

## KRAMER NETWORK 1.0 Installation Prerequisites

This document describes the **KRAMER NETWORK** 1.0 software installation requirements.

### Server Hardware Spec

The server hardware spec encompasses the following:

For a small system including up to 30 streaming devices and up to 30 controlled devices:

- CPU i5, 8GB RAM, 100GB Disk-space

For a medium system, up to 100 streaming devices and up to 100 controlled devices:

- CPU i7, 16GB RAM, 100GB Disk-space

### Server OS Language

English

### Server Operation System

**KRAMER NETWORK** 1.0 supports the following standard or virtual server operating systems:

- Windows 7 Pro / Enterprise, 64 bit, fresh install
- Windows 10 Pro / Enterprise, 64 bit, fresh install
- Windows Server 2008
- Windows Server 2012

In order for **KRAMER NETWORK** to recognize KDS-EN3 and KDS-DEC3 encoders and decoders, set the UPnP service and the SSDP Discovery service Startup Type to Automatic and verify that the Status of each service is Started.

### Server Firewall Ports

If you are using a firewall or an anti-virus application on the server make sure that the following ports are opened:



**For Dante:**

- UDP port 319, 320 PTP (address: 224.0.0.129-132)
- UDP port 5353 mDNS (address: 224.0.0.251)
- UDP port 8700 – 8708 Control and monitoring (address: 224.0.0.230 – 232)

**For Dante and KDS-3 auto-discovery:**

- UDP port 5353 for the Bonjour/multicast DNS (mDNS) protocol

**For Web Socket/Client:**

- TCP Port 9000

**For Kramer Pro AV (Matrices, Scalers, and so on):**

- TCP Port 5000
- UDP Port 50000

**Ports in use for Room Control:**

- TCP Port: 4000-5000 (range)

**For internal use:**

- TCP Port: 3333-3334

Note: These ports are not included by-default in the firewall rules, and may therefore be blocked.