

# **Installation Check List**

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## **(Read Before the Installation)**



# What you should NOT do for MVDS installation

This document describes the notes for the MVDS X-1 and BR-1 installation. Read information below carefully and check the location or direction of MVDS accordingly.

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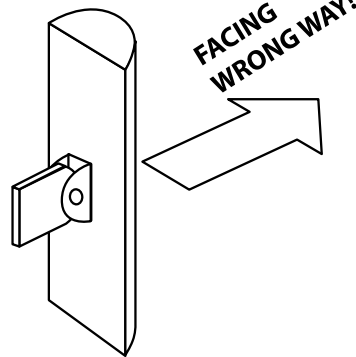
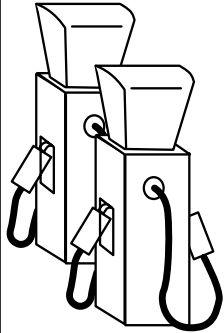
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☐ Transmitter antenna faces wrong direction.**No good!**

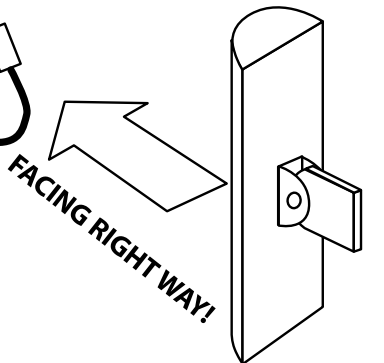
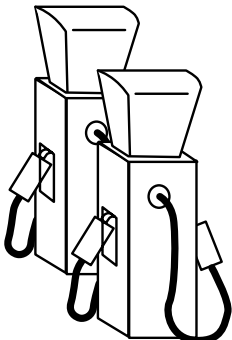
PAMP STATIONS

TRANSMITTER  
ANTENNA

The transmitter antenna (SR49120DA) is a directional type. You must install it so that the front surface is facing toward the pump stations (i.e., receivers). If you have multiple pump stations with receives, try to face to midpoint of the pump group. The transmitter antenna has about 120 degree fan-shaped horizontally coverage, so is should be able to cover in most cases.

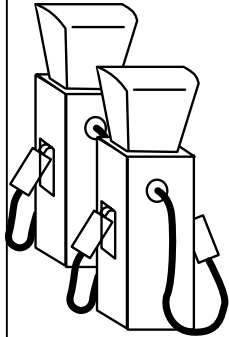
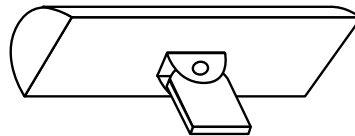
**GOOD!**

PAMP STATIONS

TRANSMITTER  
ANTENNA

☐ Transmitter antenna is placed sideways.**No good!**

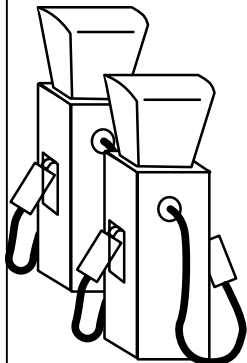
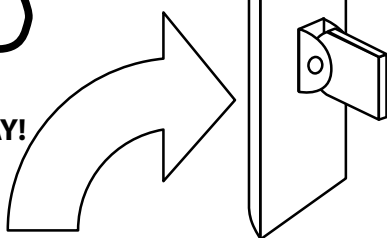
PAMP STATIONS

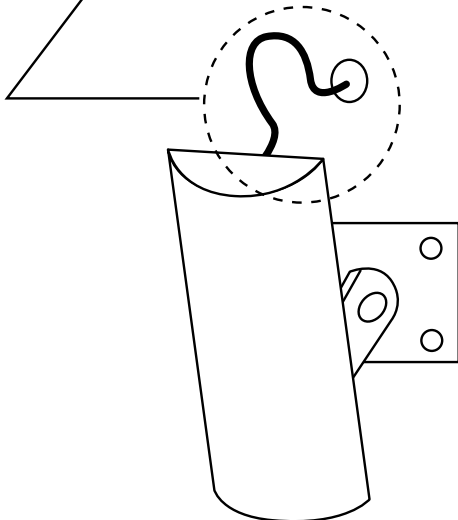
**MUST NOT BE SIDEWAY!**TRANSMITTER  
ANTENNA

The transmitter antenna (SR49120DA) has 120 degree horizontal coverage but only 20 degree vertical coverage. If you place the antenna sideways, only half of the intended performance can be utilized.

