Observer
Quick Start Guide

Release 7.2

QSG-7.2

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Contents

1   INTRODUCTION

Congratulations on your Volicon Observer system purchase! The following information will help guide you through the initial Observer system setup. This Quick Start Guide walks you through the fundamental stages of setting up your Observer:

Unpacking: Be sure and unpack your Observer system and check for damage. Report any damage to Volicon and to the shipping company. Check the contents of the packages agains the shipping list.

Documentation: Look for the Documentation CD. It includes the administrator and user guides you will need to successfully deploy, configure and use your Volicon Observer system.

Site Preparations and System Login: Prepare your site for installing the Observer according to the instructions in the "Installation Planning", "Media Connectivity" and "Initial Configuration" sections of this guide.

Observer System Connectivity: Be sure to configure your Observer IP addresses according to your network addressing scheme.   See Chapter 6 "Initial Configuration" **@**0, section of this guide for more details on connecting your Observer.

2 UNPACKING

Carefully unpack the equipment and inspect for any visible damage that occurred during shipping. Report any such damage to the shipping company and to Volicon.

Examine the contents of the package and compare it with the items listed on the enclosed "Contents" sheet.

Locate the "Restore Disk", "Documentation CD" and other reference materials and store them in a safe place.

Save the packaging material in case you should need to return the equipment to Volicon in the future.

2.1 Documentation

The enclosed Documentation CD includes the following:

1. **Observer Admin Guide** – For both Observer and RPM system administrators. Please read this document first to set up the Observer system.

2. **Observer Site Prep Guide** – How to prepare the site for physical and network configuration.

3. **Observer RPM Admin Guide** – For Observer RPM system administrators.

4. **Observer User Manual** – Explains the web client interface for end users and system administrators. See the "Getting Started" section for the initial setup of your client PC.

5. **Observer RPM User Manual** – For Observer RPM end users.

6. **Observer TS Admin Guide** – For Observer TS system administrators.

7. **CMM User Manual** – For Content Matching Module end users.

8. **Content Export User Manual** – For end users of the Content Export module, also called the Producer.

9. **Observer Release Notes XX.XX** – Covers all the Observer related products

3 INSTALLATION PLANNING

3.1 Mounting, power, basic connections

Place the chassis in a standard 19-inch rack. Follow your rack manufacturer's mounting instructions for safe and stable mounting. If your 19" rack is not large enough, the Observer ships with a converter kit in the box. If your power supply has a 110/220 switch, make sure to set it to the proper voltage (120/220VAC, 50/60 Hz). Observer server power consumption specifications should be checked for the particular systems used.

Attach a dedicated keyboard, video, and mouse, so that during urgent service there is no delay in logging into the Observer. Alternatively, attach a KVM and a network cable to the rear of the machine to provide you with instant remote access. See the Observer Site Prep Guide for more details.

3.2 Power and Physical Rack Space for Servers

Plan for your rack space and cooling requirements by creating a table similar to the one below. List your servers and related site equipment. Include a one Client PC or laptop dedicated for use with the servers. We also recommend using a UPS, as unexpected shutdowns can cause harm to system operation.

Server/Equipment part number	Description	Power	Rack Space High Multiples of 1U, (1.74 inch, 44.45 mm)
2x 4-ANL-3U-090	Observer 2 Channel Analog	2x760 W	2x3U
1U-WEB/SQL		700 W	1U
1x Client PC		400 W	
…			

Total		2620 W	7U

Figure: Example Power Demand Table

3.2.1 Power Circuit Distribution

Depending on which model of Volicon system you purchased, your Volicon server ships with dual power supplies. We recommend that you connect each power supply to a different/separate circuit. With this configuration, in the event that one circuit fails, the failing circuit will not cause total power loss to the system.

3.2.2 Total Power

Add the power requirements of all other onsite equipment to obtain the total power requirements.

3.2.3 Room Air conditioning

Ensure your wiring closed has sufficient cooling to handle the total power (Watts) of heat dissipated by the servers and your other onsite equipment as computed above.

3.2.4   Shelves for the STBs

If you purchased Observer STB or the Observer RPM S, we advise using Volicon shelf assembly's 19 inch racks (482.6 mm) to store any Set Top Boxes delivering video and audio to the Observer server. The Shelves are only used with Observer RPM and Observer STB, and provide solid installation and good IR shielding. Locate the shelves close to the Observer server to reduce cable lengths. As an example see the STB shelf shown below. It fits in a 19 inch rack 2U high.
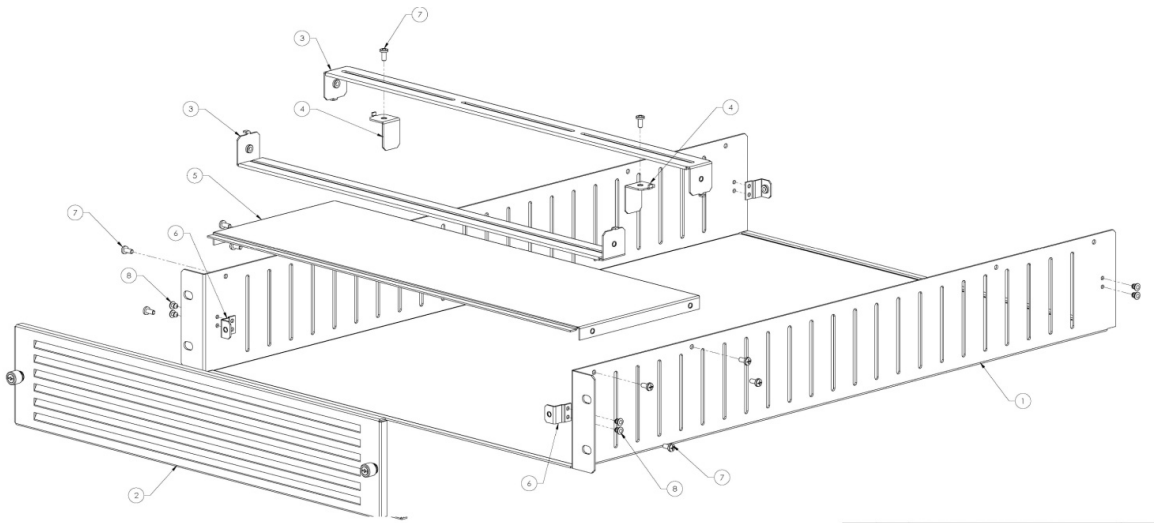
Figure: Set Top Box Mounting Shelf

3.3   Power ON, shutdown

After powering up the Observer server, wait for the login screen to appear. If you are logging into the system for the first time, consult Chapter 6: Initial Configuration or contact the Volicon support team.

After power-up, the Observer's facilities run as services (configured by default) and do not require your input.

To shutdown, use the Start → Shutdown menu sequence. To restart use the Start → Restart menu sequence. **Do not unplug the power cord** so as not to impact the database. (Its re-indexing might require help from the Volicon support group). If for some reason the main Windows server console screen is not accessible, use the front panel button to perform the shutdown or restart.

We recommend connecting the Observer's systems to a UPS or a similar high availability power supply.

3.3.1   Observer Front Panel Indicators

There are several LEDs on the control panel and others on the drive carriers to keep you informed of the overall status of the system and the activity and health of specific components. The chassis control panel includes a reset button and an on/off switch. This chapter explains the meanings of the LED indicators and the appropriate responses.
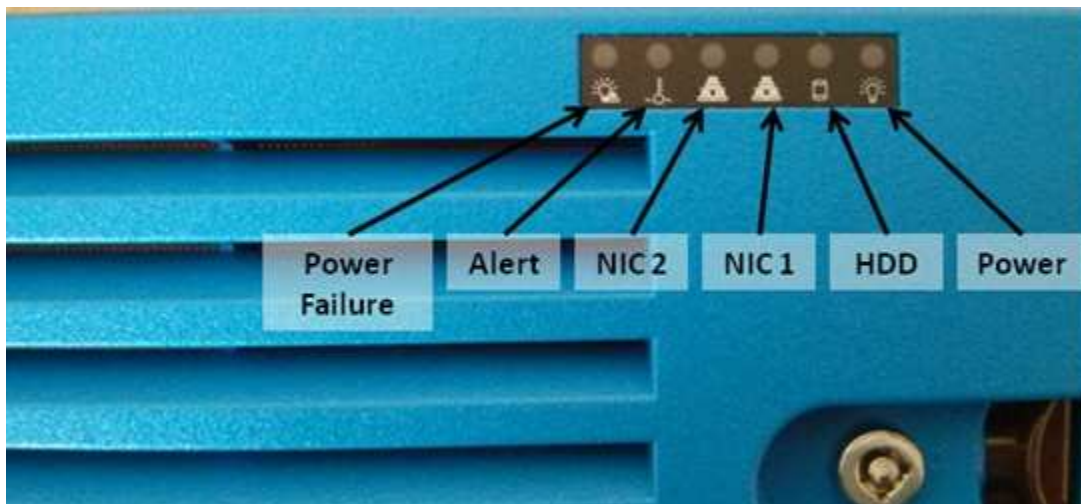
Figure: Observer Front Panel Indicators

Buttons:

- **Reset:** The reset button is used to reboot the system, and is underneath the cover.
- **Power:** The main power switch controls power from the power supply to the server system. Turning off system power with this button removes the main power but continues standby power to the system. Therefore, you must unplug the system before servicing it. The Power button is underneath the cover.

LEDs:

- **Power Failure:** When this LED flashes, it indicates a power failure in the power supply.
- **Alert:** This LED is illuminated when an alert condition occurs. See the table below for details.

Status	Description
Continuously on and red	An overheat condition has occurred. (This may be caused by cable congestion)
Blinking red (1Hz)	Fan failure, check for an inoperative fan.
Blinking red (0.25Hz)	Power failure, check for a non-operational power supply
Solid blue	Local UID has been activated. Use this function to locate the server in a rack mount environment.
Blinking blue	Remote UID is on. Use this function to identify the server from a remote location.

- **NIC2:** Indicates network activity on LAN2 when flashing
- **NIC1:** Indicates network activity on LAN1 when flashing
- **HDD:** Indicates IDE channel activity. SAS/SATA drive and/or DVD-ROM drive activity when flashing.
- **Power:** Indicates power is being supplied to the system's power supply units. This LED should normally be illuminated when the system is operating.

