

Safeguards and Notices for Speed Dome Installation Construction

I. Waterproof Performance

Note:

1. The long-arm wall mount is recommended for the outdoor application of speed dome.
2. The short-arm wall mount is not suitable for outdoor application of speed dome because of its poor water-proof performance.
3. The mount with inner threaded opening is recommended to be used and the waterproof performance must be ensured as well.
4. If the mount with outer threaded opening is used, please ensure reliable waterproof performance of the adapter applied between the mount and the dome to maintain waterproof performance.

Mounting Method

● Long-arm Wall Mount

The long-arm wall mount is recommended for the use in outdoor application. The wall mount is designed in properly tilting to prevent incoming water, as shown in Figure 1.1. During outdoor application, the long-arm wall mount can be used with the pole mount adapter or the corner mount adapter.

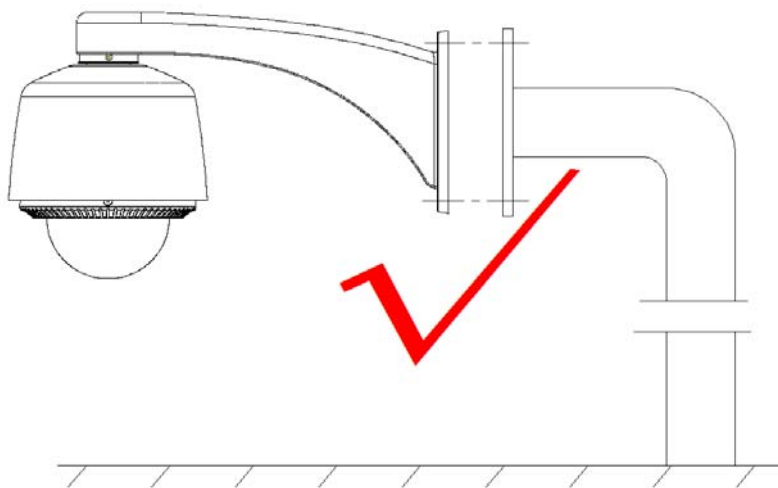


Figure1.1 Long-arm Wall Mount

● Short-arm Wall Mount

The arm of the short-arm wall mount is designed in fully horizontal and there is gap between the wall mount and the mounting plate during the installation, therefore the water may easily come into the dome during outdoor application. Refer to Figure 1.2.

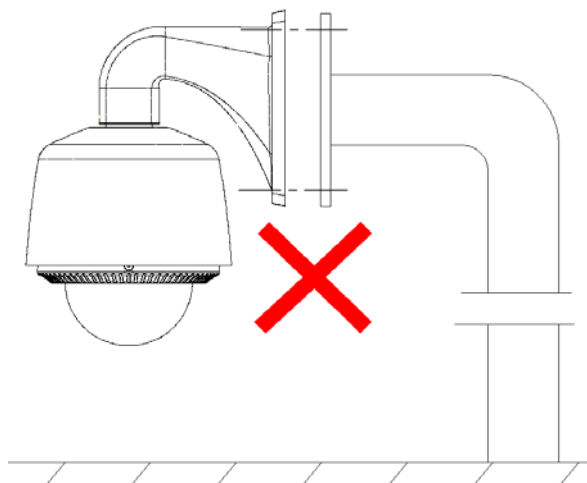


Figure1.2 Short-arm Wall Mount

- **Pendant Mount**

The pendant mount is not suitable for outdoor application as there will be gap existed between the pendant mount and the mounting plate during installation, which may cause the water to easily come into the dome, and such problem is hardly solved even by applying the thread seal tape or compound to the connection. Refer to Figure 1.3.

