

Hanging Cable Mount System Installation

The iDimension Hanging Cable Mount System hardware suspend iDimension LTL, iDimension LTL-XL or iDimension Flex dimensioners from the ceiling. The installation process and cable anchor locations vary with site requirements. Use the guidelines in this addendum to adapt the installation to the site constraints. Consult Rice Lake Weighing Systems for more information.

1.0 Parts List

No.	Sub No.	Description	Sub Qty	Qty
169253		Clamp, Beam, 3/8-16 Flange Pressed Steel w/ Lock Nut, Plain		10
169960		Turnbuckle, 5/16 x 9-1/4 Threaded 800 lb Clevis to Clevis ends		6
171821		Hanger Assembly		4
	14649	Nut, Jam 3/8-16NC Hex Steel Zinc Plated	1	
	165584	Hanger, Frame iDim	1	
	169960	Turnbuckle, 5/16 x 9-1/4 Threaded 800 lb Clevis to Clevis ends	1	
	188044	Bolt, Eye, 3/8 - 16 NC x 3 4-5/8 in Long, 1 in Eye, Steel, Zinc Plated	1	
	22072	Nut, Lock 3/8-16NC Hex Nylon Insert Steel Zinc Plated	1	
171822		Wire Hanging Assembly		10
	13720	Cable, Aircraft 1/8 7 x 19 Strand Core Steel Galvanized	35 ft	
	175655	Sleeve, Swage, Cable, 1/8 x 9/16, Hourglass, Aluminum or Tin Plated Copper	1	
	188044	Bolt, Eye, 3/8 - 16 NC x 3 4-5/8 in Long, 1 in Eye, Steel, Zinc Plated	1	
	58579	Strap, Tie 8 in Length	2	
172095		Clamp, Wire rope lock for 1/8 in Wire Rope, Galvanized		10
175655		Sleeve, Swage, Cable, 1/8 x 9/16, Hourglass, Aluminum or Tin Plated Copper		10
21938		Washer, Plain 3/8 Type a Series N steel Zinc Plated ID = .401-.421 OD = .805-.827 Thickness = .051-.080		8
22072		Nut, Lock 3/8-16NC Hex Nylon Insert Steel Zinc Plated		4
69987		Bolt, 3/8-16NC x 3 HEX Head partially threaded A307 Grade 2 Steel Clear Zinc Plated		4

Table 1. iDimension Hanging Hardware Kit (PN 188757)

2.0 Basic Hanging Configuration

The Hanging Cable Mount System includes 10 cables and hardware to suspend dimensioner from building structure. Mounting point locations vary depending on site requirements.

