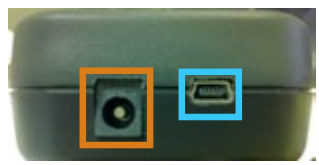
SQUID-PRO

User manual version 1.1

Contents

Unpacking - Upon opening the box that Squid-PRO comes shipped in, you will see the Pelican case and below that a documentation box containing an SD card, calibration certificate and AC auto adapter. Inside the Pelican carrying case you will find the Squid-PRO unit, AC charger and antennas.

Before You Start - Completely charge up your Squid-PRO using the supplied AC/DC transformer. Note the mini-USB port for later use with a PC. Be sure to also securely connect all antennas to the Squid-PRO for maximum sensitivity.



Starting Up - Power up Squid-PRO by pressing the pushbutton trackball or center keypad black button (model dependent) on the front of the unit. You should notice a horizontal startup bar for approximately 20 seconds. After startup, Squid-PRO scans all nearby cellular networks followed by the acquisition of base station names and finally GPS satellite lock. Time scan usually takes between 1 to 2 minutes total for all networks.

Navigation- Some Squid units utilize a small pushbutton trackball for navigation while other units utilize a standard five pushbutton keypad layout (left, right, up, down and select (black center button)). These two different models are only cosmetically different. Functionally, they are identical.

Connecting Antenna - Be sure to connect all antennas before making scanning for any carriers. The antenna inputs are hardwired to their respective bands. Looking at thr rear of the unit:

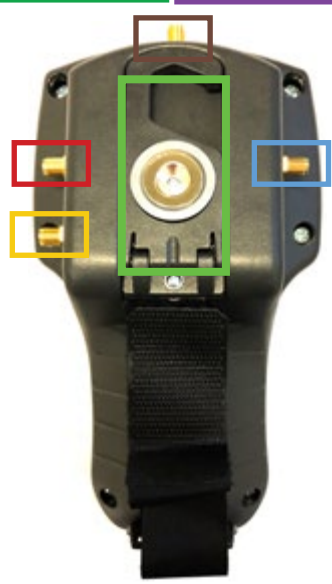
Top left SMA connection is for CDMA carriers like Verizon

Right SMA connection is for UMTS/GSM carriers like AT&T and T-Mobile

Top SMA connection is for CDMA bands used by Sprint

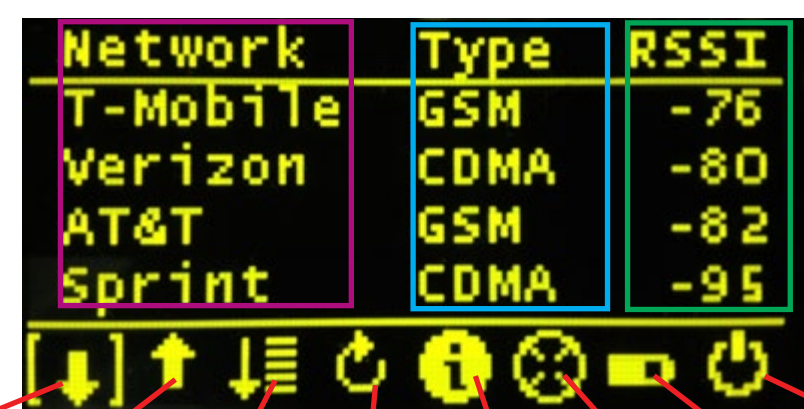
Bottom left connection is only for GPS connection (active GPS antenna only).

Magnetic Hook - Squid-PRO contains a fold-out hook that easily slips onto a utlity belt or low hanging wire. The embedded magnet also allows Squid-PRO to be mounted temporarily to metal surfaces.



Main Screen - Once the Squid-PRO powers up and scans all nearby base stations, you will notice the main screen complete with Network Carrier, Type of wireless standard, RSSI measurements in dBm and Squid-PRO menu icons below.

Network base stations are listed according to their wireless carriers. Not all carriers are supported so ask your BVS sales agent.



TYPE lists the wireless standard detected including CDMA, Wideband CDMA and GSM. Not all bands are supported so ask your BVS sales agent.

RSSI values are listed as they are scanned. Use the RE-LIST BY RSSI function to place the strongest base stations at the top.

DOWN ARROW UP ARROW SORT BY RSSI DISPLAY REFRESH PRODUCT INFO GPS INFO BATTERY POWER OFF

ICONS and their FUNCTIONS

DOWN ARROW - Use this arrow to scroll down when the list is greater than 4.

UP ARROW - Use this arrow to scroll up when the list is greater than 4.

REFRESH DISPLAY- Use this to update info on the screen and remove or add items that are not current.

SORT BY RSSI - This icon lists RSSI so that the strongest RSSI values appear at the top (for instance, -55 dBm is stronger than -93 dBm)

INFORMATION - This screen displays which antenna (left, right and center) is receiving which wireless standard.

GPS - Displays navigation information including latitude, longitude, UTC and fix. The GPS antenna must be connected to the GPS connector on the top of the unit in order to achieve GPS lock. If your unit does not contain a Sprint module, you must use an active antenna to achieve GPS lock.

BATTERY - This screen displays battery power left (percentage) of the Squid's internal batteries. Typical runtime is approximately 8 hours.

POWER OFF - Select this icon to turn off the Squid.