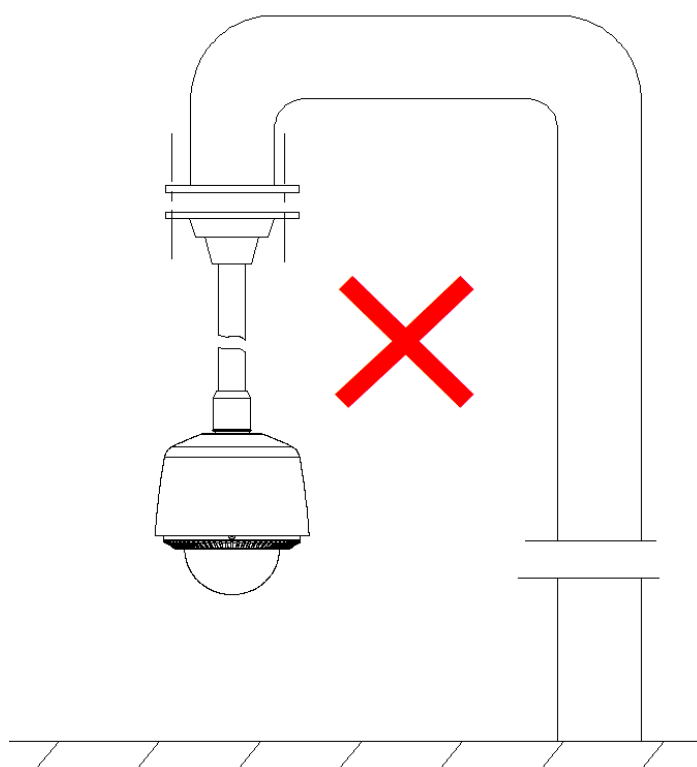


Figure1.3 Pendant Mount

- **Customized Mount**

The customized mount can be designed with the inner threaded opening through which the speed dome can be directly screwed into the mount. Refer to Figure 1.4.

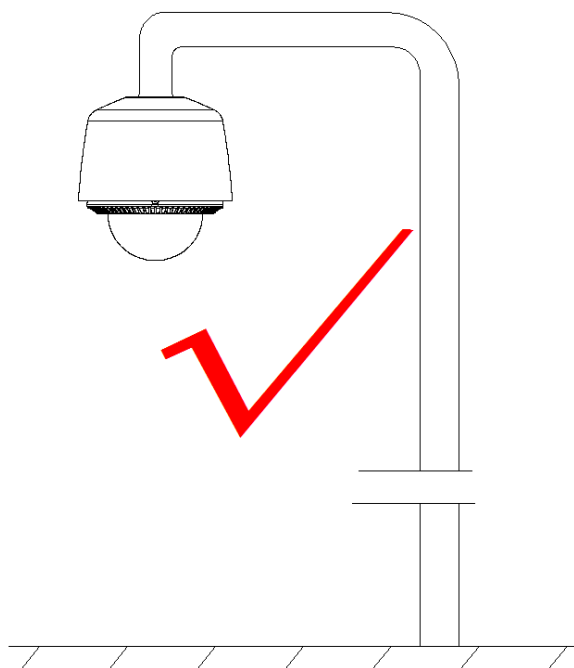


Figure1.4 Customized Mount

II. Anti-insect & Damp-proof Performance

Note:

During the outdoor application, the damp and insects may easily come into the speed dome, as shown in Figure 2.1, which will cause damages to the circuit board and thus affect monitoring result. It is required to apply the damp-proof stopper and thread tape around the threaded opening of the back box between the dome and the mount. Refer to Figure 2.2.