Required parameters

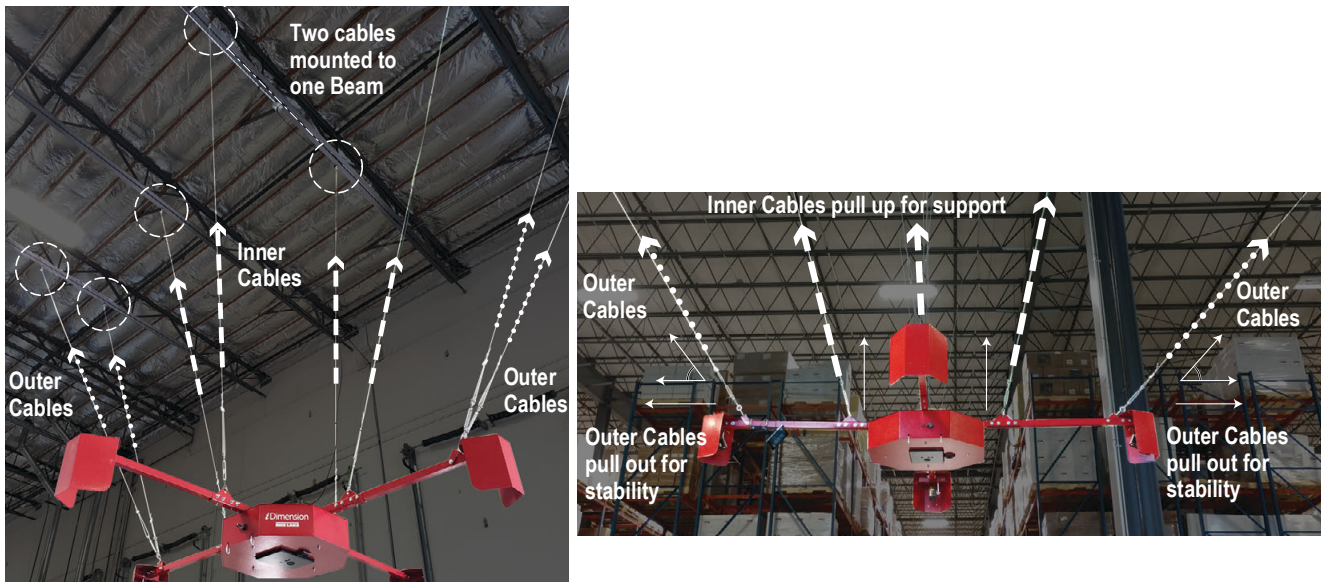
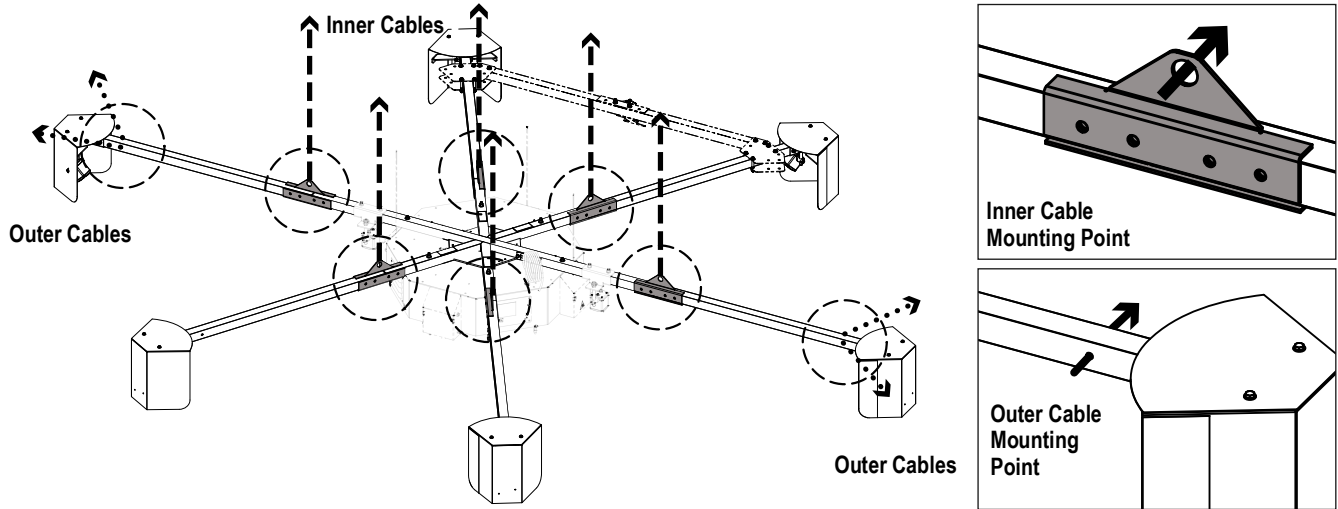
- Dimensioner must be stable, level and secure.
- Dimensioner sensors must be centered 11 ft (3.352 m) above the measurement site.
- All building paths must have headroom required by both building egress code and warehouse needs. Do not block pathways with cables.

Guidelines

- Distribute weight as evenly as possible over all cables.
- The inner support cables level the dimensioner. Inner support cables should be as vertical as possible.
- The outer stabilizing cables stabilize the dimensioner. Outer stabilizing cables should create opposing lateral forces on the unit.
- If possible, mount two of the inner support cables to one beam to align the dimensioner with the structure.

Safety

- The four main cables support the largest LTL XL dimensioner with a greater than static 5:1 safety ratio. The additional six stabilizing (secondary) cables provide supplementary security. If required by local regulations, the buyer is responsible for organizing an independent third party to evaluate and certify the installation is suitable and safe.