ANTENNA PLACEMENT (CDMA only) - This screen displays the RSSI and Ec/Io of the current carrier in large text so that the OLED may be seen from a distance while adjusting the antenna for optimum placement. A CDMA base station must be selected to see this icon.

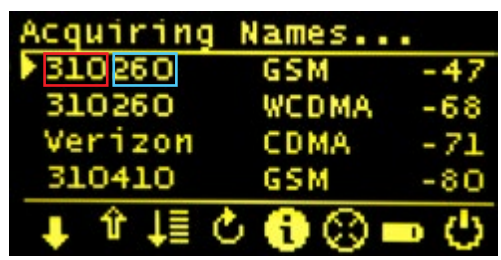
TEXT SCREEN (CDMA only) - Select this icon to display additional information about a CDMA base station including SID, NID, channel, PN, band and more. A CDMA base station must be selected before this icon can appear.

BACK ARROW - Select this icon anytime to go back to the previous screen

USER SCREENS and their FUNCTIONS

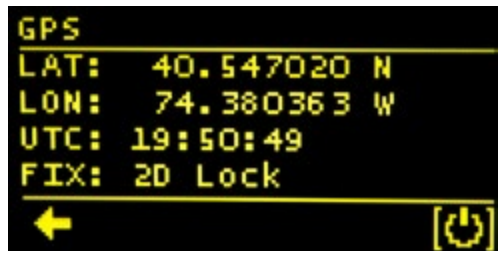
STARTUP SCREEN - Upon power up, Squid-PRO will display the firmware version and progress bar. It typically takes about 30 seconds for Squid-PRO to power up and begin locating nearby base stations.

FINDING NETWORKS - After the startup screen, Squid-PRO takes a moment to find and list nearby networks by brand name, band and RSSI value. Even if this list has filled the screen, Squid-PRO may continue to add base stations and acquire more names. CDMA networks are typically found almost instantly. GSM/UMTS networks generally take longer to acquire and are scanned while "Finding Networks..." is shown. (models with trackballs will blink GREEN and BLUE until it has found all networks listed)



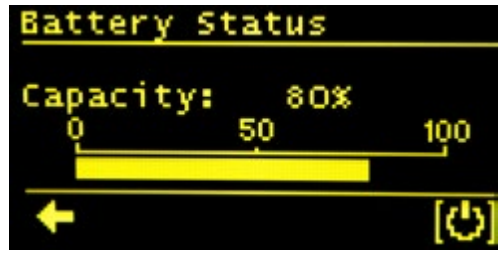
AQUIRING NAMES - After all nearby networks are listed, it takes approximately 30 seconds to acquire names of the base stations. Before the carrier brand is identified, the Mobile Country Code or MCC and the Mobile Network Code or MNC are displayed. This value shows up on a Squid-PRO in place of the name until the Squid-PRO is able to retrieve the name. The Squid-PRO still attempts to find the names for networks even after the "Acquiring Names" disappears. Normally, Squid-PRO will eventually find all the names. See WIKI excerpts at the end of this manual for carrier codes by country.

ANTENNA INFORMATION - This screen displays which antenna (left, center & right) is receiving which wireless standard. These connections are hard-wired to the receiver modules so the user knows that when facing the screen, left antenna connection is always for GSM while the connection on the right is always CDMA. The function of the center antenna depends on the Squid-PRO configuration. If equipped with a Sprint CDMA module, the center antenna is a shared CDMA/GPS (passive) antenna. If not equipped with a Sprint module, the center antenna is an active GPS antenna and marked appropriately.

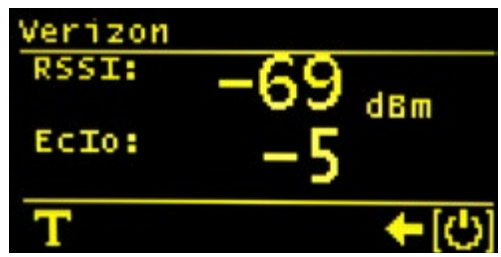


GPS - Displays navigation information including latitude, longitude, UTC and fix. The GPS antenna must be connected to the GPS connector on the top of the unit in order to achieve GPS lock. If your unit does not contain a Sprint module, you must use an active antenna to achieve GPS lock.

BATTERY STATUS - This screen displays battery power left (percentage) of the Squid's internal batteries. Typical runtime is approximately 8 hours.



