

iDimension® Plus

Mounted Dimensioning System

Installation Manual



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Revision History

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

Revision	Date	Description
A	June 20, 2025	Initial manual release; Established revision history

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

The iDimension Plus mounted assembly must be completed prior to installing to the stand and configuring the unit for use. When interfacing the unit to third party software, please refer to 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 QubeVu Administrator Guide

The iDimension QubeVu Administrator Guide (PN 221652) provides a detailed overview of the QubeVu Manager, the embedded firmware of the iDimension Plus. The QubeVu Manager software allows for device setup and configuration of the iDimension Plus in any environment. The QubeVu Manager software should only be used by a technical systems administrator.



NOTE: Prior to powering on the unit, see the *iDimension QubeVu Administrator Manual (PN 221652)*. The *iDimension QubeVu Administrator Manual* contains the following information for common installation and operation requirements:

1. *Place system into the location intended for use.*
2. *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 a static IP address is required.*
 - *Scale parameters*
 - *Flat detection, objects under 1.2 in height*
 - *Static IP address*
 - *Adjusting scan area and zone of interest for measuring flats*
 - *Configuring certification settings*
 - *Calibration, if necessary*

iDimension Plus XL Single and Dual Arm Stands Addendum

The iDimension Plus XL Single and Dual Arm Stands addendum (PN 199199) provides a detailed overview of the installation procedure to mount iDimension XL scanning head(s) to a single or dual arm stand to work in conjunction with most conveyor or tabletop applications.

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 32–95° F (0–35° C).

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.

Never drop or allow an impact to the head.

Mount on a flat surface.

Never use product for anything other than its intended purpose.

1.2 Mounting and Installation Consideration

The iDimension Plus is designed to be attached to a variety of mounts using the included mounting bracket.

Regardless of how the iDimension Plus is installed, the following must be considered to ensure the best performance:

- The scanning head must be leveled
- The scanning head must be positioned centrally over the measuring platform, from the sensors perspective
- The scanning head must be mounted such that no movement can occur
- When installing the scanning head at 79 in, flat detection is increased to 2.4 in
- The background of the measuring work area should be constant color, flat black is recommended for contrast
- If using over a static roller conveyor, configure the system for the depth only mode
- Ensure the system is installed in an area where glare from overhead lights are not visible on the measuring surface
- Determine ethernet cable length required for installation; Have ethernet cable available during assembly of the system

Once the iDimension Plus has been assembled, use the iDimension Single and Dual Arm Stands instructions (PN 182726) to assemble the stand and mount the iDimension Plus and USB display RAM mount bracket.

Upon completion of assembly, refer to the iDimension QubeVu Administrator Guide (PN 221652) to configure and setup the iDimension Plus using the setup wizard from the USB display and QubeVu Manager embedded firmware.

The iDimension Plus can be installed at either 60.2 in for a Legal for Trade application or 79 in for non-Legal for Trade mode using the setup wizard. Installing at 79 in increases the maximum measurement applications provided by the iDimension Plus table top stand, as shown below.

Length	Width	Height
80 in	60 in	0 in
78 in	58.6 in	2 in
76 in	57 in	4 in
74 in	55.6 in	6 in
72 in	54 in	8 in
70 in	52.6 in	10 in
68 in	51 in	12 in
66 in	49.6 in	14 in
64 in	48 in	16 in
62 in	46.6 in	18 in
60 in	45 in	20 in
58 in	43.6 in	22 in
56 in	42 in	24 in
54 in	40.6 in	26 in
52 in	39 in	28 in
50 in	37.6 in	30 in
48 in	36 in	32 in
46 in	34.6 in	34 in
44 in	33 in	36 in
42 in	31.6 in	38 in
40 in	30 in	40 in
38 in	28.6 in	42 in
36 in	27 in	44 in
34 in	25.6 in	46 in
32 in	24 in	48 in
30 in	22.6 in	50 in

Table 1-1. Measurement Capabilities (inches)

Length	Width	Height
203.2 cm	152.4 cm	0 cm
198.12 cm	148.844 cm	5.08 cm
193.04 cm	144.78 cm	10.16 cm
187.96 cm	141.224 cm	15.24 cm
182.88 cm	137.16 cm	20.32 cm
177.8 cm	133.604 cm	25.4 cm
172.72 cm	129.54 cm	30.48 cm
167.64 cm	125.984 cm	35.56 cm
162.56 cm	121.92 cm	40.64 cm
157.48 cm	118.364 cm	45.72 cm
152.4 cm	114.3 cm	50.8 cm
147.32 cm	110.744 cm	55.88 cm
142.24 cm	106.68 cm	60.96 cm
137.16 cm	103.124 cm	66.04 cm
132.08 cm	99.06 cm	71.12 cm
127 cm	95.504 cm	76.2 cm
121.92 cm	91.44 cm	81.28 cm
116.84 cm	87.884 cm	86.36 cm
111.76 cm	83.82 cm	91.44 cm
106.68 cm	80.264 cm	96.52 cm
101.6 cm	76.2 cm	101.6 cm
96.52 cm	72.644 cm	106.68 cm
91.44 cm	68.58 cm	111.76 cm
86.36 cm	65.024 cm	116.84 cm
81.28 cm	60.96 cm	121.92 cm
76.2 cm	57.404 cm	127 cm

