TONGSHI
WorldSpace Adapter
User Manual

Please read this manual carefully and follow its instructions before using Tongshi WorldSpace Adapter ("Adapter").

Precautions:
♦ While the power is on, the Adapter's internal or external wire should not be unplugged or disconnected. This misuse may damage the Adapter, antenna or Computer permanently.
♦ Never place the Adapter in close proximity to electric motors or other equipment generating strong magnetic fields that may cause malfunctions or corrupt image data.

Trademark Acknowledgements:
♦ TONGSHI is a trademark of Xi'an Tongshi Data Corp. Limited.
♦ Xi'an Tongshi Technology Limited ("Xi'an Tongshi") is authorized to use TONGSHI as agreed.
♦ ℰ WorldSpace is a trademark of WorldSpace Corp.
♦ Xi'an Tongshi is authorized to use ℰ WorldSpace as agreed.
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Disclaimers:
♦ While every effort has been made to ensure that the information contained in this manual is accurate and complete, no liability can be accepted for any errors or omissions.
♦ Xi'an Tongshi reserves the right to change the specifications of the hardware and software described herein at any time without prior notice.
♦ Any software not provided upon the sale of the Adapter may be considered additional accessories to be purchased from Xi'an Tongshi or third parties.
♦ No part of this manual may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without the prior written permission of Xi'an Tongshi.
♦ Xi'an Tongshi makes no warranties for damages resulting from corrupted or lost data due to a mistaken operation or malfunction of the Adapter, the software, personal computers, peripheral devices, or use of non Tongshi Accessories.

- ♦ Xi'an Tongshi has no influence over the contents or services delivered by the Adapter and will not be responsible for the contents or services in any respects.
- ♦ Please note that the Adapter are intended for personal use and should never be used in a manner that infringes upon or contravenes international or domestic copyright laws and regulations.
- ♦ The Radio's warranty is only effective in the country of sale. If a problem arises while the Radio is in use, please contact the dealer who sold you the Radio.

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Chapter One Preparing the Adapter

Chapter Two Radio Service

Chapter One Preparing the Adapter

1. Services

TONGSHI DAMB-A WorldSpace computer adapter is equipped to receive all WorldSpace audio and data programs worldwide including special services in China. The adapter's USB interface, compact size, low power consumption and easy-to-carry features and relatively low-price-advantage make it an optimal choice for PC or notebook's WorldSpace services reception.

WorldSpace Satellite Coverage map:
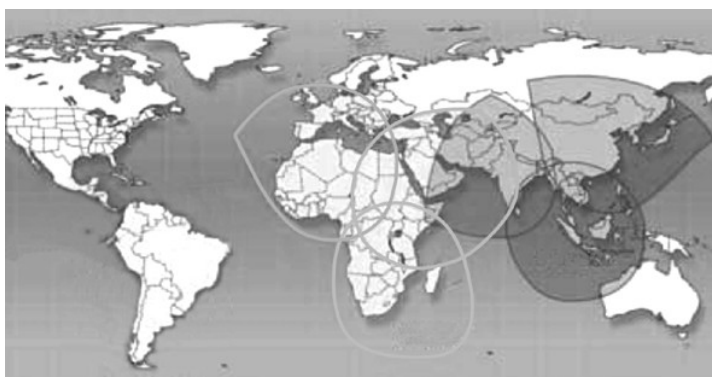
2. Technical Feature

	Item	Spec
1	Name	WorldSpace Adapter
2	Type	DAMB-A
3	Band	WorldSpace band
4	RF frequency	1452-1492 MHz
5	Modulation	QPSK
6	Audio coding	MPEG 1, 2, 2.5 Layer 3
7	Inputs	WorldSpace Antenna
8	Interface	USB 1.1
9	Receiving Rate	Up to 128 Kbps
10	Power Source	From USB cable
11	Consumption	Less than 1 Watt
12	Operation System	Windows 98SE/Me/2000/XP
13	Dimensions	132mm*91mm*26mm
14	Weight	Approx: 150g (without antenna)

3. Connectors
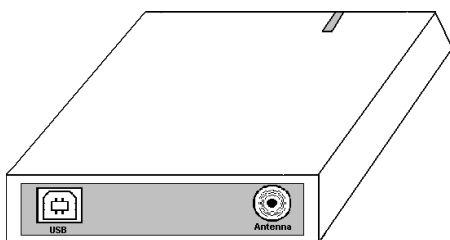
Two connectors placed on rear of Adapter. They are:

Sign	Name	Functions
⊡	USB connector	Connect to PC with USB cable
◉	F-Type connector	Connect to WS antenna

Chapter Two Radio Service

Installation steps

Install application and drivers =>turn off computer =>attached hardware

If missing step, please according to appendix A to retry.