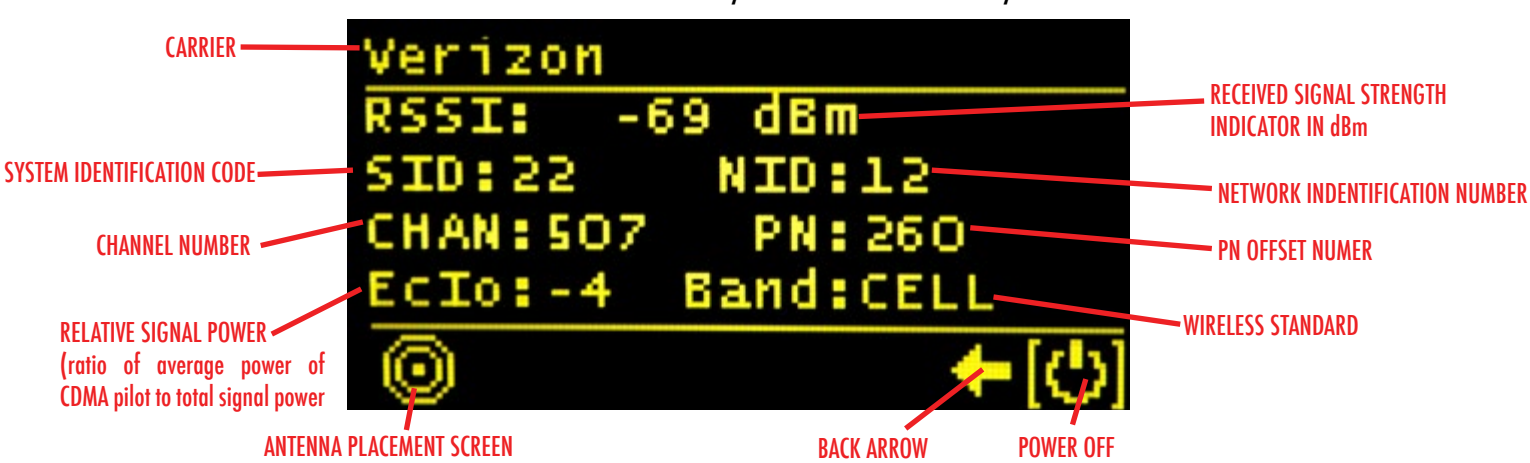
ANTENNA ALIGNMENT - This screen is most useful for antenna alignment when the operator may be out of arm's reach to the unit while holding or repositioning an antenna. From here, the user can select the "T" icon to view detailed information about the currently selected CDMA base station. These screens only relate to CDMA base stations.



POWER OFF - Select this power icon to turn off the Squid.

EMERGENCY SHUTOFF SWITCH - Since Squid-PRO powers off normally through software, there is a small possibility that the software can become unresponsive. In this case, Squid-PRO would not be able to be shut down until the battery fully dies. For this reason, an emergency shut off switch is located on the right side of the unit on it's side. Use a paper clip or any wire small enough to fit intothe hole. Hold the switch until the screen goes dark. You may now power your Squid-PRO back up again normally.

BASE STATION INFORMATION - This screen allows the user to see many details about the currently selected base station.



OPTIONAL DIRECTION FINDING ANTENNA - This option includes a DF antenna, bracket and antenna cable. Note the assembly in the photo. Attach antenna before powering up the Squid-PRO. Recommended procedure for DF antenna use is to begin by first attaching omni-directional antenna(s) to acquire local base stations. After all local carriers have been detected, swap out omni for direction finding antenna. Be sure to choose the appropriate antenna connection the carrier band of interest (UMTS/GSM on left & CDMA on right side when facing display). If center connector is marked "GPS", do not use that connector for direction finding.

TYPICAL SQUID-PRO APPLICATIONS - Since Squid-PRO provides dBm accurate measurements, it allows installers to verify and optimize M2M sites for the following applications and more.

Remote Meter Reading

Power Station Monitoring & Control

Variable Message Signs

Gas, Water & Oil Flow Monitoring

Fire, Law & Rescue Operations

Cellular ATM Transactions

Cellular Lottery Terminal Transactions

Fleet Management Solutions

GLOSSARY OF M2M TERMS

AVL (automatic vehicle location)
A system that determines the geographic location of a vehicle and transmits this information to a tracking center.

CDMA (code division multiple access)
A form of multiplexing that allows numerous signals to occupy a single transmission channel, optimizing the use of available bandwidth. The technology is used in UHF (ultra high frequency) cellular systems in the 800 MHz and 1.9 GHz bands. CDMA offers several data bearer options including IS-95, 1xRTT, and SMS (short-message service).

Condition Monitoring
The process of monitoring a parameter of condition in equipment, such that a significant change is indicative of a developing failure. It is a major component of predictive maintenance. The use of conditional monitoring allows maintenance to be scheduled, or other actions to be taken to avoid the consequences of failure, before the failure occurs. Nevertheless, a deviation from a reference value (e.g. temperature or vibration behavior) must occur to identify impeding damages.

EDGE (enhanced data rates for GSM environment)
A digital mobile phone technology that allows increased data transmission rates and improved data transmission reliability.

Edge Device
These wireless device networking solutions connect virtually any intelligent device to the Internet or IP network for remote monitoring, control and configuration.

GPRS (general packet radio service)
A packet-based wireless communication service that delivers data at rates up to 114 Kbps and continuous connection to the Internet for mobile phones, devices, and computers on GSM networks.

GSM (global system for mobile communication)
A digital wireless system that uses a variation of TDMA (time division multiple access) to digitize and compress data. It then sends this data down a channel with two other streams of user data, each in its own time slot. GSM operates at either the 900 MHz or 1800 MHz frequency band and offers several data bearer options including GPRS (general packet radio service), HSCSD (high-speed circuit switched data), and SMS (shortmessage service).

LBS (location based services)
A location-based service (LBS) is an information service, accessible with mobile devices through the mobile network and utilizing the ability to make use of the geographical position of the mobile device. LBS services can be used in a variety of contexts, such as health, work, personal life, etc. LBS services include services to identify a location of a person or object, such as discovering the nearest banking cash machine or the whereabouts of a friend or employee. LBS services include parcel tracking and vehicle tracking services. LBS can include mobile commerce when taking the form of coupons or advertising directed at customers based on their current location. They include personalized weather services and even location-based games.

MNO

A mobile network operator (MNO), also known as mobile phone operator, carrier service provider (CSP), wireless service provider, wireless carrier, or cellular company, is a telephone company that provides services for mobile phone subscribers.

MVNO

A mobile virtual network operator (MVNO) is a company that provides mobile phone service but does not have its own licensed frequency allocation of radio spectrum, nor does it necessarily have all of the infrastructure required to provide mobile telephone service. A company that does have frequency allocation(s) and all the required infrastructure to run an independent mobile network is known simply as a Mobile Network Operator (MNO). MVNOs are roughly equivalent to the "switchless resellers" of the traditional landline telephone market. Switchless resellers buy minutes wholesale from the large long distance companies and retail them to their customers.

Smart Grid

A smart grid includes an intelligent monitoring system that keeps track of all electricity flowing in the system. It also incorporates the use of superconductive transmission lines for less power loss, as well as the capability of integrating alternative sources of electricity such as solar and wind. When power is least expensive a smart grid could turn on selected home appliances such as washing machines or factory processes that can run at arbitrary hours. At peak times it could turn off selected appliances to reduce demand.

Smart Services

The use of advanced sensing, communication, and control technologies to deliver services more effectively, economically, and securely.

SMS (short-message service)

The process of sending short data messages to and from mobile phones and devices.

Telematics

The integration of wireless communication devices (and often location tracking devices) into automobiles for remote engine diagnostics, stolen vehicle surveillance,roadside assistance, etc.

Telemedicine

Telemedicine is a rapidly developing application of clinical medicine where medical information is transferred through interactive media for the purpose of consulting, and sometimes remote medical procedures or examinations. Telemedicine may be as simple as two health professionals discussing a case over the telephone, or as complex as using satellite technology and videoconferencing equipment to conduct a real-time consultation between medical specialists in two different countries. Telemedicine generally refers to the use of communications and information technologies for the delivery of clinical care.

Telemetry

A highly automated communications process by which measurements are made and data collected at remote or inaccessible points and transmitted to receiving equipment for monitoring, display, and recording. Telemetry may also include two-way communication for the purpose of remote machine management and control.

U.S. Wireless Carrier Codes & Bands

MCC	MNC	Brand	Operator	Status	Bands (MHz)
310	053		Virgin Mobile US	Operational	CDMA2000 1900.
310	054		Alltel US	Operational	Unknown
310	066		U.S. Cellular	Operational	GSM AND CDMA
310	004	Verizon	Verizon Wireless	Operational	Unknown
310	005	Verizon	Verizon Wireless	Operational	CDMA2000 850 / CDMA2000 1900
310	010		MCI	Not operational	Unknown
310	012	Verizon	Verizon Wireless	Operational	CDMA2000 850 / CDMA2000 1900
310	013	MobileTel		Unknown	Unknown
310	014		Testing	Operational	Unknown
310	016		Cricket Communications	Operational	CDMA2000 1900 / CDMA2000 1700 / CDMA2000 2100
310	017		North Sight Communications Inc.	Operational	Unknown
310	020		Union Telephone Company	Operational	GSM 850 / GSM 1900
310	026	T-Mobile		Operational	GSM 1900 / UMTS 1700 / UMTS 2100
310	030	Centennial	Centennial Communications	Operational	GSM 850
310	034	Airpeak		Operational	Unknown
310	040	Concho	Concho Cellular Telephone Co., Inc.	Operational	GSM 1900
310	046	SIMMETRY	TMP Corp	Operational	GSM 1900
310	060		Consolidated Telcom	Operational	Unknown
310	070		Highland Cellular	Operational	Unknown
310	080	Corr	Corr Wireless Communications LLC	Operational	GSM 1900
310	090	AT&T	AT&T Mobility	Operational	GSM 1900 / UMTS 1900
310	100	Plateau Wireless	New Mexico RSA 4 East Ltd. Partnership	Operational	GSM 850
310	110	PTI Pacifica	PTI Pacifica Inc.	Operational	GSM 850
310	120	Sprint		Operational	CDMA2000 1900
310	150	AT&T	AT&T Mobility	Not operational	GSM 850 / UMTS 850 / UMTS 1900
310	160		T-Mobile	Not operational	GSM 1900
310	170		T-Mobile	Not operational	GSM 1900
310	180	West Central	West Central Wireless	Operational	GSM 850 / UMTS 850 / UMTS 1900
310	190	Dutch Harbor	Alaska Wireless Communications, LLC	Operational	GSM 850
310	200		T-Mobile	Not operational	GSM 1900
310	210		T-Mobile	Not operational	GSM 1900

310	220		T-Mobile	Not operational	GSM 1900
310	230		T-Mobile	Not operational	GSM 1900
310	240		T-Mobile	Not operational	GSM 1900
310	250		T-Mobile	Not operational	GSM 1900
310	260		T-Mobile	Operational	GSM 1900 / UMTS 1700 / UMTS 2100
310	270		T-Mobile	Not operational	GSM 1900
310	280		T-Mobile	Not operational	GSM 1900
310	290		T-Mobile	Not operational	GSM 1900
310	300	Big Sky Mobile	Smart Call (Truphone)	Operational	GSM 1900
310	310		T-Mobile	Not operational	GSM 1900
310	311		Farmers Wireless	Operational	GSM 1900
310	320	Cellular One	Smith Bagley, Inc.	Operational	GSM 850 / GSM 1900
310	330	T-Mobile		Not operational	GSM 1900
310	340	Westlink	Westlink Communications	Operational	GSM 1900
310	350		Carolina Phone	Not operational	GSM 1900
310	380	AT&T	AT&T Mobility	Not operational	GSM 850 / GSM 1900 / UMTS 850 / UMTS 1900
310	390	Cellular One of East Texas	TX-11 Acquisition, LLC	Operational	GSM 850
310	400	i CAN_GSM	Wave Runner LLC (Guam)	Operational	GSM 1900
310	410	AT&T	AT&T Mobility	Operational	GSM 850 / GSM 1900 / UMTS 850 / UMTS 1900
310	420	Cincinnati Bell	Cincinnati Bell Wireless	Operational	GSM 1900
310	430		Alaska Digitel	Operational	GSM 1900
310	440	Cellular One		Unknown	GSM 1900
310	450	Viaero	Viaero Wireless	Operational	GSM 850
310	460	Simmetry	TMP Corporation	Operational	GSM 1900
310	470	nTelos		Operational	CDMA2000 1900
310	480		Choice Phone	Operational	Unknown
310	490	T-Mobile		Operational	GSM 850 / GSM 1900
310	500	Alltel		Operational	CDMA2000 800 / CDMA2000 1900
310	510	Airtel	Airtel Wireless	Operational	Unknown
310	520	VeriSign		Unknown	Unknown
310	530		West Virginia Wireless	Operational	Unknown
310	540	Oklahoma Western	Oklahoma Western Telephone Company	Operational	GSM 1900
310	560	AT&T	AT&T Mobility	Operational	GSM 850

310	570	Cellular One	MTPCS, LLC	Operational	GSM 1900
310	580	T-Mobile		Not operational	Unknown
310	590	Alltel	Alltel Communications Inc	Operational	GSM 850 / GSM 1900
310	610	Epic Touch	Elkhart Telephone Co.	Operational	GSM 1900
310	620	Coleman County Telecom	Coleman County Telecommunications	Operational	GSM 1900
310	630	AmeriLink PCS	Choice Wireless	Operational	GSM 1900
310	640	Airadigm	Airadigm Communications	Operational	GSM 1900
310	650	Jasper	Jasper Wireless, Inc	Operational	GSM 850
310	660	T-Mobile		Not operational	GSM 1900
310	670	Northstar		Operational	Unknown
310	680	AT&T	AT&T Mobility	Operational	GSM 850 / GSM 1900
310	690	Conestoga	Conestoga Wireless Company	Operational	Unknown
310	730	SeaMobile		Operational	Unknown
310	740	Convey	Convey Communications Inc.	Operational	Unknown
310	760	Panhandle	Panhandle Telecommunications Systems Inc.	Operational	Unknown
310	770	i wireless	Iowa Wireless Services	Operational	GSM 1900
310	780		Airlink PCS	Not operational	Unknown
310	790	PinPoint	PinPoint Communications	Operational	GSM 1900
310	800		T-Mobile	Not operational	GSM 1900
310	830	Caprock	Caprock Cellular	Operational	GSM 850
310	840	telna Mobile	Telecom North America Mobile, Inc.	Operational	GSM 1900
310	850	Aeris	Aeris Communications, Inc.	Operational	CDMA2000 850 / CDMA2000 1900 / GSM 850 / GSM 1900
310	870	PACE	Kaplan Telephone Company	Operational	GSM 850
310	880	Advantage	Advantage Cellular Systems	Operational	GSM 850
310	890	Unicel	Rural Cellular Corporation	Operational	GSM 850 / GSM 1900
310	900	Mid-Rivers Wireless	Mid-Rivers Communications	Operational	CDMA2000 850 / CDMA2000 1900
310	910	First Cellular	First Cellular of Southern Illinois	Operational	GSM 850
310	940		Iris Wireless LLC	Operational	Unknown
310	950	XIT Wireless	Texas RSA 1 dba XIT Cellular	Operational	GSM 850
310	960	Plateau Wireless		Operational	Unknown
310	970	Globalstar		Operational	Satellite
310	980		AT&T Mobility	Not operational	GSM 850 / UMTS 850 / UMTS 1900
310	990		AT&T Mobility	Not operational	Unknown
311	000		Mid-Tex Cellular	Operational	CDMA2000 850 / CDMA2000 1900

311	010	Chariton Valley	Chariton Valley Communications	Operational	GSM 1900
311	020		Missouri RSA 5 Partnership	Operational	GSM 850
311	030		Indigo Wireless	Operational	GSM 1900
311	040		Commnet Wireless	Operational	GSM 850 / GSM 1900
311	050		Wikes Cellular	Operational	GSM 850 / GSM 1900
311	060	Farmers Cellular	Farmers Cellular Telephone	Operational	GSM 850 / GSM 1900
311	070	Easterbrooke	Easterbrooke Cellular Corporation	Operational	GSM 850
311	080	Pine Cellular	Pine Telephone Company	Operational	GSM 850
311	090	Long Lines Wireless	Long Lines Wireless LLC	Operational	GSM 1900
311	100		High Plains Wireless	Operational	GSM 1900
311	110		High Plains Wireless	Operational	GSM 1900
311	120		Choice Phone	Operational	Unknown
311	130		Cell One Amarillo	Operational	GSM 850
311	140	Sprocket	MBO Wireless	Operational	Unknown
311	150		Wilkes Cellular	Operational	GSM 850
311	160		Endless Mountains Wireless	Operational	Unknown
311	170	PetroCom	Broadpoint Inc	Operational	GSM 850
311	180		Cingular Wireless	Not operational	GSM 850 / UMTS 850 / UMTS 1900
311	190		Cellular Properties	Unknown	Unknown
311	210		Emery Telcom Wireless	Operational	GSM 1900 / UMTS 2100
311	220		U.S. Cellular	Operational	
311	230		C Spire Wireless	Operational	Unknown
311	330	Bug Tussel Wireless	Bug Tussel Wireless	Operational	Unknown
311	480	Verizon	Verizon Wireless	Operational	LTE 700 MHz C Block (4G LTE Network)
311	481-9	Verizon	Verizon Wireless	Not Operational	LTE 700
311	660	metroPCS	metroPCS	Operational	CDMA2000 1900 / CDMA 2000 LTE/AWS 1700
313	100	700 MHz Public Safety Broadband		Unknown	700 MHz Public Safety Broadband
313	101-199	700 MHz Public Safety Broadband		Future	Reserved for 700 MHz Public Safety Broadband
316	010	Nextel	Nextel Communications	Operational	iDEN 800
316	011		Southern Communications Services	Operational	iDEN 800

Canadian Wireless Carrier Codes & Bands

MCC	MNC	Brand	Operator	Status	Bands (MHz)
302	220	Telus	Koodo Mobility and Telus Mobility	Operational	UMTS 850 / UMTS 1900
302	221	Telus	Telus Mobility	Unknown	Unknown
302	270	unknown	EastLink	Testing	UMTS 1700
302	290		Airtel Wireless	Operational	iDEN 900
302	320	Mobilicity	DAVE Wireless	Operational	UMTS 1700
302	350	FIRST	FIRST Networks Operations	Operational	GSM 850
302	360	MiKe	Telus Mobility	Operational	iDEN 800
302	361	Telus	Telus Mobility	Operational	CDMA2000 800 / CDMA2000 1900
302	370	Fido	Fido Solutions (Rogers Wireless)	Operational	GSM 850 / GSM 1900 / UMTS 850 / UMTS 1900
302	380	DMTS	Dryden Mobility	Operational	GSM 850
302	490	WIND Mobile	Globalive Communications	Operational	UMTS 1700
302	500	Videotron	Videotron	Operational	UMTS 1700
302	510	Videotron	Videotron	Operational	UMTS 1700
302	610	Bell	Bell Mobility	Operational	UMTS 850 / UMTS 1900
302	610	Bell	Virgin Mobile Canada	Operational	UMTS 850 / UMTS 1900
302	620	ICE Wireless	ICE Wireless	Operational	GSM 1900
302	640	Bell	Bell Mobility	Operational	CDMA2000 800 / CDMA2000 1900
302	652		BC Tel Mobility (Telus)	Operational	CDMA2000
302	653	Telus	Telus Mobility	Operational	CDMA2000 800 / CDMA2000 1900
302	655	MTS	MTS Mobility	Operational	CDMA2000 800 / CDMA2000 1900
302	656	TBay	Thunder Bay Telephone Mobility	Operational	CDMA2000
302	657	Telus	Telus Mobility	Operational	CDMA2000 800 / CDMA2000 1900
302	660	MTS	MTS Mobility	Operational	UMTS 850 / UMTS 1900
302	680	SaskTel	SaskTel Mobility	Operational	CDMA2000 800 / CDMA2000 1900
302	701		MB Tel Mobility	Operational	CDMA2000
302	702		MT&T Mobility (Aliant)	Operational	CDMA2000
302	703		New Tel Mobility (Aliant)	Operational	CDMA2000
302	710	Globalstar		Operational	Unknown
302	720	Rogers Wireless	Rogers Communications	Operational	GSM 850 / GSM 1900 / UMTS 850 / UMTS 1900
302	780	SaskTel	SaskTel Mobility	Operational	UMTS 850 / UMTS 1900
302	880	Bell / Telus / SaskTel	Shared Telus, Bell, and SaskTel	Operational	UMTS 850 / UMTS 1900

Squid Network Report Utility Manual

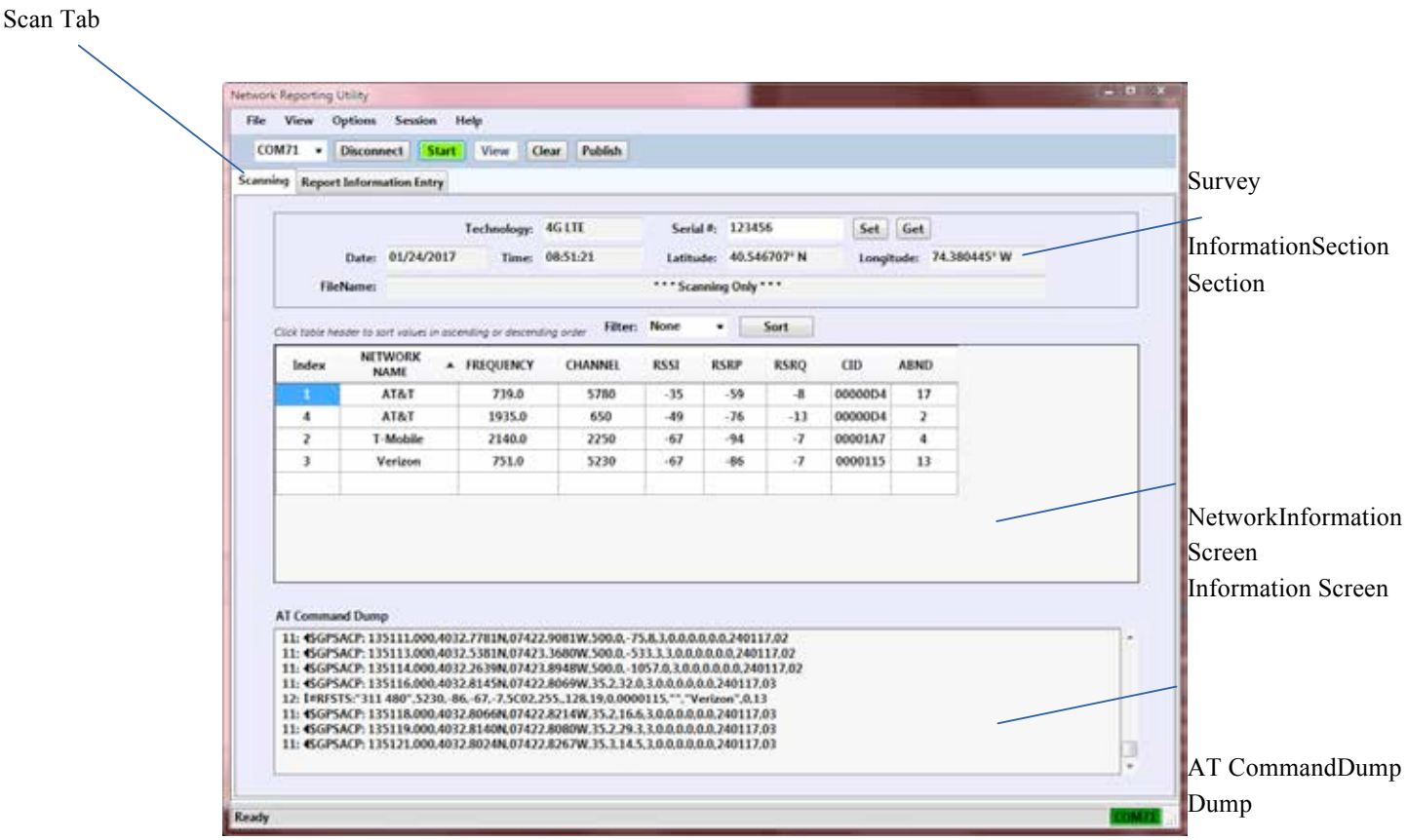


Figure 1. The main scan screen of the Network Report Utility.

View Menu

Show AT Command Dump

This is a check selection which makes the AT command dump window appear at the bottom of the screen.

Options Menu

Save Survey Information

This selection saves the boilerplate information for the report such as the Squid serial number, the company name, the name of the field technician, the field technician's supervisor, the job number and the survey location. There is also a button on the Report Information Tab that does this.

The latitude and longitude are provided automatically in the report so it is not necessary to include this information.

Report Information Tab

Save Survey Information button

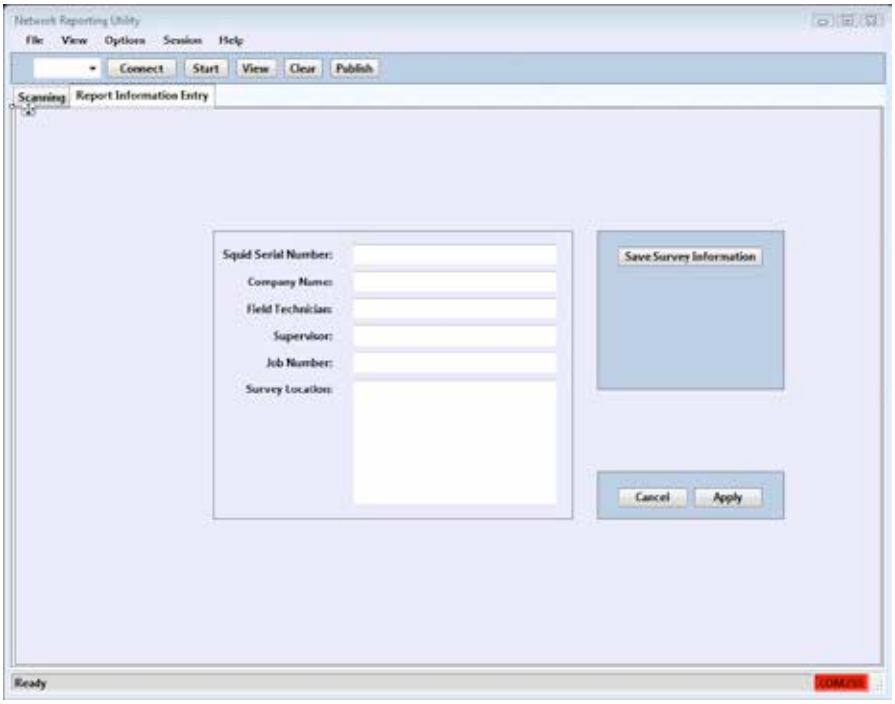


Figure 2. The Report Information Entry screen.

