

The logo for Blue Sky Network features a large, stylized blue swoosh that starts at the top left, curves around to the right, and then tapers off towards the bottom left. The text "Blue Sky Network" is positioned in the center of the swoosh.

Blue Sky Network

HawkEye 7200A-BB2327

Phone Guide

Version 1.2

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Part# 200806

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REVISION HISTORY

Date	Revision	By	Description
2016-01-22	1.0	MP	DRAFT version HawkEye 7200A-BB2327 Phone Guide
2016-01-25	1.1	MP	Added POTS Interface Specifications
2016-01-27	1.2	MP	Release version

INTRODUCTION

This user guide covers integration of an analog POTS (plain old telephone service) handset or an PTA12-100 dialer with the HawkEye 7200A-BB2327 Tracking Device. This User Guide is applicable to the following components:

Part Number	Description
200800	HawkEye 7200A-BB2327 Tracking Device
N/A	Analog POTS handset
PTA12-100	(Optional) PTA12-100 POTS Telephone Adapter with Display.

SKYROUTER

The SkyRouter portal ties together Blue Sky Networks data solutions in an integrated and user-friendly way. By accessing the SkyRouter Web-site users can do the following:

- ✓ Advanced device tracking on a global, layered map including satellite imagery and street maps.
- ✓ Event notification for emergency, take-off, landing, inactive unit, speeding, moving and more.
- ✓ Playback past trips and view detailed reports.
- ✓ 2-way email messaging to and from devices in the field.
- ✓ Update and request the current state of parameters on devices in the field.
- ✓ Management of a device fleet, including assigning units to groups and creation of sub-user accounts.
- ✓ Manage naming of the units and many other visual characteristics.



INTERFACING WITH AN ANALOG POTS HANDSET

The HawkEye 7200A-BB2327 provides a 2-wire analog POTS interface (standard 2-wire tip and ring loop.) This circuit enables the HE7200A-BB2327 to interface to one or more analog 2-wire Plain Old Telephone Service (POTS) phones that can be located around the aircraft. If more than one POTS phone is connected all POTS phones can talk on the call (only one phone should dial.)

2-WIRE ANALOG POTS INTERFACE SPECIFICATIONS

Loop Battery Voltage.....	-48VDC
Loop Resistance, Including Telephone.....	600 ohms plus telephone used (REN number). Supports REN of up to 3 (ring equivalent number). I.E. multiple telephones can be used on same line if sum of RENs is 3 or less. Modern phones are around 0.5 REN.
DC Loop Current.....	24mA
Ringing Signal.....	20 – 25Hz
Ring Voltage.....	65Vrms no load
Signaling.....	tip/ring reversal
AC Impedance.....	600 ohms
Audio Band Pass.....	300 to 3400Hz

TONE DESCRIPTIONS

The HE7200A-BB2327 will produce a number of different tones in various scenarios, the following table defines those tones.

Tone Name	Sound	Description
Dial Tone	Constant tone	This tone from the handset indicates the HE7200A-BB2327 is working properly, has signal, and is awaiting the user to dial a phone number.
Searching Signal	Long tone followed by a single beep	This tone indicates the HE7200A-BB2327 is operating and searching for satellites.
Off-Hook	0.5s on 0.5s off tone	This tones indicates that the handset has been idle for more than 30 seconds without any activity. Hang up for 30-60 seconds and try again.
Connecting Call	Single beep with 4 second intervals	This tone indicates that the HE7200A-BB2327 is attempting to connect a dialed call.

ANALOG HANDSET CALL INSTRUCTIONS

The following instructions describe how place a call on the HawkEye 7200A-BB2327 using an analog POTS handset. Please be aware that if your handset is non-standard you should review that devices User Guide for any additional dialing instructions that may be necessary to answer or initiate calls.