1. Preparing Computer

The basic computer requirements are as follows:

- ◆ Computer: X86 PC, Pentium II 266 or higher.
- ◆ Operation system: Windows 98SE/Me/2000/XP.
- ◆ Monitor: multimedia monitor, 800*600, 256 colors or higher.
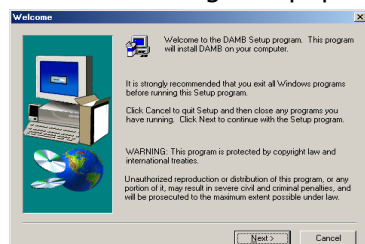
2. Install Software

Notice: Software installation operation should be done firstly. DAMB software cannot work under Win95/WinNT4.

Put DAMB software CD into CD-ROM, do installation operation step by step as follows:
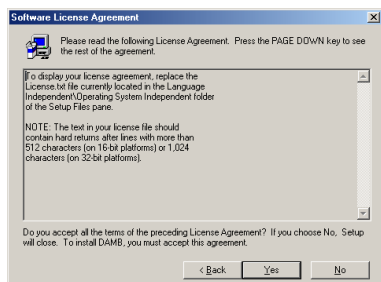
- ◆ "Choose Setup Language" dialog box pops up, select a language from the list, click "OK" to continue.
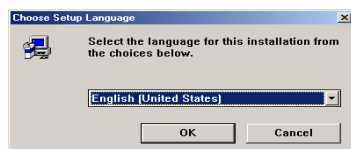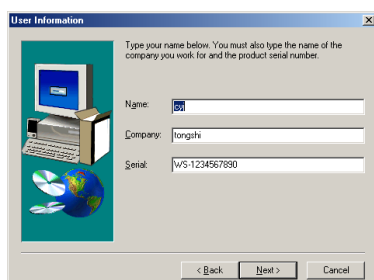

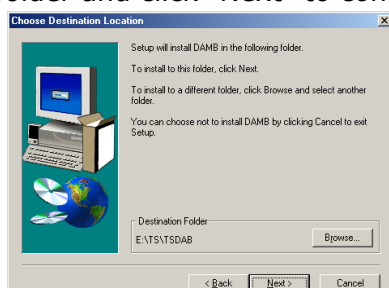- ◆ "Welcome" dialog box pops up, click "Next" to continue.

- ◆ "Software License Agreement" dialog box pops up, click "Yes" to continue.

♦ "User Information" dialog box pops up, input correct information of Name, Company. Don't modify Serial item, it's reserved for future. Click "Next" to continue.

♦ "Choose Destination Location" dialog box pops up, select destination folder and click "Next" to continue.

♦ "Select Program Folder" dialog box pops up, click "Next" to continue.
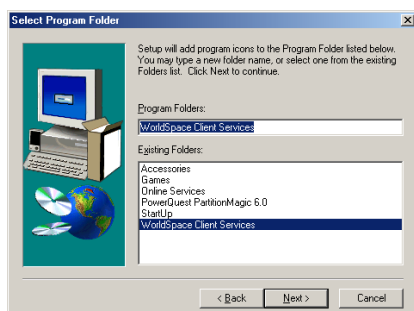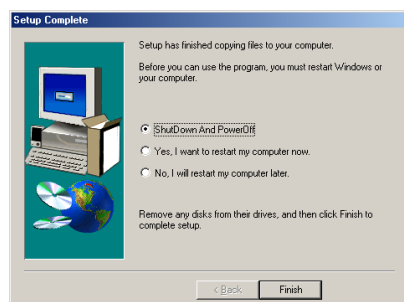