3.3.2   Observer Enterprise Chassis SDI Connections

The SDI-SD/HD connections on the Observer Enterprise Chassis are located on the back panel.

IPMI	USB	Main		SDI In	SDI In
RJ-45		Network		ENC1	ENC2
		RJ-45		BNC	
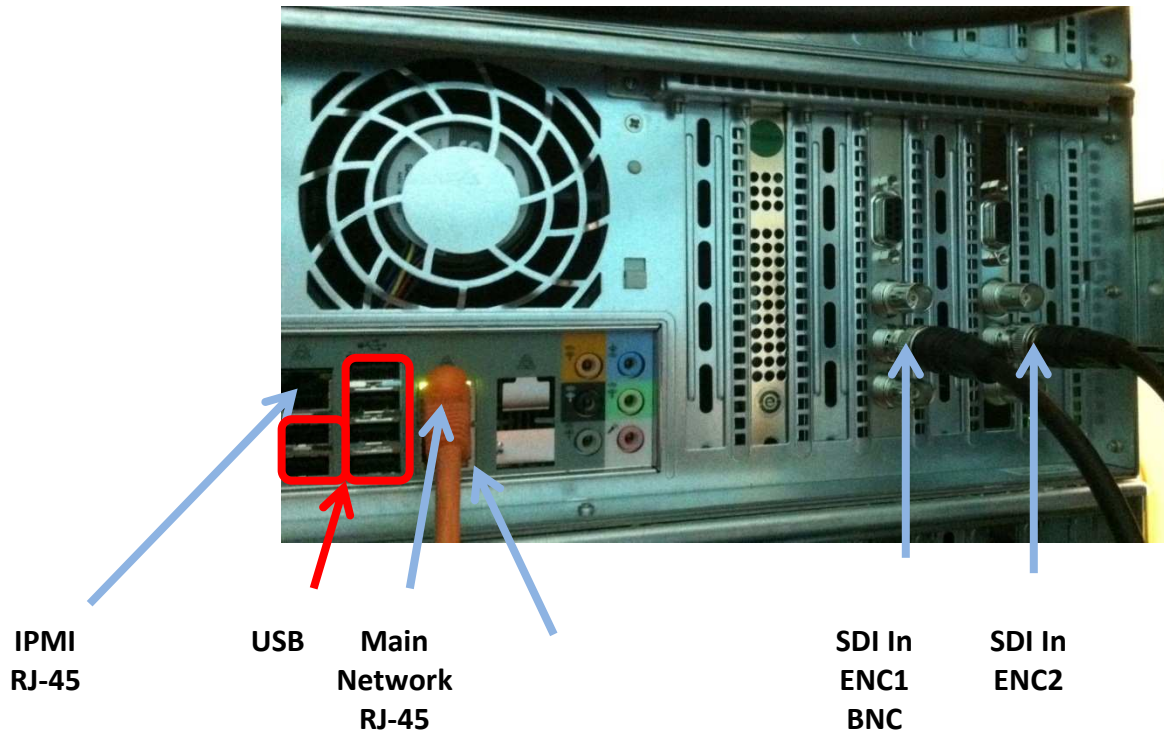
4 SDI-SD/HD SYSTEM INTERCONNECT

Serial digital interface (SDI) is a family of digital video interfaces first standardized by SMPTE (The Society of Motion Picture and Television Engineers) in 1989. For example, ITU-R BT.656 and SMPTE 259M define digital video interfaces used for broadcast-grade video. A related standard, known as **high-definition serial digital interface** (HD-SDI), is standardized in SMPTE 292M; this provides a nominal data rate of 1.485 Gbit/s.

Dual link HD-SDI and consisting essentially of a pair of SMPTE 292M links, was standardized in SMPTE 372M in 1998; this provides a nominal 2.970 Gbit/s interface used in applications (such as digital cinema or HDTV 1080P) that require greater fidelity and resolution than standard HDTV can provide. A more recent interface, **3G-SDI**, consisting of a single 2.970 Gbit/s serial link, is standardized in SMPTE 424M that will replace the dual link HD-SDI.

These standards are used for transmission of uncompressed, unencrypted digital video signals (optionally including embedded audio and time code) within television facilities; they can also be used for packetized data

All interfaces for SDI are Bayonet Neill-Concelman (BNC) connectors or mini-BNC connectors.

4.1 Dolby Digital 5.1 Support

Dolby Digital is supported in Observer release 5.5 and above. It uses AC-3 encoding to support sample rates up to 48 kHz. Select the AC3 audio profile to setup Dolby Digital on a Blackmagic SD encoder card.

5 PHYSICAL INPUTS

The Observer supports multiple physical inputs: SDI, HDMI, Composite, Component, S-Video, IP, ASI, 8VSB, DVB-T/S, and QAM. A complete list of supported capture cards is provided below.

5.0 BlackMagic Decklink Quad SDI

The Blackmagic DeckLink Quad SDI card operates as four independent SDI capture and playback cards in one. It includes four SDI inputs and four SDI outputs that can be independently switched between SD and HD video formats, as well as a common black burst/tri-sync input for all four channels. The DeckLink Quad appears as four independent SDI cards to the computer, but only uses a single PCI Express slot.

The DeckLink Quad includes a built in watchdog timer under API control with bypass relays for a robust broadcast solution that automatically switches to bypass if power is lost, or software crashes. Each SDI input and output can be a different video standard as they are all completely independent.

Figure: Blackmagic Decklink Quad SDI-SD/HD

Connections are made to the SDI inputs as shown.
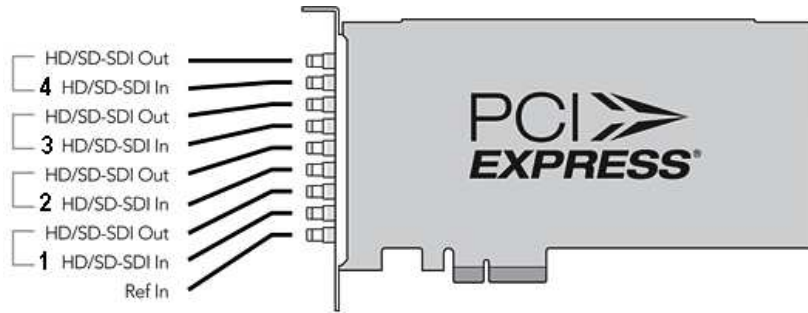
Figure: Decklink Quad SDI-SD/HD Connector Diagram

5.0.1   Breakout Cable BNC to Mini BNC Adapter

You will need a British Naval Connector (BNC) to Mini BNC Connector breakout cable to use the Decklink Quad SDI-SD/HD card. The cable is pictured below.

Figure: BNC to Mini BNC Adapter Cable

5.1   Blackmagic Decklink SDI 4K

The Blackmagic DeckLink SDI 4K is a single SDI card that is perfect when you need an SDI only solution but demand the highest quality SDI capture and playback. It supports 6G-SDI and is a multi rate SD/HD and Ultra HD SDI video card that lets you connect to any SD, HD-SDI, 2K and Ultra HD equipment. It provides RS422 deck control, internal keying and reference input.

Figure: Blackmagic Decklink SDI 4K

Connections are made per the diagram below.
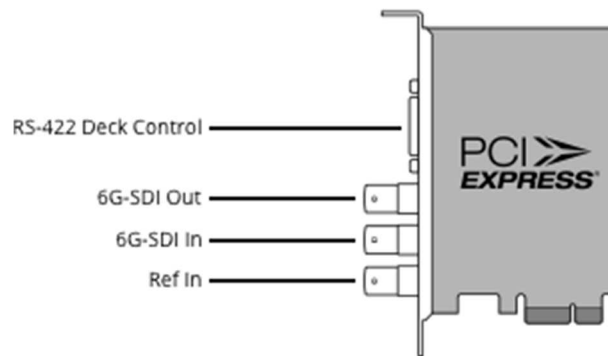
Diagram: Blackmagic Decklink SDI 4K Connections

Connect the SDI Source (from deck) with coax M to the Blackmagic Decklink SDI card's BNC connector Input.

5.2 Blackmagic Intensity Pro

The Intensity Pro is a high definition capture card, used for Composite, Component, S-Video, and HDMI physical connections. It offers HDMI and analog component, NTSC/PAL and S-Video PCIe capture and playback, and works with uncompressed SD or HD video.

Figure: Blackmagic Intensity Pro

Connections are made to the Intensity Pro as shown below:

Figure: Blackmagic Intensity Pro Connections

The Intensity Pro requires a breakout cable, pictured below.

Figure: Breakout Cable Component, Composite and S-Video (Volicon)

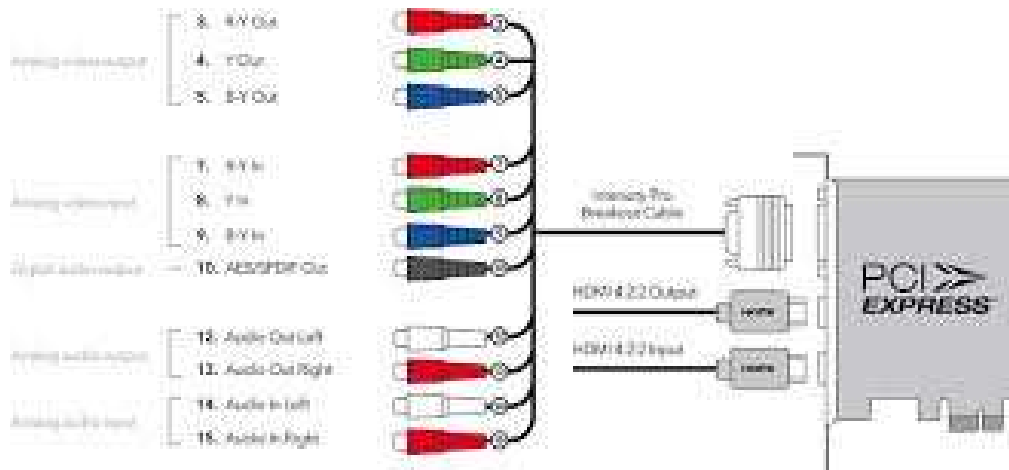The breakout cable includes Component video leads (R, G, B connectors), Composite leads (G, B connectors), audio (R, W) and the S-Video cable. *For Composite video the blue and green leads are shared with the Component video, since the card is configured only for one of the two video modes at a time. See details in the table below:*

Source Type (Common color)	Intensity Pro (Connector color)	Label
S-Video	(Black)	S-Video
Audio (White)	(White)	14 AUDIO IN LEFT
Audio (Red)	(Red)	15 AUDIO IN RIGHT
Component RGB. (Blue)	(Blue)	9 B-YIN
Component RGB, (Green)	(Green)	8 YIN
Component RGB, (Red)	(Red)	7 R-YIN
Composite video signal, (Yellow)	(Green) same connector as above	8 YIN

Table: Intensity Pro Connector Values

5.3   Blackmagic 4K HD Extreme

The Blackmagic 4K Extreme card is a 3g SDI card that offers 4 times the resolution of 1080 HD with full Ultra HD 4K capture and playback using 6G-SDI and HDMI 4K support. The DeckLink 4K Extreme includes single and dual channel SDI connections for regular 2D and 3D stereoscopic workflows as well as full resolution color RGB 4:4:4 capture and playback. It includes dual link 6G-SDI, HDMI 3D/4K and analog component, composite, S-video connections. As well as AES and analog balanced audio, 16 channel SDI audio, genlock, deck control, broadcast quality up, down and cross conversion, plus a built in SD/HD internal keyer.