MAKE A CALL

1. Lift the handset
2. Listen for a Dial Tone
 - a. If you hear a Dial Tone (constant tone) this means that the unit has signal and is ready to make a call.
 - b. A long tone followed by a beep means that the device is searching for Iridium service.
3. Enter the telephone number using your handset (see dialing formats section of this guide for further information)
4. Press the # key to initiate the call
5. You hear the Connecting Call tone (see tone descriptions)
6. The call is connected.

END A CALL

At any point during an active call it is possible to terminate the call by placing the handset is on the hook. Once the handset is on the hook you may need to wait 30-60 seconds for the call to fully terminate before attempting to make another call. Wait for the Dial Tone attempting to make another call.

RECEIVE A CALL

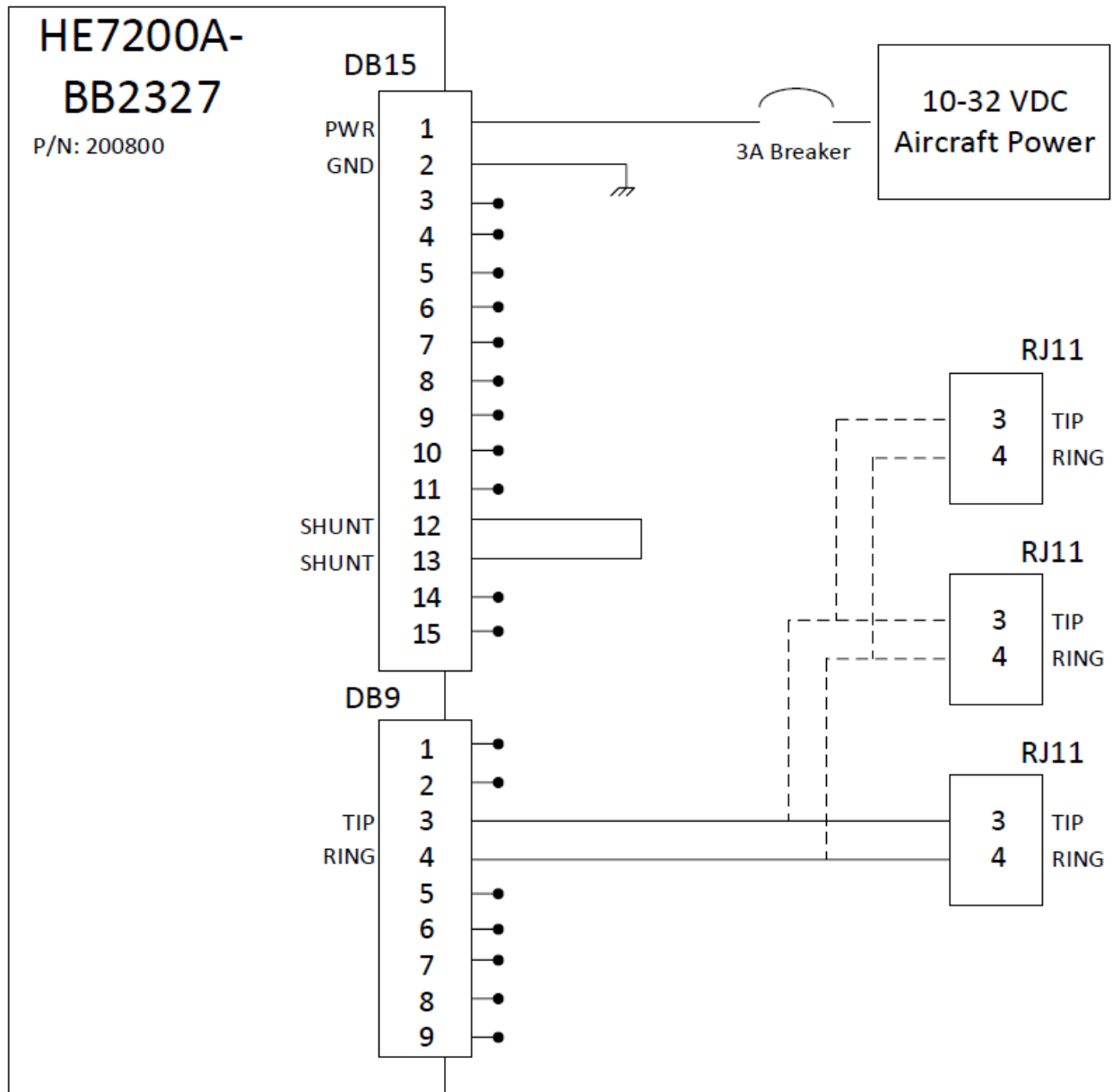
1. Incoming call is indicated by the audible ringtone at the analog POTS handset.
2. Lift the handset to answer the call