♦ "Setup Complete" dialog box pops up, select "ShutDown And PowerOff" and click "Finish" to finish installation. Computer will shut down automatically.
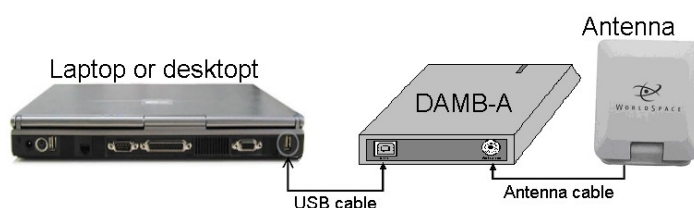
Note: In Win2000/XP, if "Digital Signature Not Found" dialog box pops up, click "Yes" to continue.

3. Connect Adapter with Computer

Notice: Connecting Adapter with Computer must succeed the installation of software.

♦ Make sure both computer and Adapter power are off.
♦ Connect Antenna, Adapter and Computer.

♦ Fix antenna:

In general, you only need to set up Antenna within line of sight of the WorldSpace Satellite you want to receive the services from. For example, from your location, AfriStar is at your Southwest direction, if you can make Antenna face southwest without blockage of sky, you may receive its signal. After some angle and direction adjustments, you will have a better reception.

For more precise and professional analysis, here is certain operation:

♦ Elevation angle and azimuth are related with user's location.
♦ Please check the relevant angle information from Appendix F and G of this manual.
♦ Adjust antenna orientation and make it face to WorldSpace Satellites.
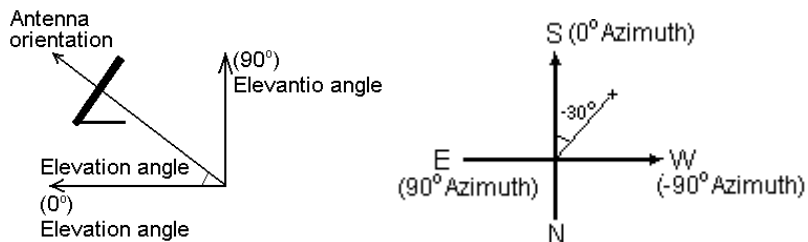
For example, in Shanghai, you can find out values of Elevation angle and Azimuth from Appendix D: Elevation angle=49 and Azimuth=-30. Then, put antenna face to up sky (49^0) of southwest (-30^0).

Note: Approximate orientation is enough.

4.Install DAMB-A Driver

After software is properly installed and Adapter connection is in order, start up computer. Driver will be installed automatically

Note: In Win2000/XP, when "Digital Signature Not Found" dialog box pops up, click "Yes" to continue. In Win98/Me, when "System Settings Change" dialog box pops up, click "Yes" to continue.

5. Radio Service

MP3 player is software-based player used to play WS audio channel in computer.

1) Run MP3 Player

Double click MP3 player icon in "WorldSpace Client Services" folder. Then, MP3 player interface will be displayed.
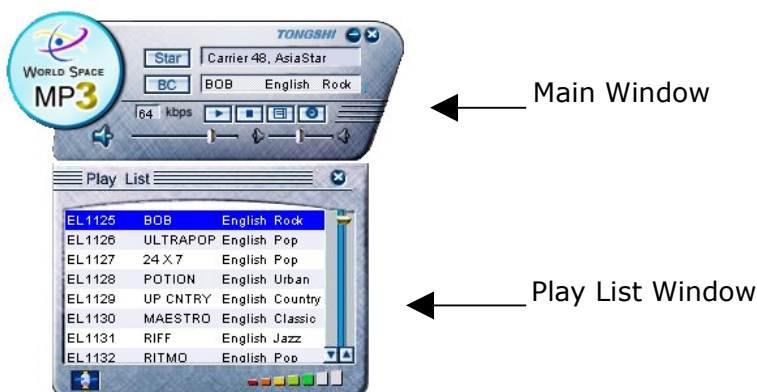
2) Scan Channel

You must scan channel when you first use MP3 player:

♦   Right click on the Main Window and select "Do scan" menu item.