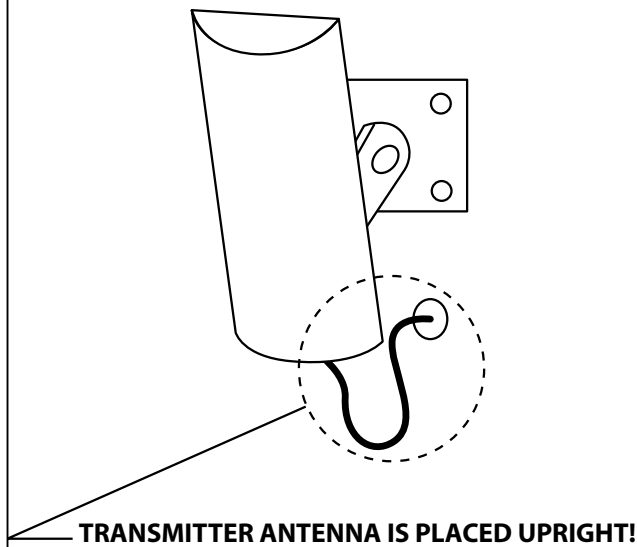
**GOOD!**

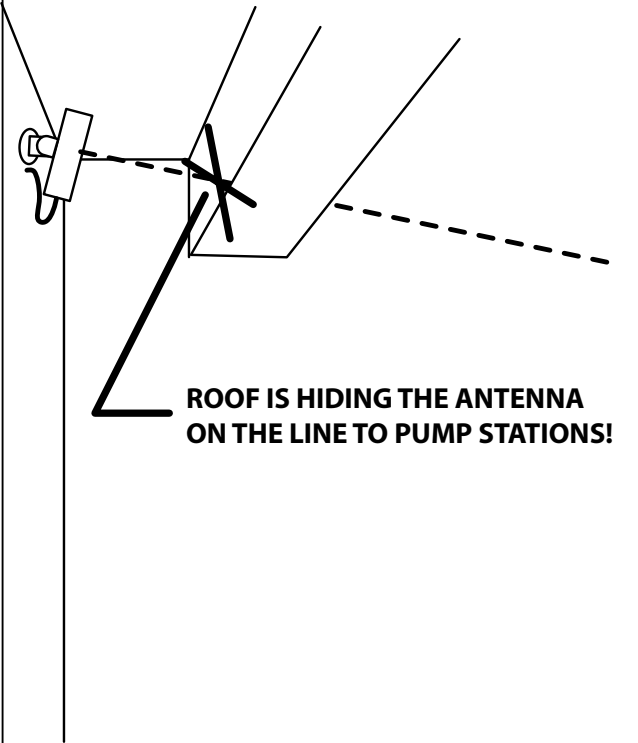
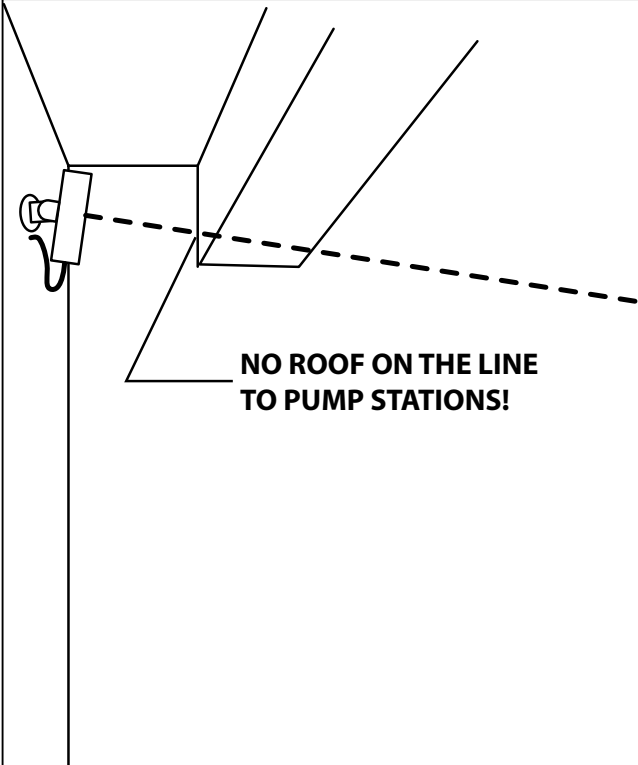
PAMP STATIONS