ANALOG POTS HANDSET WIRING DIAGRAM

The following diagram illustrates how an analog POTS handset can be connected to the HawkEye 7200A-BB2327 device.

NOTE: The HE7200A-BB2327 power interface supports a wide voltage input in the range of 10-32VDC. Installation of a single 3-amp circuit breaker is recommended to protect the aircraft power distribution system.

Additional handsets can be wired in series on the TIP and RING line, in this configuration multiple handsets can initiate and participate in a call (only one call is possible concurrently).



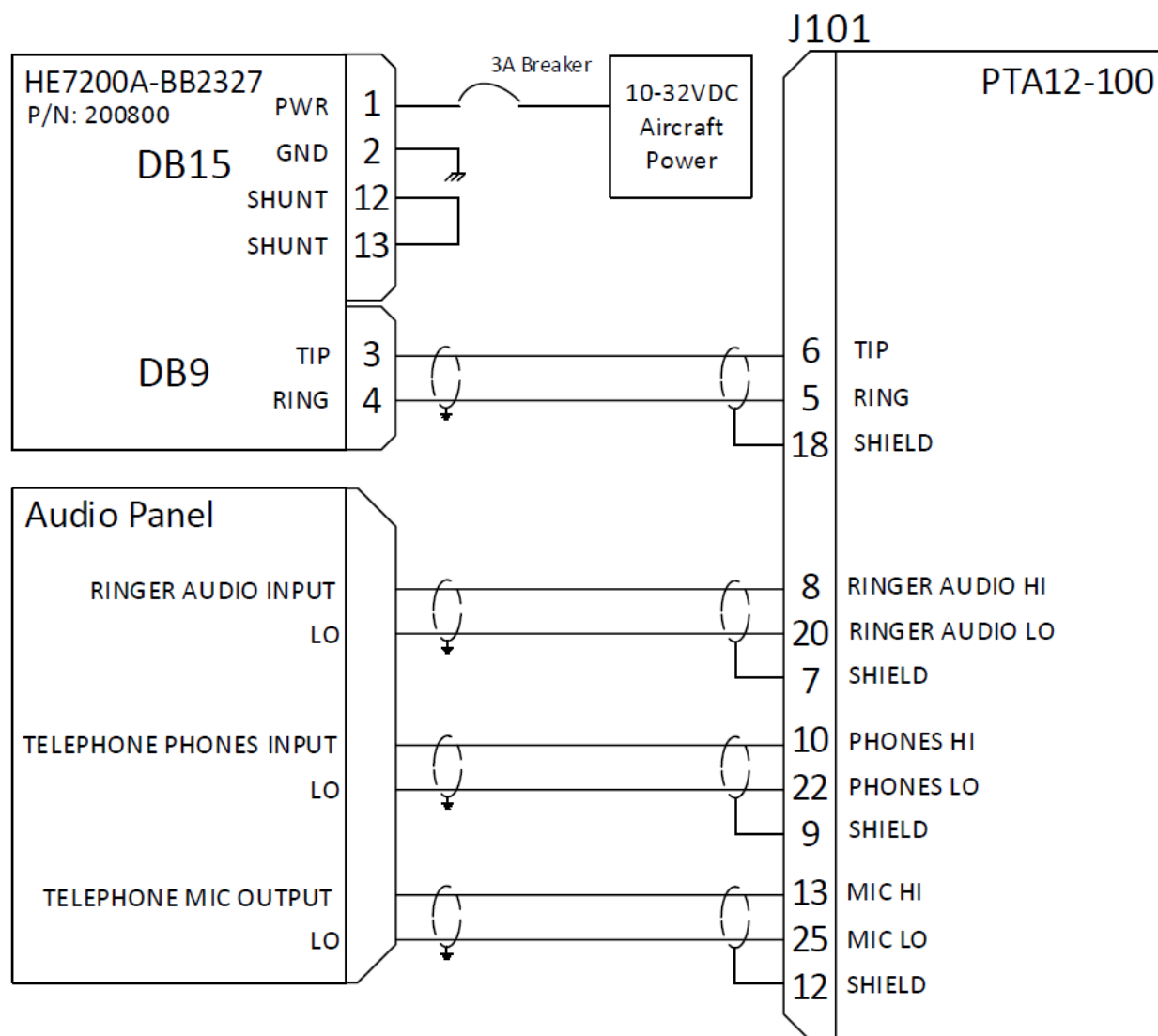
INTERFACING WITH THE PTA12-100

The HawkEye 7200A-BB2327 supports integration with the PTA12-100 POTS Telephone adapter. The PTA12-100 POTS Telephone Adapter is a keypad control and display unit for airborne telephone system applications. The PTA12-100 connects to the HawkEye 7200A-BB2327 via the 2-wire POTS interface. The PTA12-100 can also be connected to the aircraft audio panel or directly to an aviation headset.

The following diagram illustrates how the PTA12-100 POTS Telephone Adapter can be connected to the HawkEye 7200A-BB2327.

NOTE: The HE7200A-BB2327 power interface supports a wide voltage input in the range of 10-32VDC. Installation of a single 3-amp circuit breaker is recommended to protect the aircraft power distribution system.

Information used in the creation of this wiring diagram was gathered from the PTA12-100 Installation manual revision 4.02.



PTA12 CALL INSTRUCTIONS

The following instructions describe how place a call on the HawkEye 7200A-BB2327 using a PTA12-100 POTS Telephone Adapter.

MAKE A CALL

1. Press the 'Hook' key on the PTA12-100.
