



HDV500

Floor Mounted Horizontal Digital Video System

Unpacking Read Me First Instructions

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1. About These Instructions

SKE metrology systems are normally installed by factory-trained technicians who also provide operator training. The following information covers basic uncrating and movement of the system. Refer to the *HDV Floor Mounted Digital Video System User Guide (part number 7032)* for detailed information on setting up and operating the HDV system. Contact SKE Technical Services at www.ske-service.com for installation, calibration, and training services.

These instructions provide the following information for the HDV system:

- Planning the placement of the HDV system
- Uncrating the HDV system
- Moving the HDV system
- Removing the stage locks from the system
- Installing the Y-axis stage cover

2. Planning the Placement of the System

HDV500 systems are normally placed directly on a concrete floor in a work area. Following are recommendations for planning the placement of the system:

- Select a location where the temperature can be controlled to within $20^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ ($68^{\circ}\text{F} \pm 2^{\circ}\text{F}$), which is the calibration temperature of the system.
- Ensure a clean operating environment that is free from oil fumes, dust, and debris. Contaminants will coat critical mechanical and optical parts, thereby requiring more frequent system maintenance.
- Ensure the environment has grounded 2-phase electrical power outlet.
- Ensure there is adequate clearance around the machine. Allow at least 200 millimeters (8 inches) to the rear for access, and 600 millimeters (24 inches) or more to the sides. The width required for maximum X-axis stage travel is 1330 millimeters (52.5 inches). Consider the longest parts to be measured or inspected, since large parts may overhang beyond right or left sides of the stage. Also allow room for the staging of incoming and outgoing parts.

The following figure provides the dimensions of the system.

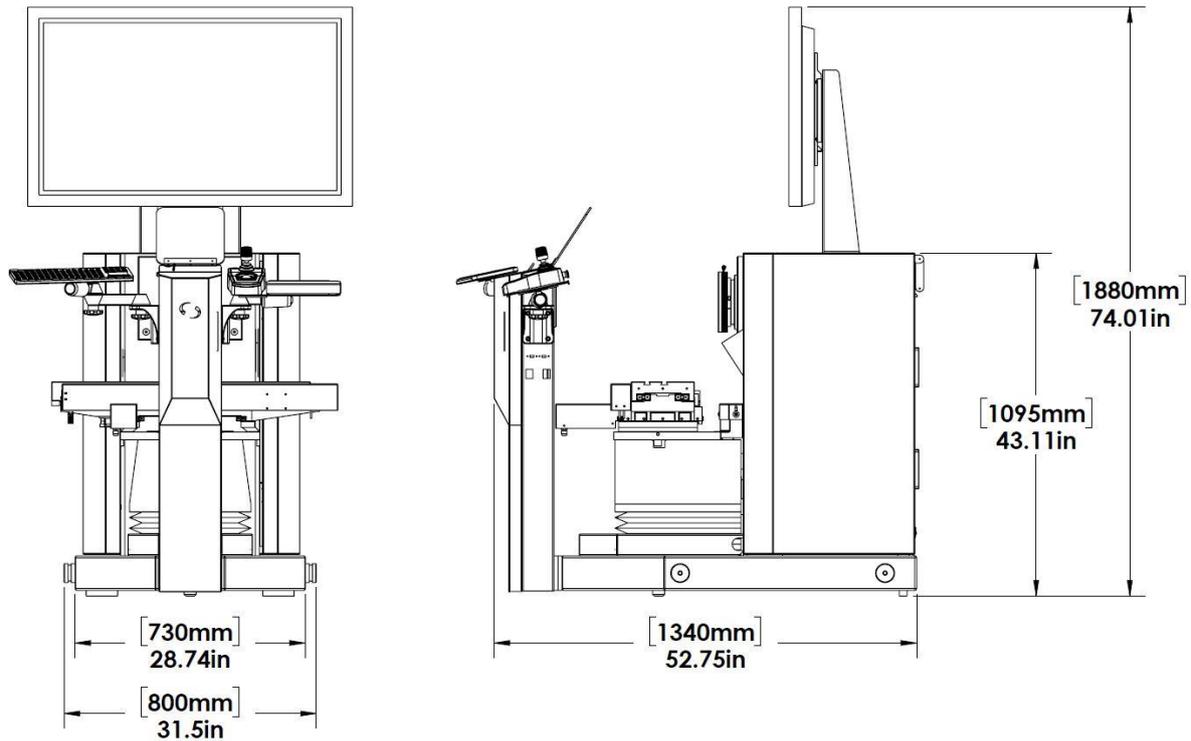


Figure 1. HDV500 Dimensions

3. Moving and Uncrating the System

WARNING

The shipping weight of the HDV system is approximately 1700 pounds (770 kilograms). The machine itself is too deep for the forks of most forklifts. It is highly recommended the system be moved and positioned by a rigging company.

The estimated shipping weight of a crated HDV500 system is 770 kilograms (1700 pounds). The machine itself is too deep for the forks of most forklifts. The machine is normally moved and positioned by a professional rigger (or rigging company) with specialized skills and equipment to move and position heavy and large machinery.

3.1. Uncrating the System

HDV500 systems are normally shipped in single wooden crate. To uncrate the system, refer to the following figures and perform the following steps:

1. Use a reversing battery powered drill with a Phillips bit, remove all wood screws from the top of the crate, then lift off the top.
2. Remove all wood screws from the side panels of the crate, then remove the side panels.

This action exposes the HDV500 main unit on the shipping pallet and the 42-inch video monitor, which is shipped uninstalled in the same crate.



Figure 2. Removing the Screws from the Shipping Container

3. Use a wrench to remove the four L-shaped brackets that secure the HDV500 main unit to the shipping pallet.



Figure 3. L-Shaped Bracket

4. Using the rigging company, lift the HDV system using the four red bosses which extend from the base.
5. Once the system is in the final location, remove any additional shipping materials and accessories.

4. Removing the Stage Locks

The HDV system is shipped with X, Y, and Z, stage locks to prevent movement during shipment. The stage locks must be removed once the equipment has been placed in its final position.

1. Locate the stage locks using the following information and figures.

- The X-axis lock is located on the left of the stage.
- The Y-axis lock is located under the lens mount.
- The Z-axis lock is located near the X-axis drive motor.

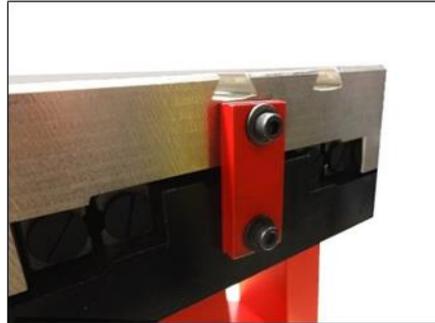


Figure 3. X-Axis Stage Lock



Figure 3. Y-Axis Stage Lock



Figure 4.. Z-Axis Stage Lock

2. Using a metric hex wrench, remove the screws that secure the lock. Repeat this step for each of the stage locks.

5. Installing the Y-Axis Stage Cover

In addition to removing the stage locks, the Y-axis stage cover must be installed on the system. To install the stage cover, perform the following steps and refer to the figures:

1. Locate the Y-axis stage cover kit that is shipped with the system.
2. Put the stage cover in the place, directly under the lens, and attach with the screws included.



Figure 5. Y-Axis Stage



Figure 6. Y-Axis Stage Screws



Figure 7. Y-Axis Stage Installation

6. Setting Up and Operating the System

For detailed information on setting up and operating the system, refer to *the HDV500 Floor Mounted Horizontal Digital Video System User Guide (part number 7032)*.