**BE LONGWAY!**TRANSMITTER  
ANTENNA

☐ Transmitter antenna is placed upside down.**No good!****TRANSMITTER ANTENNA IS PLACED UPSIDE DOWN!**

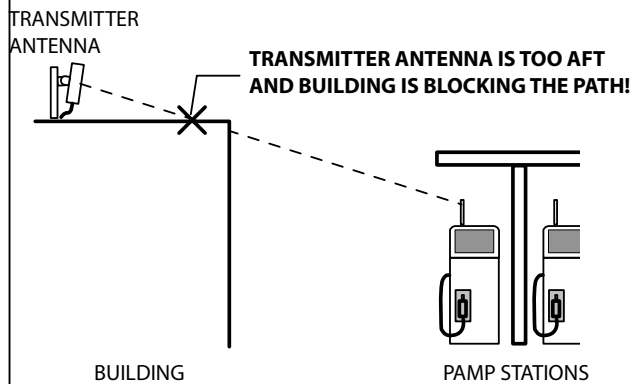
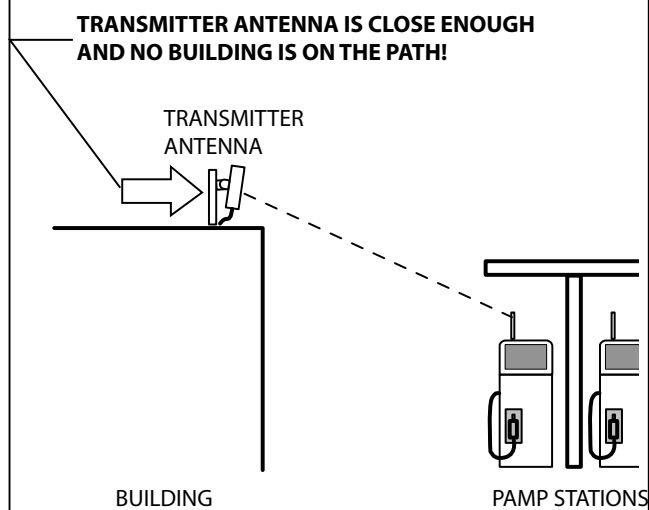
The transmitter antenna (SR49120DA) is not vertically symmetric. It is recommended to mount antenna upright (with cable pigtail underneath) in order to fully utilize antenna performance.

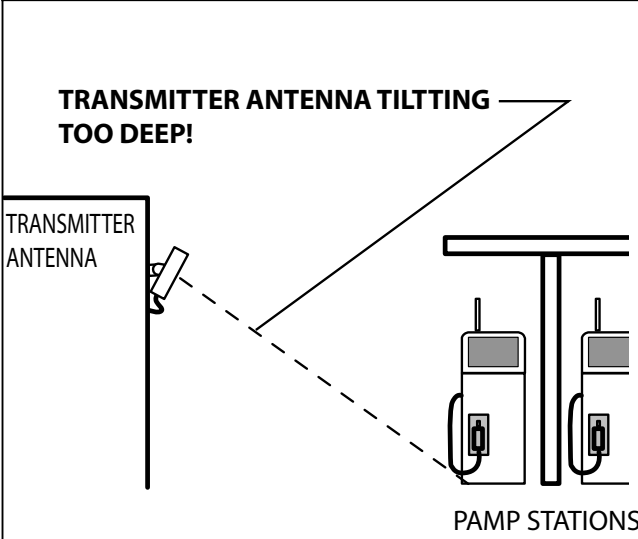
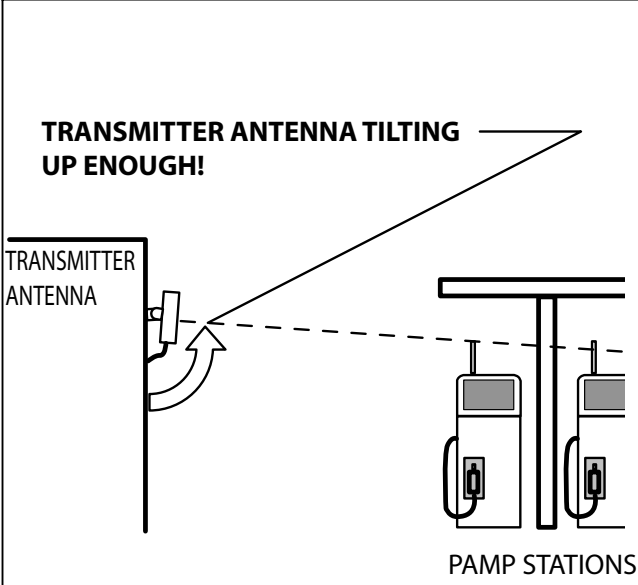
**GOOD!**