Table 1-2. Measurement Capabilities (cm)

2.0 Replacement Parts

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

2.1 Unpacking

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 includes the following parts:



Figure 2-1. iDimension Plus Parts

Item No.	Part No.	Description	Qty.
1	223603	Scanning Head	1
3	192050	USB Display	1
4	167814	Ethernet Cable	1
5	206585	Calibration Object	1
6	201028	AC Power Cable (110 V / 240 V)	1
7	226562	Power Supply	1
–	227300	Hardware Kit	1

Table 2-1. iDimension Plus Parts List (PN 226070)

Item No.	Part No.	Description	Qty.
2	198567	Scanning Head Mounting Bracket	1
8	223038	Power Cord, 25 ft (included in 198708)	1
–	198590	USB Type A Male to Type A Female	2
–	79989	Cable Tie, Black Nylon	2
–	199199	iDimension Plus XL Single and Dual Arm Stands Addendum	1

Table 2-2. iDimension Plus Installation Kit Parts List (PN 198708 & 206583)



NOTE: Keep calibration object for future use.

3.0 Assembly

This section provides an overview of iDimension Plus mounted assembly instructions.

3.1 Unit Assembly

To mount the iDimension Plus, follow the procedure below:

1. Remove scanning head and DC power supply from packaging.
2. Remove the rear cover from the scanning head by loosening and removing the six Phillips screws.



Figure 3-1. Rear Cover Screw Locations (circled)

3. Insert USB, ethernet and power supply cables through the cable slot.
4. Secure cable connections to the scanning head ([Table 3-1](#)):

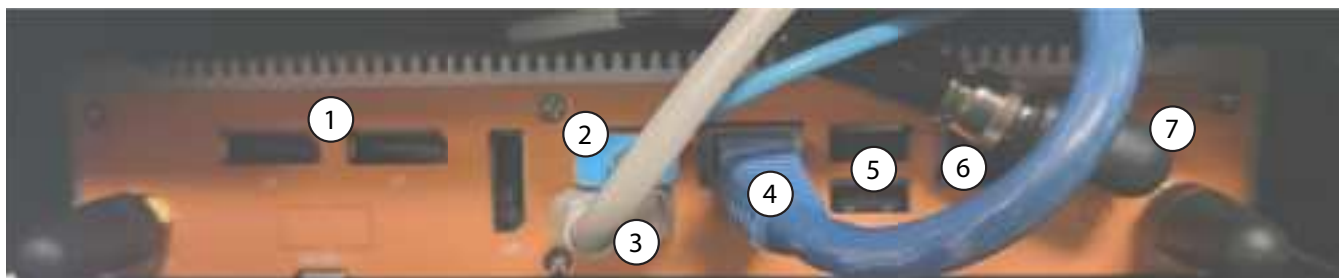


Figure 3-2. Scanning Head Connections

Item No.	Description
1	Display port (not used)
2	USB display
3	Scanner or scale connection
4	Ethernet Port #1 (PC connection)
5	Additional USB ports
6	Ethernet Port #2
7	Power (DC in) - 24 V1

Table 3-1. Scanning Head Connection List

5. Reinstall the scanning head rear cover using the six small Phillips screws removed within [Step 2 on page 9](#).

3.2 Mounting Bracket Assembly

1. Secure the power supply to the mounting bracket using the provided cable ties (2).

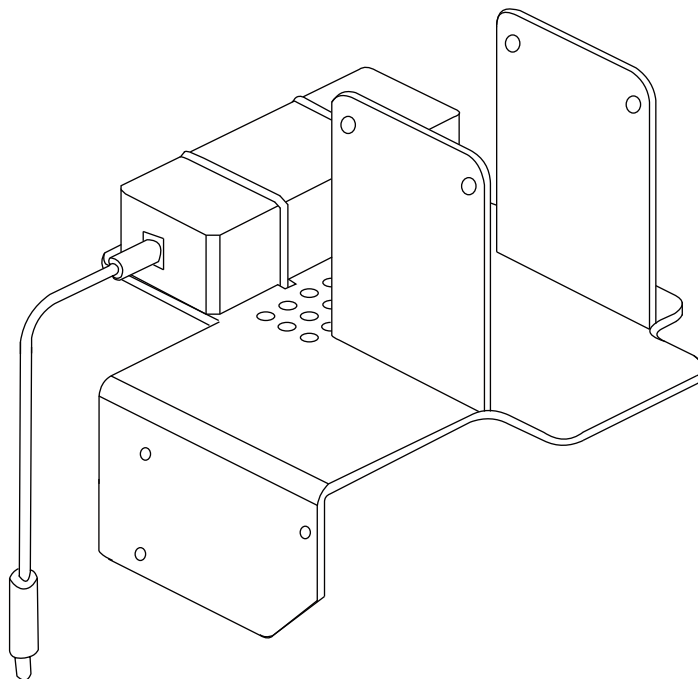


Figure 3-3. Secure Power Supply

2. Secure the mounting bracket to the top of the scanning head with the three mounting screws removed in [Step 3 on page 9](#).