3.0 Basic Hanging Process

The hanging process varies by site. This process is a basic procedure:

1. Fully assemble the dimensioner.
2. Use I-bolt end of the wire hanging assembly (PN 171822) and beam clamps (PN 169253) to attach the wire hanging assembly to the roof structure above each dimensioner inner support cable mounting point and beyond each outer stabilizing cable mounting point. Follow guidelines for inner cables in [Section 2.0 on page 1](#) to select clamp positions.
 - a. Select mounting point.
 - b. Screw I-bolt into the clamp until the bolt is flush with the inside of the clamp and the eye aligns with the flat surface of the clamp.
 - c. Tighten square bolt into the clamp to grip clamp to structure.
 - d. Tighten jam nut on the square bolt to secure in place.



Figure 3. Beam Clamp to Roof Structure

3. Use a scissor lift to center the dimensioner 131 to 132 in (3.327 to 3.352 m) above the measurement site.
4. Attach one turnbuckle (PN 169960) to each dimensioner inner cable mounting point ([Figure 1 on page 2](#)).
5. Extend each turnbuckle out until 1 in (25 mm) of thread remains on each side.

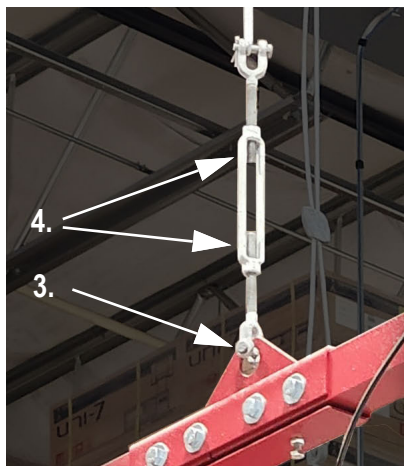


Figure 4. Turnbuckle Mounting

6. Secure the free end of each of the wire hanging assembly cables to a turnbuckle.
 - a. Trim end of cable.
 - b. Route cable through swage sleeve.
 - c. Route cable through Gripper®.
 - d. Route cable through turnbuckle.
 - e. Route cable through Gripper.
 - f. Route cable through the swage sleeve.
 - g. Pull cable taut from roof and leave about 4 in (100 mm) between the turnbuckle and Gripper and between the Gripper and the end of the cable.
 - h. Use the included tool to release clamp mechanism and adjust length and position of cables if needed.
 - i. Crimp swage twice with 1/8 in swage crimper tool.