<input type="checkbox"/> Transmitter antenna is behind the roof.	
<p>No good!</p>  <p>ROOF IS HIDING THE ANTENNA ON THE LINE TO PUMP STATIONS!</p>	<p>Any obstacle between the transmitter and receiver antennas will degrade the performance. This is especially true if the obstacle is a metal or thick concrete object, such as a roof. Be careful to choose the antenna mounting location to avoid obstacles between the antennas.</p>
<p>GOOD!</p>  <p>NO ROOF ON THE LINE TO PUMP STATIONS!</p>	

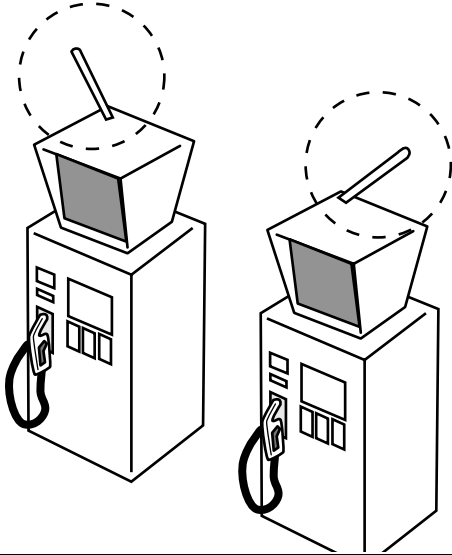
☐ Transmitter antenna is too aft.**No good!**

A too aft antenna location will also introduce an obstacle between antennas.