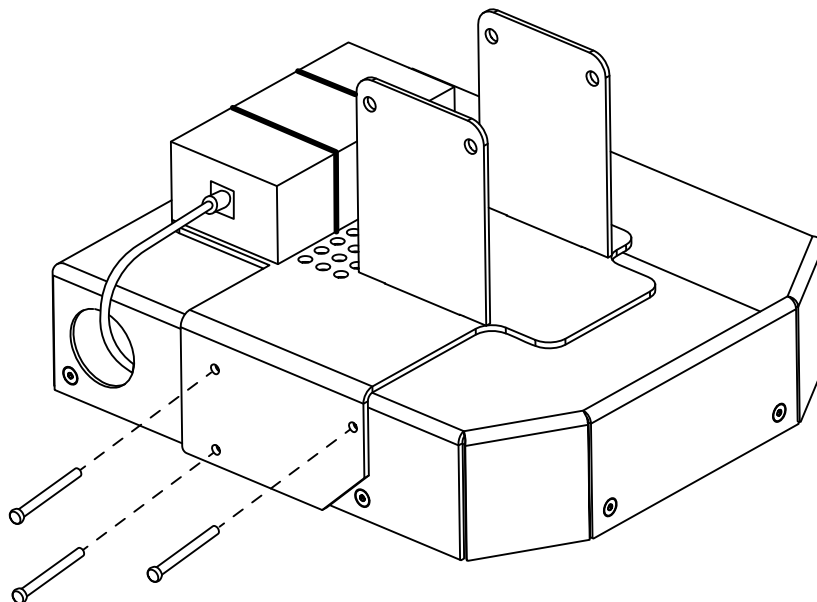


Figure 3-4. Secure Mounting Bracket

3. Mount the assembly to stand using the iDimension Plus Single and Dual Arm Stands Addendum (PN 199199).

3.3 Connect the Scanning Head to USB Display

Once the scanning head and the mounted assembly are assembled, plug the USB display cable into the mini USB port (see [Figure 3-5](#)).



Figure 3-5. Display USB Port Location



NOTE: See the *iDimension Plus Single and Dual Arm Stands Addendum (PN 199199)* for mounting display to RAM mount kit.



IMPORTANT: The USB port and cable are keyed and only connect in a specific orientation. The USB cable guides fit under the port guides and the cable retention clip must be pressed down when inserting the USB cable into the port.

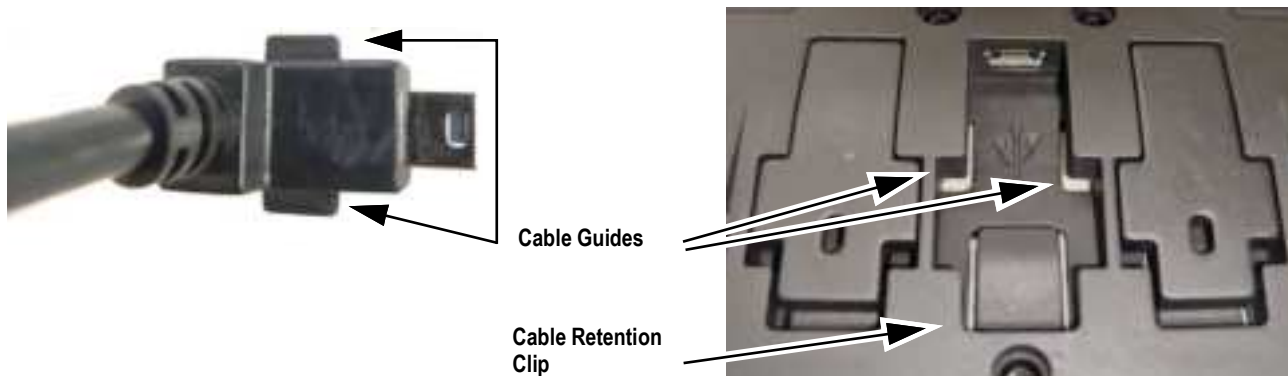


Figure 3-6. USB Cable and Port Guides

1. Position the USB cable over the retention clip and align the cable guides with the USB port guides.
2. Press the USB cable connector down on the cable retention clip to compress the cable retention clip.
3. Insert the USB cable into the USB port with both cables guides under the port guides.
4. Align the USB cable plug with the USB port and then connect.



NOTE: To align the cable plug with the USB port, the cable plug must be raised slightly upward (away from the monitor). To raise cable plug upward, press down on the back of the cable connector on the cable retention clip to angle the front of the cable plug upward.

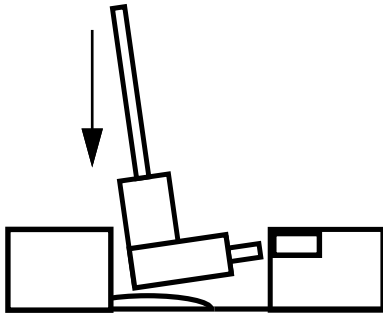


Figure 3-7. Inserting USB Cable into USB Port



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