Session Menu

Connect
This selection connects the software to the Squid unit.

Start
Start begins the survey data collection.

Help Menu

Register Squid

Use this selection to register the Squid unit to work with the software.

About Network Report Utility

The About screen has information about the Berkeley Varitronics Systems website and the Support website page as well as phone and fax numbers for BVS.

Toolbar Buttons

The COM Port dropdown box
This control selects the COM port for connecting to the Squid unit.

The Connect button
This button connects the program to the Squid unit. It will alternately display Connect and Disconnect when pressed.

The Start button
This button starts the data collection and alternately displays Start and Stop.

The View button
This button opens the currently published survey report using the currently defaulted notepad program.

The Clear button
This button clears the screen of survey data.

The Publish button
This control publishes all the survey information to a comma separated value file which can be seen in a text editor or imported into a spreadsheet program eg. Microsoft Excel. Sample report output is shown below.

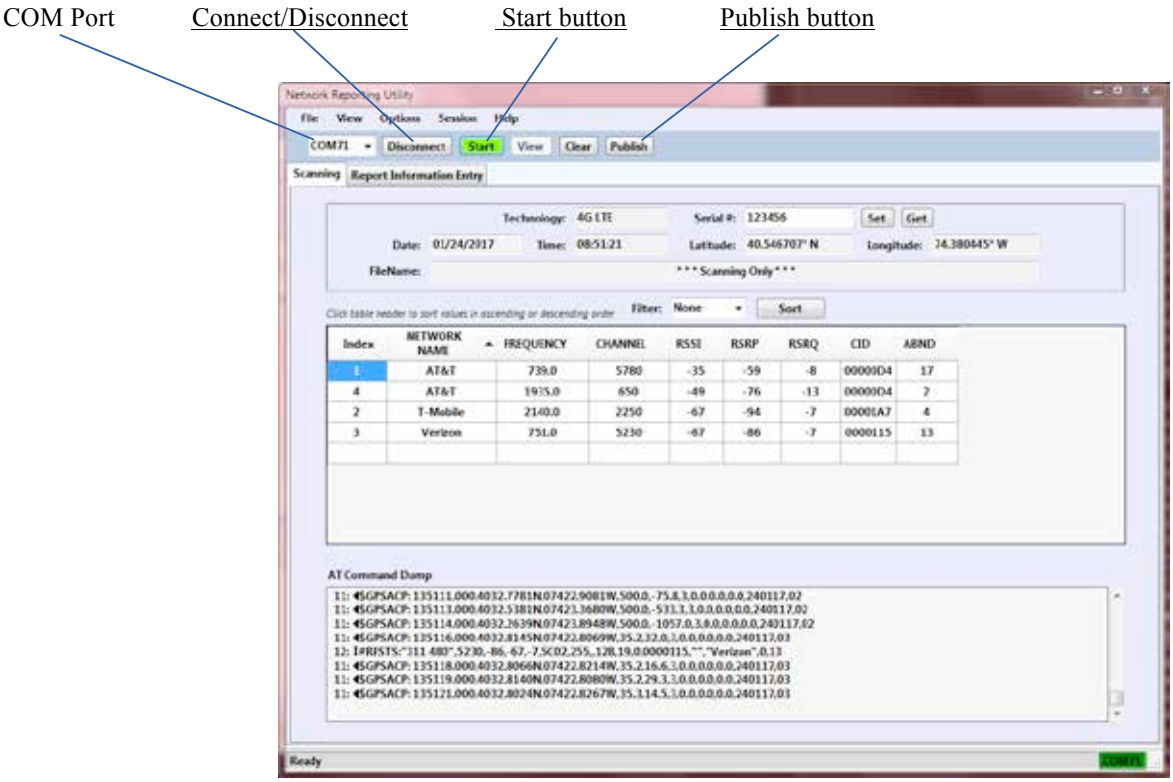


Figure 3. Main screen showing button locations

Quick Start Guide

Start the Report Utility.

Connect the USB cable to the Squid.

Click Connect on the toolbar or Session/Connect

Sample Report Output

```
Network, Information, Report
   Software Version, 1.0.6232.19726
         Technology, 4G LTE
Squid Serial Number, 123456
       Company Name, QRS Telecom
   Field Technician, Floyd R. Turbo
         Supervisor, Johnny Carson
         Job Number, 1234
               Date, 01/23/2017
               Time, 13:00:59

    Survey Location,
------------------,
           Latitude, 38.000000° N
          Longitude, 74.000000° W
            Address, 255 Liberty Street
                   , Metuchen, New Jersey

Index, Network,          Frequency,   Chan, RSSI, RSRP, RSRQ,  CID,      ABND
000001, AT&T            ,    739.0,  5780,  -33,  -58,   -8,   00000D4,   17
000003, AT&T            ,   1935.0,   650,  -51,  -75,   -8,   00000D4,    2
000004, T-Mobile        ,   2140.0,  2250,  -62,  -91,   -8,   00001A7,    4
000002, Verizon         ,    751.0,  5230,  -70,  -90,   -7,   0000115,   13
```