

iDimension® Plus

Static Dimensioning System

Assembly Instructions



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www.ricelake.com

Revision History

This section tracks and describes manual revisions for awareness of major updates.

Revision	Date	Description
B	June 19, 2023	Established revision history, Updated parts list

Table i. Revision Letter History



Technical training seminars are available through Rice Lake Weighing Systems. Course descriptions and dates can be viewed at www.ricelake.com/training or obtained by calling 715-234-9171 and asking for the training department.

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Rice Lake continually offers web-based video training on a growing selection of product-related topics at no cost. Visit www.ricelake.com/webinars

1.0 Introduction

This manual provides an overview of the iDimension Plus assembly instructions.

When interfacing this device to a third parties software program, please reference the software manufacturer's documentation for setup and configuration parameters as necessary.



Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals

Warranty information is available at www.ricelake.com/warranties

iDimension Plus QubeVu Manager Guide

The iDimension Plus QubeVu Manager Guide (PN 195441) provides a detailed overview of the QubeVu Manager, the embedded firmware of the iDimension Plus. The QubeVu Manager is a set of tools provided to set up and configure the iDimension Plus in any environment. These tools are recommended for use by a technical systems administrator.

iDimension Plus Operation Manual

The iDimension Plus Operation Manual (PN 195439) provides a detailed overview of the installation requirements, operation of the iDimension Plus and configuration parameters to change in the QubeVu Manager to alter the performance of the unit. The iDimension Plus Operation Manual is provided with each unit.



NOTE: *Prior to powering on the unit, see the iDimension Plus Operation Manual (PN 195439). The iDimension Plus Operation Manual contains the following information for common installation and operation requirements:*

1. Place system into the location intended for use.
2. Setup Wizard.
 - Upon initial power up, the setup wizard steps through configuring time and date, zeroing the height of the system with or without a scale, creating your scan zone and defining the system for use in displaying dimensions in imperial or metric mode
3. Connect to network via DHCP or directly to network connection on local PC for configuring system using embedded software, QubeVu Manager, from a Google Chrome web browser. Contact your network administrator, if static IP address is required.
 - Scale parameters
 - Flat detection, objects under 1.2 in tall
 - Static IP address
 - Adjusting scan area and zone of interest for measuring flats
 - Configuring certification settings
 - Calibration, if necessary

1.1 Safety

Safety Definitions:



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. Includes hazards that are exposed when guards are removed.



WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. Includes hazards that are exposed when guards are removed.



CAUTION: Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury.



IMPORTANT: Indicates information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

General Safety



Do not operate or work on this equipment unless this manual has been read and all instructions are understood. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any Rice Lake Weighing Systems dealer for replacement manuals.



WARNING

Failure to heed could result in serious injury or death.

Electric shock hazard!

There are no user serviceable parts. Refer to qualified service personnel for service.

The unit has no power switch, to completely remove power from the unit, disconnect the power source at the AC outlet.

For pluggable equipment the socket outlet must be installed near the equipment and must be easily accessible.

When cycling power, use the in-line power cord at a power outlet, do not power at the base.

Always disconnect from main power before performing any work on the device.

Do not allow minors (children) or inexperienced persons to operate this unit.

Do not operate without all shields and guards in place.

Do not place fingers into slots or possible pinch points.

Do not use this product if any of the components are cracked.

Do not make alterations or modifications to the unit.

Do not remove or obscure warning labels.

Do not use near water, avoid contact with excessive moisture.

Keep the unit dry.

Retain packaging. When transporting the unit, always disassemble and pack it in its original packaging.

Use only supplied power adapter. Never short-circuit the power adapter or the device.

Operate between 41–104° F (5–40° C).

Never remove the iDimension Plus head cover or the electrical connection panels at the base of the pole assembly.

Never modify or attempt to repair the unit. Service must be performed by Rice Lake Weighing Systems only.

Handle cables and cable connectors with care. Never use damaged power cords or plugs or loose electrical sockets. Never touch the power cord with wet hands.

