

IMPORTANT NOTE: This Quick Deploy Guide is meant to be a general reference to give the installer an overview of the steps required to make this system operational. The Owners Manual is the definitive source for detailed installation instructions and information.

Caution!

The connectors that connect the HydroSense II display to the sensor are a push-pull type with locators to align the connectors. DO NOT TWIST. The connectors can be damaged if the user twists them or attempts to screw or unscrew them.

Remove the AA batteries before putting the HydroSense II display into storage.

An unobstructed view of the sky may be required to achieve the most accurate global position data possible from the HydroSense II GPS.

Sensor rods must be completely inserted into the soil before making a measurement.

NOTE: Sensor rod size is selected when ordering the HS2P and ships attached to the Insertion Pole. The installed sensor can be replaced or swapped with the other sensor model by the user.





The HS2P ships with the HydroSense II Display mounted on the Insertion Pole. If the HS2P is ordered with a sensor, the sensor will also ship attached to the insertion pole and connected to the HydroSense II Display. Tools are only required if attaching a Sensor purchased separately.



Remove the HydroSense II display from the packaging

Remove the blue protective strip from the display window.

Turn on the HydroSense by holding the $\textcircled{B}{\mathbb{A}}$ button for 3 seconds.

Establishing a GPS sync may take up to one minute or more. When the GPS icon is displayed (*__), synchronization has been successful. Measurements with GPS data can now be taken.

NOTE: The HydroSense II stores positional information (when available), time, and date with measurements. To reliably take advantage of the GPS, use the HydroSense II outdoors with a clear view of the sky. Measurements can be made and data stored without a GPS signal; however, the HydroSense II Support Software (HydroSoft) will not be able to group and display any data without a GPS coordinate.

Insert the sensor rods fully into the soil. For turf applications where divots are not desirable, the HS2P uses a plastic "bumper" that covers the rod mounting nuts. Insert the rods into the soil up to the plastic "bumper."

NOTE: For turf applications where divots are not desirable, only remove the plastic bumper when replacing soil rods and put it back on when done.

To take a measurement, press (When the hourglass icon (Ξ) in the lower right of the screen is extinguished, the measured VWC and period are shown on the screen.

Press to store the measurement. Assuming the GPS is in sync, follow the prompts to create a zone.

NOTE: Zones are areas that can be used to group data for analysis. Zones can be resized and manipulated later in the Hydrosoft software.

Data are now stored in memory. To retrieve data, first establish a Bluetooth link with your PC, then collect data using the HydroSoft software.



HydroSense II Configuration Menus

Main Menu

To enter the main menu, press 🔬 from the main screen. Using the buttons, select the desired menu item and press (READ OK To exit the menu, press (5)

Deficit Mode

This menu selects whether or not soil deficit is displayed. Select ON to show deficit results and OFF to hide them. To quit this menu without saving the changes, press (STORE).

Bluetooth Power

This menu controls power to the Bluetooth module. Switching off Bluetooth will save power while the unit is awake and increase battery life. Bluetooth will need to be re-enabled to synchronize zones and upload data with a computer. Using the buttons, select the power state to use and press (READ OK To exit the menu without saving, press (STORE

Time/Date Menu

This submenu contains a list of settings to configure the clock system of the HydroSense II. Using the 🔿 💎 buttons, highlight one of the options and press (READ) Alternatively, press (STORE) to quit this menu

Time Set

The HydroSense II clock is normally set automatically at GPS sync. This menu is used to set the HydroSense II clock if GPS is not used. The $\langle \rangle \rangle$ buttons are used to move between the different parts of time and date, while the 🔿 👽 buttons adjust each individual part of the time and date. At the top of the screen, the date format is displayed for reference. To save the adjusted time to the clock, press (READ) To exit without saving, press (STORE)

MFNU DEFICIT MODE BLUETOOTH ON/OFF TIME/DATE DISPLAY SETTINGS GPS SYSTEM SETTINGS ВАСК: SELECT: OK

DEFICIT MODE ON OFF SAVE: OK CANCEL:

BLUETOOTH	POWER
DN	
DFF	
AVE: OK	CANCEL: 🗖

TIME/DATE

SET TIME

DATE FORMAT: DD/MM/YYYY

12:06:08

30 / 08 / 2013

BACK:

ADJUST: 🛨 📥

CANCEL: 🛨

SET TIME/DATE

DATE FORMAT

TIME ZONE

TIME SYNC

SELECT: OK

CHOOSE: 🔶 🔶

SAVE: OK

Date Format

This menu sets the format in which dates are displayed throughout the system. Use the \bigcirc buttons to choose the desired format, and press (READ) . To quit the menu without saving, press (READ).

Time Zone

The HydroSense II is able to use its GPS to provide a very accurate clock. Whenever a valid GPS signal is detected, the clock is adjusted using the received time (in UTC) and the time zone selected in this menu.

