



TECH NOTE

VICON TECHNICAL SERVICES GROUP

Subject: Kollektor FAQ
Product: All Kollektor series
Number: 1400-0001-26-00
Date: 12/3/01

Kollektor FAQ

Q: What is the daily hard drive usage of a Kollektor?

A: KOL3000 series, 4000 series and 8000 series will use about 1 GB a day

KOL9000 series will use about 3 GB a day

KOL7000 series will use about 10 GB a day

*Note these are basic averages that are directly affected by scene movement. Increased movement will directly increase file sizes.

Q: Are there any controls to maximize the bandwidth on the Kollektor Series device?

A: The LAN Master Software (LMSW) station sends a request to the networked Kollektor and establishes a dialog.

The amount of bandwidth used is dependant on:

- a. The amount of information being transmitted
- b. The available bandwidth of the network

All network devices will try to use the maximum bandwidth available. Since the networked Kollektor has a 10baseT card and there is no other traffic, then the available bandwidth is 10Mbps. However, data for 16 cameras from a KOL4000 to the LAN Master Software (LMSW) station is usually between 1-3Mbps, so it only uses that much. A KOL7000 could use up to 10Mbps max. Very little bandwidth with no motion, no bandwidth if not connected.

Q: How does the Kollektor talk to the LAN Master Software (LMSW) station when viewing? Does each camera send video or do all active cameras get sent together?

A: Each window on the LAN Master Software (LMSW) station can be described as a channel. Each channel transmits a packet of information, in a First In/First Out (FIFO) sequence.

Q: Is the Bandwidth between LAN Master Software (LMSW) station and the Kollektor a function of the number of video scenes being viewed at one time? If so what is the Bandwidth requirements per video scene?

A: Yes. The bandwidth per channel (up to 24 video scenes per LAN Master Software (LMSW) station) is variable based on change in scene. The compression medium we use records and transmits changes in the scene. **Zero change in the scene equals almost zero bandwidth. Greater change in scene equals greater increase in bandwidth.** This changes constantly along each channel, many times per second. A good rule of thumb would be to say the LAN Master Software (LMSW) station uses between 3-5Mbps when operating 24 channels. (2 Kollektors with various channel mix) This divides out to 0.21Mbps per channel if all the channels are at greatest demand when used with a KOL4000 series unit.

Q: Does the KOL7000 series have any better through put (Bandwidth/ Frame Rates to the remote clients on the network than the Kollektor 4000 or KOL9000 series)? What would the maximum monitoring refresh rate be on a moving object at max resolution?

A: The KOL7000 has 4 video inputs that each record at a 30fps. Remember that the required bandwidth is dictated by amount of change between frames on each camera. So a KOL7000 series, having more frames per second, would use more bandwidth.

Q: Can the Bandwidth be increased to allow for more information (Frame Rates)? Will this capability change if the user selects a 10Mbps or 100Mbps network card?

A: The KOL3000 & 4000 series hardware is limited to the 21 fps divided by up to 16 cameras. The required bandwidth is dictated by amount of change between frames on each camera. The KOL9000 series hardware is limited to the 60 fps divided into 15fps available for 4 cameras. These 4 cameras can share the available 15fps (12-1-1-1 or 4-4-4-3 or 6-6-2-1, etc..)The required bandwidth is dictated by amount of change between frames on each camera.

Q: Is there any way for the event logs to be set up so the most recent events are on top of this list instead of the bottom for easier notification and search?

A: Nothing in the event logs can be re-arranged chronologically or alphabetically.

Q: Could we develop an interface that could send an ASCII string in RS232 format to write text on certain cameras?

A: An interface to access control has been proposed but is not in development at this time.

Q: When playing back in reverse, must the unit stop at the top of every hour with customer needing to reverse or advance to the next hour before continuing?

A: It must stop...we don't have the ability to "play" video on the fly..(Streaming) at this moment..We upload it to RAM in 1-hour groups.