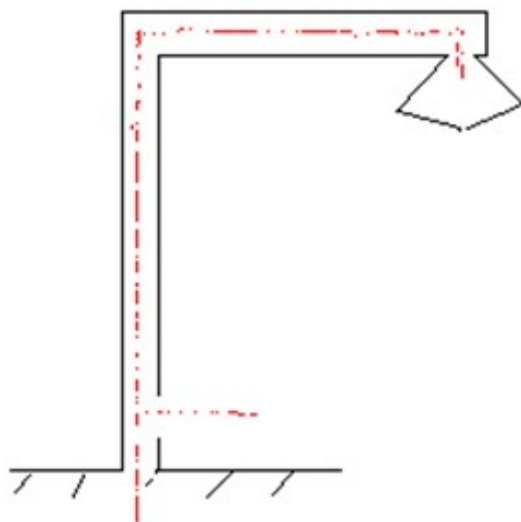


Figure 2.1 Insects and Damp Coming into Dome

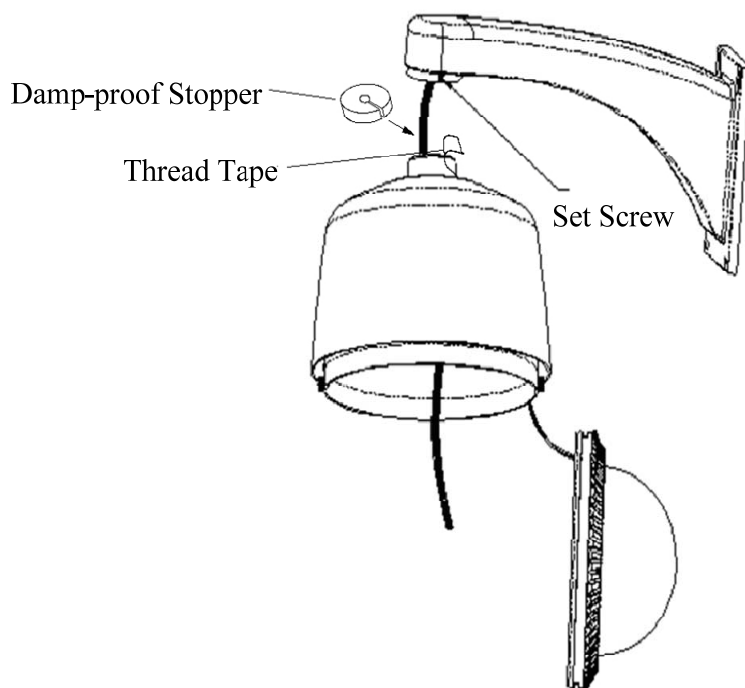


Figure 2.2 Application of Damp-proof Stopper

III. Statics, Interference, Lightning & Surge Protection

Note:

1. No grounding connection of dome will possibly cause statics damages to the electrical parts and components of dome.
2. No grounding connection of dome will possibly cause interferences to the video images.
3. Improper grounding connection of dome will cause the dome to receive error codes and result in failure of dome control.
4. In strong thunderstorm area, the speed dome must be grounded locally to release lightning or suchlike high energy to protect dome against damages.
5. In voltage instability area, the speed dome must be grounded to release surge or suchlike high energy to protect power supplier of dome against damages.

Grounding of Dome Installation

● **Cement Pole/Wall Installation:**

When the speed dome is installed in environment where is relatively insulating to the earth, e.g., cement pole or cement wall, then only the control center requires proper grounding locally. Refer to Figure 3.1.