2. Listen for a Dial Tone
 - a. If you hear a Dial Tone (constant tone) this means that the unit has signal and is ready to make a call.
 - b. A long tone followed by a beep means that the device is searching for Iridium service.
3. Enter the telephone number using the PTA12-100 keypad (see dialing formats section of this guide for further information)
4. Press the # key on the PTA12-100 to initiate the call.
5. You hear the Connecting Call tone (see tone descriptions.)
6. The call is connected.

END A CALL

At any point during an active call it is possible to terminate the call by pressing the 'Hook' key on the PTA12-100, you may need to wait 30-60 seconds for the call to fully terminate before attempting to make another call. Wait for the Dial Tone before attempting to make another call.

RECEIVING A CALL

The user is notified about an incoming call by an audible ring tone in the headset, additionally the 'hook' LED acts as a ring annunciator by flashing during an incoming call.

1. The ring annunciator is observed flashing or the ring tone is heard.
2. Press the 'Hook' key on the PTA12-100 to answer the call.

DIALING FORMATS

The following examples explain how to make calls to and from the Iridium system in various scenarios.

International Direct Dial (IDD) prefix is a code that must be entered to initiate an international call, they inform the phone system that you wish to dial an international number. IDD prefixes vary from one country to another. Country Codes (CC) is a code that must be entered when dialling another country, they identify which country to call.

Please consult the “International Dialling Codes” section of this guide for the correct IDD and CC codes.