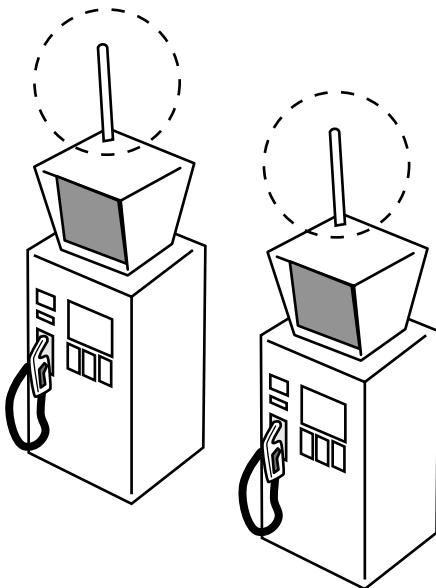
**GOOD!**

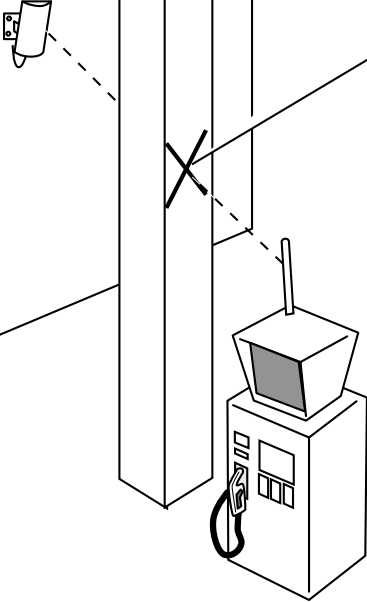
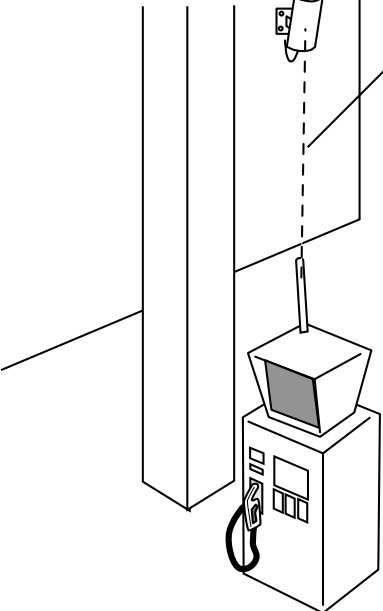
<input type="checkbox"/> Transmitter Antenna is tilted at wrong angle.	
<div>No good!</div> <div><p><b>TRANSMITTER ANTENNA TILTING TOO DEEP!</b></p><p>TRANSMITTER ANTENNA</p><p>PUMP STATIONS</p></div>	Because the transmitter antenna (SR49120DA) vertical coverage is about 20 degrees, the tilting angle must be adjusted carefully. Do not tilt down the transmitter antenna too much. The necessary angle is usually less than 10 degrees - often it is better to leave antenna straight up, rather than tilt it down by eye measurement.
<div>GOOD!</div> <div><p><b>TRANSMITTER ANTENNA TILTING UP ENOUGH!</b></p><p>TRANSMITTER ANTENNA</p><p>PUMP STATIONS</p></div>	

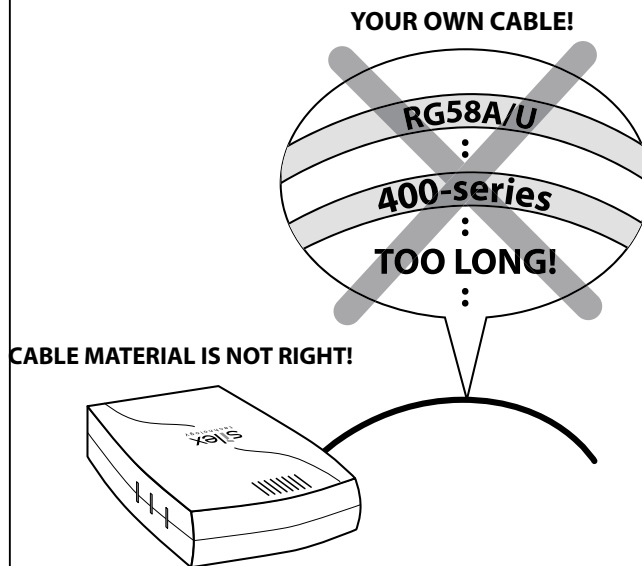


☐ Receiver antenna is not upright.**No good!****RECEIVER ANTENNA IS NOT UPRIGHT !**

The receiver antenna should be placed upright. Because the receiver antenna (HG5808U) vertical coverage is about 30 degrees, tilting it will significantly reduce its performance.

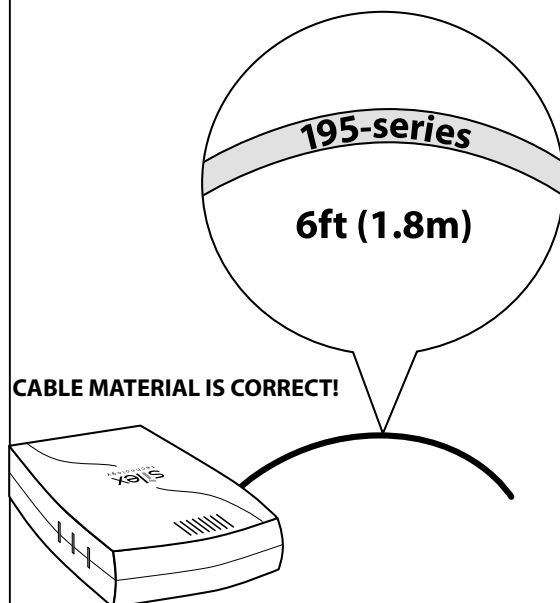
**GOOD!****RECEIVER ANTENNA IS UPRIGHT!**