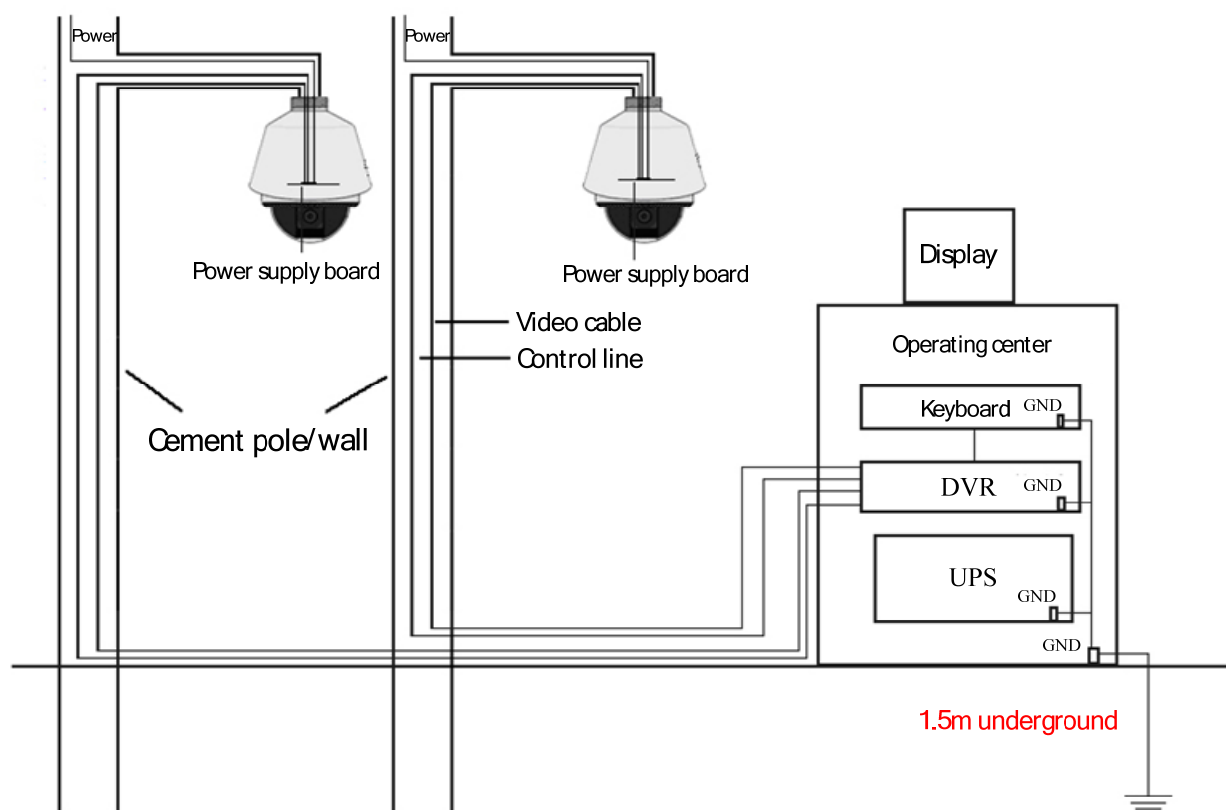


Figure 3.1 Grounding in Cement Pole/Wall Installation

Note: If the dome is installed in strong thunderstorm area, it must be grounded locally to release lightening or suchlike high energy to protect dome against damages. Refer to Figure 3.2.