Example 1

Originating a call from a landline phone in the United States terminating to an Iridium satellite phone. It doesn't matter where the satellite phone is located the dialling is the same.

From the landline phone, dial: 011 8816 XXX XXXXX

011, International Direct Dial (IDD) access code for United States/8816 XXX XXXXX, the MSISDN

Example 2

Originating a call from a landline phone outside of the United States terminating to an Iridium satellite phone. It does not matter where the ISU is located; the dialling pattern is the same.

From the landline phone, (i.e. France) dial: 00 8816 XXX XXXXX

00 International Direct Dial (IDD) access code for France/ 8816 XXX XXXXX, the MSISDN

Example 3

Originating a call from the Iridium satellite phone (does not matter where the satellite phone is located) to a landline phone located in the United States.

From the satellite phone, dial: 00 1 602-752-XXXX

00, for all outbound calls from the satellite phone/ 1, United States country code/ 602, area code/752-XXXX, actual phone number

Example 4

Originating a call from an Iridium satellite phone (does not matter where the satellite phone is located) to a landline phone located in another country.

From the satellite phone, dial: 00 CC XXXXXX

00 for all outbound calls from satellite phone, (country code)/XXXXXX, actual number

Example 5

Originating a call from an Iridium satellite phone (does not matter where the satellite phone is located) to another Iridium satellite phone.

From the satellite phone, dial: 00 8816 XXX XXXXX

INTERNATIONAL DIALING CODES

Country	CC	IDD	Country	CC	IDD
Afghanistan	93	00			005 - UNE EPM
Albania	355	00			007 - ETB
Algeria	213	00			009 - Movistar
American Samoa	1	011	Colombia	57	00414 - Tigo 00468 - Avantel 00456 - Claro Fixed 00444 - Claro Mobile
Andorra	376	00			
Angola	244	00	Comoros	269	00
Anguilla	1	011	Congo	242	00
Antigua and Barbuda	1	011	Cook Islands	682	00
Argentina	54	00	Costa Rica	506	00
Armenia	374	00	Croatia	385	00
Aruba	297	00	Cuba	53	119
Ascension	247	00	Curacao	599	00
Australia	61	0011	Cyprus	357	00
Austria	43	00	Czech Republic	420	00
Azerbaijan	994	00	Democratic Republic of Congo	243	00
Bahamas	1	011	Denmark	45	00
Bahrain	973	00	Diego Garcia	246	00
Bangladesh	880	00	Djibouti	253	00
Barbados	1	011	Dominica	1	011
Belarus	375	810	Dominican Republic	1	011
Belgium	32	00	East Timor	670	00
Belize	501	00	Ecuador	593	00
Benin	229	00	Egypt	20	00
Bermuda	1	011	El Salvador	503	00
Bhutan	975	00	Equatorial Guinea	240	00
Bolivia	591	00	Eritrea	291	00
Bosnia and Herzegovina	387	00	Estonia	372	00
Botswana	267	00	Ethiopia	251	00
		0014 - Brasil Telecom	Falkland (Malvinas) Islands	500	00
		0015 - Telefonica	Faroe Islands	298	00
Brazil	55	0021 - Embratel 0023 - Intelig 0031 - Telmar	Fiji	679	00
British Virgin Islands	1	011	Finland	358	00, 990, 994, 999
Brunei	673	00	France	33	00
Bulgaria	359	00	French Guiana	594	00
Burkina Faso	226	00	French Polynesia	689	00
Burundi	257	00	Gabon	241	00
Cambodia	855	001, 007, 008	Gambia	220	00
Cameroon	237	00	Georgia	995	00
Canada	1	011	Germany	49	00
Cape Verde	238	00	Ghana	233	00
Cayman Islands	1	011	Gibraltar	350	00
Central African Republic	236	00	Greece	30	00
Chad	235	00	Greenland	299	00
		1230 - Entel	Grenada	1	011
		1200 - Globus	Guadeloupe	590	00
Chile	56	1220 - Manquehue 1810 - Movistar 1690 - Netline 1710 - Telmex	Guam	1	011
			Guatemala	502	00
China	86	00	Guinea	224	00
			Guinea-Bissau	245	00
			Guyana	592	001
			Haiti	509	00

