TRENDnet®

Technical Bulletin

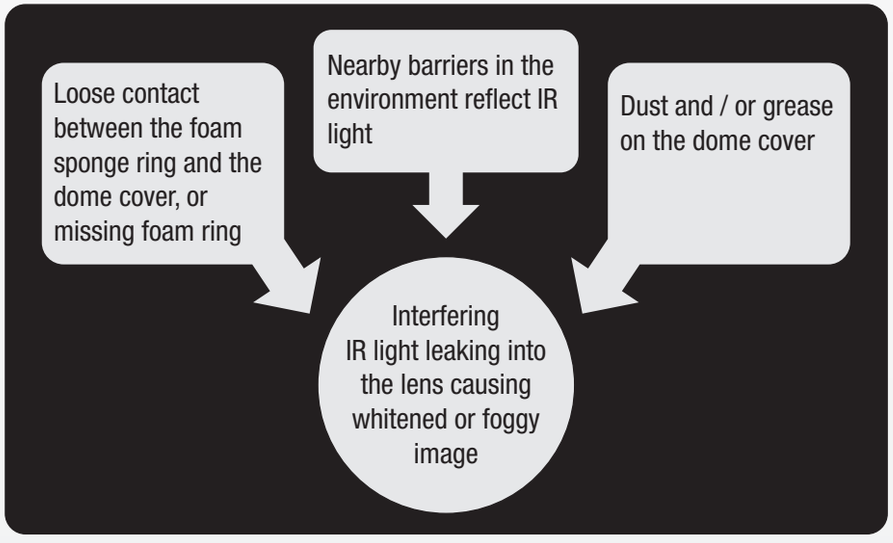
Foggy Dome

After installation, the nighttime image of a dome camera may appear to be “Foggy”or soft looking. (Figure 1).

Figure 1

This is caused by IR Reflection/Bleeding into the lens. The IR light may be reflecting off the surface of the dome cover or nearby objects. The possible causes for the IR reflection are listed in Figure 2.

Figure 2



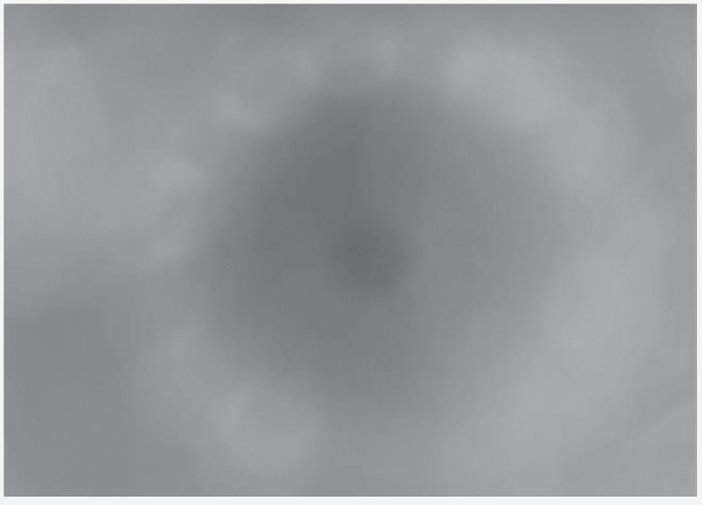
The most severe case of IR Reflection is caused by the FOAM RING not being firmly pressed against the camera dome. This will create a “CIRCULAR FOG” effect (Figure 3).

Figure 3

Normal Foam Ring

Foam Ring Loose-contact

Foam Ring Removed



To minimize the chance of IR “bleeding” into the lens, please make sure that the dome bubble is sitting snug against of the foam ring. Please note, that upon good contact with the bubble, the foam ring will appear to be squished a little bit.

Nearby objects and barriers are another possible cause of “Foggy” IR images.

Figure 4

Figure 4 shows the effect of a small piece of cardboard positioned only 4 inches away from the side of the camera. Even though not visible in the picture (the cardboard is outside of the camera’s field of view), the effect is tremendous.

To avoid this situation:

a. Avoid installing the cameras in tight corners.
b. Use wall mount brackets to offset the cameras from walls and close surfaces.
c. Try to rotate the camera as much as possible, away from background surfaces.
d. Make sure plants/vegetation are clear of the field of view. Plants leaves are highly reflective.

Dirty Domes also cause IR “bleeding” and poor images. Avoid touching the dome during the installation and try to keep the protective film on the dome unit the very end. Touching the dome cover creates grease stains/spots on the bubble, which create blur. These may not affect the daytime image but will immediately be an issue with nighttime IR images. Always clean the dome cover with a soft cloth after installation.

Commonly, the domes get covered with dust/dirt, raindrops stains, and cobwebs over time. This will cause the image quality to degrade over a period of time (“foggy condition”). Periodic cleaning of the dome cover may be required to maintain a clear image.

Figure 5

Figure 5 shows the effect of the above mentioned scenarios in a comparison with a clean dome.