<input type="checkbox"/> Receiver antenna is behind a column.	
<div><p><b>No good!</b></p><p><b>RECEIVER ANTENNA IS BEHIND A COLUMN !</b></p></div>	<p>Obstacles between the transmitter and receiver antennas will significantly interfere with the performance, especially if they are made of metal. Be careful that columns at the pump station site do not interrupt the line-of-sight to the transmitter antenna.</p>
<div><p><b>GOOD!</b></p><p><b>NO OBSTACLES BETWEEN TRANSMITTER AND RECEIVER ANTENNA!</b></p></div>	

☐ Cable material is not right.**No good!**

Use the antenna cable that came with BR-1 (6ft cable).

Other types of cables, or shorter or longer cables may cause wireless quality problems.

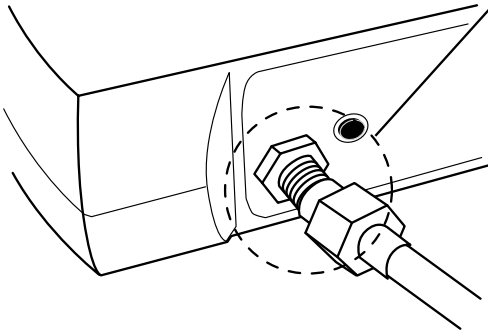
**GOOD!****THE ANTENNA CABLE THAT CAME WITH BR-1**

☐ Cable connector is screwed loosely.

No good!

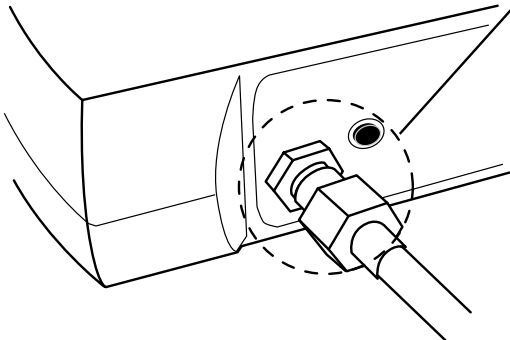
Antenna connectors should be screwed tightly.

**CABLE CONNECTOR IS SCREWED LOOSELY!**



GOOD!

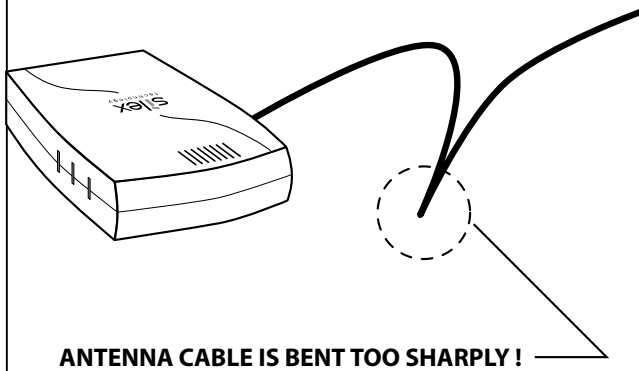
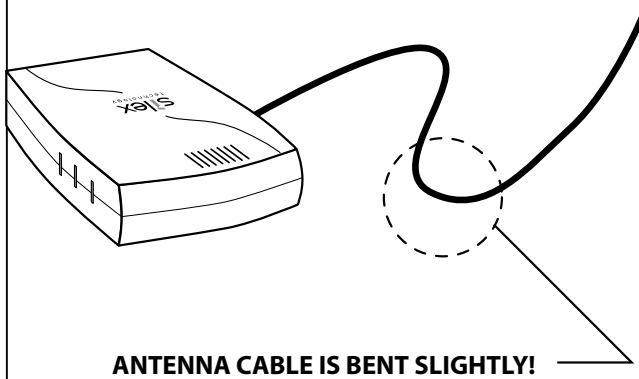
**CABLE CONNECTOR IS SCREWED TIGHTLY!**

