Communitek Video Systems, Inc.

MiniMobile-HD – The Manual!

This manual covers the operation of the following model numbers:
MiniMobile-HD, MiniMobile-HD2, MiniMobile-HDMI

Communitek Video Systems, Inc.

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MiniMobile – The Manual!

The MiniMobile is a specialized product designed specifically for Webcasting and
Web Conferencing. Primary features include Live Streaming of Video & Audio Content
over IP Networks and the Internet.

Hardware included with the MiniMobile products:

1- Compact Frame with 750 GB or 1TB Drive
2- MiniMobile-HD has a single HD/SD-SDI Input, via BNC Connector,
   MiniMobile-HD2 has two HD/SD-SDI Inputs, which can be 2 inputs,
   MiniMobile-HDMI has a single HDMI input.
3- USB Connectors, 4 on the rear panel, 2 on the front panel, including 2 USB3 connectors
4- Combination Keyboard/Touchpad
5- 2- HDMI Outputs and 1- DVI Output (LCD or LED Monitor is Optional)
6- Audio Break-out Cable, 2 XLR Female Connector
7- 2- WiFi/Bluetooth Antennas
8- 1 AC Power Supply with AC Cord and 4 Pin DC Connector

Hardware Options:
1- Video Camera(s)
2- PTZ Camera(s)
3- Video Switcher
4- Audio Mixer
5- Wireless Video System
6- Wireless Audio System
7- MJPEG Encoder

Software included with the MiniMobile:
1- Windows 7 OS, 64 Bit Professional
2- Flash Media Encoder 3
3- Capture Board Drivers

Software options:
1- VidBlaster - Video Switcher and Streamer
2- Wirecast - Special Effects
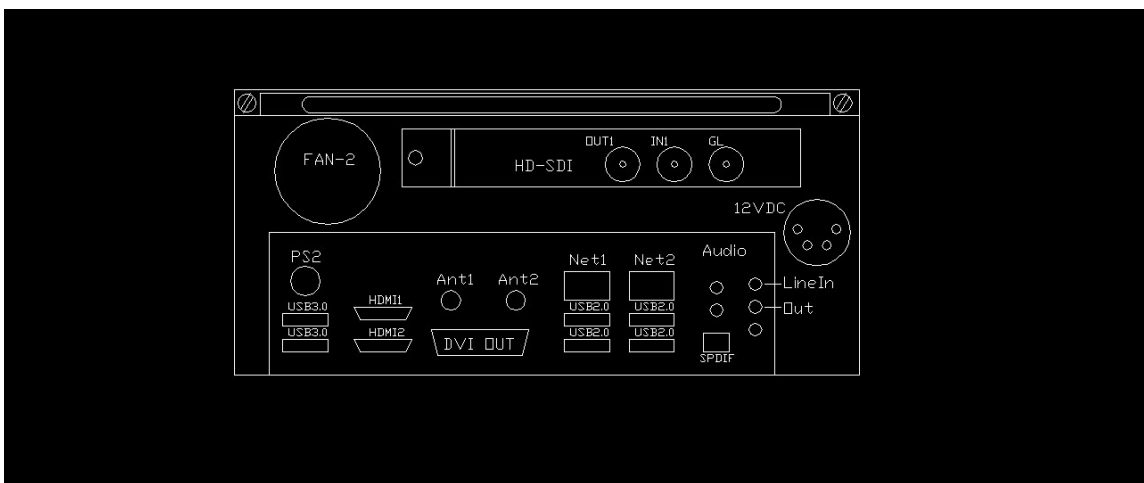3- Web based PTZ Camera Control
4- Windows Media Encoder

Hardware options:
1- Upgrade from Single HD/SD-SDI to Dual HD/SD-SDI
2- External Audio Embedded for HD/SD-SDI

Installation:

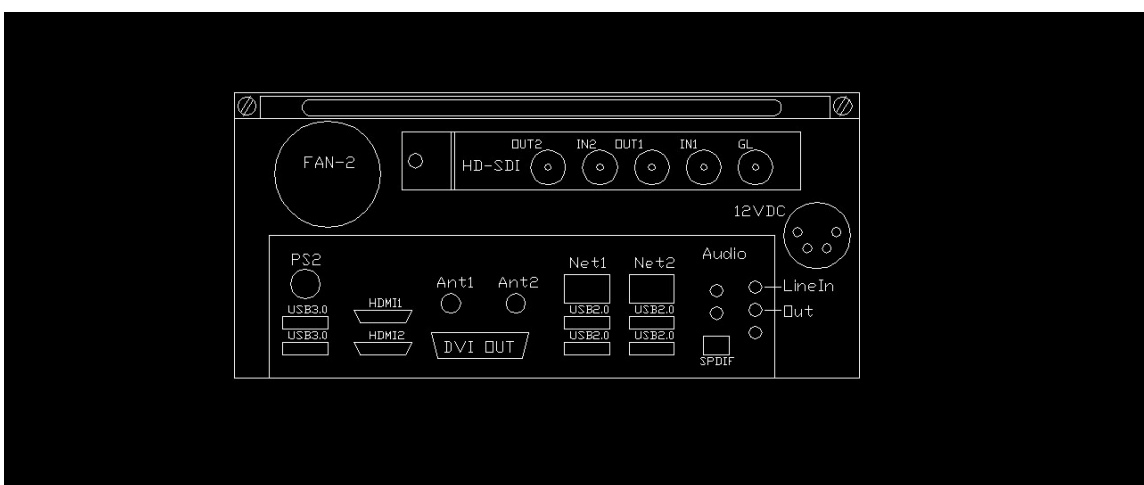Take a moment to become familiar with the Rear Panel Connections – See the drawing for your MiniMobile model:

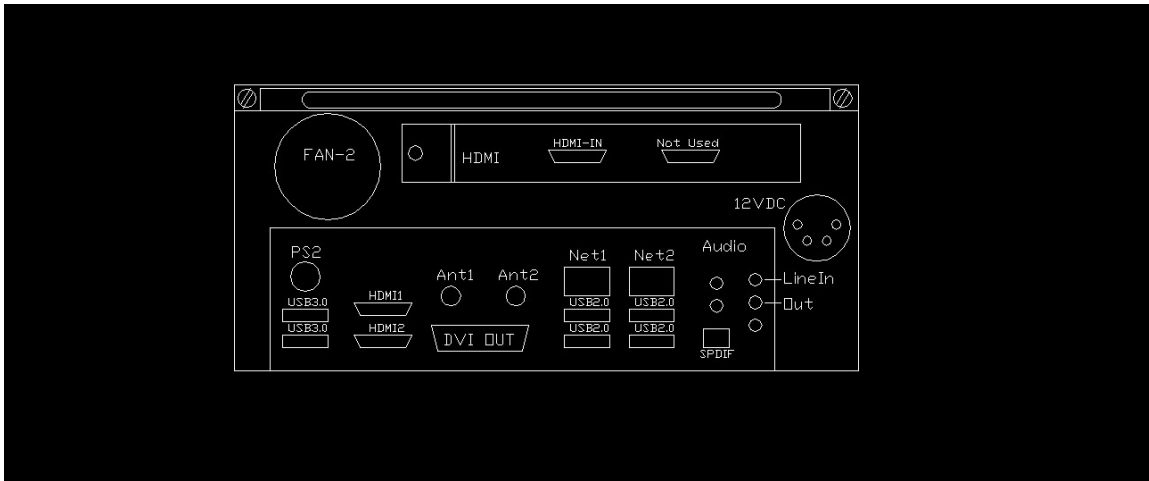MiniMobile-HD Rear Panel:

Fig.1

Minicaster-HD2 Rear Panel:

Fig.2

MiniMobile-HDMI Rear Panel:

Fig.3

Keyboard:
    1- Start with the Keyboard/TouchPad
        The supplied keyboard has a built-in touch pad (pad operates like a "mouse")
        Your Keyboard/Pad uses a single USB Connector which can be plugged into
        either of the 2 USB jacks located on the front panel.

Monitor:
    2- Connect the DVI output with a DVI Cable to your monitor. Optionally, you can
        connect one of the MiniMobile HDMI outputs via an HDMI Cable, to your
        Monitor.

Power:
    3- Connect the supplied AC Power Adaptor with 4-Pin XLR to the Rear DC
        connector on the MiniMobile, and Connect the other side to a standard utility AC
        outlet (110-120V)

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Connect the Video Source(s)

4- Determine the video sources, cameras, or another video device.
And decide which signal will be connected:

4a. For HD/SD SDI cameras, connect the BNC output of the camera(s) to the BNC inputs on the Rear Panel of the MiniMobile (self terminating). Please use the appropriate coax video cable and observe industry standards for HD or SD signals and cable lengths.

4b. For MiniMobile-HDMI, connect an HDMI camera or source to the HDMI connector to the left HDMI In, the HDMI connector on the right is not in use.

4c. For IP Cameras use the Net-2 connector, and for USB Cameras, use one of the USB2 or USB3 connections on the Rear Panel

5- Turn on the cameras or video sources, and set them for the desired video resolution and frame rates, as per the camera manufacturer's procedures.
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A Note about Gen-Lock – Most MiniMobile-HD models have an extra BNC connector, which is the Gen-Lock Input. This input is only needed if the user has implemented one of the video output connectors, and needs to lock the MiniMobile to another video switcher in an external system configuration. Otherwise the Gen-Lock is not needed.

Connect the Audio Source:

6- Use the supplied Audio Break-out cable to connect 2 channels of analog audio source. The cable has a mini (1/8") connector wired to 2 XLR connectors. Communitek recommends using balanced audio sources, if you have a broadcast type mixer or camera, however, more often than not, the audio source is unbalanced, such as audio from a pro-sumer or industrial video camera or mixer. In this case, use either RCA adaptors or a Mini-to-Mini (1/8")audio cable as may be needed for your system

Network Interfaces:

7- There are two Network Connections, Net-1 and Net-2
Connect the supplied RJ-45 Ethernet cable as follows:
a. For Network connections related to Streaming,, connect an Ethernet cable to the Net-1 Connector
b. When using IP cameras as sources, connect the camera networked Ethernet cable to the Net-2 Connector
c. In either case above, connect the other side of the Ethernet Cable to your Network Router, Hub, or Switch.

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Double check that all connectors are in the appropriate receptacles, before continuing with installation.

8- Momentarily Push the Power button on the front power of the MiniMobile panel.
The Blue Light should come on and the MiniMobile will boot up.
The Hard Drive activity light, located above the blue power light should blink alternately on/off as the system is running.

9- Any USB 2.0 compatible device may be plugged into the 4 Rear Panel USB Connectors, located under the 2 Network Jacks. Use Software "Safe Removal" procedures when disconnecting USB devices.

10- Any USB 3.0 compatible device may be plugeed into the 2 Rear Panel USB3.0 Connectors, located under the PS2 Connector. Use Software "Safe Removal" procedures when disconnecting USB devices.

Back to the Front Panel:
The MiniMobile has the following connections available from the Front Panel:

-USB Connectors:
As above, use one of these connectors for the keyboard/pad, while the other USB Front Panel connector can be used for a USB 2.0 compatible device. Use Software "Safe Removal" procedures when disconnecting any non-keyboard/mouse type USB devices.

-Audio Connectors
Although it is recommended to only use the rear panel audio connectors and the rear Break-out cable for audio, the front headphone connector (green) can be used.

Proceed to Quick Start or Detailed Start-up.

Quick Start:

MiniMobile products are pre-programmed, with Profiles for Flash Media Encoder, and if the VidBlaster option is purchased, profiles for VidBlaster are also included.

After boot-up, the operating system will have a log-in Icon labeled: Mini-User.
Click this Log-in, and enter the password provided by Communitek in an email confirming your Minicaster purchase or rental.

For Quick Flash Start-up:
The MiniMobile has pre-programmed profiles for Flash Live Media Encoder (FLME), and there is quick-launch icon on the desktop. Click the FLME icon, and the Encoder user interface will come-up with a pre-loaded profile. This profile has standard settings for connection to a Communitek Server, and will accept any of the video inputs that have been connected, as well as the audio connection.
To run FLME, click the "connect" button on the display. The button will shortly change to "Connected".
Once the connection is established, you can click the "Start" button. Immediately, the stream will begin, and the status display will show the stream information.

For Quick Start-up of Windows Media Encoder:
If your system has the optional Window Media Encoder installed: Encoding, via Windows Media, is pre-programmed, by Communitek, and will also run the loaded profile when the "Shortcut to Encoder" Icon is clicked.
The configuration of the encoding profile can be changed if needed (See "Windows Media Publishing Point" in the detailed set-up). Otherwise, once the Encoder screen is open, the Encoder will connect to one of Communitek's Streaming Video Servers. Simply click "Start" to begin the encoder stream.

Operation of the Camera (Option)
If a camera was supplied with the MiniMobile, or you are using your own, or third party supplied camera, it must be connected prior to MiniMobile start-up.
Refer to Section 4 "Connect the Video Source".

Operation of the Audio
Use an audio mixer and microphones or other source to feed Audio to the MiniMobile
Refer to Section 6 "Connect the Audio Source".

After the Flash or WME encoders have started, and, if you do not need to make changes to the streaming profile, you can jump to the section on page 10, titled "Viewing the Stream".

Detailed Start-up:

The MiniMobile includes Windows 7 64 Bit Professional Operating System, as well as a dedicated video operating system and drivers. While booting up the Windows operating system, the Video Operating System and Drivers go through a simultaneous start-up sequence. When the Log-in icon "Mini-User" appears, click on the Icon, and type in the password provided by Communitek in an email confirming your MiniMobile purchase or rental.

The Video operating system requires no operator assistance at this time in the set-up.