♦   For the first time, you are prompted to select antenna type.

♦   "Scan now" pops up, click "Yes".

♦   Waiting for scanning patiently.

♦   First channel in "Play List" will be played automatically.
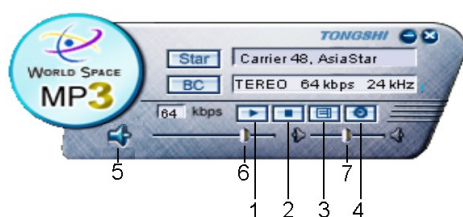
♦   All channels will be listed after scanning.

Note:

♦   Scanning is needed when you change antenna type.

♦   Right click Main Window again and select "Cancel scan" can stop scanning.

3) Play Channel

Double click a channel in Play List window.

4) Main Window

Seven buttons placed in the Main Window. They are:

| Sign	Name	Functions
▶	Play	Play Channel
■	Stop	Stop playing
▤	Show/Hide	Show or hide the Play List
⊙	Config	Select player skin
⬉	Mute	Mute on or off
⊣⊢	Volume	Volume control
⊣⊢	Balance	Left or right track control

Three items are placed in Main Window. The means of these items are :

Star: WS star name and carrier number.

BC: Broadcast Channel information.

Kbps: Present channel's bit-rate.

Right click Main Window, a menu displayed.
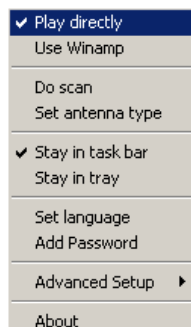
There are ten items for selecting.

Item	Function
Play directly	Play channel using the MP3 decoder embedded in the player
Use Winamp	Install Winamp first and run it to play channel.
Do scan	Scan channel
Set antenna type	Refer to the label stuck on ANT back and select LINEAR, CIRCULAR or CABLE
Stay in task bar	MP3 player is shown in WINDOWS taskbar
Stay in tray	MP3 player icon is shown in tray at down right corner of screen
Set language	When a channel is broadcasted in several languages, select a preferential language from the list for Player
Add Password	Input audio password *
Advanced Setup	Refresh Play List when BC changed
About	About MP3 player version information

* When receiving a pay channel, 🔒 appears on the left BC window. To receive it, you need to have a subscription agreement with the services provider and get a set of password (22 or 25 digits number). This function can be achieved by the following operations:
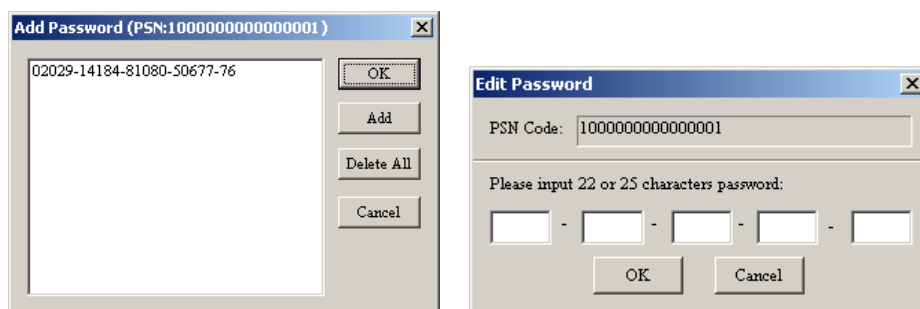
OK: Save input password and exit.

Add: Add audio password.

Delete All: Delete all passwords.

Cancel: Exit dialog without saving.

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5) Play List Window:

All scanned information is displayed in Play List window. There are five columns in the list:

BCID: Broadcast Channel ID, such as EL1125

SC No: Service Component number. No display if only one SC within the BC

Service label: Name of BC provider, such as MAESTRO

Language: Language of the channel using, such as English

**Type**: Music type of the channel, such as Rock.

 Light or gray means satellite signal on or off. If the icon is light, you can enjoy the channel.

 Receiving quality. More bars lighten, much better the signal.

Right click a channel and a menu displayed. There are five items for selecting.

