

Installation Guide and User Manual

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CONTACT INFORMATION

If you should have any problems with your JobLink system, please call us. For sales, service and technical support, please contact:

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WARRANTY

ONE-YEAR JOBLINKTM LIMITED WARRANTY.

COMVERGICS SYSTEMS warrants to the original end user purchaser ("You") that the product shall be free of defects in materials and workmanship under normal use for one (1) year from the original date of purchase (the "Warranty Period"). THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTIES ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

COMVERGICS SYSTEMS exclusive liability and Your exclusive remedy hereunder is expressly limited to, at COMVERGICS SYSTEMS sole option and discretion, the exchange, repair or replacement of defective or non-conforming materials, parts, or components without charge for either parts or labor, and to whatever extent it shall deem necessary to the restoration of the product or components to proper operating condition. Any replacement shall consist of a new or re-manufactured functionally equivalent product of equal value, and will be solely at the discretion of COMVERGICS SYSTEMS.

Please read the full warranty enclosed with your JobLink system for additional information.

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COMPLIANCE AND SAFETY INFORMATION

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR MODIFICATIONS NOT EXPRESSLY APPROVED BY COMVERGICS COULD VOID THE USER'S AUTHORITY TO OPERATE THE SYSTEM.

Read these simple guidelines. Failure to obey safety rules can result in serious danger or death. In addition, FCC compliance may be compromised.

ELECTRICAL HAZARD



This device uses A/C power. Do not operate near water or with cover removed.



OPERATE SYSTEM PROPERLY

Use this system safely and within its operating guidelines. Contact Comvergics if you have safety or usage questions.



INTERFERENCE

Wireless systems are susceptible to interference from a variety of sources. Performance may be affected.



DO NOT USE IN HOSPITALS

Do not operate system near medical equipment. Follow hospital guidelines.



SWITCH OFF IN AIRCRAFT

When transporting system by aircraft, disconnect battery to prevent accidental power-up if ON/OFF switch is bumped.



SWITCH OFF WHEN REFUELING

Do not use system near fuel or chemicals. This equipment is not spark, static or electric discharge resistant.



SWITCH OFF NEAR BLASTING

Do not use system where blasting is in progress. Observe site restrictions.



SERVICE ONLY BY COMVERGICS

There are no user-serviceable components in the system. Contact Comvergics for all service or repair needs.



USE COMPATIBLE COMPONENTS

Use only Comvergics-approved equipment and accessories.



USE COMPATIBLE BATTERY

Only connect an approved back-up battery. An incorrect battery type may damage the JobLink™ electronics.



KEEP SYSTEM DRY

The system is not water resistant. Keep system indoors, away from rain, water spray or high humidity.



911 EMERGENCY CALLS

The system supports cellular E911 calls with GPS locating capability. **Dial 911 and wait for assistance**.

UNPACKING

Unpack and inspect each component. You should have all of the items shown:













JobLink™ Base Unit

Cartridges

GPS Antenna

(2) 3.0dBi 6" Antennas

A/C Power Adapter

Battery

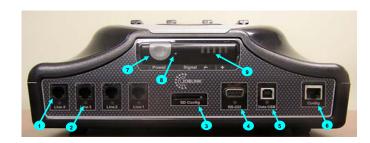
Additional Items included:

User Manual Software CD USB Cable Ethernet cable Metal GPS Antenna Base

Please call Comvergics service dept. at (877) 832-5465 to report any items that are missing or damaged.

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FRONT PANEL



- 1. Telephone Lines #1-4 Jack(s) (RJ-11)
- 2. Line Status LED (s)
- 3. SD Card slot
- 4. RS-232 Data Interface Jack (DB9)
- 5. USB Data Interface Jack (USB jack)
- 6. Ethernet User Management Jack
- 7. Power ON/OFF Button
- 8. Power Status LED
- 9. Wireless Signal Strength LED Display

BACK PANEL



- 1. A/C Power Jack
- 2. GPS Antenna Jack (color coded green)
- 3. Antenna 2 Jack High Band(color coded yellow)
- 4. Bracket Board Connector (DB37)
- 5. Antenna Jack Low Band(color coded white)

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STEP 1: INSTALLING COMVERGICS CARTRIDGES

Your JobLink $^{\text{TM}}$ system requires activated transceiver cartridges to be installed to access wireless network services. These should have been pre-activated and installed prior to shipment. If your cartridges were shipped separately they will need to be installed.