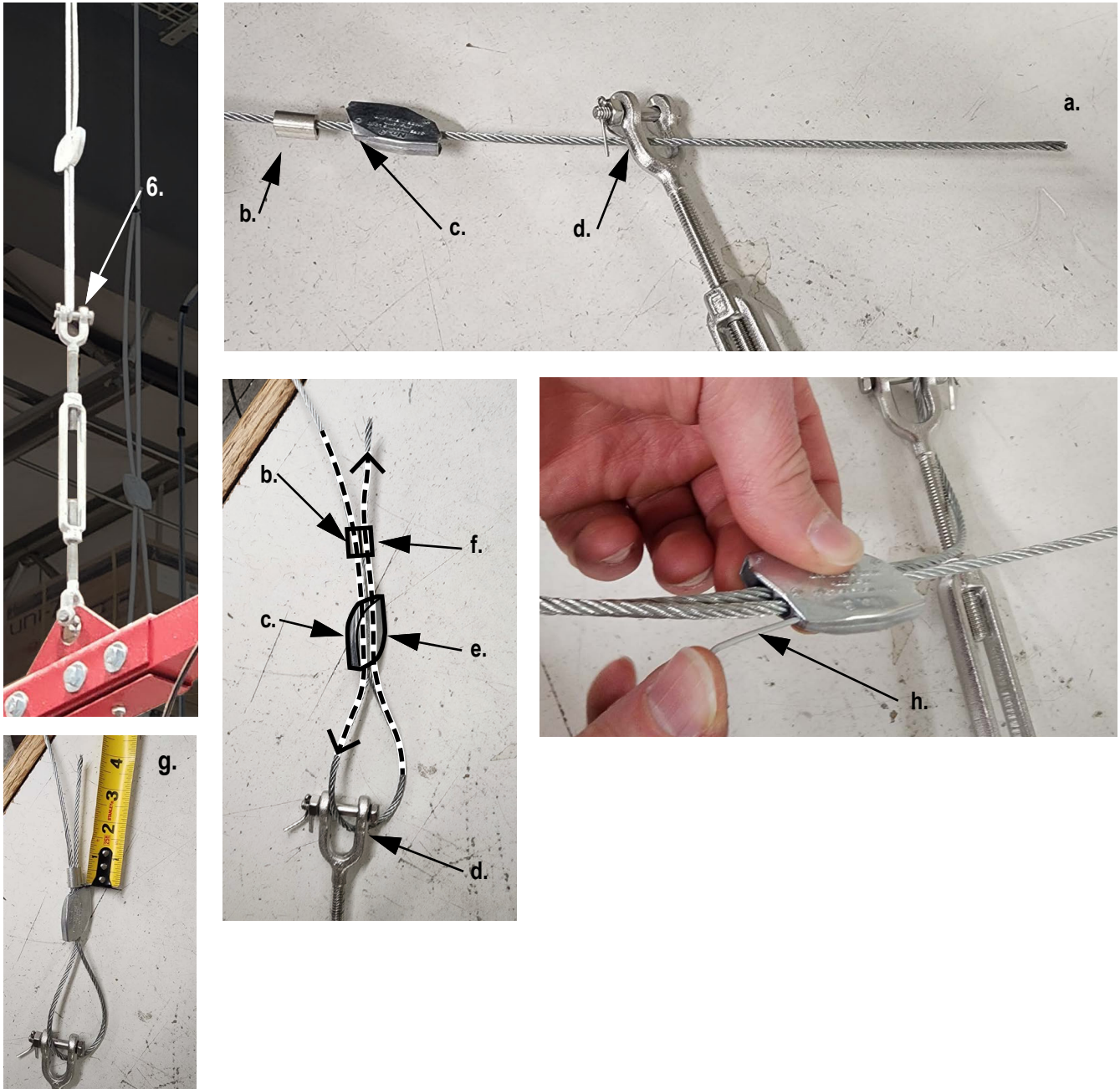


Figure 5. Free End to Turnbuckle

7. Adjust turnbuckles to remove slack and ensure an even tension to support the dimensioner in a level position.
8. Lower scissor lift to transfer full support of dimensioner to inner cables.
9. Attach hanger assemblies (PN 171821) to outer cable mounting point of opposing arms of the dimensioner. Follow guidelines for outer cables in [Section 2.0 on page 1](#) to select position of hangers.

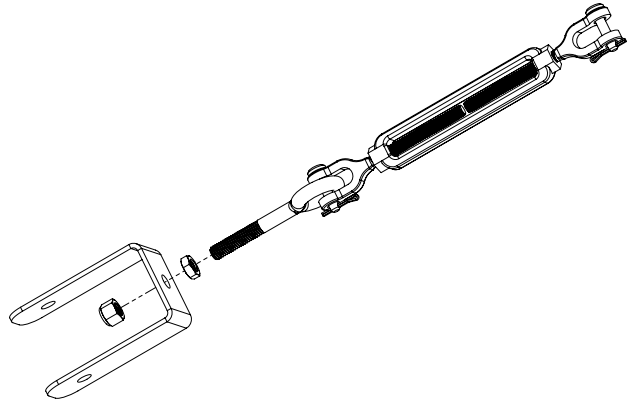


Figure 6. Turnbuckles to Hanger Assembly

10. Use I-bolt end of the wire hanging assembly (PN 171822) and beam clamps (PN 169253) to attach wire hanging assembly to the roof structure beyond outer cable mounting points as in [Step 2. on page 3](#). Follow guidelines for outer cables in [Section 2.0 on page 1](#) to select position of clamps.
11. Secure the free end of each wire hanging assembly cable to a turnbuckles as in [Step 6. on page 4](#).
12. Adjust turnbuckles to an even opposing tension to support the dimensioner as in [Figure 2 on page 2](#). Outer cable will provide stability.
13. Re-tighten inner cables to evenly distribute weight between all cables.



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