Item	Function
Play	Play selected channel.
Hide list	Hide Play List Window. Click "Show/Hide play list" button to show the window again
Search	Search matched channels*
Show all BCs	Show all the scanned channels in Play List.
Sort list	Sort list by BCID, service label, language or program type. The list is arranged in ascending order.

* User can filter some favorite channels according to selected language and type. For example, select pop music in English.
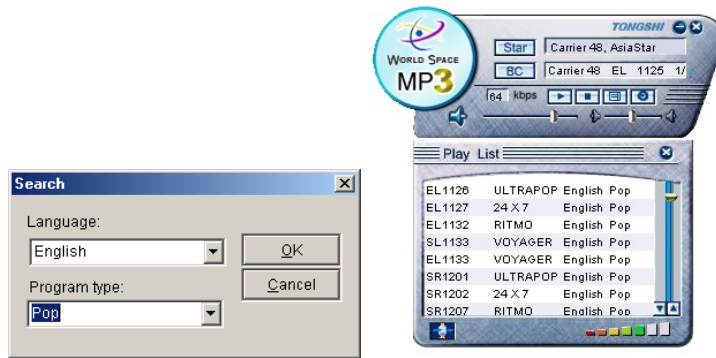
6. Data Service

DAMB-R supports DMS, CLASS and TONGSHI DATACAST that used in WorldSpace system now. Data service provider will provide manual of data reception.

Appendix A: Reinstall the Driver Manually

The method is for professional only.

If the driver was installed incorrectly, you can reinstall the driver step by step as follows:

1) Open "Control Panel" and double click "System" icon.

2) In Win98/Me, "System Properties" dialog box will pop up. Select "Device Manager" and select "USB<->Serial" in other devices.

   System Properties interface in Win98/Me:
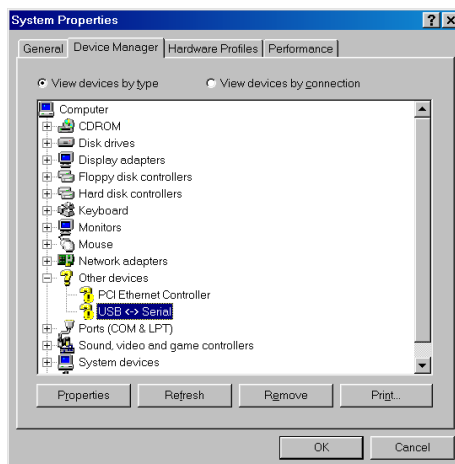
3) In Win2000/XP, "System Properties" dialog box pops up. Select "Hardware" and click "Device Manager…", "Device Manager" window pops up, select "USB<->Serial" in Other devices

   System Properties interface in Win2000/XP:
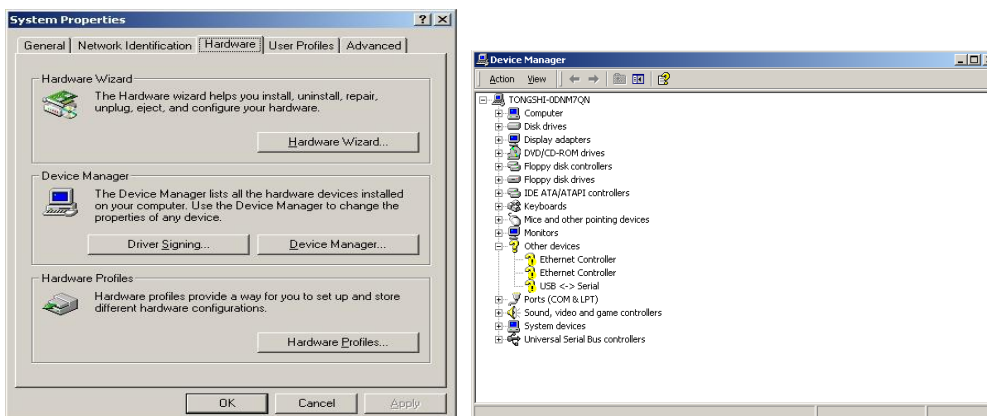
4) In Win98/Me, click "Remove" button (In Win2000/XP, click right button will pop up a menu, then click "Uninstall…"), "Confirm Device Removal" dialog box pops up, click "OK".

