

48089 Fremont Blvd
Fremont, CA 94538
(510) 623-9600
www.loadstarsensors.com



DS-3000U

Digital Display Module

4-channel USB Sensor Input

Users Guide

Copyright © 2008 - 2010 [Loadstar Sensors, Inc.](http://www.loadstarsensors.com) All rights reserved.

that are sold into the China market have the required marking on the product designating that the product meets the China RoHS requirements.

The second step involving a testing obligation is currently under development. Full compliance will follow once it has been finalized.

Table of contents:

1	<i>I WANT TO:</i>	7
2	<i>INTRODUCTION</i>	8
3	<i>MODULE FEATURES</i>	9
4	<i>PHYSICAL DETAILS</i>	10
4.1	DS-3000 Physical Orientation.....	10
4.2	DS-3000 Mechanical Dimensions.....	12
5	<i>OPERATION QUICK START GUIDE</i>	14
5.1	Quick Operation and Programming Overview.....	14
5.2	Getting Started.....	15
6	<i>RUNNING OR PROGRAMMING?</i>	16
6.1	Entering programming mode (from run mode).....	16
6.2	Entering run mode (from programming mode).....	16
6.3	Modifying a Programmed Value.....	16
7	<i>QUICK PROGRAMMING HOW-TO TIPS</i>	17
7.1	How to change the displayed decimal point location.....	17
7.2	How to reset or TARE the current displayed value to zero?.....	17
7.3	How to display the load from only sensors I choose?.....	17
7.4	How do I tare only one connected sensor?.....	17
7.5	How can I tell which sensors are currently being displayed?.....	18
7.6	How do I get the firmware version?.....	18
7.7	How do I enable the remote tare function?.....	18
7.8	How do I change the display brightness?.....	18
7.9	How do I turn off attached sensor ports to save power?.....	19
7.10	How do I change the password?.....	19
7.11	What if I've lost the password, How can I get into program mode?.....	20
7.12	How do I reset the unit to factory defaults?.....	20
7.13	Is there an easy way to see what is currently programmed.....	20
7.14	How do I check my programming?.....	20
8	<i>COMMAND REFERENCE</i>	22
8.1	Run Mode Command Descriptions.....	22
8.1.1	Tare All Sensors.....	22
8.1.2	Set Displayed Units.....	22
8.1.3	Enter Programming Mode.....	22
8.1.4	Change Display Precision Mode.....	22
8.2	Programming Mode Commands.....	23
8.2.1	Programming Command Summary.....	23
8.2.2	Display Options Menu.....	23
8.2.3	Tare Options Menu.....	24
8.2.4	Relay Output 1 Menu.....	24
8.2.5	Relay Output 2 Menu.....	25
8.2.6	Power Options Menu.....	26
8.2.7	Option Menu.....	27
8.2.8	Run 27.....	27
9	<i>DS-3000U SYSTEM PROGRAMMING EXAMPLES</i>	28
9.1	Tank Fill Controller.....	28
9.1.1	Application Requirements:.....	28
9.1.2	Implementation Details:.....	28
9.1.3	Programming Summary.....	29
9.1.4	Programming the DS-3000:.....	29
9.2	Empty Tank Warning.....	30
9.2.1	Application Requirements:.....	30
9.2.2	Implementation Details:.....	31
9.2.3	Programming the DS-3000:.....	31

9.3	Go/NoGo Acceptable Weight Limit Test	32
9.3.1	Application Requirements:	33
9.3.2	Implementation Details:.....	33
9.3.3	Programming the DS-3000:.....	33
9.4	Automated Fertilizer Bag Fill Dispense system	34
9.4.1	Application Requirements:	34
9.4.2	Implementation Details:.....	34
9.4.3	Programming the DS-3000:.....	35
10	REMOTEY CONNECTING TO THE DS-3000	37
10.1	Installing Virtual com port drivers	37
10.2	Communicating with the DS-3000 using Hyper-terminal	37
11	REMOTEY PROGRAMMING THE DS-3000	41
11.1	o0W0, o0W1, o0X1 ↵	41
11.2	SLC ↵	41
11.3	CS0, CS1, SS0, SS1.....	41
11.4	CT0 ↵	42
11.5	ETT ↵ (Future Command, not yet implemented)	42
11.6	TTS, TTH ↵	42
11.7	SST ↵	42
11.8	LED ↵ (Future Command, Not yet Implemented)	42
11.9	ST ↵ (Future Command, Not yet Implemented).....	43
11.10	RnTPx ↵ (Future Command, Not yet implemented).....	43
11.11	RnTPxT ↵ (Future Command, Not yet implemented)	43
11.12	RnSx ↵ (Future Command, Not yet implemented).....	44
11.13	RnD ↵ (Future Command, Not yet Implemented).....	44
11.14	ASx ↵, RSx ↵ (Future Command, Not yet implemented).....	44
11.15	MODEL ↵	45
11.16	UNIT ↵ (Future Command, Not yet implemented).....	45
11.17	SETTINGS ↵	45
12	DS-3000 TECHNICAL SPECIFICATIONS	47

List of figures:

Figure 1:	DS-3000 Top View- User Interface	10
Figure 2:	Side View: Input Sensor Connectors	10
Figure 3:	End View: Power and USB Host Connections	11
Figure 4:	End View: Wiring Adapter Socket	12
Figure 5:	DS-3000 Top View (Includes optional mounting base)	12
Figure 6:	DS-3000U Mechanical Host End View	13
Figure 7:	DS-3000U Mechanical Side View	13
Figure 8:	What you need to get started with the DS-3000	15
Figure 9:	Wiring for Program Example 1	29
Figure 10:	Wiring diagram for program example 2	31
Figure 11:	Schematic for Program Example 3	33
Figure 12:	Schematic for Program Example 4	35

1 I WANT TO:

1.	Quickly understand the DS-3000 user interface –or-	
2.	Get Started Quickly with the DS-3000	
5	OPERATION QUICK START GUIDE	14
3.	Get to programming mode on the DS-3000?	
6	RUNNING OR PROGRAMMING?	16
4.	See a list of common DS-3000 programming tips	
7	QUICK PROGRAMMING HOW-TO TIPS	17
5.	Look at some Example DS-3000 Program Examples	
9	DS-3000U SYSTEM PROGRAMMING EXAMPLES	28
6.	Find the DS-3000 mechanical specifications?	
4.2	DS-3000 Mechanical Dimensions	12
7.	Find the DS-3000 power requirements?	
3	MODULE FEATURES	9
8.	Review detailed DS-3000 specifications?	
12	DS-3000 TECHNICAL SPECIFICATIONS	47

This is a “Table of Contents preview” for quality assurance

The full manual can be purchased from our store:

[https://the-checkout-tech.com/manuals/loadstar/DS-3000U user manual.html](https://the-checkout-tech.com/manuals/loadstar/DS-3000U%20user%20manual.html)

And our free Online Keysheet maker:

<https://the-checkout-tech.com/Cash-Register-Keysheet-Creator/>

[HTTPS://THE-CHECKOUT-TECH.COM](https://THE-CHECKOUT-TECH.COM)