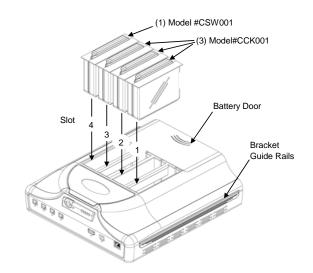
Step A: Locate THE CARTRIDGES - If they have not already been installed. Locate the cartridges included with your system. You may have:

- 1 to 3 model#CCK001 cartridges (Voice & Fax)
- 1 Model # CSW001 Cartridge (Data Only)

Note: At least one (1) Model#CCK001 must be installed in Slot #1 for the system to operate as per FCC guidelines. 911 calls require an activated cartridge be installed in Slot #1.

STEP B: Locate slots – Slots #1 through slot #4 are located as shown in the diagram.

STEP C: INSTALL CARTRIDGE IN SLOT #1 - Slide one cartridge model #CCK001 into slot#1 making sure the guides are aligned.



- The round antenna connectors on the bottom of the cartridges must be toward the back of the slot. The cartridge can not be inserted if turned the wrong direction.
- When the cartridge reaches the connectors, firmly and evenly push down until the cartridge seats. DO NOT FORCE. The top lip of the cartridge will be flush with the top of the base unit when properly seated.

STEP D: INSTALL CARTRIDGES IN SLOTS #2 & #3 - Repeat step #C for slots #2 and #3 with the remaining two cartridges marked model #CCK001.

STEP E: INSTALL DATA CARTRIDGE IN SLOT #4 – The remaining cartridge should be model #CSW001 for EVDO network use. If this is not the correct cartridge, you should remove the cartridges previously installed one by one to verify you have installed the correct model. Repeat step #C for slot #4 and install model #CSW001 cartridge.

YOU HAVE COMPLETED INSTALLING YOUR CARTRIDGES. YOUR SYSTEM IS NOW CAPABLE OF 3 VOICE/FAX* LINES AND A SHARED DATA CONNECTION FOR YOUR WORKGROUP.

* The Beta version of JobLink can not support analog Fax. A digital Fax machine has been supplied for Beta testing until support for analog Fax is available.

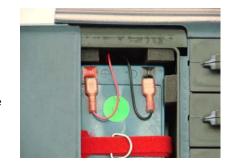
STEP 2: INSTALL AND CONNECT BATTERY

Your JobLink™ system has been shipped with the Backup Battery already placed inside the Battery Compartment. The wires are left disconnected for safety during shipping.

STEP A: OPEN BATTERY DOOR– Slide open the battery hatch (see diagram on page 10), located behind the cartridge slots. Place the battery inside (if not already in place) with the terminals closest to the battery wires.

STEP B: CONNECT WIRES – Connect the **RED** wire's connector to the positive (+) terminal of the battery. Connect the **BLACK** wire's connector to the negative terminal of the battery (-).

STEP C: CLOSE BATTERY DOOR – Slide the hatch cover back in place until it clicks fully closed.





Do not use a battery that has been dropped, is cracked, or shows signs of leaking. Batteries contain caustic chemicals that can burn skin or cause eye damage.



STEP 3: LOAD THE JOBLINK™ SOFTWARE

A compact disc is supplied for configuring the JobLink™ system. A single desktop icon will be installed to choose between configuration mode or connecting the computer to the internet.

STEP A: LOAD THE SOFTWARE - Place the disc in you computer's CD drive. It should begin automatically.

STEP B: FOLLOW THE PROMPTS - Follow the prompts as requested until the installation is complete.



If installation doesn't begin automatically, find the program **JOBLINK.EXE** on the disc. Double-click to run it.

The software will load the JobLink[™] software and place a JobLink[™] icon onto the computer desktop. After the installation process has completed, the disc may be removed from your computer. Store it in a safe place. It will not be needed again for normal operation.

STEP 4: TESTING YOUR SYSTEM

Prior to completing the installation of the JobLinkTM system and connecting all of your peripherals in its final location, test the system's call making capability using the provided Antenna(s) to verify coverage in the area you are operating.

STEP 1: SET THE SYSTEM – find spot such as on a desk or table for ease of access.