Time zones from UTC-12 to UTC+14 are available. Use 🔿 💎 to select a time zone and press (READ). To exit without making changes, press (STORE).

The HydroSense II supports only standard time; it does not automatically adjust for daylight saving time. Change the setting to an adjacent time zone to adjust for daylight savings time.

Time Synchronization

Whenever a valid GPS signal is detected, the clock is adjusted using the received time (in UTC) and the configured time zone. To use GPS synchronization, Select ON from the list, or OFF to ignore the GPS time. After highlighting a selection from the list, press (READ OK To quit the menu, press (STORE)

Display Settings

This submenu contains a list of settings related to the screen of the HydroSense II Using the 🔿 💎 buttons, highlight one of the options shown and press (READ). Press (STORE) to exit the menu.

Contrast

Use the $\langle \rangle \rangle$ buttons to adjust the contrast level. The highest and lowest contrast settings should only be required in the most extreme conditions. Press $\binom{\text{READ}}{\text{OK}}$ to save the new setting. Press (store) to exit.

DATE FO	RMAT
DD/MM/YYYY MM/DD/YYYY	
YYYY/MM/DD	
SAVE: OK	CANCEL:

	TIMEZONE	
UTC+10:00		
UTC+10:30		
UTC+11:00		
UTC+11:30		
UTC+12:00		
UTC+12:45		
SAVE: OK	CANCEL:	•

TIME SYNC

CANCEL:

ON

OFF

SAVE: OK

	The LCD backlight turns on whenever
	a button is pressed. This menu sets
	how long it remains lit after each
	press. The 🔇 🔊 buttons change
CANCEL: 🗖	the period. Pressing (READ) will save
	it. Press 🔊 to exit without saving.

it remains lit after each $(\langle \rangle)$ buttons change d. Pressing (READ) will save to exit without saving. Setting the backlight on time to "Always On" will drastically reduce battery life.

This menu allows the brightness of

the LCD backlight to be adjusted.

Reducing the brightness level_will

extend battery life. Use the $\langle \rangle$

buttons to set the brightness level.

Press (READ) to save or (STORE) to quit.

Backlight On Time

Light Sensing

Brightness

In bright, sunny conditions, the LCD backlight has very little effect on readability. The HydroSense II switches the backlight off in bright conditions. Use this menu to disable this feature. Use the \bigcirc buttons to select On or Off and press (READ OK to save, or (STORE) to quit.

GPS Settings

This submenu contains a list of settings related to the GPS. Using the buttons, highlight one of the options shown and press (READ OK to select that time. Alternatively, press (to exit the menu.

GPS Power

This menu controls power to the GPS module. Switching off GPS will save power while the unit is awake and increase battery life. However, the time and date used by the HydroSense II may be less accurate and any stored data will not be geotagged for future display and charting. Use the 🔿 💎 buttons to select a power state, and press (^{READ}). Press (^{STORE}) to exit without saving.



BACKLIGHT ON TIME 15 SECONDS CANCEL: 🗖 SAVE: OK

	LIGHT SENSING	
ON		
OFF		
		+

GPS	
GPS ON/OFF COORDINATE FORMAT	
SELECT: OK	BACK:

	GPS POWER		
ON			
OFF			
SAVE: OK		CANCEL:	t

DISPLAY SETT	INGS	
LCD CONTRAST		
BACKLIGHT BRIGHTNESS		
BACKLIGHT ON TIME		
LIGHT SENSING		
SELECT: OK	BACK:	



Coordinate Format

Latitude and longitude information is displayed in one of three formats: DDD.DDDD° DDDºMM.MMM' DDD°MM'SS" Use the buttons to select a format and press (READ OK To exit without saving, press (STORE)

System Settings

This submenu contains a list of system-wide settings. Use the buttons to highlight an option and press (READ). Alternatively, press (to exit the menu.

System On Time

Use this menu to set how long the HydroSense II will remain on after the last button press. Use the $\langle \rangle$ buttons to select the timeout period and press (READ). Pressing (STORE) will exit without saving. When "Always On" is chosen, the unit will only turn off when the button is pressed. This greatly reduces battery life.

Restore Settings

This menu restores the HydroSense II to its factory defaults. Press (READ) to overwrite all configuration settings with default values or (STORE) to exit without changing settings.

This step cannot be undone. If the unit is inadvertently set to factory defaults, all settings will need to be restored manually through the previous menus.

Serial Number

This screen displays the serial number of the HydroSense II. This should match the serial number label on the front panel of the unit. Press (STORE) to exit this screen.

D-DEG, M-MIN, S-SEC	
DDD.DDDD°	
DDD°MM.MMM'	
DDD°MM'SS"	
SAVE: OK CANCEL:	þ







SERIAL NUMBER SN: 27384

BACK: