

Asaca AM-Series DVD Digital Virtual Library

Site Requirements

Revision 1.0

When installing an AM-Series library in a new location, there are several requirements that must be met in order to ensure that the library will operate properly and reliably. Physical, environmental, and power requirements that need to be observed are described below. In addition, some of the libraries have special parts that need to be purchased through your distributor in order to ensure proper operation of the library.

CAUTION If the library is moved or shipped without proper internal and external packaging, the library WILL be damaged. Always make sure that the internal and external packing is in place prior to moving the library.

◆ **Attention:** All internal, external, and custom packing material must be kept. These packing materials will be needed when the library is moved or shipped to another location.

1.1 Physical Requirements

The library will be delivered packaged on a pallet. The library will need to remain in its packaging until it reaches its installation location. The library must also be kept upright at all times. In order to transport the packaged library to its installation point, a pallet jack or a forklift must be onsite. In addition, the delivery point needs to have either a truck dock or a forklift available to unload the library. If neither a truck dock nor a forklift is available, make sure that on the delivery schedule it is specified that a truck with a lift gate will make the delivery. This will eliminate the need for the truck dock or the forklift, making a pallet jack the only equipment needed.

When moving the library, it must be kept upright or damage may occur to the robotics. Make sure that the door jams and hallways between the delivery point and installation location will allow the packaged library to be moved freely. Figure 1.1 A gives the dimensions of the AM-series libraries in their packaging.

Library	Dimensions (DxWxH in inches)	Dimensions (DxWxH in cm)
AM-250	32 x 32 x 39	82 x 82 x 100
AM-750	32 x 32 x 60	82 x 82 x 153
AM-1450	45 x 48 x 83	115 x 122 x 211

Figure 1.1 A—Packaged library dimensions

It is possible to remove the external packaging of the library prior to its arrival at the installation site; however, it is recommended that the external packing materials be left in place as long as possible. The external packaging may need to be removed in order to get the library through narrow halls or doors.

When the library is installed there needs to be enough clearance on various sides of the library in order to allow service and maintenance of the library when necessary. The library dimensions are given in figure 1.1 B.

Library	Foot Print Dimensions (DxW in inches)	Foot Print Dimensions (DxW in cm)
AM-250	28 x 17	71 x 43
AM-750	28 x 20	71 x 51
AM-1450	28 x 20	71 x 51

Figure 1.1 B—Library foot print dimensions

There must be at least 20 inches (50 cm) of clearance on all sides of the library when it is installed in order to allow the doors to open and access to the side panels. Doors will need to be opened to access drives and magazines and to perform various service tasks. The side panels will need to be accessed for service purposes. There must also be 12 inches (30 cm) of clearance above the library in order for a service representative to access the upper library components.

The floor where the library is to be installed must be able to support the weight of the library. Figure 1.1 C gives the weights of the different AM-series libraries.

Library	Weight (lbs)	Weight (kg)
AM-250	178.2	81.0
AM-750	347.0	157.4
AM-750 with embed system	377.0	171.4
AM-1450	485.0	220
AM-1450 with embed system	515.0	234.1

Figure 1.1 C—AM-Series library weights

If installing an AM-1450 library a stabilization tray must be used when installing the library. Further instructions on installing the tray are given in section 1.5. AM-250 and AM-750 libraries are normally free standing equipment however the AM-750 can use the stabilization tray if desired.

1.2 Environmental Requirements

The following environmental conditions must be met by the installation location of the library in order to ensure proper operation and reliability of the library. If these conditions are not met, the library may be damaged or work improperly.

- The location of the library must be relatively dust free.
- The relative humidity must be between 15% and 85 %.
- The temperature must be between 5°C and 40°C (for AM-1450 libraries with more than 12 drives, it is recommended that the room temperature not exceed 35°C).

1.3 Power and wall outlet Requirements

There must be enough power on any facility circuit to support the library. Figure 1.3 A gives the power requirements of the AM-series libraries.