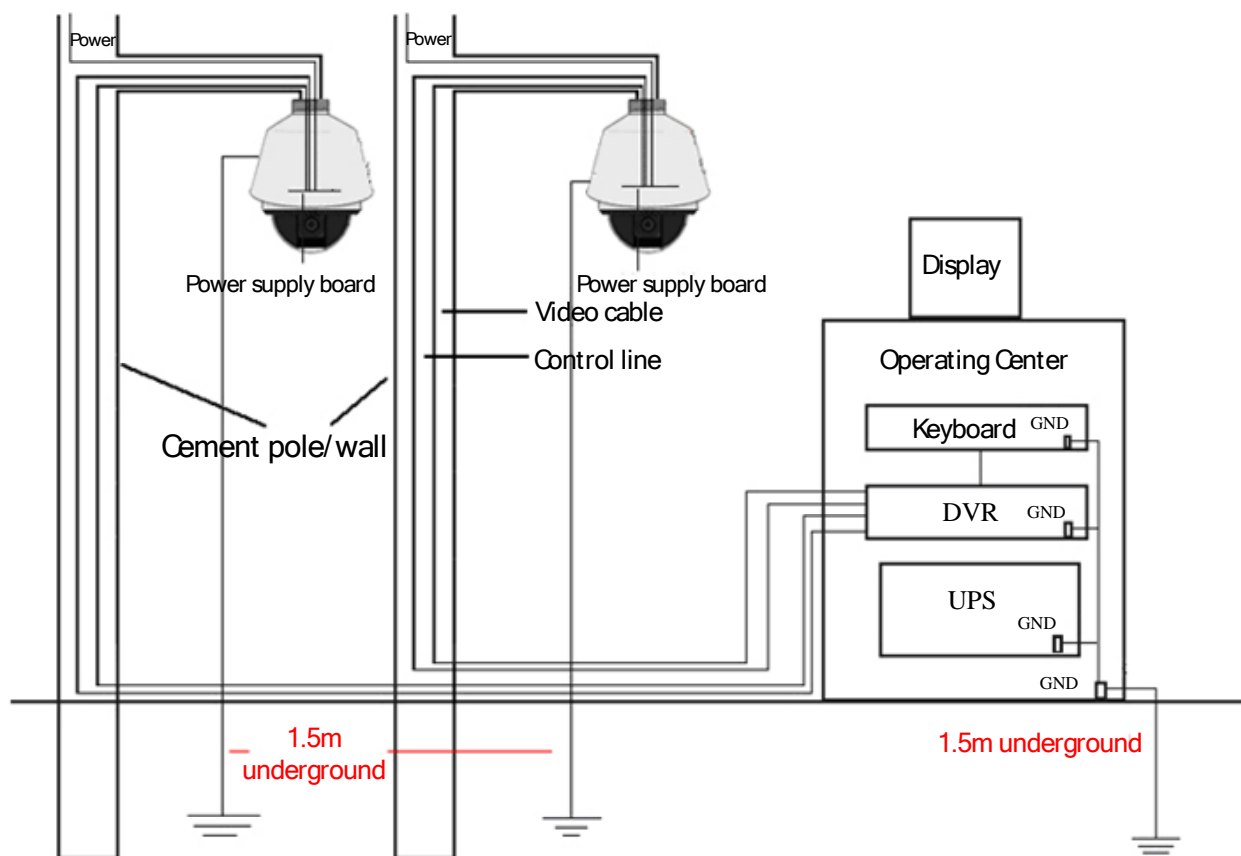


Figure 3.2 Lightning-protection Grounding in Cement Pole/Wall Installation

Note: Interference to the video images will occur if the dome is grounded according to Figure 3.2. During the installation of 6-inch speed dome, the yellow & green line may be disconnected to separate the back box and the dome drive. Such operation will protect the dome drive against being affected by the interference from back box, as shown in Figure 3.3. Refer to Figure 3.6 for the yellow & green connection line.