STEP 2: CONNECT THE ANTENNA(s) – Locate the two small 6" blade style antennas provided with your system. Connect one antenna to each of the two connections on the Rear Panel of the JobLink™ system (color coded white and yellow) and marked "Antenna #1" and "Antenna #2". Align the antennas so they are pointing up.

STEP 3: PLUG IN THE JOBLINK™ BASE UNIT — Attach the A/C power cord to the Power jack (color coded RED) on Back Panel of the Base Unit. Plug the other end into a 110V wall outlet.

STEP 4: TURN THE SYSTEM ON – Push and hold down the Power ON/OFF Button until the power LED turns **RED** then release. The Power Status LED will remain **RED** and then change to **GREEN** if A/C power is available (AMBER if running solely on the Backup Battery). The system will take a couple of minutes to boot up. When completed the LEDs under the phone jacks and the signal strength indicator will become illuminated.

STEP 5: PLUG IN A TELEPHONE – Check to make sure that the Line Status LED for Line #1 located on the front panel is **GREEN**, indicating that it is ready for telephone usage. Plug a standard telephone set into Line 1. (Note: a digital phone set will not work)



If the Line Status LED under Line 1 RJ-11 (see page 10 - "Front Panel") stays **RED** or blinks **AMBER**, see the Trouble Shooting section for assistance on wireless signal problems.

STEP 6: MAKE A CALL – Lift the handset and confirm that you get a dial tone. Place a local call to confirm proper operation.

- If you were able to complete your call successfully, proceed to step #7 and on with the rest of the installation.
- If you test call could not be completed, contact Comvergics at (877) 832-5465.

STEP 7: TURN SYSTEM OFF – Push and hold down the Power ON/OFF Button until the Power Status LED begins blinking **RED**, then release. The system will sign off the network and power down. This will take a few seconds. When complete all LEDs will be dark. Proceed with your final installation.

STEP 5: COMPLETING YOUR INSTALLATION

Buildings and work site trailers vary greatly and therefore must be taken into consideration when determining the best location and type of installation for the JobLink™ Base Unit. Here are some things to keep in mind:

- SOLID SURFACE Place the system securely on a shelf or table where the cables will not cause a tripping hazard or a risk of falling or being pulled out of place. If you are using the JobLink™ Bracket system or are connecting directly to the premises telephone cabling see the "Bracket Installation" guide included with the bracket.
- DISTANCE TO ANTENNA(s) If the 6" direct-connect antennas used to test your system provided sufficient signal strength, this should not be an issue; however, if you're in a metal trailer or have considerable concrete structures around you, you may need to use an external antenna. In which case, the system should be located to minimize the cable length from the antenna to the JobLink™ Base Unit. The maximum recommended cable length is 20' (See table in "Antenna Installation Guidelines").
- A/C Power The system requires the use of an A/C power adapter 'block' plugged into a 110 Volt outlet for normal operation and battery charging.

DESK TOP INSTALLATION

STEP 1: Connect the two 6" direct connect antennas provided with your system to the antenna connectors labeled "Antenna" (color coded White) and "Antenna #2" (Color coded Yellow) on the back panel of the system. (this may already be completed from when you tested the system.)

STEP 2: Connect the GPS antenna to the connector labeled "GPS" (color coded green) directly to on the back panel of the JobLink™ Base Unit. This antenna has a magnetic base and should be mounted in a vertical position on the metal base plate provided with your system.

STEP 3: Connect the A/C adapter to the back of the unit in the plug labeled "Power" and color coded Red.

STEP 4: Place the system where you have chosen based on the guidelines above and where it will remain in operation.

STEP 5: Plug the A/C adapter into a nearby outlet.

STEP 6: Connect your standard telephone equipment and computer peripherals as described in "Connecting Your Equipment" on Page 24. Make sure to secure all equipment cables out of the way to prevent tripping hazards or damage to your JobLink™ system.

STEP 7: Turn on system power and begin using your JobLink™ system.

ANTENNA GAIN

Important: To comply with FCC approvals and requirements, the maximum gain of any antenna(s) used with the JobLinkTM system may not exceed:

- o 10.7 dBi including cable loss at 800MHz (part 22)
- o 3.3 dBi including cable loss at 1900 MHz (part 24)
- Applications exceeding these gains will not meet mobile-station power output limits and will require FCC site licensing.
- The Table below provides the average losses (dBi) for the cable sizes/lengths listed.

