

## Equipment Compatibility Guide

### For the Phase-Two Water Detector (for Phase Separation)

#### ***What TLS consoles does the Phase-Two Water Detector work with?***

The Phase-Two Water Detector is compatible with the Veeder-Root models:

- TLS-450
- TLS-350 (excluding TLS-350J)
- TLS-300 (excluding IFSF)

#### ***Do I need to upgrade my TLS console software to work with the Phase-Two Water Detector?***

Yes, the consoles will need at minimum the following updated software versions:

- TLS-450: Version 3A      Started shipping August 16, 2010
- TLS-350: Version 30B      Started shipping August 11, 2010
- TLS-300 Version 30B      Started shipping August 11, 2010

These updated software versions support the Phase-Two Water Detector in two ways:

1. They have the ability to select the new float upon setup
2. They have algorithms to determine phase separation

#### ***What probes does the Phase-Two Water Detector work with?***

The Phase-Two Water Detector is compatible with **Mag Plus** Probes, which are probe type MAG7, MAG8, or MAG9. These probes were introduced in North America in May 2006, and have form numbers 8463xx-1xx, -2xx, or -3xx, and circuit codes D004, D005, D006. The float does NOT work with Standard Mag (MAG1, MAG2, MAG3), Retrofit probes nor MAG-D (Density) probes.

## **TLS-350 / TLS-300**

### ***How do I know what software version I have on my TLS console?***

Print out the System Diagnostic Report. It will return the Software Revision Level.

A return string of VERSION 110.01 would be interpreted as version 10B.

A return string that includes the code 346130-100-AXA would be interpreted as version 30 (last 2 digits of 6-digit string).

The printouts below show consoles before and after upgrade:

```
SOFTWARE REVISION LEVEL
VERSION 121.00
SOFTWARE# 346121-100-A
CREATED - 00.11.15.13.23

NO SOFTWARE MODULE
SYSTEM FEATURES:
  PERIODIC IN-TANK TESTS
  ANNUAL IN-TANK TESTS
```

Version 21A

```
SOFTWARE REVISION LEVEL
VERSION 330.01
SOFTWARE# 346330-100-B
CREATED - 10.07.23.17.25

NO SOFTWARE MODULE
SYSTEM FEATURES:
  PERIODIC IN-TANK TESTS
  ANNUAL IN-TANK TESTS
```

Version 30B

Version 24 software contains the ECPU2, which was launched in October 2003. Any software version prior to version 24 will also need an ECPU2 upgrade to get to the latest version of software. See the Serial Interface Manual for more details on this command.

### **Remotely**

Run the following serial command: CNT A I90200.

The version number is interpreted as described above.

## How do I know if I have an ECPU2 installed?

From the console, you will need to open the door and view the version number on the CPU board.

The following photo shows the ECPU2 label on the board.



### Remotely

Run the following serial command:

➤ CNT A I@F700

If the return string contains ECPU2 BOARD, then you have it installed. If it says ECPU BOARD or something else, you do not have it installed. See the Serial Interface Manual for more details on this command.

### ***How do I know which probes I have? Can I remotely check?***

Print out an In-Tank Diagnostic report. Under Probe Type, look for the PROBE TYPE field.

- If the PROBE TYPE returns MAG7, MAG8, or MAG9, you have Mag Plus probes which are compatible to the Phase-Two Water Detector.
- If the PROBE TYPE returns MAG1, MAG2, or MAG3, you have Standard Mag probes and will need to upgrade.

The printout below (from a TLS-350) shows the output of an In-Tank Diagnostic report.

```
IN-TANK DIAGNOSTIC
-----
PROBE DIAGNOSTIC
T 1: PROBE TYPE MAG7
SERIAL NUMBER 281819
LENGTH 48.00
DATE CODE = 5236
ID CHAN = 0xD004
GRADIENT = 396.2200
PROBE INIT:
  JUL 23, 2010 11:02AM

OPTIONS:
LOW TEMPERATURE

NUM SAMPLES = 20

CO0 1053.0 CO1 14611.0
CO2 14611.0 CO3 14611.0
CO4 14611.0 CO5 14611.0
-----
```

Probe Type = MAG7 indicates that this probe is a Mag Plus probe

### **Remotely**

Run the following serial command: CNT A IA0100.

This will return the Probe Type, which can be interpreted the same as above.

**How do I know which floats I have? Can I remotely check?**

Print out an In-Tank Setup report. Under Float Type, look for the FLOAT SIZE field. The possible return values are:

- 4.0" PS
- 4.0"
- 3.0"
- 2.0"
- 1.0"
- CUSTOM

This is the Phase-Two Water Detector

```

IN-TANK SETUP
-----
T 1:TANK 1
PRODUCT CODE      :      1
THERMAL COEFF     :.000700
TANK DIAMETER     :   48.00
TANK PROFILE      : LINEAR
FULL VOL          :   4000

FLOAT SIZE:       4.0 IN.

MAX OR LABEL VOL :   4000
OVERFILL LIMIT   :    90%
                  :   3600
HIGH PRODUCT     :    95%
                  :   3800
DELIVERY LIMIT   :    10%
                  :    400

LOW PRODUCT      :    100
LEAK ALARM LIMIT:    99
SUDDEN LOSS LIMIT:  99
TANK TILT        :    0.00
PROBE OFFSET     :    0.00
  
```

**Remotely**

Run the following serial command: CNT A I62F00 .