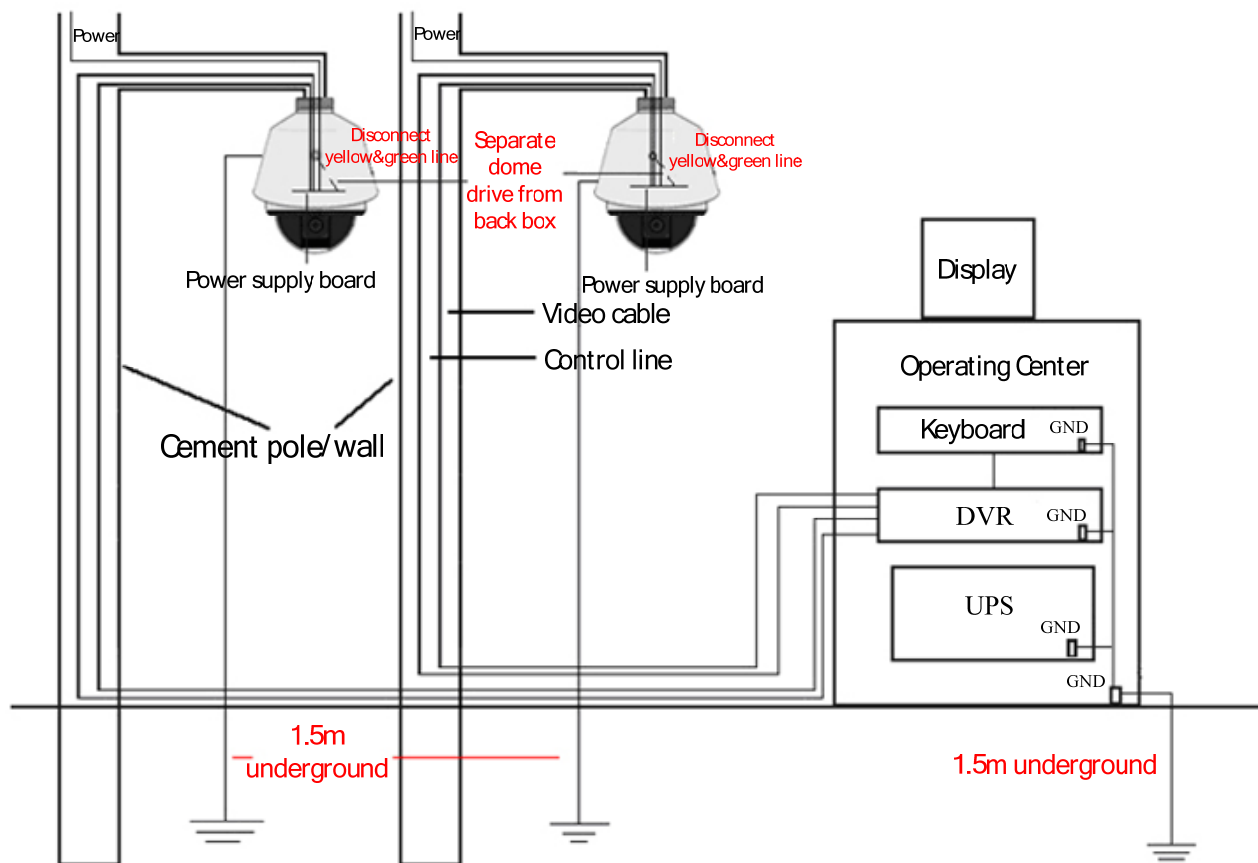


Figure 3.3 Disconnection of Yellow & Green Line during 6-inch Speed Dome Installation

- **Metal Pole Installation:**

When the speed dome is installed in environment where is conductive to the earth, e.g., metal pole, then the grounding of dome can be achieved by the properly grounded metal pole, meanwhile, the control center must be grounding connected locally as well. Refer to Figure 3.4.