CABLE SIZE (DIA.)	3′	6′	10′	15′	20'
LMR400 (.405")	Not recommended		1.7	2.0	2.4
LMR 240 (.240")	1.3	1.7	2.1	2.7	Not recommended
LMR 200 (.200")	1.4	1.9	2.5	3.2	Not recommended
LMR 195 (.195")	1.5	2.0	2.6	3.5	Not recommended

^{*}assumes -1dBi total Insertion loss for connectors

RECOMMENDED ANTENNAS:

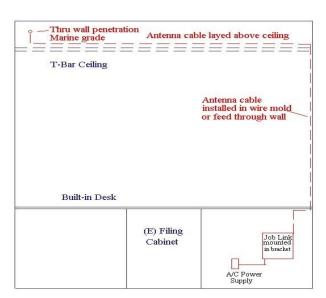
Direct connection (included) - Mobile Mark – Model # PSKN3-900/1900T (3.0 dBi) **Exterior Antenna -** Wilson Cellular 301123 (5.2 dBi)

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INSTALLATIONS USING AN EXTERNAL ANTENNA (OPTIONAL)

Using an external antenna requires additional labor for routing of the cables and mounting of the antennas. The example below shows a sample installation of a JobLinkTM system installed in a construction site trailer:

- The system is mounted under the desk to the wall of the trailer using the optional Bracket mounting system. The system may also be placed on a desk or shelf adjacent to the location where the antenna cable will exit the building.
- The antenna cable is hidden inside a wire mold strip going up the wall from the desk to the ceiling. If a wire mold is not used cables should be secured to wall.
- The cable then runs above the T-bar ceiling tiles over to the exit point.
- The cable then exits the trailer through a water-tight gasket in the wall to be connected to the external antenna.



EXTERIOR ANTENNA INSTALLATION GUIDELINES

An exterior antenna will help the JobLink™ system provide optimum performance for voice and data transmission, as well as reliable network connections. Here are some guidelines to installing an external antenna:

- CHOOSE A HIGH SPOT The antenna should be located as high as reasonably possible above the building roof line. Also, keep in mind a location that will be difficult for vandals to reach without a ladder.
- CHOOSE A CLOSE SPOT The antenna should be located adjacent to the room where the JobLink™ system will be located, within reach of the antenna coax cable (max. 20′ cable run). The best signal performance is obtained with the shortest coax length possible.
- AVOID OBSTRUCTIONS Antennas perform best without obstructions blocking the signal from the wireless tower. The fewer nearby line-of-sight obstructions, the better your signal quality should be.



Unsure where to get the best signal? Try temporarily positioning the antenna in different locations. Observe each location's signal strength and performance before choosing the final spot to mount the antenna.

MOUNTING THE EXTERIOR ANTENNA

Follow the manufacturer's mounting instructions included with your exterior antenna(s). Some basic steps are listed below:

- INSTALL ANTENNA MOUNTING BRACKET Mount the angle bracket to the structure so the antenna will be vertical and unobstructed when mounted. Refer to antenna bracket manufacturers instructions if any for proper installation.
- MOUNT ANTENNA & CABLE Insert the antenna into the bracket and secure with its locking nut. Secure the appropriate connector on the end of the coax cable to the antenna's connector.
- Pass Cable Through wall Carefully drill an appropriately sized hole for the cable(s) you are using. Make sure to use a good cable seal to prevent moisture damage to walls or building. Some of the cable seal parts may need to be slipped onto the cable first before passing cable through wall.
- CONNECT CABLE Conceal and run the coax antenna cable as desired to the back of the JobLink™ Base Unit. Connect it to the mid-range antenna connector (color coded white) by screwing it clockwise onto the end of the connector until secure.



Always obtain the appropriate permissions before drilling or modifying premise.

CONNECTING YOUR EQUIPMENT

The JobLink™ system can support up to four wireless uplinks. They can each be configured for voice, fax, or data. Slot 1, which holds the wireless cartridge for Telephone Line 1, also has connections for the GPS Antenna, allowing it to support E911 (cellular network emergency services with GPS locating capability).

