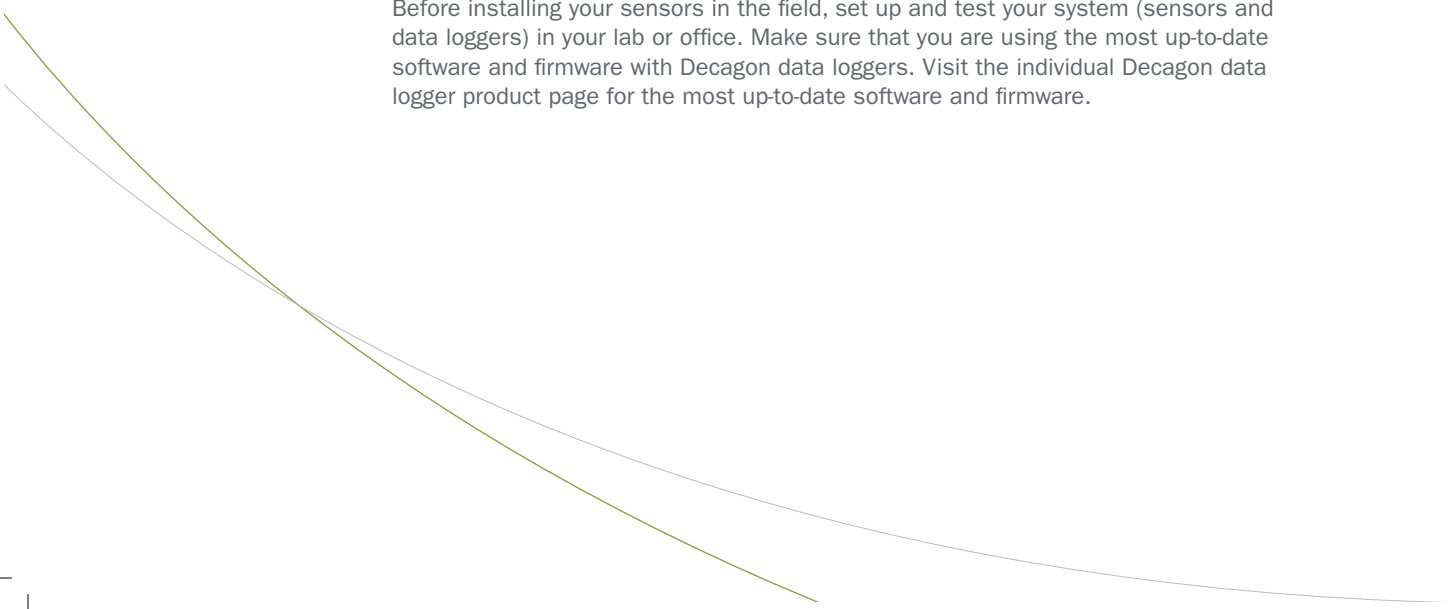# QUICK START GUIDE / DECAGON DEVICES

ENVIRONMENTAL SENSORS
VP-4 | ECT | SRS | LWS | ES-2 | RT-1

Pre-Installation

Before installing your sensors in the field, set up and test your system (sensors and data loggers) in your lab or office. Make sure that you are using the most up-to-date software and firmware with Decagon data loggers. Visit the individual Decagon data logger product page for the most up-to-date software and firmware.

Sensor Overview

VP-4

Barometric Pressure, Humidity, Temperature, Vapor Pressure

ECT

Air Temperature

SRS

Measures NDVI or PRI Spectral Vegetation Indices
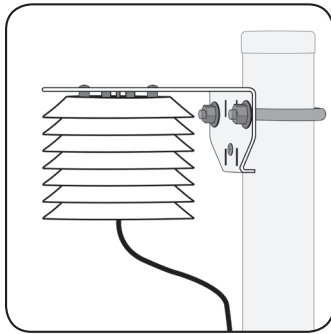
LWS

Duration of Leaf Wetness
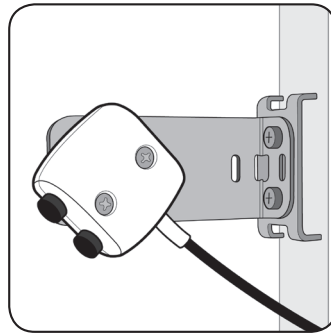
ES-2

Electrical Conductivity, Temperature
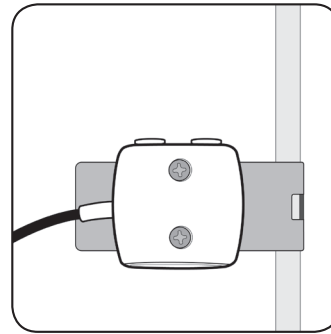
RT-1

Rugged Temperature

Installing Sensor

ECT / VP-4
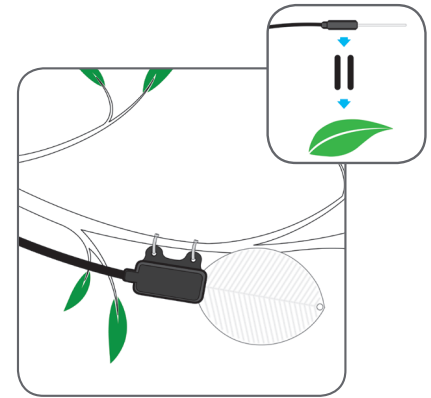
Securely mount and level the sensor as necessary.