Ensure that the base plate, pole assembly and head unit are all securely attached before attempting to move the unit.

Never lift the unit by grasping only the pole assembly; always ensure that both sections of the pole assembly and the base plate are supported.

Never drop or allow an impact to the head.

Mount on a flat surface.

Never use product for anything other than its intended purpose.

2.0 Overview

This section provides an overview of the parts featured within the packaging for the iDimension Plus.

2.1 iDimension Plus Parts

Immediately after unpacking the iDimension Plus, visually inspect the contents to ensure all components are included and undamaged. If any parts were damaged in shipment, notify Rice Lake Weighing Systems and the shipper immediately.

The iDimension Plus is packaged with the following parts:



Figure 2-1. iDimension Plus Parts

Item No.	Part No.	Description	Qty.
1	197224	Upper Pole Assembly	1
2		Lower Pole Assembly	1
3	195516	Display Pole Mounting Bracket	1
4	195517	Base Plate	1
5	188101	Calibration Object	1
6	195504	Scanning Head	1
7	195510	USB Display and Bracket	1
8	-	Ethernet Cable	1
9	201028	AC Power Cable	1
10	195509	Power Supply	1

Table 2-1. iDimension Plus Parts List



NOTE: Keep calibration object for future use.

3.0 Assembly

This section provides an overview of iDimension Plus assembly instructions.

3.1 Unit Assembly

To assemble the iDimension Plus, follow the procedure below.

3.1.1 Pole Assembly

1. Locate the two hex screws and two Phillips screws pre-installed at the pole joint of the upper pole assembly. Using a 3 mm hex key and #2 Phillips screw driver, remove the screws and set them aside for installation in [Step 3](#).

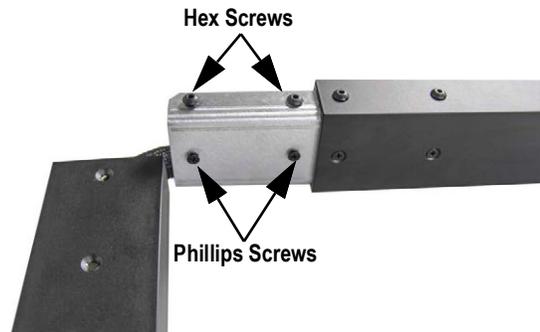


Figure 3-1. Upper Pole Assembly Joint

2. Ensure the holes align.



Figure 3-2. Connecting Pole Joint

3. Reinstall the four screws removed in [Step 1](#).

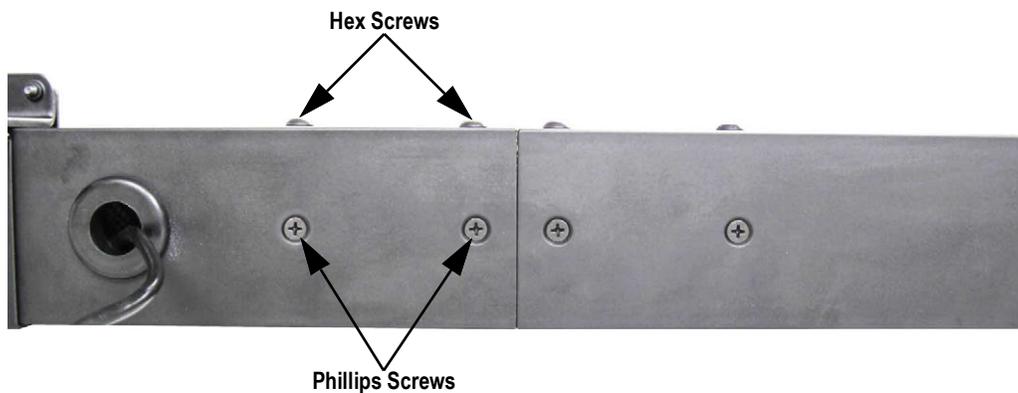


Figure 3-3. Secured Pole Joint

3.1.2 Attach Base

1. Lay the pole assembly on a table or flat surface. Ensure the base block is hanging over an edge.
2. Use a 3 mm hex key to remove the four screws installed in the base block. Set screws aside for installation in [Step 5](#).