From the factory, the system is configured as follows:

- **Telephone Line 1** Voice; this line is only voice capable to support e911 locating using GPS services.
- **Telephone Line 2** Voice; this line will have a different phone number than line #1 and may also be set to Fax mode for use with a fax machine.
- **Telephone Line 3** Voice; this line will have a different number tha line #1 or #2 and may be set to fax mode for use with a Fax machine.
- **Telephone Line 4** Data; voice calls will not be supported if a data only cartridge is installed. You may use a voice enabled cartridge by setting the mode to voice.

The device supported on each line can be modified using the supplied JobLink™ software using a Windows-compatible PC attached to the Ethernet User Management Port (see System Configuration).

PLUG IN YOUR TELEPHONE(S) - Any telephone that works on a standard telephone land line will work with the JobLink™ system. Do not use PBX phones.

Plug a telephone into Telephone Line 1 (if not already done). If you have a second phone, plug it into Line 2.

- PLUG IN YOUR FAX MACHINE (OPTIONAL) If you wish to connect a fax machine, plug it into Telephone Line 3.
- PLUG IN YOUR COMPUTER (FOR INTERNET) Connect your computer's USB port to the JobLink™ system's USB Data Interface Jack, using the USB cable supplied. The system will utilize the wireless cartridge in Slot 4.
- TURN THE SYSTEM ON Push and hold down the Power ON/OFF Button for five seconds. The Power Status LED will flash RED and then should change to solid GREEN (indicates A/C power; AMBER indicates battery power).









PHONE OPERATION (VOICE CALLS)

Placing a telephone call is the same as it is for standard land line phone systems with a few exceptions as listed below.

- PICK UP THE PHONE Pick up the telephone handset. You should hear a normal dial tone.
- M DIAL Dial the destination telephone number (7-digit local, 10-digit long distance, international, 311 city information, 411 telephone information, 611 JobLink™ service or 911 emergency). Special 3 digit calls are handled differently than on a landline system:
 - o <u>911 Emergency Calls</u> are dialed as normal and are handled very much the same as if you were making a 911 call using your cell phone. The call will be directed to the authority that handles mobile 911 calls in your area (typically Highway Patrol in CA).; however, to insure GPS functionality is maintained so that emergency services has a location for the call, JobLink™ routes all calls for 911 through line #1 regardless of the line# you make the call from. This means any non-911 calls in progress on line #1 will be immediately ended so that the 911 call can go out over line #1. No special actions are required by you.
 - 411 directory assistance calls will go to the wireless provider's directory assistance for the provider you are using on the particular cartridge which corresponds to the line number you are using.

- o <u>611 service calls</u> will forward directly to Comvergics Systems. If the call is related to your JobLink™ system, a Comvergics service representative will assist you. If the call is only related to billing issues with your service provider, the Comvergics service representative will connect you with the service provider for further assistance.
- TALK You should hear the wireless link connecting your call, then the normal telephone audio (e.g. ringing then someone answers) from the other end.
- Mang UP When you are done with your call; just hang up.
- LED STATUS An LED under each line connection will display the line status as indicated below:

Not Lite	No cartridge installed for this line; Line not active (Do not use)
Solid Green	Cartridge installed for line; Line active (Okay to use)
Blinking Green	Line active and in use
Yellow	Line is active, but roaming (May incur additional charges if used)
Red	Cartridge installed; not usable for voice or Fax (Slot used for Data only)

PROBLEMS? - Refer to the Troubleshooting Guide in the back of this manual for possible solutions or call (877) 832-5465 toll free and one of our service representatives will gladly help you.



INTERNET OPERATION

To connect to the internet, your computer equipment should already be plugged in to the **USB Data Interface Jack** on the front panel. The Beta model does not support the RS-232 or RJ-45

Ethernet port for data connections.

STEP 1: CLICK JOBLINK™ ICON – Launch the access manager by clicking on the JobLink™ icon located on your computer's desktop. You will see a drop-down menu to choose either Configuration or Connect.

STEP 2: CLICK CONNECT – Clicking **Connect** option will launch "Watcher", the access manager used to initiate your network connection. **Watcher** will locate the network and prompt you to click the "connect" button to sign on to the network. Once signed on Watcher will indicate "connected" on watchers dash board.