SRS Field Stop

Securely mount and level the sensor as necessary.
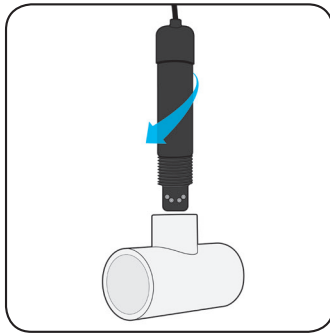

SRS Teflon® Diffuser
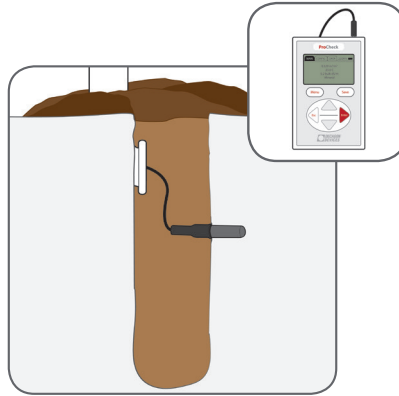
Securely mount and level the sensor as necessary.

LWS

Secure sensor to plant ensuring the sensor face is parallel with the adjacent leaf surfaces.
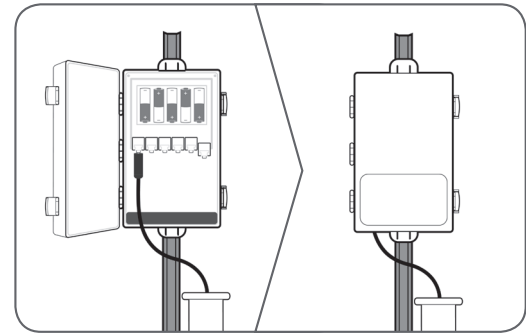
ES-2

Screw sensor into threaded pipe fitting.

RT-1

Insert the sensor into undisturbed soil and use the optional ProCheck to make sure your sensor reads accurately.

Plug in Sensor and Configure Logger

Always protect the cables with PVC casing above the ground surface. See next page for more details about configuring your sensor.

Logger Configuration

Configuring your logger in ECH2O Utility

File Edit Data Actions Window Help

Connected to Em50R:

EM6784

5/22/2014 8:35:01 AM

Connect Via: Direct on COM3 Decag

Disconnect   Download   Scan

Em50R Identity

Name EM6784

Device ID: EM6784

Firmware Version: Em50 2.18

Device Location

Site Name

Latitude ° ' "

Longitude ° ' "

Time Zone: UTC-07

Communication Hardware Options

Communications configured with these settings

Radio Mode: Radio Off
Channel: 0
Sub Channel: 0
Radio Firmware Version: 5000

Sensor Measurement

Measurement Interval Off (not logging)

Data Storage:0% in use

Port 1 Sensor GS3 Moisture/Temp/EC

Port 2 Sensor GS1 Soil and Media Moisture

Port 3 Sensor 5TM Moisture/Temp

Port 4 Sensor None Selected

Port 5 Sensor None Selected

Power Noise Filter: 60 Hz

Revert   Apply

① Pick your measurement interval

② Select the sensor plugged into each port

③ Select "Apply" to save settings

Configuring your logger in DataTrac 3

1 Select the sensor plugged into each port

2 Pick measurement intervals by selecting "Sensors and Measurements"

Non-Decagon Loggers

Our user manuals and integrator's guides have complete information for interfacing Decagon Sensors with non-Decagon loggers. In addition, we suggest that you use the specific logger manual during set-up.

Sensor Cable 3-Wire Interface

! *Please note that all Decagon sensors use the* **RED WIRE** *for* **DATA OUT, NOT EXCITATION**

White: Excitation

Bare: Ground

Red: Data Out*

Model	Excitation	Output
LWS	2.5–3.6 V	Analog
ES-2	3–15 V	SDI-12
VP4	3–15 V	SDI-12
SRS	3.6–15 V	SDI-12

NOTE: Decagon does not support the use of the Temperature or Temperature/Relative Humidity sensors with non-Decagon data loggers.

Related Products

GS1

GS3

5TE

5TM

10TM

EC-5

Volumetric Water Content

Temperature

Electrical Conductivity

MPS-2

MPS-6

Soil Matric Potential

Temperature

Most Accurate

CTD Sensor
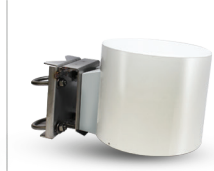*Water Depth, Temperature, Electrical Conductivity*

Drain Gauge
Deep Drainage Monitor

ECRN-50
Low-Resolution Rain Gauge

ECRN-100
High-Resolution Rain Gauge

Cup Anemometer
Wind Speed, Direction

DS-2
Sonic Anemometer, Wind Speed, Direction

PYR/QSO-S
Total Solar Radiation, PAR Photon Flux

EM50 Logger Series
Radio, Cellular, or Direct Connect Logger

ProCheck
Sensor Read-Out and Storage System