Library	Power Requirements
AM-250	100-120 VAC—6.5A or 200-240 VAC—3.3A
AM-750	100-120 VAC—7A or 200-240 VAC—3.5A
AM-750 with embed system	100-120 VAC—7.7A or 200-240 VAC—3.8A
AM-1450	100-120 VAC—12A or 200-240 VAC—6A
AM-1450 with embed system	100-120 VAC—12A or 200-240 VAC—6A

Figure 1.3 A—Library power requirements

The libraries require specific wall outlets depending on the configuration of the library. Figure 1.3 B gives the wall outlet required for each library configuration for libraries used in the United States or Canada. If the library is to be used outside the United States or Canada, make sure to follow that countries wall outlet requirements and the power requirements given in figure 1.3 A.




Library	Wall Outlet	Outlet Plug Picture
AM-250 AM-750	Standard 15A outlet	
AM-750 with embed system	NEMA L5-15R	
AM-1450 AM-1450 with embed system	NEMA L5-20R	

Figure 1.3 B—Wall outlets and plug picture for different library configurations inside the United States and Canada

If the library is to be used outside the United States or Canada, you will have to supply your own power cord. Figure 1.3 C gives the library side cord connector that should be used when ordering a power cord for your library.



Library	Power Cord Connector IEC code	Connector Picture
AM-250 AM-750 AM-750 with embed system	60320 C13	
AM-1450 AM-1450 with embed system	60320 C19	

Figure 1.3 C—Library side power cord connectors

For maximum reliability and operability of the library, it is recommended that an uninterruptible power supply (UPS) be used with the library. In the case of the AM-750 and AM-1450 libraries with embed systems, a minimum ### Joule surge protection is mandatory and must be purchased by the customer.

1.4 Stabilization of the library

If installing an AM-1450 library, a stabilization tray must be used. The stabilization tray may also be used in place of the standard stabilizer to stabilize the AM-750 library. The stabilization tray must be used on any library being installed in an earthquake prone area. Your users manual will give specific instructions on how to attach the library to the stabilization tray.

You will need to purchase the proper anchor bolts to attach the library stabilization tray to the floor. If the floor is concrete you will need to buy 4 of each of the following items:

- 1.5 inch long 3/8 inch anchor bolts
- 3/8 inch nuts to thread on the anchor bolts
- 3/8 inch washers

If the floor is plywood you will need 4 of each of the following items:

- 1.5 inch long 3/8 inch lag bolts
- 3/8 inch washers

If the library is being installed on a raised floor you may need to add additional cross members in order to accommodate the stabilization tray. You will also need to use an alternative attachment method than those described above.

The following steps should be completed prior to the day of installing the library. A dimensional drawing of the stabilization tray is shown in figure 1.4. The circles represent the location of the holes. The schematic will assist you in making the preparations described below:

1. Make sure that the requirements described in the previous sections are fulfilled.
2. In order to roll the library into the tray, there will need to be at least 30 inches (76 cm) of room in front of the stabilization tray.
3. The holes drilled in the floor should be 3/8 inch in diameter. The location of the holes can be determined by referring to figure 1.4. You will need a hammer drill and a masonry drill bit if drilling the holes in a concrete floor.
4. If you feel comfortable with drilling the holes based on the schematic in figure 1.4, go ahead and drill the holes. Otherwise, when the library arrives, take the tray out of the packaging and place the tray on the floor and mark where the hole should go and then drill the holes.