The Windows operating system may require the following set-up:
1- Network TCP/IP set-up
2- For Flash Encoding, the Server Publishing point may need to be entered or changed. as well as the stream name, and any authorization code or additional string of characters required by the Content Distribution Network (CDN) that you are using.
3- For Windows Media Encoder (WME), the "Output" Set-up may need to be entered or changed.***Note" WME is only installed as an option. Contact your dealer or distributor for availability of this option.

Note: Your Minicaster may be pre-configured by Communitek for your network operation. Check with your sales rep or technical support

If your Minicaster has not been pre-configured, and requires changes to the Network IP, Flash or Windows Media Publishing Point:

1- Network Set-up
If you are using a dedicated IP addresses, go to "Control Panel". Click On the "Network Connections" icon, click on the "Local Area Connection" icon and the Network Properties Window will pop up. Locate the scroll window under "This connection uses the following items". Pull the scroll bar down to show the Internet Protocol (TCP/IP) and click on the item to highlight. Click on Properties, and the "Internet Protocol (TCP/IP) Properties" window should appear. Click the "Use the following IP address" radio button. Enter the IP address, Subnet mask, and Default Gateway.

If you are using a DNS server, click the "Use the following DNS server addresses" radio button and enter two DNS Server addresses.

Click "OK" , and the "Local Area Connections Properties" window should re-appear.

Click "OK" on this window and wait for the window to close. You have now set the IP address for the Minicaster.

If you are using DHCP (Dynamic IP addressing), instead of clicking "Use the following IP address", click the "Obtain an IP address automatically" radio button.

2- For Flash Publishing Point:
Click on the Flash Live Media Encoder Icon (FLME). This will open the Flash Encoder interface. Although your Minicaster has been pre-programmed with a Flash Server Publishing Point, you may need to change the address, if you use third party hosting or another Communitek server address. Click on the server radio button to enable the RTMP address. Enter the RTMP address for your assigned server.
ie...*//video8.videohostpro.com/live*
At this point you can enter a stream name, ie…*livestream*
In the save to file section of the interface, enter a file name, ie…*mystream*

3- For Windows Media Publishing Point
Click on the Windows Media Encoder (WME), and this will open Windows Encoder interface. Click on the "Output Tab" and click the radio button for "Server Push".
Then, type in the server address, ie…video5.videohostpro.com
And type in the Publishing Point Name, ie…*mypoint*
Click OK.

4- VidBlaster Option - If your MiniMobile has VidBlaster Pro (or higher level VidBlaster edition) installed, you should refer to the VidBlaster Manual, available at:
http://www.usvidblaster.com/downloads/manuals/VidBlasterTheManual.docx
for selecting camera sources, graphics, and the "Streamer 1" Module. The Streamer module allows the user to pre-program FMS URL's and stream names directly. In addition, the VidBlaster "Output 1" Module can be used with FMLE, to seamlessly provide both switching and streaming functions.

You are ready to stream:

5- To Start a Flash Stream with FMLE (if using VidBlaster, skip to "Start a Stream with VidBlaster"):
Click the red "Start" button on the FLME interface, and observe that the display switches to streaming status, and shows that the stream has been started.

5a- To Start a Windows Media Stream (if using ViBlaster, skip to "Start a Stream with VidBlaster"):
Click the "Start" button on the WME interface, and observe that the stream status is active.

6- To Start a Stream with VidBlaster:
In the standard "Streamer 1" Module Click "Start" to start the Stream. If the Streamer 1 Module is set to the larger Display Mode, then right click on the Streamer 1 Module, and select "Start". In VidBlaster this procedure is the same for Flash or Windows Media.

Viewing the Live Stream:

If you have scheduled live hosting services with Communitek Video Systems, you will either

1- be assigned a MiniMobile Web Page, ie…www.communitek.tv/minimob1
2- Communitek will provide custom pages written for your specific event.

This is the easiest way to get your streams on the World Wide Web. For pricing and information, Contact Communitek at 718-361-1774, or email stream@communitek.tv

If you have a third party hosting provider, you will need the Publishing Point information from the provider and assign a stream name. See the "Detailed Set-up" section, item 2. Some hosting providers will also specify an "authorization key" for your Publishing Point, which will need to be added to the stream name.
Communitek personnel will be more than happy to assist you step by step with the configuration for a third party hosting provider, once you have obtained the Publishing Point and, if required, the authorization key.

Servicing and Troubleshooting:

In the unlikely event that you experience a service issue with your MiniMobile Communitek provides support by email, web contact form, or phone.
email mini@communitekvideo.com - By phone" 718-361-1774
For direct Web support go to: http://www.communitekvideo.com/contact
Additional information on all MiniMobile support is available at www.minicview.com

Thank you for selecting your MiniMobile turnkey streaming system from Communitek Video Systems, Inc.