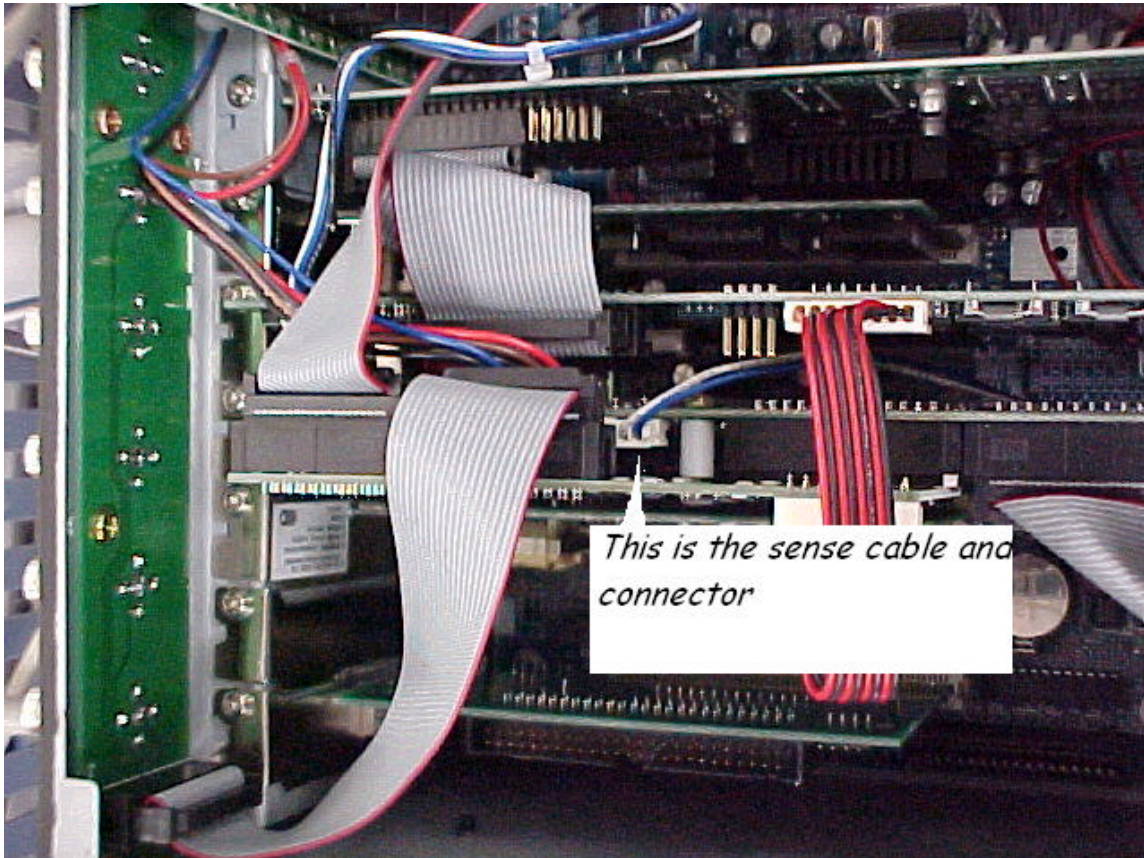
Q: When connecting to the KOL4000 & 7000 series via DSL line..... What kind of modem is required (there are different kinds of DSL modems that can be dictated and supplied by the provider)? How do you connect a modem to a Kollektor unit with 56K modem? What bandwidth will be available? What frame rate can dealer or customer expect?

A: DSL Modems offer an Ethernet connection 10/100-base/T depending on the model. Kollektor comes with internal POTS modem. DSL ranges in bandwidth (typical bandwidth is up to 128kbps download and 56k upload) and is generally not guaranteed. If you estimate 1-3Mbps for 16 cameras and the math shows major slow downs. Better to transfer a file and play locally if smooth activity is desired.

Q: Can we set up PTZ presets & tours through LAN Master Software (LMSW)?

A: All features and functions of the PTZ device must be accessed locally thru the Kollektor at the present time. This ability is being developed for remote control stations (LAN Master Software (LMSW) station).

Q: A customer wants to use a regular mouse on their Kollector with monitor connected. How do you get the regular mouse to work with the mouse in the house still in the house?? Is there a switch we can disconnect so that the GUI will come up with the sliding shelf still in the Kollector unit?



Notice the blue and white cable dead center of this picture—you would unplug the cable from the connector and short the 2 pins on the connector of the circuit board together. This will disable the sense circuit that detects whether the mouse is “home” or not.

A: The internal mouse is connected thru a standard PS2 connector on the back of the KOL; you could substitute your mouse here.