Country	CC	IDD	Country	CC	IDD
Honduras	504	00	Montserrat	1	011
Hong Kong	852	001	Morocco	212	00
Hungary	36	00	Mozambique	258	00
Iceland	354	00	Myanmar	95	00
India	91	00	Namibia	264	00
Indonesia	62	001, 008 - Indosat 007 - Telkom 009 - Bakrie Telecom	Nauru	674	00
Inmarsat Satellite	870	00	Nepal	977	00
Iran	98	00	Netherlands	31	00
Iraq	964	00	Netherlands Antilles	599	00
Ireland	353	00	New Caledonia	687	00
Iridium Satellite	8816/8 817	00	New Zealand	64	00
Israel	972	00, 012, 013, 014, 018	Nicaragua	505	00
Italy	39	00	Niger	227	00
Ivory Coast	225	00	Nigeria	234	009
Jamaica	1	011	Niue	683	00
Japan	81	010	Norfolk Island	6723	00
Jordan	962	00	North Korea	850	99
Kazakhstan	7	8 - wait for dial tone - 10	Northern Marianas	1	011
Kenya	254	000 (006 and 007 to Uganda and Tanzania)	Norway	47	00
Kiribati	686	00	Oman	968	00
Kuwait	965	00	Pakistan	92	00
Kyrgyzstan	996	00	Palau	680	011
Laos	856	00	Palestine	970	00
Latvia	371	00	Panama	507	00
Lebanon	961	00	Papua New Guinea	675	00
Lesotho	266	00	Paraguay	595	00
Liberia	231	00	Peru	51	00
Libya	218	00	Philippines	63	00
Liechtenstein	423	00	Poland	48	00
Lithuania	370	00	Portugal	351	00
Luxembourg	352	00	Puerto Rico	1	011
Macau	853	00	Qatar	974	00
Macedonia	389	00	Reunion	262	00
Madagascar	261	00	Romania	40	00
Malawi	265	00	Russian Federation	7	8 - wait for dial tone - 10
Malaysia	60	00	Rwanda	250	00
Maldives	960	00	Saint Helena	290	00
Mali	223	00	Saint Kitts and Nevis	1	011
Malta	356	00	Saint Lucia	1	011
Marshall Islands	692	011	Saint Barthelemy	590	00
Martinique	596	00	Saint Martin (French part)	590	00
Mauritania	222	00	Saint Pierre and Miquelon	508	00
Mauritius	230	00	Saint Vincent and the Grenadines	1	011
Mayotte	262	00	Samoa	685	0
Mexico	52	00	San Marino	378	00
Micronesia	691	011	Sao Tome and Principe	239	00
Moldova	373	00	Saudi Arabia	966	00
Monaco	377	00	Senegal	221	00
Mongolia	976	001	Serbia	381	00
Montenegro	382	00	Seychelles	248	00
			Sierra Leone	232	00
			Singapore	65	001, 008
			Sint Maarten	1	00

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Country	CC	IDD
Slovakia	421	00
Slovenia	386	00
Solomon Islands	677	00
Somalia	252	00
South Africa	27	00
South Korea	82	001, 002
South Sudan	211	00
Spain	34	00
Sri Lanka	94	00
Sudan	249	00
Suriname	597	00
Swaziland	268	00
Sweden	46	00
Switzerland	41	00
Syria	963	00
Taiwan	886	002
Tajikistan	992	8 - wait for dial tone - 10
Tanzania	255	000
Thailand	66	001
Thuraya Satellite	882	1600
Togo	228	00
Tokelau	690	00
Tonga	676	00
Trinidad and Tobago	1	011