Figure:Blackmagic 4K HD Extreme

Connections are made to the inputs as shown.
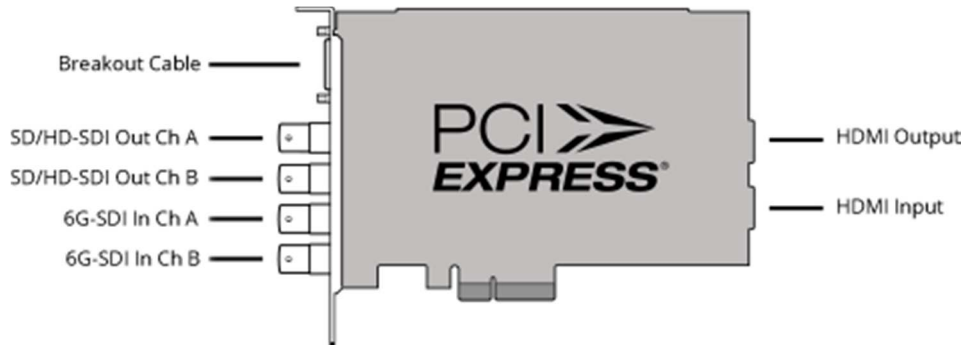
Figure: Blackmagic 4K HD Extreme Connections

5.4 Blackmagic Decklink Duo SDI

The Blackmagic DeckLink Duo SID adapter dual HD/SD capability with two SDI interface connections to the adapter card. It provides two completely independent capture and playback streams in and out of a computer, or two channels of video in a single card. There are two SDI inputs, and two SDI outputs plus a common tri-sync/black burst reference.
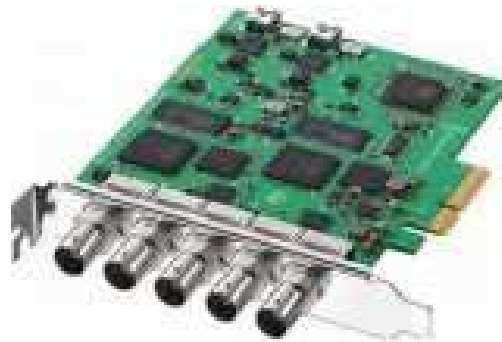
Figure: Blackmagic Decklink Duo SDI Adapter

Connections are made through BNC connectors as shown below:
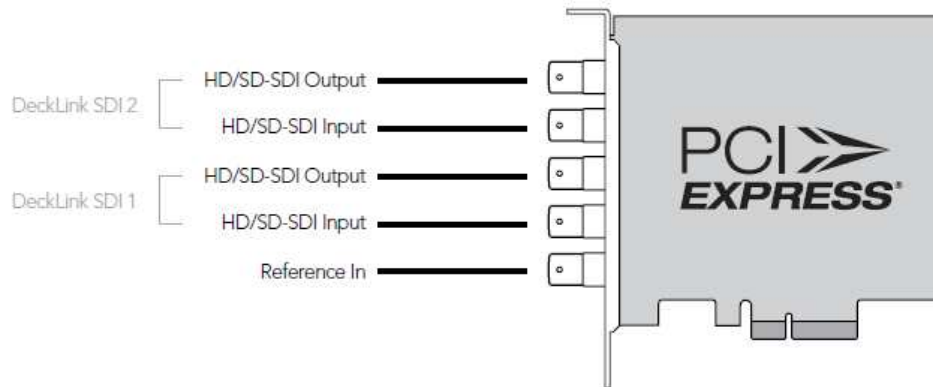
Figure: Decklink Duo SDI/HD Adapter Connections

5.5   Blackmagic Decklink Studio 4K

The Blackmagic DeckLink Studio 4K is a single SDI, Component, and Composite card that supports a massive number of analog and digital video connections including SD/HD/Ultra HD 6G-SDI, HDMI 1.4b, SD/HD component, composite, S-video, 4 channel balanced analog audio, 2 channel AES/EBU switchable to 6 channel out, black burst and tri-sync reference input, RS-422 deck control connections, keying in SD and a hardware down converter.

Figure: Blackmagic Decklink Studio 4K

Connections are made as described below:
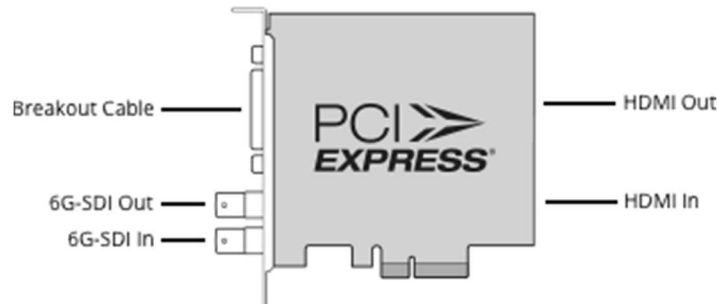
Figure: Decklink Studio 4K Connections

5.6   Transport stream DekTec interface

This card is configured and monitored by the Media Hub snap in on the server desktop. See the TS Admin guide for more details about the configuration and monitoring of TS streams.

5.6.1   DekTec DTA-2136 Controller

The DekTec DTA-2136 is a Dual-channel QAM receiver, compliant with J.83 Annex A (DVB-C), B and C. It provides two ASI monitoring ports; each ASI port can also be configured as independent output. Each channel provides reception status, RF level, demodulation status, constellation, MER, and pre-Reed Solomon BER.

Applications have access to the complete Transport Stream.

The DTA-2136 does not support QAM-128.

Figure: DekTec DTA-2136

Connections are as per the diagram below.

RF Input Connector 1 →

RF Input Connector 2 →

ASI Output Connector 1 →

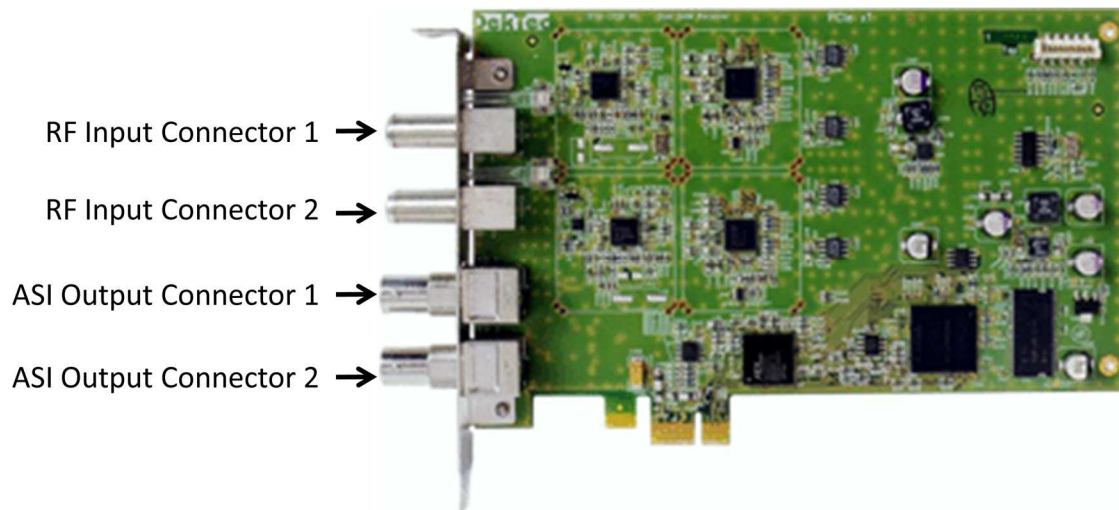ASI Output Connector 2 →

Figure: DekTec DTA-2136 Connections

5.6.2   DekTec DTA-2137 Controller

The DekTec DTA02137 is a Single DVB-S / DVB-S2 receiver that can be configured as single-channel receiver with support for QPSK, 8-PSK, 16-APSK and 32-APSK, or as dual-channel receiver with support for QPSK and 8-PSK. It supports advanced DVB-S2 features: VCM, ACM, multiple input streams (MIS) and Generic Stream (GS), and provides reception and forwarding of baseband frames (BBFRAMEs) as described in DT-AN-2137-1.

The DTA-2137 provides you two ASI monitoring ports; each ASI port can also be configured as independent output. The dual LNB inputs can function independently or as a single shared feed.

Each channel provides lock status, RF level, modulation type, code rate, SNR/MER and RS error counts (DVB-S only).

Figure: DekTec DTA-2137 Controller

Connections are as per the diagram below.

Antenna Input Connector 1 →
Antenna Input Connector 2 →
ASI Output Connector 1 →
ASI Output Connector 2 →
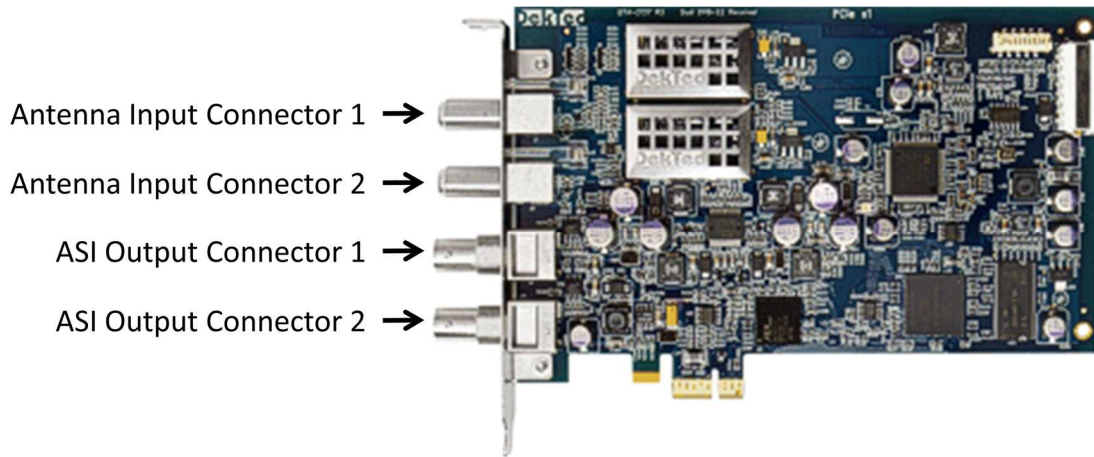
Figure: DekTec DTA-2137 Connectors

5.6.3   DekTec DTA-2138 Controller

The DekTec DTA-2138 is a single-channel DVB-C2 / DVB-T2 receiver for VHF/UHF with legacy support for DVB-C and DVB-T. Each channel provides reception status, RF level, demodulation status, MER and BER. Measurements include RF level, MER, bit error rates and monitoring of L1 parameters.

Figure: DekTec DTA-2138 Controller

The DTA-2138 provides a single RF Input connector, as shown below.

RF Input Connector ➡
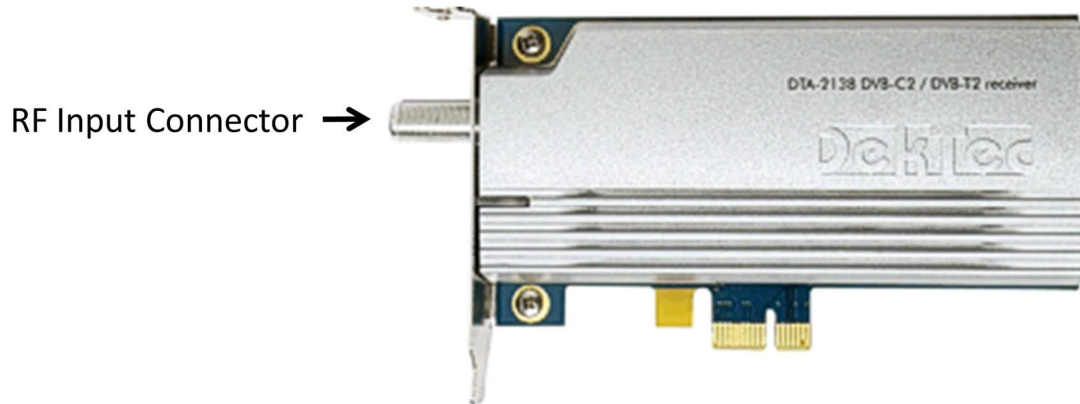
Figure: DekTec DTA-2138 Connector

5.6.4 DekTec DTA-2144 Controller

The DekTec DTA-2144 is a Quad ASI receiver that offers four BNC ports with individual status LEDs. It allows you to select ASI or SDI operational mode in software, and to configure each port individually as input or output. It provides 10-bit SDI, full stream @ 270 Mbit/s, and lossless SDI Huffman encoding / decoding for reduction of bus bandwidth. It also offers cable equalization and inverted ASI, and provides hardware counters for bitrate measurement and statistics.
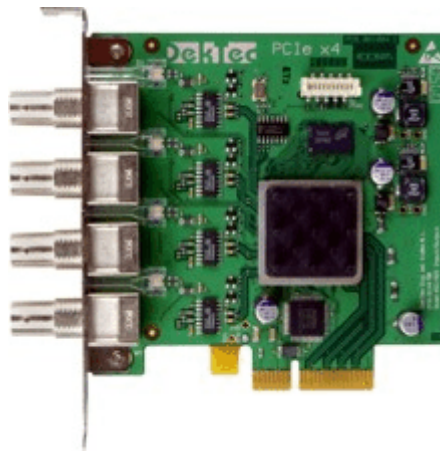
Figure: DekTec DTA-2144 Controller

The DTA-2144 provides connectors as diagramed below. Note that each BNC port can function as either input or output.
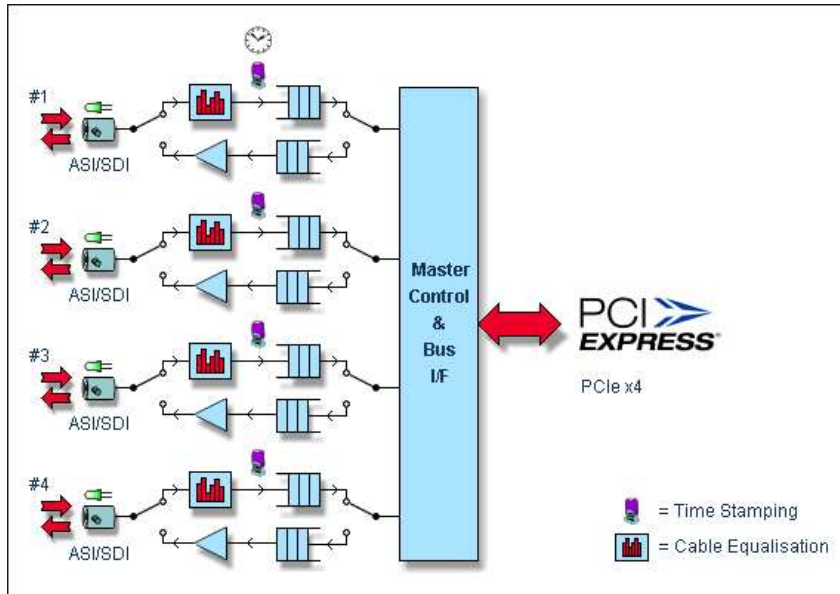
Figure: DekTec DTA-2144 Connectors

5.6.5   DekTec DTA-2145 Controller

The DekTec DTA-2145 Controller is a Dual ASI receiver that provides two independent ASI/SDI ports. You can use one port for input and one for output, or configure the card for dual output (software-selectable). It offers adaptive cable equalization and inverted ASI, SDI lossless Huffman encoding / decoding, and bit-rate measurement and statistics.

Figure: DekTec DTA-2145 Controller

The DTA-2145 provides you with the connections diagrammed below. Note that Connector 1 can be configured for both input and output, while Connecter 2 is output only.
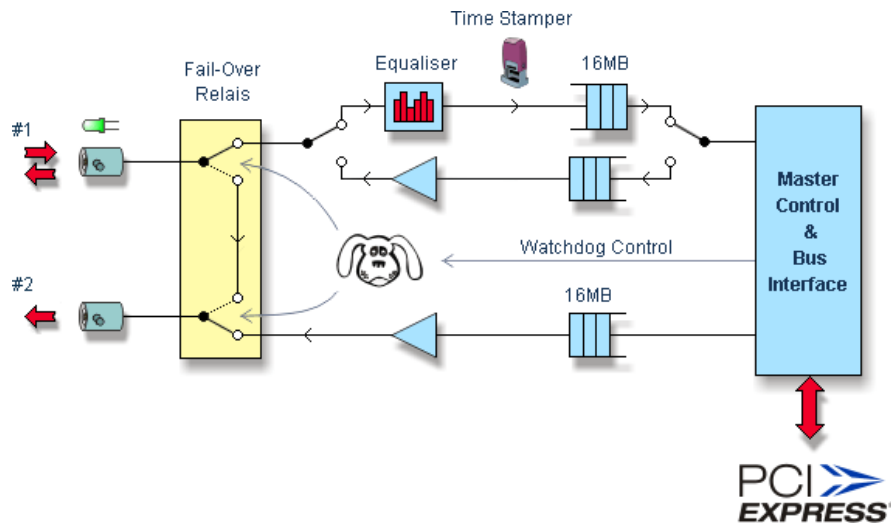
Figure: DekTec DTA-2145 Connectors

5.6.6   DekTec DTA-2160 Controller

The DekTec DTA-2160 Controller is a Triple ASI and GigE controller that supports the transmission and reception of Transport Streams over IP networks. It provides three general purpose DVB-ASI ports and one GigE port. It provides zero-jitter play-out of multiple IP streams, and the time stamping of incoming IP packets to enable IP jitter analysis.

Figure: DekTec DTA-2160 Controller

The DekTec DTA-2160 has one GigE and three ASI interfaces:

Port type	Logical port number
Gig E	Port 4
ASI 1	Port 1
ASI 2	Port 2
ASI 3	Port 3

Table: DekTec TDA-2160 Connector Ports

Note the location of the connectors for the interface links. The top connector is the Gig E connector, called port 4, followed by the ASI port 1, ASI port 2 and ASI port 3 interfaces.

Gig E	Port 4
ASI 1	Port 1
ASI 2	Port 2
ASI 3	Port 3

Figure: DekTec DTA-2160 Connections
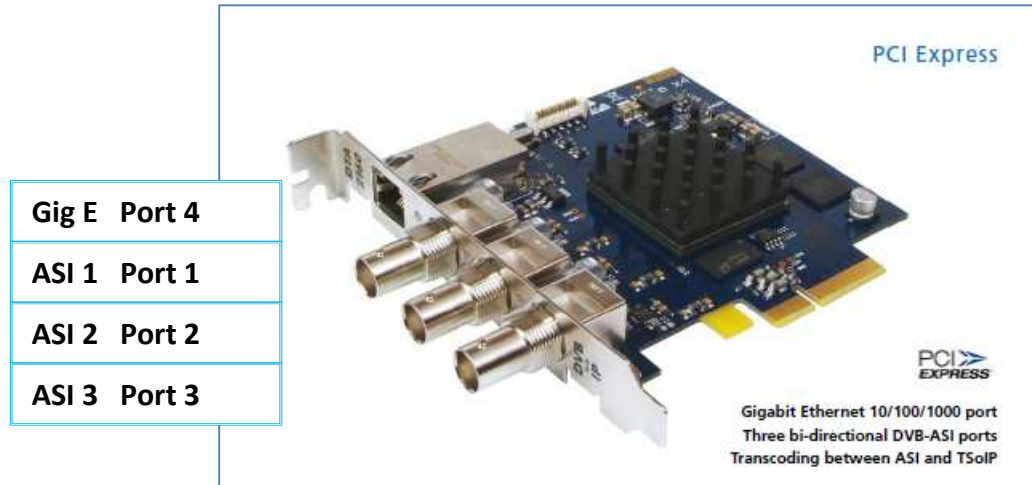
5.7　Viewcast Osprey-260e X1 PCI-EXP

The Osprey-260e receiver supports composite, S-Video and component inputs with balanced or unbalanced stereo audio. It supports one channel of switchable input.

Figure: Viewcast Osprey-260e

The Osprey-260-e ships with two adapters, shown below. Choose the adapter that fits your deployment.

Figure: Osprey-260-e Y/C to S-Video Adapter

Breakout Cable

Figure: Osprey-260-e Breakout Cable

5.8   Viewcast Osprey 460e X1 PCI-EXP

The Osprey 460e is a quad composite receiver designed to simultaneously capture four independent channels of analog video and unbalanced stereo audio signals and process them independently. The Osprey-460e supports 4 external video inputs; all can be configured as analog composite. Attach up to four BNC composite video cables to the input video connectors.

Figure: Osprey-460e X1 PCI-EXP

The breakout connector provided with the Osprey card has 4 left/right, unbalanced audio inputs, which are clearly marked per left and right input. Red is reserved for the right channel and white is reserved for the left channel

4 outputs for unbalanced audio, each consisting of left and a right connector labeled

Left 1/Right 1

Left 2/Right 2

Left 3/Right 3

Left 4/Right 4

Figure: Osprey 460e Breakout Connector

Observer encoder channels are configured as follows:

- Video Input A and Audio Left 1 / Right 1
- Video Input B and Audio Left 2 / Right 2
- Video Input C and Audio Left 3 / Right 3
- Video Input D and Audio Left 4 / Right 4

5.9   Hauppage WinTV-HVR-2250

The Observer supports the Hauppage WinTV-HVR-2250, which is an 8VSB card. If you are using the HVR 2250, please have your channel connection details and frequencies ready when you call support.
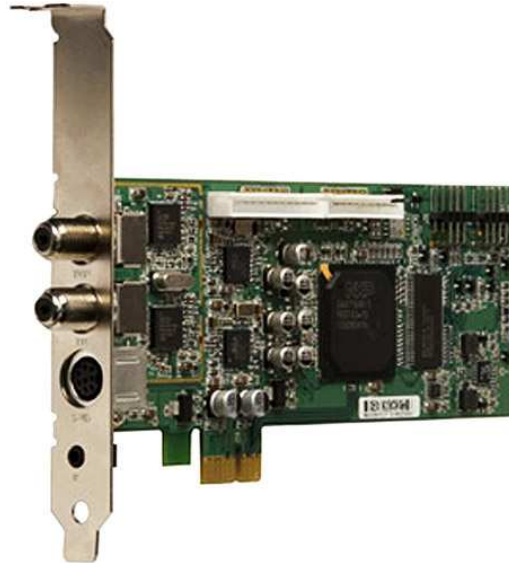

Figure: Hauppauge WinTV-HVR-2250

The WinTV-HVR-2250 is a PCI Express X1 board based on the NXP 7164 bus interface chip. The WinTV-HVR-2250 contains two tuners with a built-in TV splitter. There is one cable TV or TV antenna connector which is split, providing a video source for both tuners. For ATSC and QAM digital TV, all 18 ATSC formats including 1080i can be watched or recorded to disk as a MPEG-2 Program Stream. The NXP 7164 contains two highly integrated MPEG-1/2 hardware encoders for recording analog cable TV to disk. The playback of the recorded ATSC and QAM digital TV and MPEG-2 encoded analog programs are done through a software MPEG-2 player.

The WinTV-HVR-2250 now supports an on-board IR receiver and blaster, which can control up to two external set top boxes.
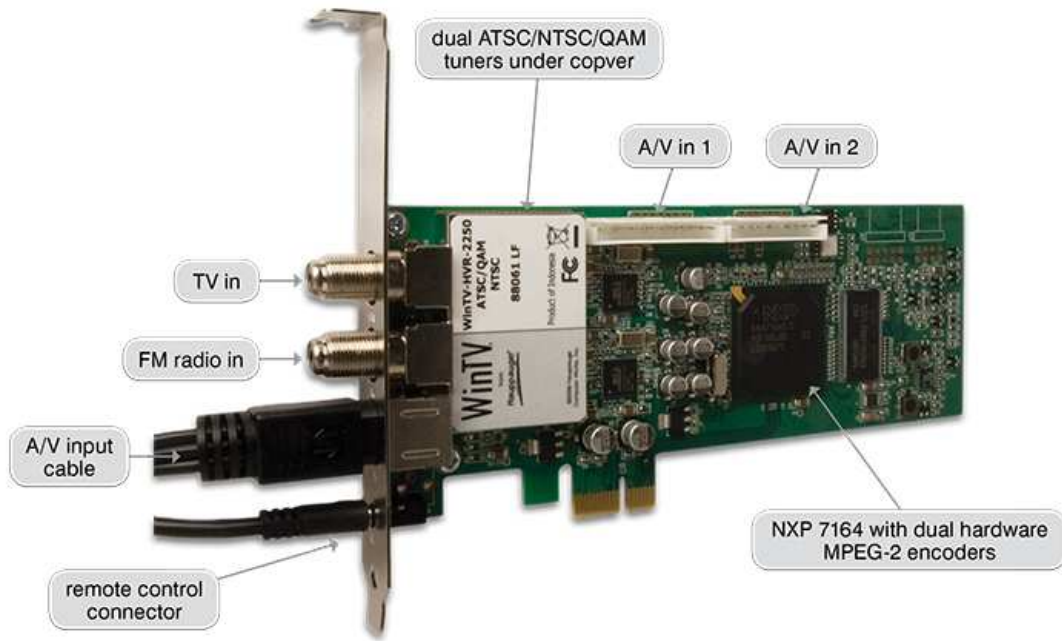

Connect as per the diagram below.

Figure: Hauppauge WinTV-HVR-2250 Connections

6 SERVERS

The Volicon Observer runs on servers from SuperMicro and comes in 1RU, 2RU, 3RU, and 4RU versions. Each SuperMicro chassis features a unique and highly-optimized design. All chassis are equipped with a redundant high-efficiency power supply, along with high-performance fans that provide ample optimized cooling.

The server relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 250 V, 20 A.

6.1 Server Installation

Ensure that the server is completely de-energized before you access the chassis interior to install or remove system components. Disconnect the power cord from the power supply module before you open the chassis. If your server has more than one power supply, be sure to disconnect all power cords.

Follow the installation instructions that came with your server.

6.2 Server Models

6.2.1 SC815TQ-563UBK

The SC815-TQ563UBK is a 1RU server that offers dual AMD Opteron™ 6000 series
processors, and supports up to 512GB DDR3 1600MHz ECC Registered DIMM using 16x DIMM sockets.

Figure: SC815TQ-563UBK Server

It provides the following input/output options:

SATA	4x SATA2.0 (3Gb/s) Ports
LAN	2x RJ45 LAN ports 1x RJ45 Dedicated LAN supports IPMI
USB	7x USB 2.0 ports 2x Rear, 4x header, 1x Type A
VGA	1x VGA port
Serial Ports	1 Fast UART 16550 serial port 1 serial port header.
Other	1 UID.

6.2.2   SC825TQ-563UBK

The SC825-TQ563UBK is a 2RU server that supports dual single Intel® / AMD® processors. It provides:

- 1x Full-height Universal I/O Expansion Slot (Riser Card Required)
- 3x Full-height, Full-length Expansion Slots
- 3x Low-profile Expansion Slots

Figure: SC825TQ-563UBK

6.2.3   SC825TQ-R700BK

The SC825TQ-R700BK is a 2RU server that supports dual, single Intel® / AMD® processors. It provides:

- 1x Full-height Universal I/O Expansion Slot (Riser Card Required)
- 3x Full-height, Full-length Expansion Slots
- 3x Low-profile Expansion Slots

Figure: SC825TQ-R700BK

6.2.4   SC835TQ-R800BK

The SC835TQ-R800BK is a 3 RU server equipped with 8 hot-swappable 3.5" SAS/SATA hard drive bays. With 100% cooling redundancy and an 800W high-efficiency redundant power supply, the SC835 is optimized for SuperMicro's Intel® Xeon® (5500 series) and AMD Opteron™ system motherboards.

The SC835TQ-R800BK provides you with 7 full-height full-length expansion slots.

Figure: SC835TQ-R800BK

6.2.5   SC836A-R1200BK

The SC836A-R1200BK is a 3RU server that supports 2 1200W high-efficiency (1+1) redundant power supplies and runs dual, single Intel® / AMD® processors. It provides 16 3.5" hot-swappable SAS/SATA drive bays and offers 7 full-height full-length expansion slots.

Figure: SC836A-R1200BK

6.2.6   SC846A-R1200BK

The SC836A-R1200BK is a 4RU server that supports 2 1200W high-efficiency (1+1) redundant power supplies and runs dual, single Intel® / AMD® processors. It provides 24 3.5" hot-swappable SAS/SATA drive bays and offers 7 PCI expansion slots.

Figure: SC836A-R1200BK

7 INITIAL CONFIGURATION

7.0 Initial Login

The Observer system is preconfigured with the following default passwords:

- Observer servers Windows desktop account:

    User: **Observer**   Password: **Inst@11** (case sensitive)

- Web client account:

    User: **admin**   Password: **pass**

Note: Do not change the Observer or Volicon account passwords. They are used by the Volicon software and will not function properly if changed.

7.1 Network Configuration

Assign a static IP address to each Observer server. You must also configure your network according to the considerations below:

- If public IP access is used, provide a firewall
- Additionally, insure that the following TCP ports are open through the firewall:

Observer Encoder servers:

- Ports TCP 4504/4505 for content streaming (to client PCs)
- Ports TCP 8220 for database updates
- Port TCP 3389 or a VPN connection for support

Central/Web server:

- Ports TCP 80 for the HTTP (Web frontend and client PCs)
- Port TCP 25 SMTP for Hmailserver email alerts
- Port 943 for Silverlight

Be sure to provide sufficient bandwidth between server and the monitoring facility. Size the bandwidth to provide 1.2-1.5 times the sum of the viewed streams' bandwidth, with a minimum connection speed of 10 Mbps.

Network Time Protocol

Volicon recommends that you set up a Network Time Protocol server in your network, and configure the Observer to synchronize with it. Double check that you are configuring your server to be in the correct time zone.

7.2 Initial Configuration

Due to the complexity of the Observer modules and setup, most Observer servers are not shipped in a "plug and play" ready state. We recommend that you contact Volicon Support for assistance with your initial Observer Server configuration.

We offer several ways to reach our experienced technical support specialists:

- **Web:** http://www.volicon.com/index.php/support/
- **Email:** support@volicon.com
- **Telephone:** Customer Support is available Monday to Friday
  - o **US**:   +1 781 221 7400 Option 5 9am - 6pm EST (4am - 1pm GMT)
  - o **EMEA:**   +44 1223 96 8866   7am - 4pm CET (6am - 3pm GMT)

When you call, please be ready with your video feed information (e.g., 1080i or 720p, etc.).

7.3 Do Nots

As part of setting up the Observer, you will establish the encoders you want to use, under **Central Config>Encoders**.
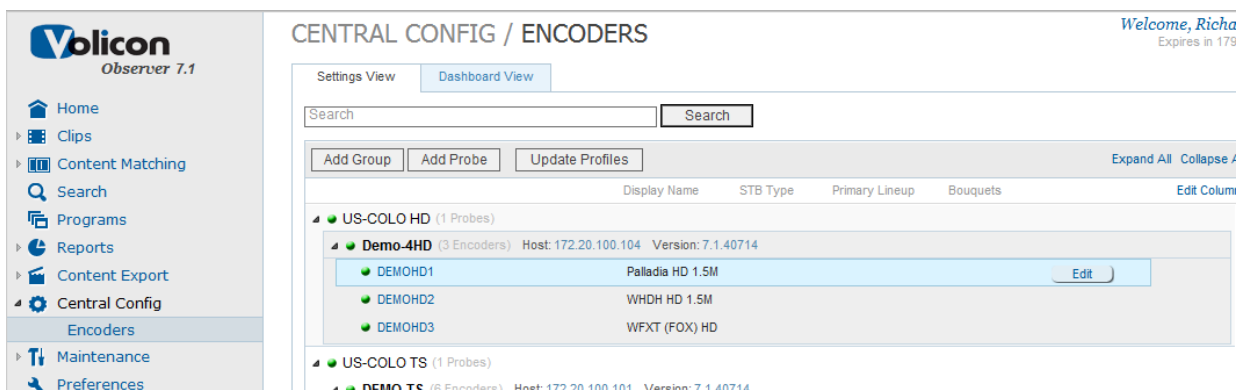

Figure: Central Config>Encoders

Clicking the Edit button will open up the Edit Encoder window. **DO NOT** edit the encoder names, only the encoder display names.
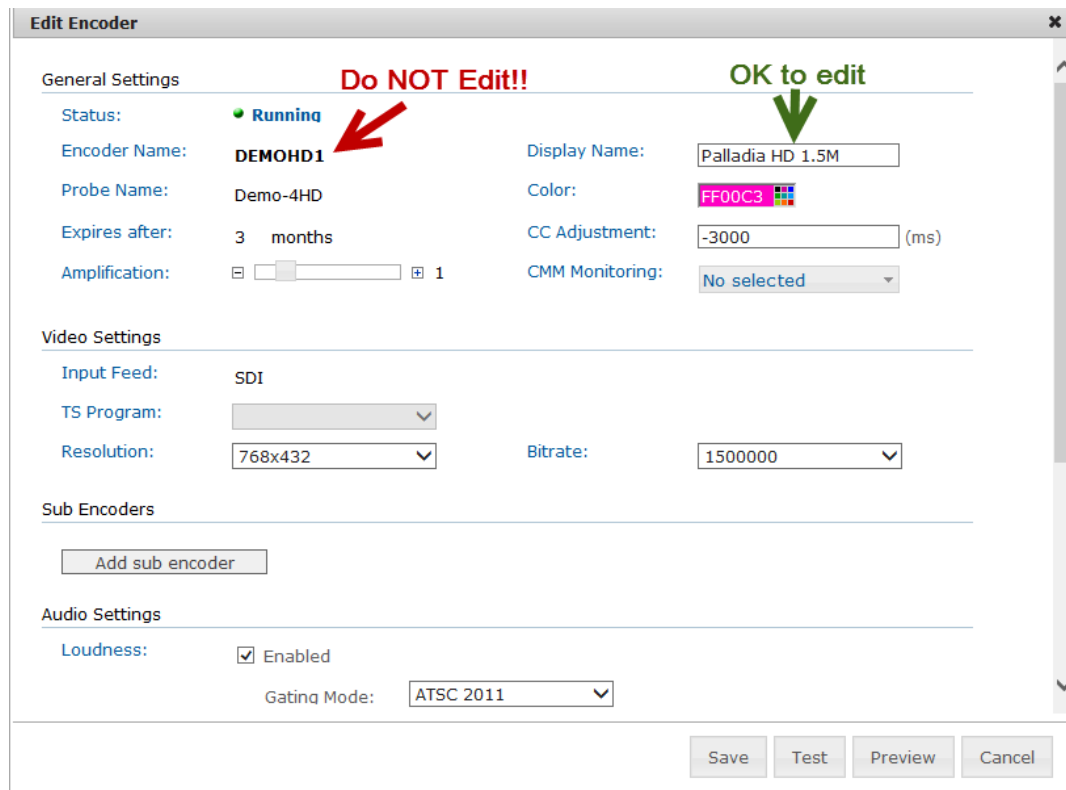
Figure: Do NOT Edit the Encoder Name

DO NOT use the Observer server instead of a client PC machine.

DO NOT install any other applications with the exception of NTP software or antivirus software; see "Antivirus Excluded Storage Areas" in the Observer Admin Guide.

Do NOT change the Observer or Volicon account passwords. They are used by the Volicon software, and it will not function properly if you change them.

8   SETTING UP THE OBSERVER CLIENT

8.1   PC Client Minimum Requirements checklist

Before you install the Observer Media Player, check that your computer meets or exceeds the PC Client Minimum Requirements, listed below:

- Windows 7, 64 bit OS or above
- 3.5 GB of RAM or greater
- Sound card
- Microsoft Internet Explorer (IE) 8 or above
    - Alternatively, Silverlight support if you are using a non-IE browser
- Windows Media Player 11 or above
- Pentium 4 3.0 GHz or equivalent processor (recommended)
- NVIDIA or ATI video adapter or better
- Minimum of 10 Mbps network connection bandwidth
  (You will need bandwidth greater than or equal to 1.2-1.5x the sum of the bandwidth of the streams you are viewing. For example, to view two 512 Kbps streams smoothly, you will need between 1.2 Mbps and 1.5 Mbps of available bandwidth.

In addition to the physical requirements listed above, you must also:

- Place the URL or IP address of the Web server in your browser's **"Trusted Sites"** zone
- Be a user with local administrative privileges on your machine, to install the signed ActiveX control

8.2   Installing the Observer Media Player

To connect to Volicon Observer for the "first time", launch your Internet Explorer web browser. If you are using IE 10 or IE 11, you must add the URL of the central server to compatibility view. In the address bar, type in the IP address or domain name of the Volicon server provided to you by your Volicon Administrator. In the example below, we are connecting to the Volicon demo server at http://observer.volicon.com.
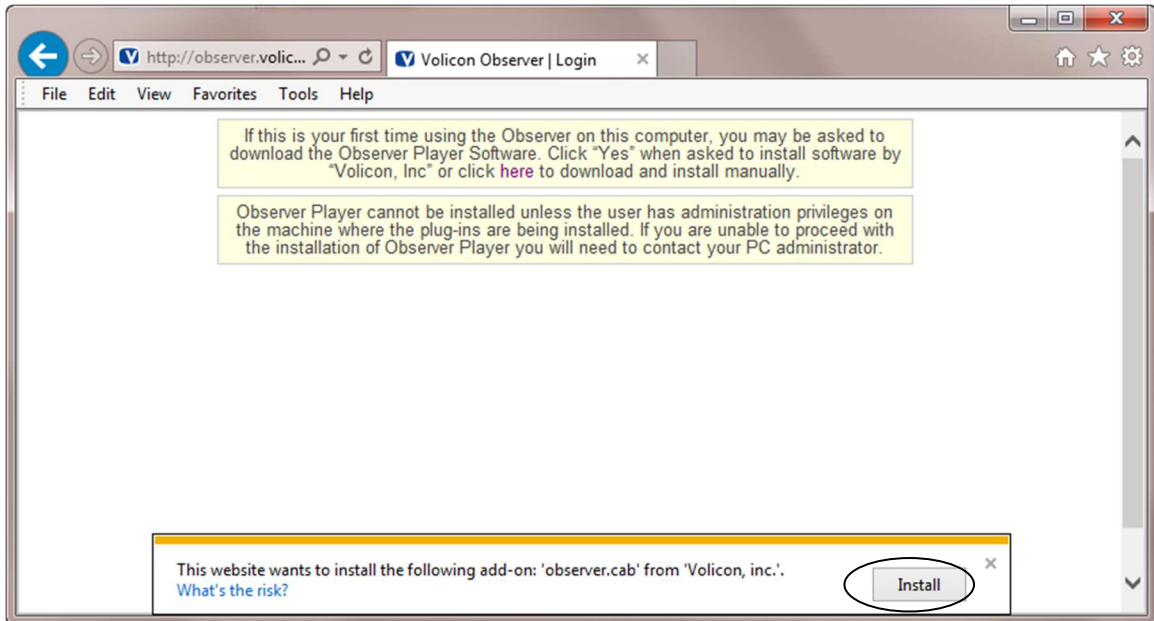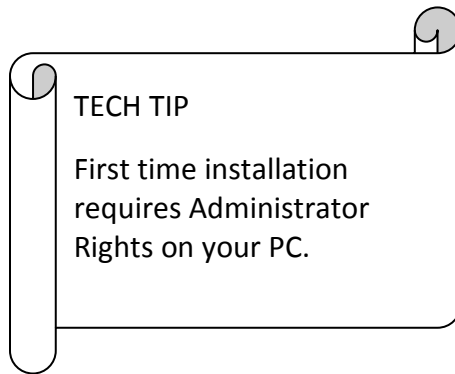
Figure: Initial Connection

TECH TIP

First time installation requires Administrator Rights on your PC.

If your Volicon Administrator has not previously loaded Observer on your PC/laptop, you must have administrative rights, (the ability to install software on your PC) for the initial install of the Observer Media Player software. Any subsequent logins will require only the permissions you currently have on your PC/laptop. The first time you connect to the Observer solution, IE will take approximately 30 seconds to load the Observer Media Player install software. Click **Install** to begin the installation process. IE will continue to calculate and will present you with a Security Warning.

Figure: Security Warning

Accept the warning by clicking **Install**. Observer will launch the Observer Media Player Setup Wizard.
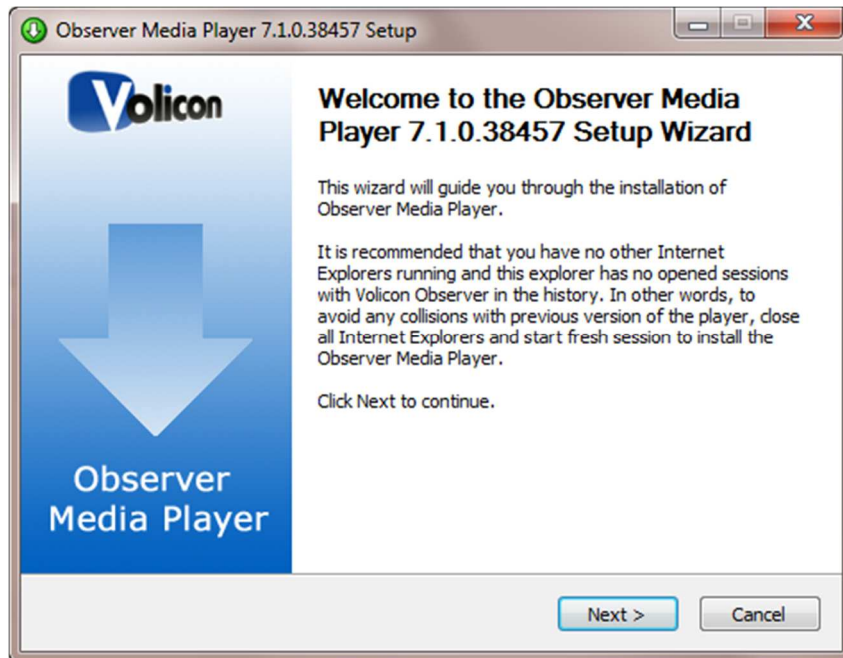

Figure: Observer Media Player Setup Wizard

Click **Next** to continue.

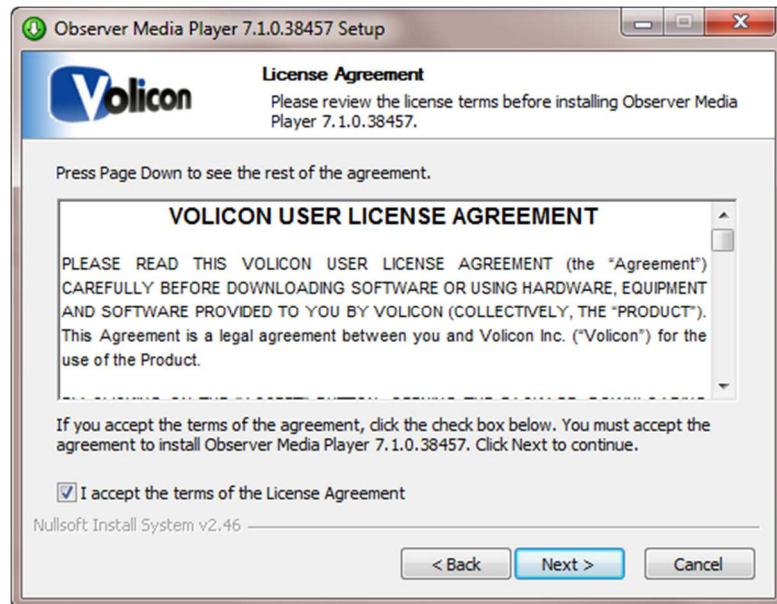Accept the terms of the License Agreement and click **Next** to continue.

Figure: License Agreement

You now have the option of choosing the folder into which Observer will install the Media Player. Unless Volicon Support has instructed you otherwise, accept the default folder by clicking **Install**.
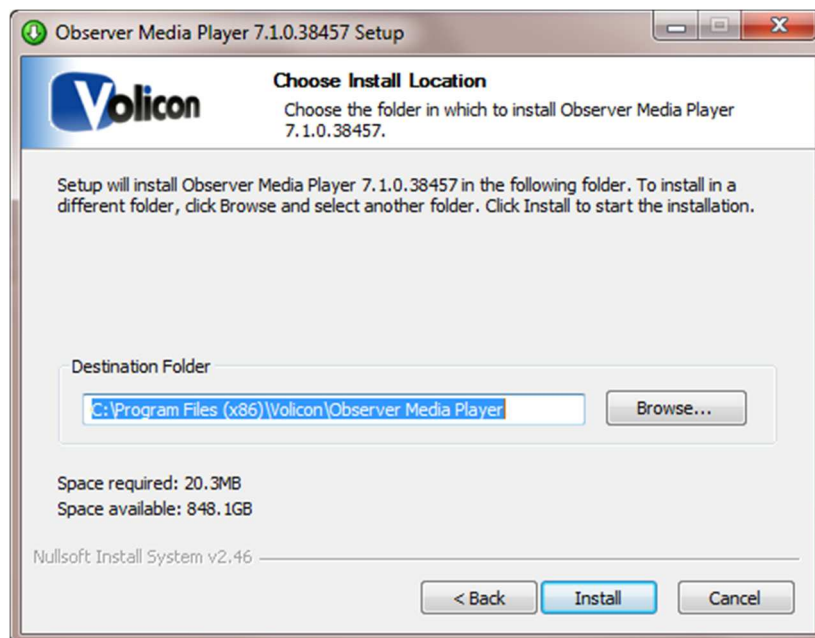
Figure: Choose Install Location

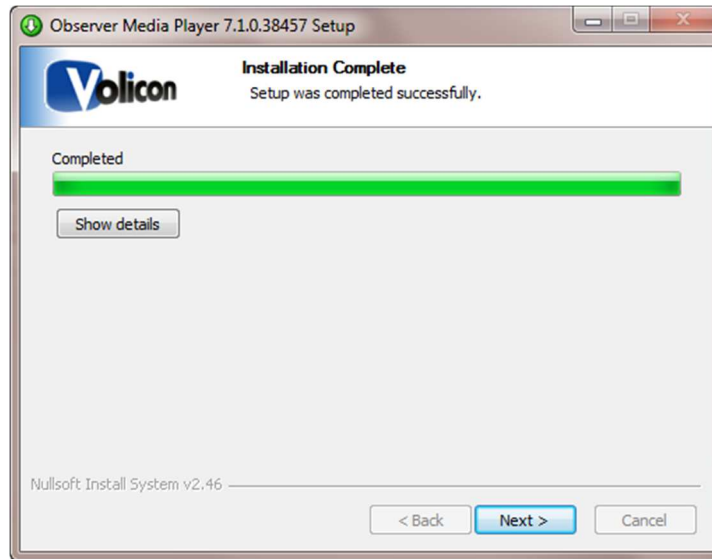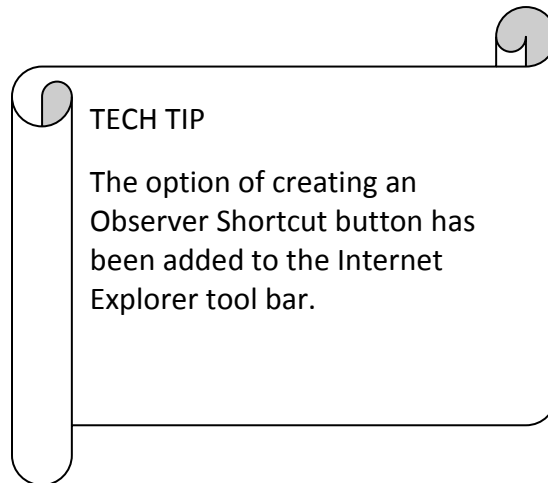Setup will give you a success message. Click **Next.**

Figure: Installation Complete

TECH TIP

The option of creating an Observer Shortcut button has been added to the Internet Explorer tool bar.

OPTIONAL SETTINGS/SELECTION

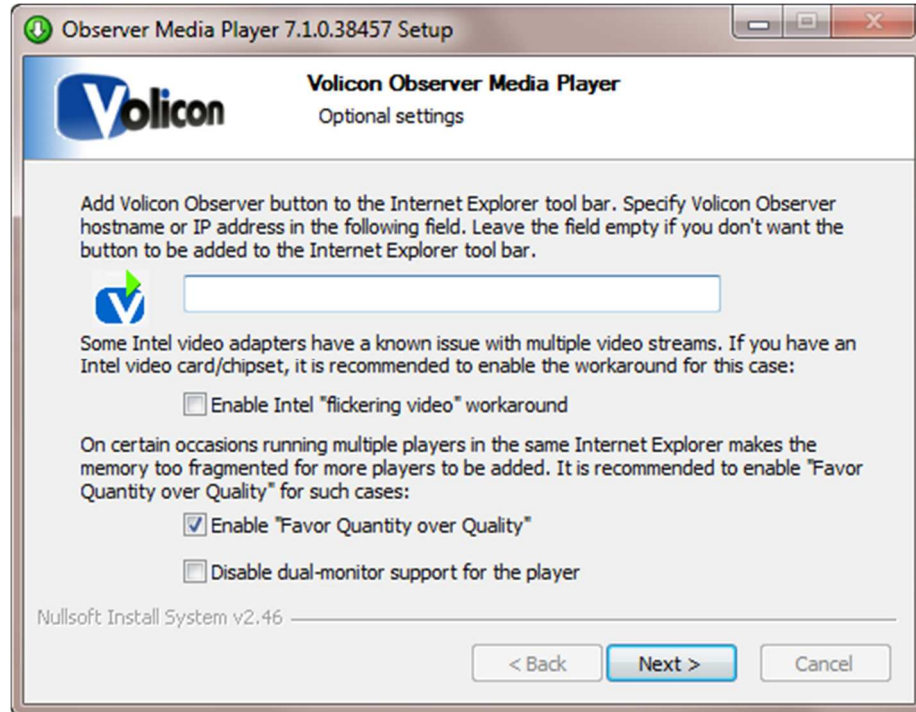Observer will present you with the Optional Settings window.