5) Installation software according to chapter two.

6) Please reboot computer to reinstall the driver.

Appendix B Service Website of Tongshi Corp.

http://www.tongshi.com is our company's service website. Some convenient services are provided on the website, include:

  1) Tongshi company.
  2) Products introduction.
  3) Technology support.
  4) Download the latest update.
  5) News, forum and applied fields.
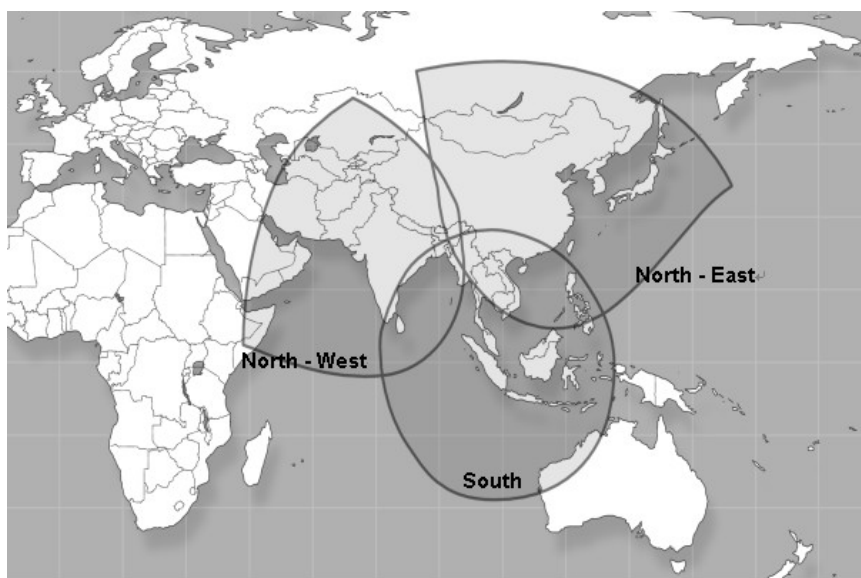

If you have any question, please contact to in E-mail:
 support@tongshi.com. We shall answer you as soon as possible. Some advices, minds or suggestions are all welcome. Thanks.

Appendix C Country-List for AsiaStar™

WorldSpace AsiaStar™					
"-"of azimuth express southwest "+"of azimuth express southeast			This country coverage list is valid only for an unobstructed line of side connection to the satellite.		
Country	Azimuth	Elevation	Country	Azimuth	Elevation
Afghanistan	55	33			
Christm.lsl. (Australia)	-177	78	Kyrgyzstan	41	33
Bahrain	72	24	Laos	3	68
Bangladesh	33	58	Malaysia	-51	84
Bhutan	30	54	(Kuala Lumpur)	46	85
Brunei	-65	78	(Kuching)	-74	84
Burma	24	64	Maldives	83	53
Cambodia	0	75	Mongolia	2	37
China	3	51	Nepal	39	50
(Yining)	32	34	North Korea	-32	38
(Chongqing)	-3	56	Oman	73	31
(Canton)	-20	61	Pakistan	55	38
(Shanghai)	-30	49	Palau	-79	56
India	52	52	Philippines	-58	66
(Bombay)	62	47	Qatar	73	24
(Madras)	64	58	Russian Federation	16	17
(Kalkutta)	37	58	(Irkutsk)	1	30
Indonesia	-100	76	(Magadan)	-50	12
(Medan)	60	82	(Chabarowsk)	-38	27
(Jambi)	139	88	Saudi Arabia	77	20
(Jakarta)	-164	82	Singapore	43	88
(Surabaya)	-135	77	Somalia	87	24
(Manado)	-86	67	South Korea	-36	42
Iran	66	25	Sri Lanka	74	60
Japan	-48	36	Taiwan	-35	57
(Naha)	-43	50	Tajikistan	47	33
(Osaka)	-46	38	Thailand	18	74
(Tokyo)	-50	35	Turkmenistan	59	25
(Sapporo)	-47	28	United Arab.Emirates	71	28
Kazakhstan	45	24	Uzbekistan	53	27
Kuwait	73	20	Vietnam	-4	71
			Yemen	80	23