Figure 3-4. Base Block

3. Locate the alignment slot (center left) and alignment hole (center right).
4. Locate guide pins in base plate.

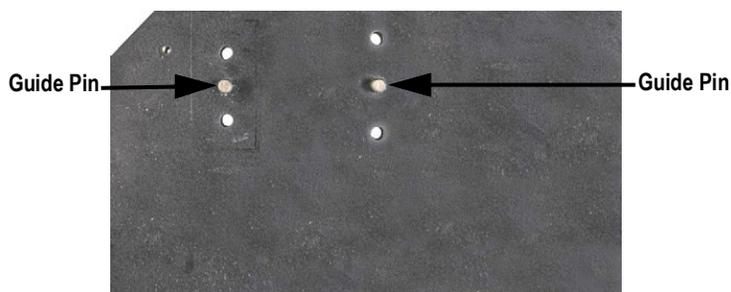


Figure 3-5. Base Plate Top view

5. Install the base plate by inserting the guide pins into the alignment slot and alignment hole from [Figure 3-4](#), using the four screws removed in [Step 2](#) with the 3 mm hex wrench.

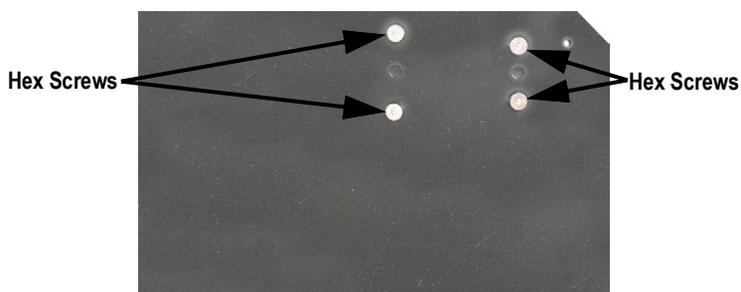


Figure 3-6. Base Plate Bottom view

3.1.3 Attach Display

1. Using a 2 mm hex key, remove the pre-installed hex screw from the pole assembly display bracket.

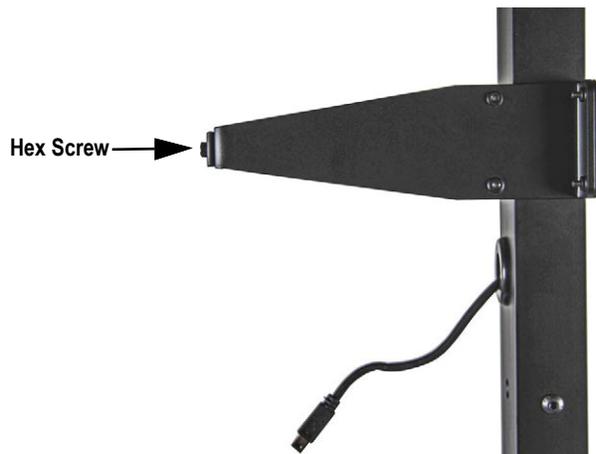


Figure 3-7. Pole Assembly Display Bracket

2. Secure the display mount to the pole assembly display bracket using the previously removed screw.

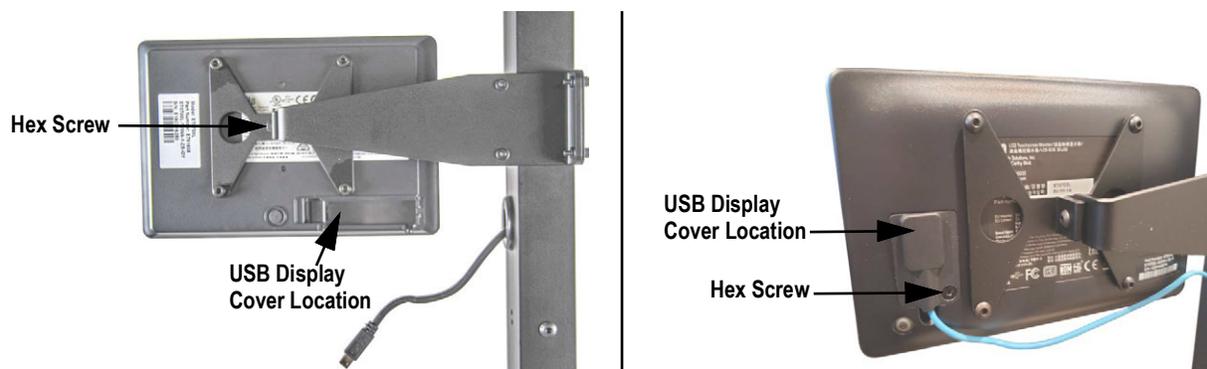


Figure 3-8. Secure Display Mount

3. Locate the display cover plate and a #1 Phillips screw in a separate plastic bag.
4. Plug the USB display cable into the mini USB port.

5. Route the USB display cable into the cable slot and replace the display cover by placing it over the cable and installing the #1 Phillips screw.



Figure 3-9. Display Cover

3.1.4 Attach Scanning Head

1. Locate the cables extending from the upper pole opening. Cables include power, Ethernet, USB 1 and USB 2.



Figure 3-10. Pole Assembly Kit Cables



NOTE: Cables should extend approximately 6 in. If cables require adjustment, carefully pull cable through the upper arm. Extra cable length is available.

2. Remove the rear cover from the scanning head by loosening and removing the three small Phillips screws of the cover. See [Step 9 on page 14](#) for instructions on how to reinstall the Phillips screws.