International Dialing Codes

Country	CC	IDD
Tunisia	216	00
Turkey	90	00
Turkmenistan	993	8 - wait for dial tone - 10
Turks and Caicos Islands	1	0
Tuvalu	688	00
Uganda	256	000
Ukraine	380	00
United Arab Emirates	971	00
United Kingdom	44	00
United States of America	1	011
U.S. Virgin Islands	1	011
Uruguay	598	00
Uzbekistan	998	00
Vanuatu	678	00
Vatican City	379, 39	00
Venezuela	58	00
Vietnam	84	00
Wallis and Futuna	681	00
Yemen	967	00
Zambia	260	00
Zimbabwe	263	00

TWO-STAGE DIALING

The Two-Stage Dialing Platform was developed to allow callers the ability to call an Iridium subscriber via a local phone number in Arizona. This alleviates an issue with some long distance carriers not allowing calls to the 8816 country code (Iridium).

It also helps keep the cost of calling down as the caller is charged only for the call to Arizona. The rest of the call is charged to the Iridium subscriber, typically a lower rate than a long distance call to Iridium directly.

CALLING INSTRUCTIONS

The calling party dials an Arizona USA number (+1.480.768.2500); this connects the caller to Iridium's Two-Stage Dialing platform located in the Tempe, Arizona.

Using automated voice prompts, the calling party enters the Iridium subscriber's phone number (8816.....) The system will identify the IRIDIUM subscriber and connect the call. If there is no answer, the call will then be forwarded to the Iridium subscriber's voice mail.

The voice prompts on this platform are in English only.

APPENDIX A - FAQ

We've put together a list of our most frequently asked questions and answers, if you still can't resolve your issue please contact Blue Sky Network Technical Support and we'll be happy to help! For self-help; our support site can be found at <https://support.skyrouter.com>.

Q Analog handset - No Dial Tone

A Try hanging up the phone for 30-60 seconds and try again. If the problem persists check the wiring between the handset and the HawkEye 7200A-BB2327.

Q You hear the message "Number dialed is not in service"

A Check the dialing syntax you have used, verify that the country and international direct dial codes used are correct. Finally validate that the number is valid.

Q I tried to make a call but there is another call in progress

A Try hanging up the phone for 30-60 seconds and try again. It can take up to 60 seconds for an Iridium call to properly terminate.

Q You hear the message "Emergency Calls Only"

A This could be an indication that the voice portion of your device is not activated. Submit a service activation request at <https://support.skyrouter.com>

SERVICE ACTIVATIONS

To activate service; please submit an activation form via our Support Site at <https://support.skyrouter.com>

You should receive a confirmation email at the provided email address shortly after submitting the form, please review the form data shown in the email and let us know if there are any errors.

For security reasons we will only activate upon the request of the account administrator. The account administrator is the contact name listed on your service agreement.

Please allow 1-2 hours for activations to be completed during business hours (Monday - Friday, 8am - 5pm Pacific Time). For emergency requests (after business hours); additional time may be required and a \$100 fee (per activation) will be charged to your account in addition to applicable activation/service charges.

Once activation is complete the account administrator will receive a confirmation email from Blue Sky Network.

We strongly recommend that you submit activation requests well prior to your requested activation time.

The following is an image of our online activations form:


Required *

Name *

Company *

Email *

Contact Tel *


Activation Date * 

Activation Timeframe * Standard (Business Hours, Free) Emergency (Out of hours, \$100)

Service Type * Data Voice Data + Voice

IMEI Number *

Notes

Spam Check * 

TECHNICAL SUPPORT

Blue Sky Network is committed to providing the highest level of service and support. If you have any questions or concerns please feel free to contact your account manager or support (contact information is available at the bottom of this page.)

Non-emergency technical support is available for all Blue Sky Network products and services Monday-Friday 8AM-5PM Pacific Time.

Emergency technical support for aviation subscribers is available 24/7/365 but please be aware a service charge may apply.



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