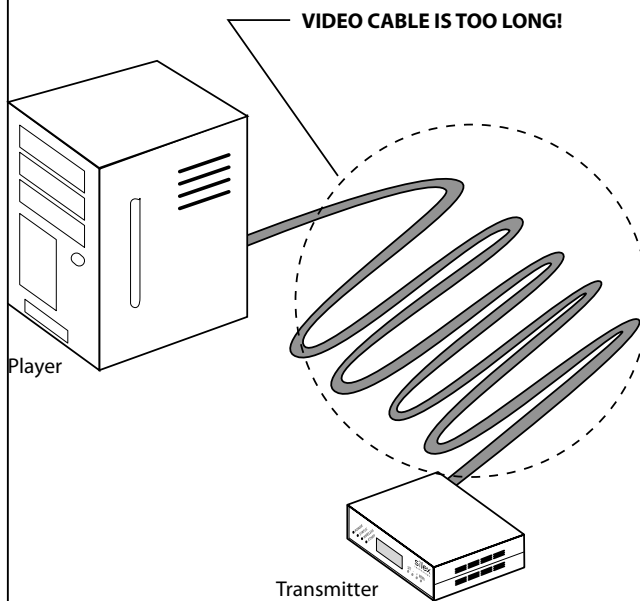


☐ Antenna cable is bent too sharply.**No good!**

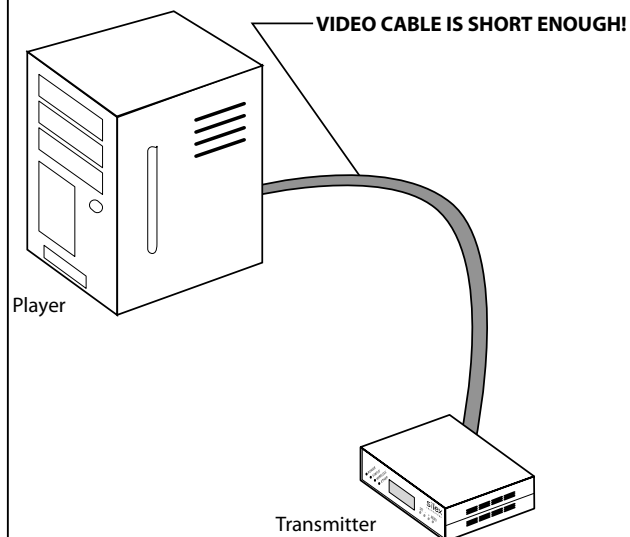
Antenna cable is precision equipment.

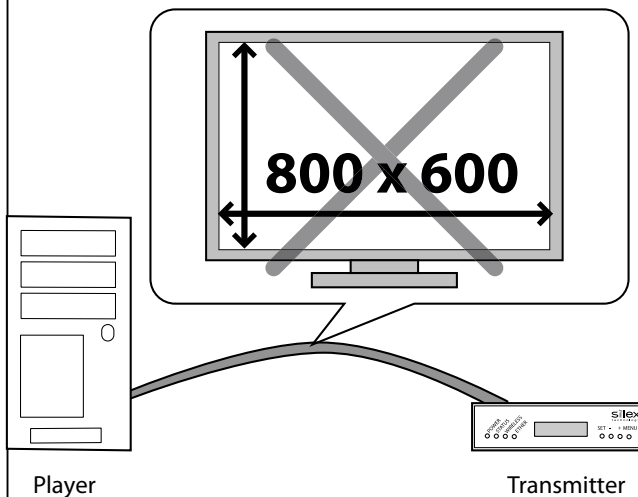
Try not to bend cable too sharply.

**GOOD!**

☐ Video cable is too long.**No good!**

The VGA cable length should be less than 15ft. Too long VGA cable (such as 50ft) will result picture quality loss.

**GOOD!**

☐ Video resolution is not right.**No good!****VIDEO RESOLUTION IS NOT RIGHT!**

The MVDS system is designed with a fixed resolution (for example, the WXGA model is fixed at 1280x768x60Hz). The image source (media player or PC) must be configured with a matching video resolution before it is connected with the MVDS transmitter.

**GOOD!****VIDEO RESOLUTION IS CORRECT!**