STEP 3: SURF! – Launch your internet browser (i.e., Internet Explorer, Fire Fox etc.). Your computer can now access the internet through your browser. The connection will remain open and usable until you end the session or shut the JobLink™ system down.

ENDING THE INTERNET SESSION – Close your browser as normal, the access manager will remain open on you desktop. Click "disconnect" option button to end the session and close the wireless link.



NOTE: The JobLink™ User Management software can only be accessed by the browser via the **Ethernet User Management Port**, using the supplied Ethernet cable (see System Configuration below).



FAX OPERATION (NOT AVAILABLE IN BETA MODEL)

(An IP Fax machine has been provided with your JobLink™ Beta model. Please refer to the Manufacturers instructions for operation.)

RECEIVING A FAX – Just as you would with a landline, you must provide the sending party with the phone number your fax machine is connected to. With JobLink^{TM}, this will be the phone number for the cartridge installed in the corresponding slot for the line number you have selected for fax operations (usually Slot 3).

They may send their fax normally, except that no voice portion is provided, so they will be unable to converse with you on the fax machines' handsets, as is possible with land line fax connections.

WHEN YOU RECEIVE THE FAX - As fax pages arrive over the wireless link, they are first received and stored within the JobLink™ system. The system will then re-transmit the fax pages directly to your fax machine. This store-and-forward method is necessary because digital wireless fax transmits fax images in a different format than traditional analog fax machines.

SENDING A FAX - There is a distinct difference between regular land line fax operation and faxing over a wireless network:

The fax pages you send must first be received and stored inside the JobLink™ system first. They

are then re-transmitted out over the wireless network digitally to the wireless network's fax storage memory. This causes a delay in receiving confirmation from the destination fax machine that all the pages were *actually received correctly*. By the time confirmation comes, your fax machine has already completed and hung up.

Once the JobLinkTM system gets confirmation from the wireless network that the destination fax machine finished receiving all the pages (or had an error), it will generate a *Confirmation Fax* to send to your fax machine, letting you know whether the fax was received correctly or not.



NOTE: You will **not** be directly connected to the destination fax machine. The JobLink™ system will receive your fax and then re-send it to the destination fax machine.

To send a Fax – Place the pages to be faxed into the fax machine as required by your fax machine. Pick up the fax handset or press the HOOK button. You should hear a dial tone. Dial the destination fax machine's phone number. The fax machine should hear a fax tone and begin sending the pages until complete. It should then hang up.

After you finish sending a fax, your fax machine will soon *ring, answer, and receive* a one-page fax reporting whether or not the fax was received correctly by the destination fax machine.



SYSTEM MANAGEMENT TOOL

The System Management Tool allows for configuration of the $JobLink^{TM}$ system settings through a series of internal HTML (web) pages accessed via your computer. These pages will give you various options such as viewing information and status of your JobLinkTM system, changing settings, trouble-shooting, and downloading updates for JobLinkTM software. To access the User Management software:

STEP 1: CONNECT ETHERNET CABLE – Connect the supplied Ethernet "Cross Over" cable between the **Ethernet User Management Port (RJ-45)** on the front panel of the JobLink™ system and the Ethernet Port on your computer.

STEP 2: WAS THE JOBLINK SOFTWARE LOADED ON COMPUTER? – The JobLink™ software you installed when you set up your system installed an application on you computer that will help you to access the User Management interface via a separate browser window to administer the JobLink™ system. If you are using a different computer or did not complete the software install, you will need to complete the installation now (See Page 13).

STEP 3: ENABLING THE ETHERNET CONNECTION BETWEEN YOUR PC AND JOBLINKTM – If the $JobLink^{TM}$ system is turned on and you have connected your PC to $JobLink^{TM}$ as instructed in Step #1, you should see a flashing Icon in your computer' system tray. Click this Icon to establish the Ethernet connection between your computer and $JobLink^{TM}$.

STEP 4: OPEN BROWSER - OPEN THE YOUR BROWSER ON THE DESKTOP AND GO TO http://192.168.8.8 (JOBLINK'S IP ADDRESS). THE FIRST PAGE TO APPEAR WHEN YOU ESTABLISH A CONNECTION WITH THE USER MANAGEMENT INTERFACE IS THE STATUS PAGE.

STATUS PAGE

This page will provide you information on each cartridge installed in the 4 available slots in your system and is labeled **Line 1** through **Line 4** (see right).