Figure: Optional Settings Window

Optional Setting/Selection: Internet Explorer shortcut

If you want to add a quick connect button to your Internet Explorer tool bar, enter the URL or the IP address for your Volicon Observer in the field provided. Leave the field empty if you do not want Observer on your tool bar.

Optional Setting/Selection: Intel video adapter workaround

Volicon does recommend that if your computer has an Intel video card, or a video card with an Intel chipset, that you enable the Intel "flickering video" workaround checkbox as a precaution. Enabling the checkbox will not affect the performance of the Intel chip sets that do not have issues with multiple video streams, and will protect you in the event that your chipset is one of those with known issues.

Optional Settings/Selection: Favor Quantity over Quality

Volicon also recommends that you check the **Enable "Favor Quantity over Quality"** checkbox for the best experience using Internet Explorer to run multiple players.

Make your choices, and click **Next**.

Observer presents you with the "Completing the Observer Media Player Setup Wizard" window.

Figure: Completing the Observer Media Setup Wizard Window

Click **Finish** to exit setup.

8.3　Graphical User Interface (GUI): Initial Login

8.3.1　Internet Browser Support

8.3.1.1　Internet Explorer Support

For full functionality, the Observer Media Player currently supports Internet Explorer 8, 9, and 10 in both 32-bit and 64-bit format. When you are using Internet Explorer 10; you must set "compatibility mode". From your browser
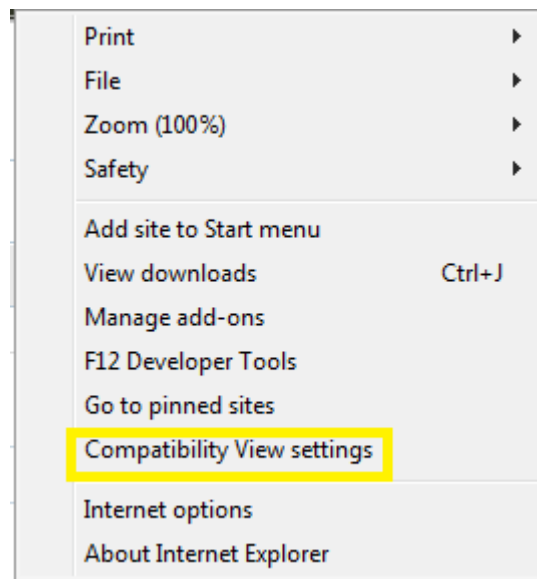
window select **Tools>Compatibility View**. Set your options to "compatibility view options."

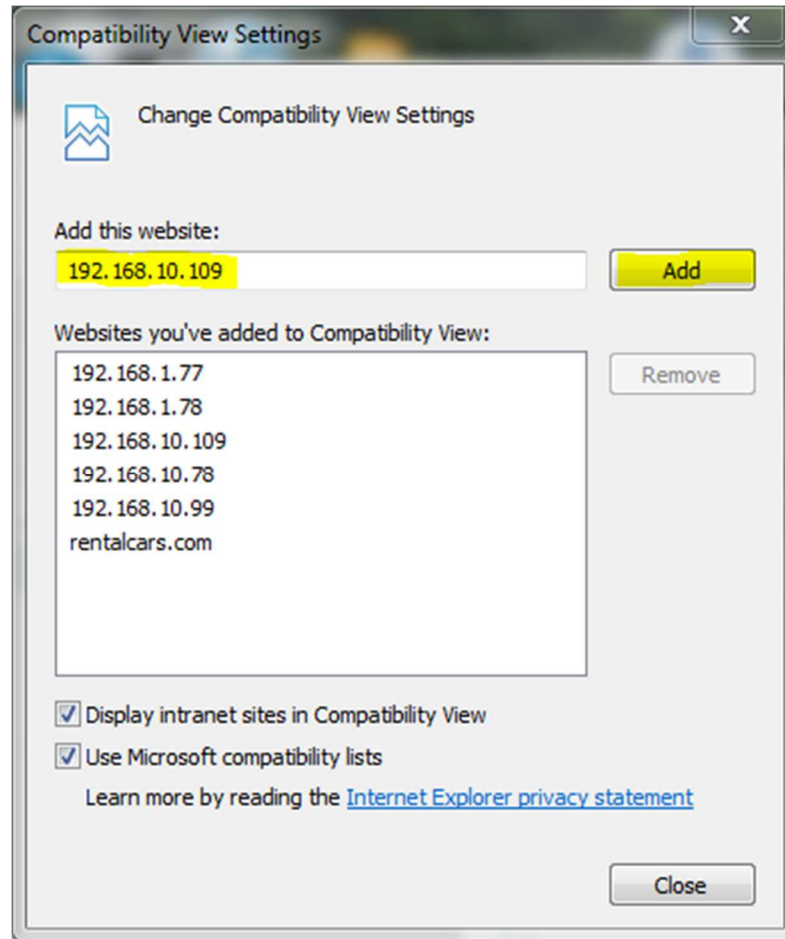You must run a specific procedure to use Observer with IE11. To do so:

10. Open Internet Explorer. Click on the Tools icon (Alt+X) → Internet Options. Make sure that the following window opens:

11. Click on Alt→ Tools→ And then choose "Compatibility View Settings."

12. Under "Add this website:" insert the client's IP address and then click on Add.

Compatibility view mode is now enabled.

8.3.1.2 Multiple Browser Support using Clientless Mode – Silverlight and Flash Players

The Volicon Observer now supports a clientless mode for use with Chrome, Firefox, and Safari browsers. Clientless mode allows you to avoid installing the Active-X player.
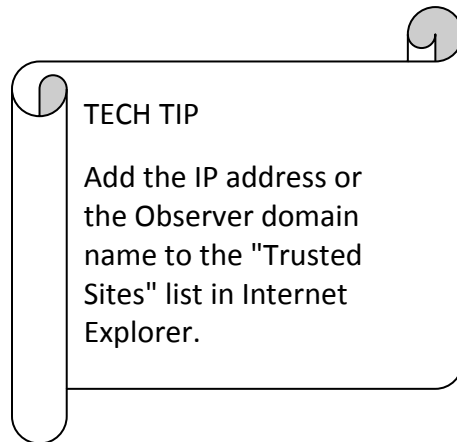
To use clientless mode, you must perform some local php configuration:

define("CLIENTLESS_PLAYER", "FLASH"); // SILVERLIGHT or FLASH (using Flash if undefined)

Please read the Clientless configuration documentation for complete details.

8.3.2   Steps to Log In

1.   At the top of your Browser search bar, enter the IP or URL address provided from your Administrator.

2.   You will then be Prompted for your log in credentials (Username/Password). This will also be provided to you by your Observer System Administrator.

TECH TIP

Add the IP address or the Observer domain name to the "Trusted Sites" list in Internet Explorer.

8.3.3   Your Initial LogIn Screen

For your initial login, choose **Home**, and enter the Username and Password your administrator provided you and select "Log In" In future logins, you will be able to select your starting screen from the drop-down menu on the left; options include-Home, Clips, Search, User Preferences, and Settings.
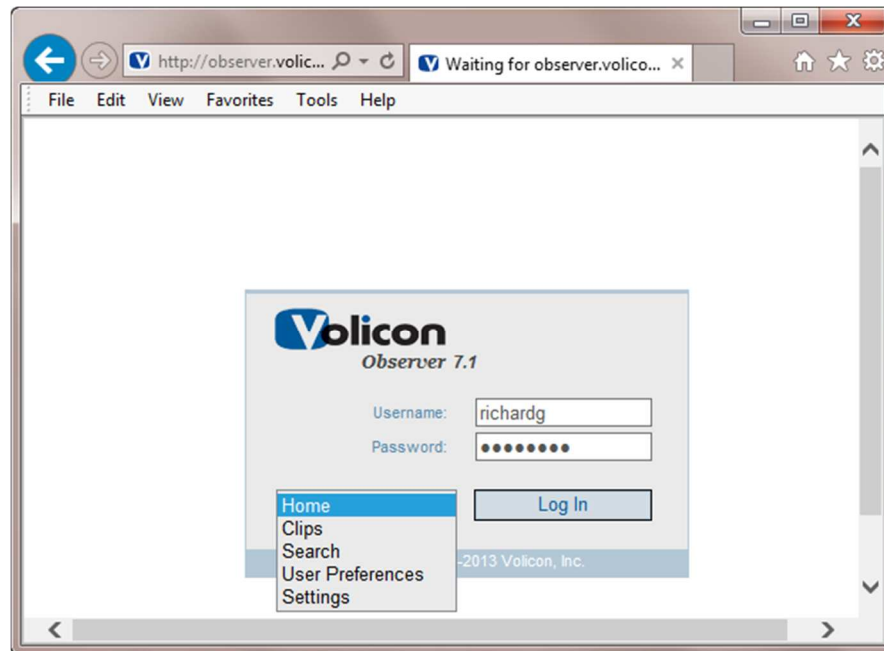
![Volicon logo]

Error! Reference source not found. Release 7.2

Figure: Initial Login Screen

Click **Login**.

8.3.4 Installing player cab file

When a firewall blocks Volicon player download from a Web server or you need to install players on multiple machines, it might be more convenient to use an installation file. You can download a cab file from the Observer Web server: **https://ObserverURLaddresss/observer.cab.** Then for the installation to proceed, double click on the installation file and accept all the prompts.

NOTE: YOU MUST SET THE CORRECT TIME ZONE ON YOUR PC/LAPTOP IN ORDER TO DISPLAY VIDEO IN ITS ORIGINAL TIME.

9 APPENDIX

9.1 Revision History

Date	Description
4/25/2014	Creation of Quick Start Guide
5/22/2014	Revision of Quick Start Guide