the currently selected weather variable, along with a graph showing the highs for the last 24 hours or days.

To view a different weather variable, press the key(s) for that variable.

To scroll between highs & lows: Press **HI/LOW** or **(+)** or **(-)** to scroll between:

- Day Highs • Day Lows
- Month Highs • Month Lows
- Year Highs • Year Lows

The time and date will change as you move between the various highs and lows. (NOTE: Not all highs and lows are available for all weather variables. See *Vantage Pro2 Console Manual* for details.)

To go back or forward in time: Press **(<)** or **(>)**. The time and date will change and the corresponding dot on the graph will flash.

To exit the high/low screen: Press **DONE**.

To clear highs & lows: See "CLEAR."

Press **HUM** to toggle between:

- Outside Humidity (%)
- Inside Humidity (%)
- Hum 2–8 (%) if you have a Temperature/Humidity Station.
- Leaf Wetness & Outside Temperature (0°F, 0.0°F, 0°C, 0.0°C) if you have a Leaf Wetness Station. Continue to press **HUM** to display each leaf wetness/temperature pair. Maximum is two pairs.

LAMPS

Press **2ND** & **LAMPS** to toggle between:

- Backlight on.
- Backlight off.

If the console is running on AC power:

- The backlight will remain on until you turn it off.

If the console is running on battery power,

- The backlight will remain on as long as you continue pressing various keys or a ticker tape message is scrolling across the screen. It will automatically turn off if you do not press a key within ten seconds.
- The backlight will not come on when battery power is low.

Press **RAIN DAY** to toggle between:

- Rain Day (0.00 in, 0.0 mm)
- Rain Storm (0.00 in, 0.0 mm).

Press **2ND** & **UNITS** to change unit of measure.

All rain and ET readings will read in the same unit of measure. Changing one from 0.00 inches to 0.0 mm (or vice versa) changes all others.

To view the last 24 rain storms:

1. Select Rain Storm, then press **GRAPH** to enter the graph screen.
2. Press **(<)** or **(>)** to move backward or forward in time.
3. Press **DONE** to exit the graph screen.

On the ticker tape:

LAST 24 HRS OF RAIN . . . will appear on the ticker tape if it has rained within the last 24 hours and you are currently displaying rain rate.

STORM STARTED ON . . . will appear when you are displaying rain storm.

RAIN YR

Press **RAIN YR** to toggle between:

- Rain Month (0.00 in, 0.0 mm)
- Rain Year (0.00 in, 0.0 mm)
- Rain Rate (0.00 in, 0.0 mm)

Press **2ND** & **UNITS** to change unit of measure.

All rain and ET readings will read in the same unit of measure. Changing one from 0.00 inches to 0.0 mm (or vice versa) changes all others.

When it is currently raining:




will appear between the rain day and rain year fields.

On the ticker tape:

LAST 15 MIN OF RAIN . . . will appear in the ticker tape when you are displaying rain rate.

To set an alarm:

1. Press **ALARM** to enter the alarm screen. The  icon will appear on the screen. In each field, you will either see the alarm setting or, if no alarm has been set, a series of dashes.
2. Press **2ND** & **TIME** or a weather variable key, or use **(+)**, **(-)**, **(<)**, or **(>)** to move between weather variables. Except for the time alarm, the graph icon displays next to the variable you have selected.
3. Press **HI/LOW** to switch between high and low alarms. (Note: Not all alarms are available for all weather variables. See *Vantage Pro2 Console Manual* for details.)
4. Press **2ND** & **SET** to enter or change an alarm setting. Use **(+)** or **(-)** to change the digit within a field. Use **(<)** or **(>)** to move to the next field.
5. Press **DONE** to accept the alarm setting. Repeat steps 2–4 to set another alarm, or press **DONE** again to exit the alarm screen.

The **SET** key is also used to enter selected daily, monthly, and yearly totals and to calibrate selected readings. (See *Console Manual*.)

SOLAR

If you have a solar radiation sensor, press **2ND** & **SOLAR** to display:

- Solar Radiation (W/m^2)

Press **TEMP** to toggle between:

- Outside Temperature (0°F, 0.0°F, 0°C, 0.0°C)
- Inside Temperature (0°F, 0.0°F, 0°C, 0.0°C)
- Temp 2–8 (0°F, 0.0°F, 0°C, 0.0°C) if you have one or more Temperature and/or Temperature/Humidity Stations.
- Soil Moisture (centibars) & Soil Temperature (0°F, 0.0°F, 0°C, 0.0°C) if you have a Soil Moisture Station. Continue to press **TEMP** to display each soil moisture/temperature pair. Maximum is four pairs.

Press **2ND** & **UNITS** to change unit of measure.

All temperature-related readings (inside and outside temperature, wind chill, heat index, and dew point) will read in the same unit of measure. Changing one from °F to °C (or vice versa) changes all others.

For temperature from Leaf Wetness Station, see "HUM."

TIME

Press **2ND** & **TIME** to toggle between:

- Current Time & Date
- Time of Sunrise & Sunset

To set the time and date:

1. Press and hold **DONE** and then press the down arrow **(-)** to enter the Setup Mode.
2. Press **DONE** repeatedly until you see ENTER TIME in the ticker tape.
3. Press **(+)** or **(-)** to change the flashing digit. Press **(<)** or **(>)** to move between digits.
4. Press **2ND** & **UNITS** to change from 12- to 24-hour clock or from month/day to day/month, if desired.
5. Press and hold **DONE** to return to the current weather screen.

To correct the time of sunrise and sunset:

Enter latitude, longitude, and time zone in setup screen. See "SETUP."

Press **2ND** & **UNITS** to change the unit of measure for a selected variable:

- All temperature-related readings (inside and outside temperature, wind chill, heat index, and dew point) will read in the same unit of measure. Changing one from °F to °C (or vice versa) changes all the others.
- All rain and ET readings will read in the same unit of measure (0.00 inches or 0.0 mm).

In the setup screen, press **2ND** & **UNITS** to:

- Change from 12- to 24-hour clock and from month/day to day/month.
- Change latitude from north to south.
- Change longitude from west to east.
- Change elevation from feet to meters.
- Change wind cup size from small to large.
- Change unit of measure for rain collector.

UV

If you have a UV sensor, press **2ND** and **UV** to toggle between:




- UV Index
- UV Dose (meds)

Press **WIND** to toggle between:

- Wind Speed (0 mph, 0.0 m/s, 0 km/h, 0 knots)
- Wind Direction (degrees)

Press **2ND** & **UNITS** to change unit of measure.

On the compass rose:

-  Current wind direction
-  Dominant wind direction for a ten-minute period within the last hour. If dominant wind direction remained constant over the last hour, only one arrow will be shown. If dominant wind direction varied, up to six arrows (representing six ten-minute periods) may be shown.
-  Current wind direction is the same as one of the dominant wind directions.

On the ticker tape:

10 MIN AVG WIND SPEED . . . will appear on the ticker tape when you are displaying wind speed.



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