This page also provides you general information on your $JobLink^{TM}$ system such as battery level, system date & Time, and software version.

No changes can be made on this page. Changes can only be made via the **Configuration** page (see below).



VIEW/EDIT SETTINGS – Across the top of all User Management web pages are tabs that allow you to navigate between the various pages. These tabs are labeled:

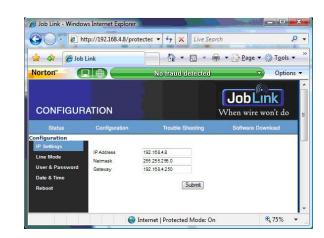
- ❖ Status Shows network information, operating mode, and signal quality for each cartridge plugged into the system.
- ❖ Configuration Has five pages for setting IP address, mode (voice, fax, data or disabled), password, time and date, and shutting down the system. There are five Configuration pages available:
 - IP Settings
 - Line Mode
 - User & Password
 - Date & Time
 - Reboot
- ❖ Troubleshooting JobLink has an on-board interactive troubleshooting guide consisting of multiple pages with YES / NO questions to guide you to a solution for the problem you are experiencing.
- **Software Download** Allows you to update the JobLink[™] software, if requested by Comvergics or install upgrades to the system.

CONFIGURATION PAGES - IP SETTINGS

The default IP address of the **Ethernet User Management Port (RJ-45) is 192.168.8.8.**

From the Status page click the "configuration" tab. You will be prompted to enter your user name and password before entering any the configuration pages (default; user name: admin, password: password).

The first page you will see upon entering the configuration section is the "IP Settings" page. This page will show the current IP settings for your $JobLink^{TM}$ System. These settings will not normally need to be changed unless you are connecting a router or other network device to



JobLink™. To change the IP settings simply enter the new IP address, netmask and gateway address and click submit.

If you wish to use a router or other networking device, please contact Comvergics Tech Support (877) 832-5465 for a list of compatible devices and specific instructions.

CONFIGURATION PAGES – LINE MODES

Once you have entered the configuration section (see page 33) click the "Line Mode" tab in the column on the left side of the page. This will open the Line Mode page which will show the current configuration for the slot(s)/line(s) on the $JobLink^{TM}$ system.

Slot 1/Line 1 may only be set to voice. Slot(s)/line(s) 2, 3 can be set to either voice (default) or fax and slot 4/line 4 can be set to voice or data (default).

You may change the line mode for your equipment configuration by selecting the mode desired the drop down menu for each line. When You have made the appropriate changes click "submit".



A voice cartridge (model #CCK001) must always be installed in Slot 1/ Line 1.

CONFIGURATION PAGES – USER NAME / PASSWORD RESET

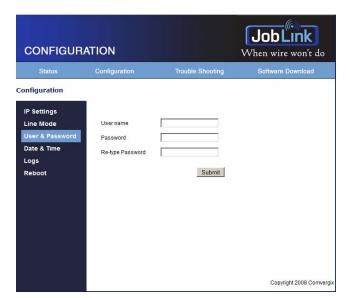
The default user name and password is:

User name: admin

Password: password

To configure a new user name and password enter the configuration pages as described on page 33. Click "User & Password" tab in the column on the left side of the page. This will open up the window to allow you to designate a new user name and password. Type in the new user name and password you wish and click submit.

Important: Write down or record your user name and password in a safe place in case it is forgotten. Once your system is set-up it is unlikely you will need to access configuration pages for a considerable length of time.



CONFIGURATION PAGES - DATE & TIME

The JobLink system's date and time will automatically be set to Network Time (NTP) as soon as a module is inserted in slot 1/Line1. If the module is removed from slot 1/ Line 1 the system will default to a default date and time and not current date and time.

Reinserting a cartridge into slot #1 will re-set the time from the network. There may be occasion that the date and time may need to be set manually.



To configure the date and time manually enter the configuration pages as described on page 33. Click the "Date & Time" Tab on the column on the left side of the page. This will open up the window to configure date and time. Simply enter the new date and time and click the submit button.

Note: The date and time you enter will remain in affect until the system can obtain a new time from the network or power is completely removed from the system.

CONFIGURATION PAGES - REBOOT

At times it may become necessary to Reboot the system such as after a software upgrade.