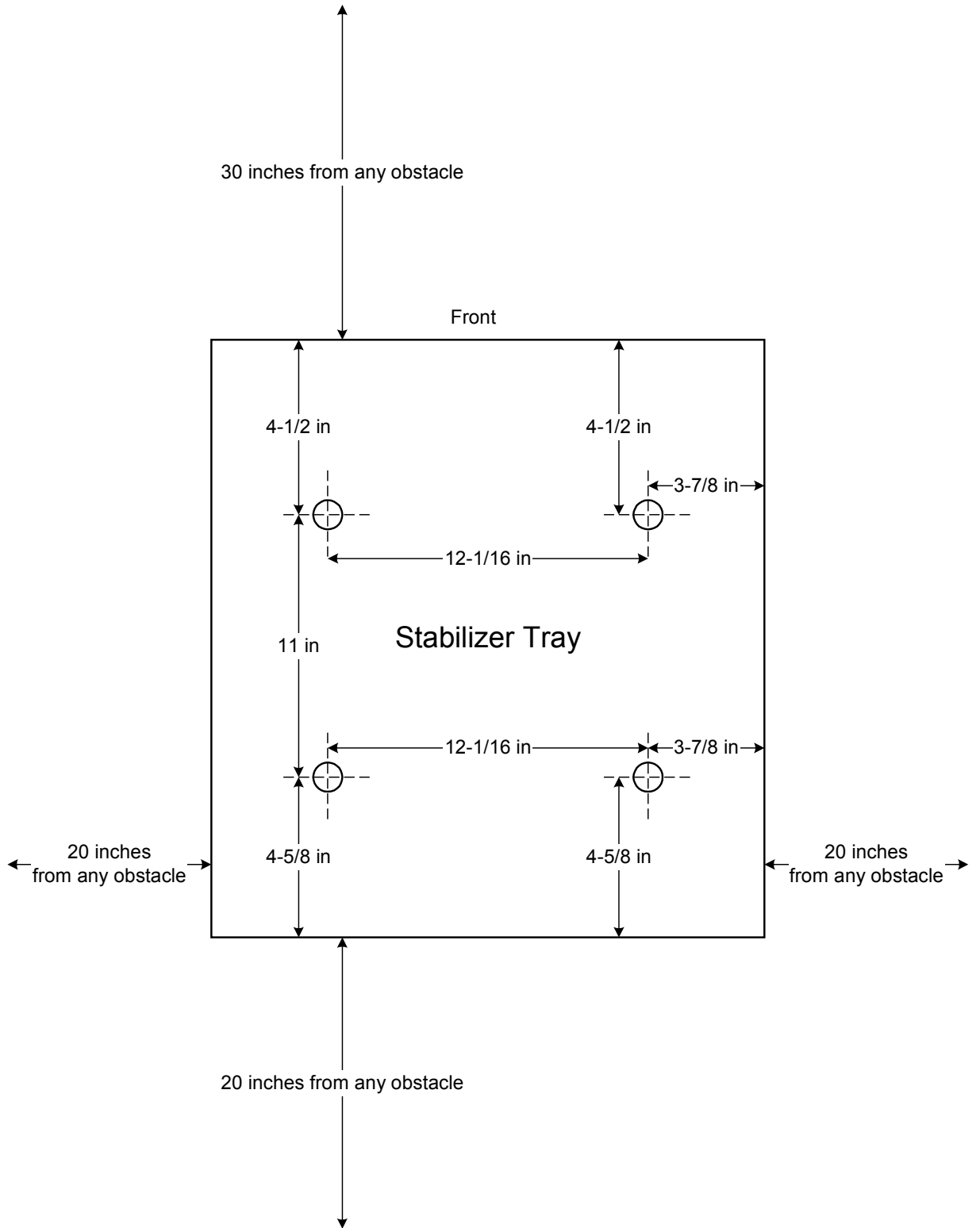


Figure 1.4—Stabilization tray schematic

1.5 Interface requirements

The most common way to interface with a library is through SCSI interface. If SCSI interface is to be used with the library, the customer must supply an adequate SCSI adapter and SCSI cables to connect the library to the host computer. The cables need to have screw mount, 68-pin connectors.

Another way to interface with the library is through fibre channel. Fibre channel interface is only available on libraries with embedded Fibre/RAID/GBIC assemblies. If Fibre channel will be the interface used with the library, the customer must supply adequate GBIC interface converter modules and cables to connect the library to the SAN system.

It is also highly recommended (mandatory) that all libraries be assigned an IP address and be connected to the local 10/100T network for status, service, and support operations.

1.6 Special Parts

1.6.1 AM-250

The only special part that may be needed for the AM-250 library is a rack mount kit if you want to mount your library in a rack. Contact your distributor if you want to mount your library in a rack and do not have an Asaca rack mount kit. The rack mount kit will fit a standard 19 inch wide rack at 24, 26, and 28 inch depths.

1.6.2 AM-750

If you are installing an embedded system in an AM-750 you will need to place a ferrite clamp on the library network cable to comply with FCC regulations. The ferrite clamps should have been shipped with the embedded system. If you did not receive the clamps with the embedded system, contact your distributor.