Understanding Networking your NVR

This is the back panel of your basic NVR IP Camera recorder.

NVRs come in many different flavors from 4, 8, 16, 32, 64, 128 and 256 camera port models.

We will use this 4 IP port NVR as an example. On a 4 port NVR. A maximum of 4 cameras can be added in a mixture of two different ways.

 Each of the 4 network ports (above left) can be used to connect an IP camera. This portion of the NVR has its own private network on 192.x.x.x. Any camera plugged in here should be set to universal Plug and Play (UPnP) The maximum range of this method is 328 feet from the NVR to the camera. We plug in a camera here as an example on Port 1 and for this example we will call it Camera 1.

Now let's say we have another camera (Camera 2) that needs to be installed further away than 328 feet. How is this problem solved?

There is also a LAN port on the NVR that can be configured to a Switch/Router/Router/Modem. The router at the beginning of this chain should be set to **pass through** to the NVR and for external access ports 80, 8000, and 8554 must be set on the NVR so the NVR and cameras can be accessed. You will need to disable UPnP on this device and for Camera 2 at the NVR which is in stark contrast from camera 1. This camera (camera2) would have to be set manually to a private IP address from a scheme of the network shared by the router and designated by onsite IT (or whoever has control over that router) so that it can communicate with the NVR. Setting UPnP on this camera (camera 2) or the Router is **NOT** advised as multiple devices using UPnP is known to cause problems and conflicts.

What you are technically doing here is rerouting Port 2 (above left) to go look out to the **LAN** port for a camera (Camera 2). Remember the example above is using 4 ports (4 cameras total) so whether you are adding cameras through ports 1-4 on the NVR itself or through a switch or router through the LAN port you are still limited to 4 cameras. The LAN connection just allows you to daisy chain from a router to another switch or set of switches and to the camera (In this example Camera 2) so you can go beyond 328 feet.

How do I set my private IP address for LAN cameras?

Once you have received a scheme or slot of IP Address for use please see the document; **SADP.pdf** on how to see and change IP addresses of attached devices. This document can be found on our FTP.