To reboot *JobLink*™ system, enter the configuration pages as described on page 33. Click the "Reboot" Tab in the column on the left side of the page. This will open up the window to initiate a reboot. To turn the system off, click the "Reboot" button. Your JobLink™ system will sign off of the network and shut down.

Important: The JobLink™ system will not automatically restart. You must manually press the power button until the system restarts.

Check the LEDS on the front of the system or view the system status page to make sure the system has powered up properly.

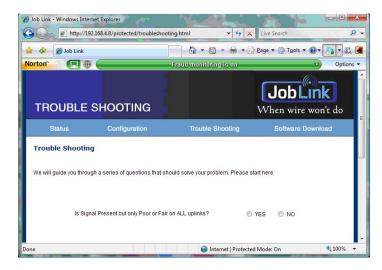


TROUBLE SHOOTING

If you are having a problem with your system, JobLink has an interactive trouble shooting guide to assist you.

Enter the System management Tool as described on page 30. Click the "Trouble Shooting" tab. This will begin a series of questions and answers to assist in diagnosing the source of the problem you are having.

Choose the category of the problem you're having and answer each question by clicking on the circle next to your answer.



If this trouble shooting section does not diagnose what you are experiencing, please contact Comvergics at (877) 832-5465 for additional technical support.

SOFTWARE DOWNLOAD

To accommodate future software upgrades, users may be requested by Comvergics to obtain and load a new software file into the JobLinkTM system.

After receiving a new software program file to install:

- BROWSE Click the Browse button and locate the file on your computer.
- DOWNLOAD Click the Submit button to begin the process of loading the new file onto the JobLink™ system.



RESTART THE SYSTEM – Shut down the JobLink™ system by Rebooting (configuration pages) or holding the **Power ON/OFF Button** down until the power LED begins to blink then release. After the system has completely powered off, turn the system back on by holding the **Power ON/OFF Button** down again until the power LED turns RED, then release.



TROUBLESHOOTING GUIDE

Contact Comvergics at (877) 832-5465 if you are unable to find a suitable answer in this section or the problem persists.

Problem	Possible Solutions		
General			
Missing Parts	Call (877) 832-5465 to get replacement parts		
Power			
System won't turn on	 Did you hold power button down until LED turned Red (approx. 5 seconds) Check to see if battery is connected Battery drained Check A/C adapter is in live outlet 		
Power LED is yellow	 System is operating on battery only, check A/C outlet. 		
RJ-11 Phone Jacks			
LED is Yellow	System is roaming		

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LED is RED	 Cartridge has not been activated There is no service in the area Line mode for that line is set for Data 	
LED is dark	Cartridge is not installed	
Fax Operation		
Fax not picking up	 Mode not set to Fax 	
Data Operations Won't connect to internet	Is USB cable connected to JobLink and PC?	
Wort connect to internet	 Was "watcher" launched from PC or Laptop? Did you click "Connect" in the Watcher dialog box? 	
Data speeds are slow	 Check that both antennas are securely fastened Outside of EVDO Rev. A network coverage area Too many users on single access point 	

JOBLINK[™] SPECIFICATIONS

(Beta version, Release 1.0 October 1, 2008)

PHYSICAL (BASE UNIT)

Width	11 inches
Depth	12 inches
Height	4.5 inches
Weight	+/- 5 lbs. including back-up battery

ELECTRICAL

TDM Bandwidth	120 DS0s
POTS Line Capacity	4 POTS trunks
Up-Links Wireless	4 Wireless Transceiver Cartridges – multiple technologies (initial modules: Kyocera M200, Sierra Wireless MC5725V)
Regulatory	UL-60950, FCC Part 15 Class A, FCC Part 68

Power

Power	110/220 VAC, 25 Watts
Backup Battery	12 Volt, Sealed, Lead-Acid, Rechargeable (PowerSonic Model PS-1230 or equivalent)
Electrical Noise	Tolerance and generation per GR-499-CORE, GR-513, ANSI T1.315
Features	Reverse battery protection, In-rush current limiting, Per card fusing, Automatic restart

ENVIRONMENTAL

Operating Temperature	40 °F to 149 °F (40 °C to 65 °C)
Range	Note: Some cartridge technologies may place tighter
	restrictions on temperature range.

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