Q: Is there a priority level available for PTZ domes on a Kollektor? If two people are looking at a Kollektor remotely and trying to PTZ the same dome, what happens?

A: First person in will lock out all others until released.

Q: Whom do we need to contact if we wish another NIC card to be installed? One application might require a 100baseT and another installation might require a 100BaseFX (Fiber with ST connectors).

A: Currently there are no in the field modifications available. We can investigate costs involved with special order units or units coming back for NIC card upgrades. Contact your Vicon sales representative for further investigation.

Q: Software Copies of the LAN Master Software. Is there a possibility to purchase a site license for the LAN Master Software (LMSW)?

A: The site licensing issue is directly tied to the software lock (dongle) that comes with each LAN Master Software (LMSW) or LMSW-ADD. This is a piracy protection tool and additional security since the software cannot be run without the key. This key plugs into your Parallel port and must be present for the software to run.

Q: How do we save the recorded images to a transportable file type such as *.AVI for video clips? The ability to save clips as video clips would go a long way.

A: No, the video files recorded by the Kollektor are in a protected, proprietary format. Video Authentication is built in to the video to ensure the video is not modified and is admissible in court. This means that you must use the Kollektor viewer program to play the video files. Video can be transported in one of two ways. A CD-RW or DVD can be connected to any Kollektor via SCSI or USB port. The viewing software is exported automatically, or the video can be downloaded and manually copied with the viewer to CD-RW or DVD using the LAN Master Software (LMSW). The Viewer is supplied at no charge (shareware).

Q: Do you have a plug in for MS Media Play for viewing video clips?

A: No. The video files recorded by the Kollektor in a protected, proprietary format. If you change the format to AVI it would be inadmissible in court since AVI is a standard that is easy to modify. Video Authentication is built in to the video to ensure the video is not modified and is admissible in court. All this means is that you must use our program to play the video files. Video can be transported in one of two ways. A CD-R can be connected to the KOL4000 and video with the viewing software is exported automatically, or the video can be downloaded and manually copied with the viewer to CD-R using the KOL5000. The Viewer is supplied at no charge (shareware).

Q: Can the security and Access accounts/groups from a local NT Domain be used to allow access to the Kollektor System?

A: The Kollektor will only respond to video playback, live video or file copy requests from the LAN Master Software (LMSW). No other requests are acknowledged from any other software. The Kollektor can be seen and Pinged on the network, but file access is restricted.

Q: What Operating System (OS) is running on the Kollektor?

A: Windows98. Although, the OS is neither visible nor accessible on the Kollektor, we are presently migrating to Windows 2000.

Q: Can you break out of the Kollektor to install new devices? (...CD RW, additional networks cards, ...)

A: No, Vicon recommends network card upgrades be performed at an authorized Vicon service center. There is no space inside the unit for CDR/CDR-W/DVD.... However, there is a SCSI/USB interface port for up to 6 specific models of DVD, CD-R, CD-RW SCSI/USB Hard drive if needed.

Q: Can you control the Kollektor without the mouse board being out? Example if we put a Keyboard, Mouse and Video extender can we control the Kollektor with some special keys.

A: Yes. You can remote the mouse. The internal mouse is plugged into its PS2 port on the back of the KOL; connect your external mouse or the KVM switch to the back of the unit.

Q: Does the Kollektor have the ability to send notification of an alarm to the LAN Master Software (LMSW) station?

A: Yes, the KOL can be programmed to notify certain LAN Master Software (LMSW) stations based on their IP address. The listed LMSW units would show the alarmed camera video on the first available window, subsequent alarm video would show on the next available window.

Q: Does Vicon offer a software developers kit for custom apps?

A: We presently offer an ActiveX software development kit and the KOL-WASW (Web Agent software). This is an HTML format web browser that can be incorporated into custom applications.

Q: How much administration capability does the Kollektor have?

A: Only the options found in the setup screens. These are primarily Network IP related, Internet Gateway access, POTs line access, and the like and normal operation/function setup. Remote configuration will be available in early 2003.

Q: After capturing a still image from the Kollektor's software, can the image be processed or enhanced before exporting to improve quality of the image?

A: The image can be altered before actually printing (we do more of a print screen function) if you zoom in on a picture, we will print the zoomed image, if you adjust grayscale or contrast or brightness, we print the adjusted image...