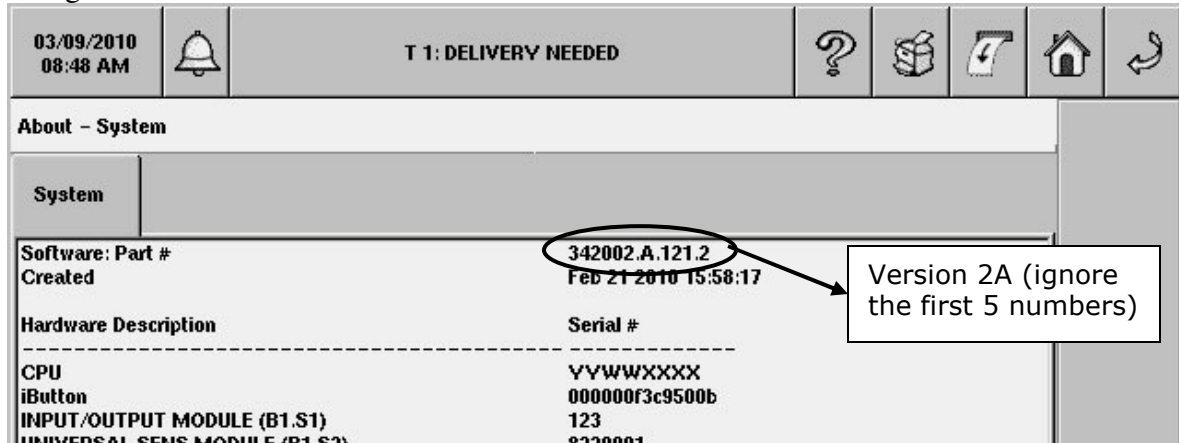
This will return the Float Size, which can be interpreted the same as above.

## TLS-450

### *How do I know what software version I have on my TLS console?*

- Go to Diagnostics Screen
- Select About

The resulting screen will show software version:



System	
Software: Part #	342002.A.121.2
Created	Feb 21 2010 15:58:17
Hardware Description	Serial #
-----	-----
CPU	YYWWXXXX
iButton	000000f3c9500b
INPUT/OUTPUT MODULE (B1.S1)	123
UNIVERSAL SENS MODULE (B1.S2)	0000001

### Remotely

Run the following serial command: CNT A I90700.

The version number is interpreted as described above.

**How do I know which probes I have? Can I remotely check?**

- Go to Diagnostics Screen
- Select Probe
- Select General tab

The printout below shows one probe from the TLS-450

07/28/2008 02:32 PM		Pm 2: PUMP OUT			?		?		?		?		?	
Diagnostics - Probes - General #1											Probe 1		More	
General		Reference Distance		Channel		MAG Options		Communication				More		
Type	Code	Length	Serial No.	Date (Yr/Wk)	Rev.....							More		
Probe 1: REGULAR - Tank 1														
MAG1	c000	96.00	176011		0									

Probe Type = MAG1 indicates that this probe is a Standard Mag probe

**Remotely**

Run the following serial command: CNT A IA0100 .

This will return the Probe Type, which can be interpreted the same as above.

**How do I know which floats I have?**

- Go to Setup Screen
- Select Devices
- Select Probe
- Pan down to Float Type

A printout of this would like this →

```

JAN 27, 2011 5:04 PM

DEVICE SETUP - PROBES REPORT

PROBE CONFIGURATION

PROBE LABEL CONFIGURED
1 UNL ON
2 PRE ON
3 TALL TANK ON
4 OFF
5 OFF
6 OFF
7 OFF
8 OFF

MAG PROBE DEVICE TYPE ADDRESSES

PRIMARY
DEVICE ADDRESS
1 B1.S1.4
2 B1.S1.8
3 B1.S1.1
4 (NOT ASSIGNED)
5 (NOT ASSIGNED)
6 (NOT ASSIGNED)
7 (NOT ASSIGNED)
8 (NOT ASSIGNED)

MAG PROBE FLOAT SIZE

TANK PRODUCT LABEL FLOAT SIZE
1 UNLEADED 4.0 INCHES
2 PREMIUM 4.0 INCHES
3 1 4.0 INCHES
4 CUSTOM
5 CUSTOM
6 CUSTOM
7 CUSTOM
8 CUSTOM
    
```

- Choices:**
- 4.0 INCHES PHASE SEPARATION
  - 4.0 INCHES
  - 3.0 INCHES
  - 2.0 INCHES
  - 1.0 INCHES
  - CUSTOM



**Remotely**

Run the following serial command: CNT A I62F00 .

This will return the Float Size, which can be interpreted the same as above.