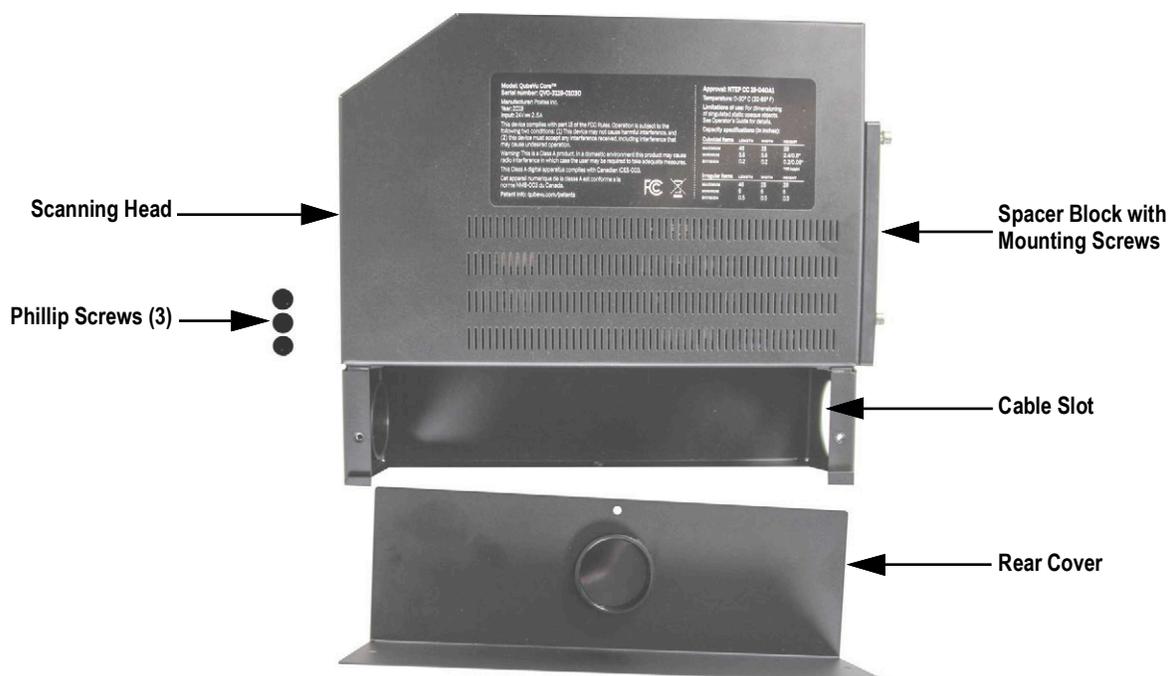


Figure 3-11. Scanning Head Parts

3. Loosen the three mounting screws so the screws are .25 in from the spacer plate.

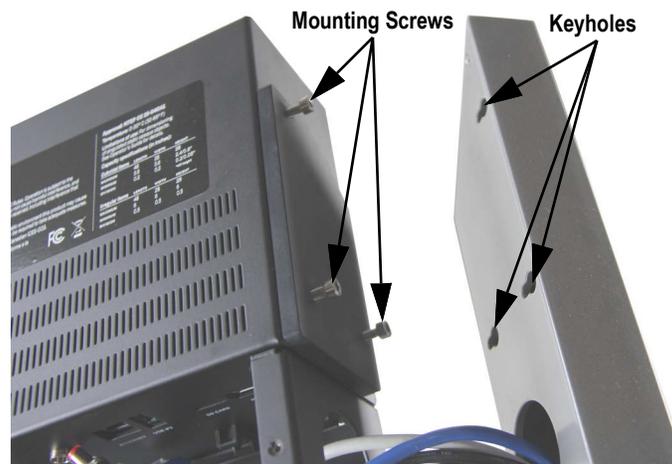


Figure 3-12. Mounting Screws and Key Holes

4. Insert the cables from the upper pole assembly through the cable slot on the rear enclosure.



Figure 3-13. Feed Cables Through Head

5. Line up the mounting screws with the keyholes in the pole assembly. Insert the screws through the pole wall and seat them all the way down into the keyholes.



Figure 3-14. Upper Pole Keyhole Access

6. Ensure that the heads of the mounting screws are seated properly in keyholes. The plastic spacer block top surface should be parallel with the top surface of the pole.



Figure 3-15. Assembly Parallel

7. Use the 3 mm hex key and tighten the screws. Ensure the scanning head remains parallel with the pole while tightening.
8. Secure cable connections from the pole assembly to the scanning head ([Table 3-1](#)).



Figure 3-16. Scanning Head

Item No.	Description
1	Power (DC in) - 24 V1
2	Ethernet Port
3	Open USB Port
4	SD Card (Not Supported)
5	HDMI Port (Not Supported)
6	Display Connection
7	USB Port at Electrical Base

Table 3-1. Scanning Head Connection List



Figure 3-17. Scanning Head Connections

- Reinstall the scanning head rear cover using the three small Phillips screws removed within [Step 7 on page 13](#).



Figure 3-18. Scanning Head with Rear Cover Secured



Figure 3-19. Scanning Head with Rear Cover Secured Continued

10. Connect cables to the back of the electrical base (Table 3-2).



Figure 3-20. Electrical Base

Item No.	Description
1	Standard USB Port (type A, for use with scale, barcode scanner or USB hub)
2	Ethernet Port (used to connect to network in order to interface compatible software)
3	Power (DC in) - 24 V1

Table 3-2. Electrical Base connections



NOTE: Prior to powering on the iDimension Plus, see the iDimension Plus Operation Manual (PN 195439) for system setup and configuration

11. Attach the power cable connector to the port labeled Input 24 V, prior to plugging the power cable connector into an AC outlet.



Figure 3-21. AC Power Connection

12. The fully assembled iDimension Plus should resemble [Figure 3-22](#).



Figure 3-22. Assembled iDimension Plus



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