B: Copying (to floppy): comes right from the hard drive...there are plenty of shareware programs that allow you to "play" with the picture, but we keep the "file" itself unchangeable.

C: Copying (to CD-RW, DVD): also comes right from the hard drive, but can only be viewed with the viewer software and the displayed image can be altered, but again, the file itself is left unchanged...

Q: UTP video transmission (such as Vicon's V500NVT, V1000NVT, etc...or NVT products) combined with Kollektor and most other digital products produce bright or washed out pictures, poor color or no color...

The video all looks perfect on a (analog) monitor. But when viewed off a digital product, it is poor...

A: Please refer to Tech Note ***Kollektor, A2K & Digital video products with NVT (1400-0001-27-00)***

Q: How do I Find the MAC address of a network card?

A: On Windows NT4/2000 machines

Start a command prompt, then run:

ipconfig /all

The MAC address can be found under the section "Physical Address".

B: On Windows 95/98 machines

Run the command:

winipcfg

The MAC address can be found under the section "Adapter Address".

You will have to contact Vicon tech support to gain access to a DOS prompt.

Q: What PTZ devices can the KOL control?

A: The current PTZ list contains:

Vicon - V1311RB-3W, Surveyor99, Surveyor2000

VCLTP Protocol

SungJin Elecomm - CCR-07PS, SJ3728R1

Samsung Aerospac - SRX_100A, SAD800

Star Micronics - MD-2000 Series, INV_T2605RX

Samsung TECHWIN- SPD_1600

Panasonic - WV-CS854

Pelco - D protocol, P protocol

Network Korea - AtEye

NK-97CH/CHE

LiLin - PIH717RX, PIH820RX

LG - Zoom Camera (GC455NK), GRU1604A RX

Kenko - DMP15HI

Javelin - J0308ACU

Fine Elecomm - CRR1600I RX

DynaColor - D7720

Diamond - SmartScan

Chilsung Elecomm - CRD6416 & CRX64A RX

Q: What are options for storage on external (local) devices?

A: External SCSI

-HP cd-writer 9200se 8X Write / 4X Rewrite / 32X Read

- HP cd-writer 9600se 12X/8X/32X

-Plextor PX-W1210TSE/SW 12X/10X/32X

-Yamaha CRW 2100 SZ 16X/10X/40X

-We are presently supporting SCSI RAID devices also

External USB

- HP cd-writer 8210e 4X/4X/6X

- HP cd-writer 8220e 4X/4X/6X

- HP cd-writer 8230e 4X/4X/6X

Q: What are options for storage on external (remote) devices?

A: We have the capability to support RAID devices over a LAN.

Raid levels 0,1 and 5 are supported.

RAID Level 0 is like DAT Tape, You lose a tape (or a Hard drive) and you lose all the data. It offers High-speed access and no fault tolerance.

RAID level 1 offers slow/med access and 100% copy of data.

RAID level 5 stores multiple copies of the same data across many hard drives. It offers slow/med access and you can lose up to 1 HDD and not lose any video.

Q: The titling in my LMSW display changes back and forth from Green to yellow, why?

A: This color change can be interpreted 2 ways..

First, the text is green when there is no activity in the scene being viewed and yellow when there is motion. Secondly, since the KOL does not record if there is no motion (dependant on the sensitivity setting) the yellow can be indicative of the fact that the camera is being recording to the hard drive at that time. Green indicates that video from that camera is not presently being stored on the hard drive.

Q: Can I use this the programming for Internet connection there is the option for selecting DHCP?

A: DHCP (Dynamic Host Configuration Protocol) is a [protocol](#) for assigning [dynamic IP addresses](#) to devices on a [network](#). With dynamic addressing, a device can have a different IP address every time it connects to the network. In some systems, the device's IP address can even change while it is still connected. We do not support this option because the LMSW requires a static (unchanging) IP address to maintain security of the transmitted video.

Q: Can I use this the programming for Internet connection there is the option for selecting DNS?

A: DNS (Domain Name Service), is an [Internet](#) service that translates [domain names](#) into IP addresses. Because domain names are alphabetic, they're easier to remember. The Internet however, is really based on [IP addresses](#). Every time you use a domain name, therefore, a DNS service must translate the name into the corresponding IP address. While the KOL products do support DNS, it is not typically used in a LAN configuration.