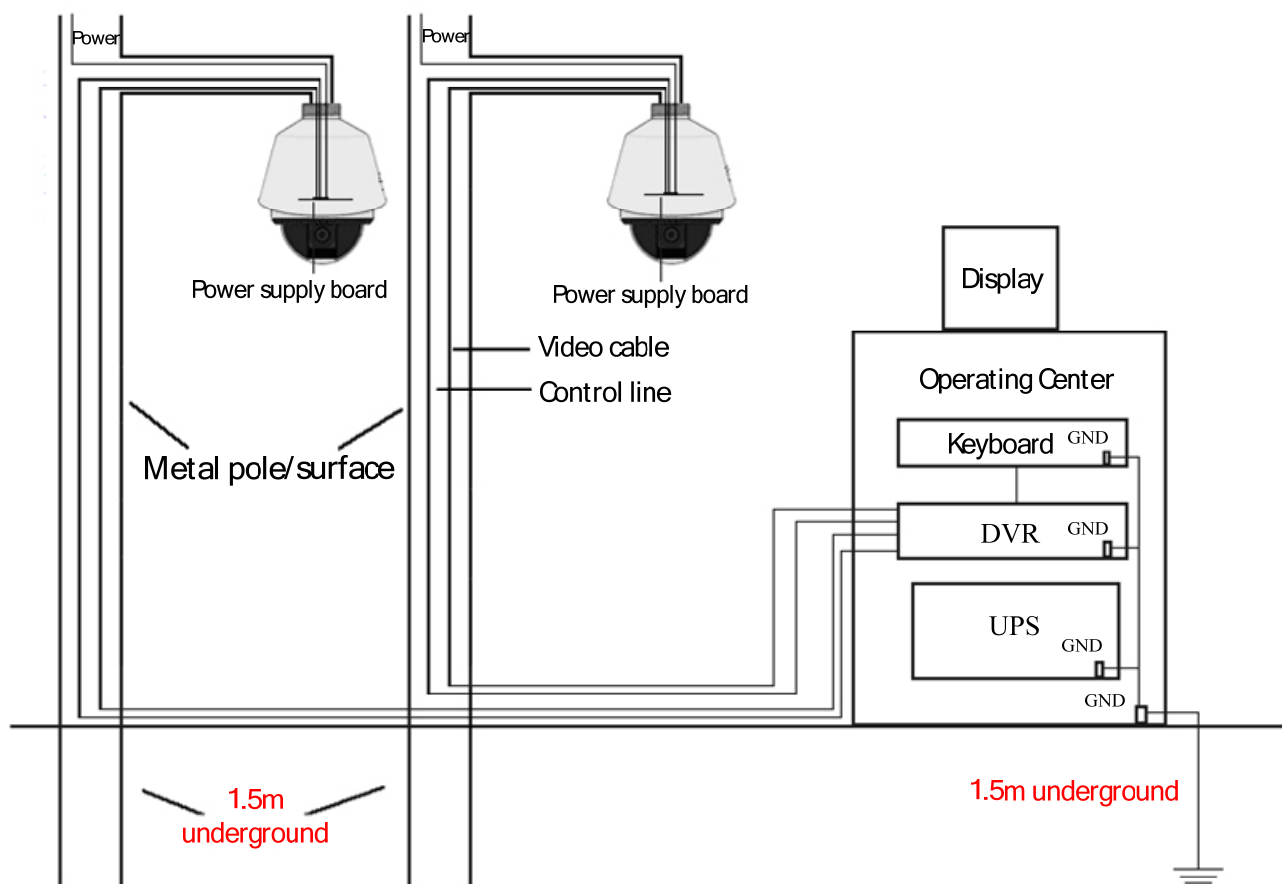


Figure 3.4 Grounding in Metal Pole Installation

Note: Interference to the video images will occur if the dome is grounded according to Figure 3.4. During the installation of 6-inch speed dome, the yellow & green line may be disconnected to separate the back box and the dome drive. Such operation will protect the dome drive against being affected by the interference from back box, as shown in Figure 3.5. Refer to Figure 3.6 for the yellow & green connection line.

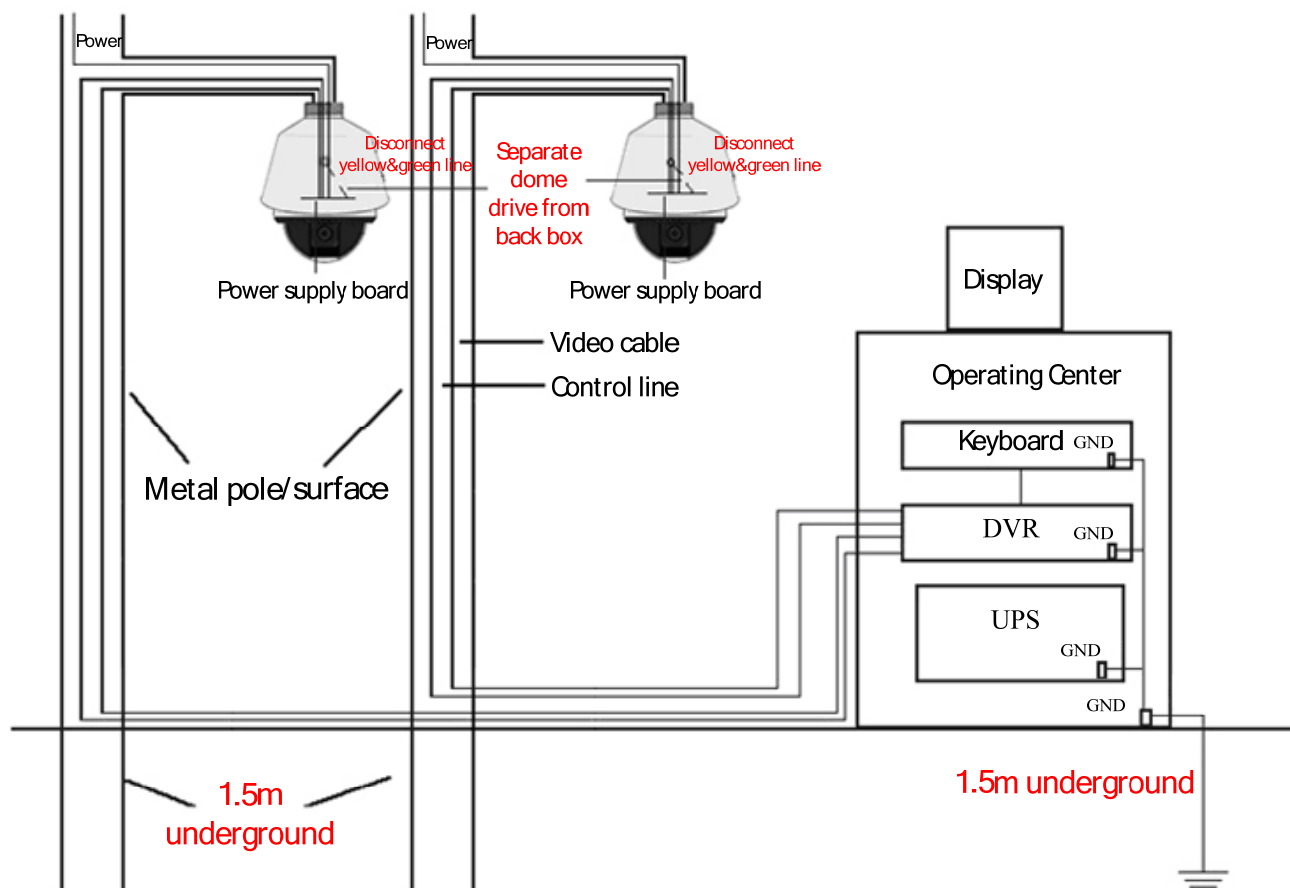


Figure 3.5 Disconnection of Yellow & Green Line during 6-inch Speed Dome Installation

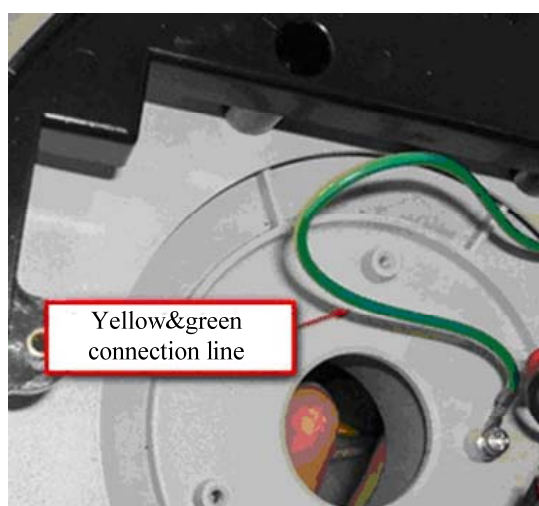


Figure 3.6 Yellow & Green Connection Line of 6-inch Speed Dome

Note: If the fiber optics, lightning protector or other device are applied during the transmission of speed dome, such devices as well as the video cables of dome connected must be ensured with proper grounding.

IV. FAQ

- **User can operate zoom control of speed dome but fail to realize pan/tilt control.**

Open the bubble of dome and remove the expand aple poly ethylene from dome drive.

- **The wire leads of speed dome are cut off.**

Unplug the wire leads before the dome installation, and connect them until the dome has been installed to the mount. And make sure each wiring terminal is plugged into its matching connector.

- **During PTZ control, the dome is unable to move to the defined left/right limit stop positions.**

There is friction generated between the dome drive and the back box due to the latch A and B on sides of dome drive are not firmly locked. Make sure to secure latch A and B into place.

- **The speed dome automatically powers off and restarts during its PTZ control or preset callup operation.**

The power supply of speed dome fails to meet requirements.