Appendix D Country-List for AfriStar^{TM}
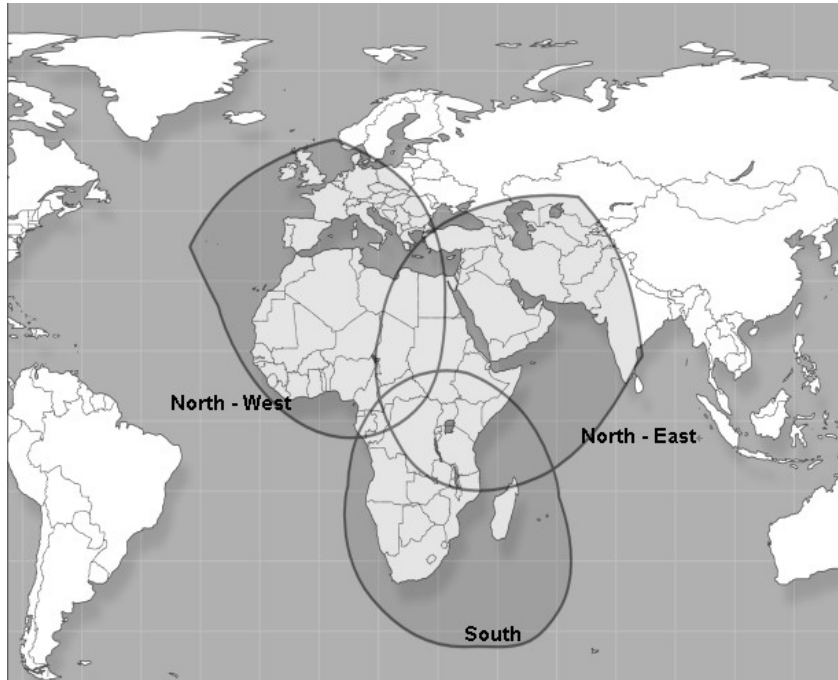
WorldSpace AfriStar™					
"–"of azimuth express southwest "+"of azimuth express southeast			This country coverage list is valid only for an unobstructed line of side connection to the satellite.		
Country	Azimuth	Elevation	Country	Azimuth	Elevatio n
Afghanistan	-60	29			
Algeria	36	52			
Andorra	28	37	Libya	7	58
Angola	166	75	Madagascar	-125	53
Armenia	-34	37	Malawi	-135	69
Azerbaijan	-38	36	Mali	57	56
Bahrain	-52	45	Malta	11	48
Benin	64	65	Mauritania	61	47
Botswana	-172	64	Mayotte (France)	-116	58
Burkina Faso	62	60	Mocambique	-141	63
Burundi	-111	79	Morocco	45	42
Cameroon	56	78	Namibia	170	64
Cape Verde	75	36	Niger	34	66
Centr.African.Repub.	8	82	Nigeria	56	71
Chad	8	72	Oman	-64	43
Comores	-116	60	Pakistan	-66	28
Congo	102	83	Portugal	41	36
Corse (France)	17	40	Portugal (Azores)	61	24
Cyprus	-21	47	Portugal (Madeira)	55	34
Dem.Rep.of Congo	-136	86	Qatar	-54	45
Djibouti	-63	62	Rwanda	-103	79
Egypt	-19	57	Sao Tome and Princi.	89	73
Equatorial Guinea	82	77	Sardegna (Italy)	18	42
Eritrea	-52	62	Saudi Arabia	-49	51
Ethiopia	-64	66	Senegal	71	46
France	25	33	Seychelles	-101	52
Gabon	93	79	Sierra Leone	77	51
Gambia	71	46	Socotra (Yemen)	-71	50
Georgia	-32	36	Somalia	-79	59
Ghana	71	63	South Africa	-171	56
Guinea	73	51	Spain	35	37
Guniea-Bissau	74	46	Spain (Isl.Baleares)	28	40
Iran	-51	38	Spain (Isl.Canarias)	58	38
Iraq	-38	45	Sudan	-33	71
Israel	-25	50	Swaziland	-158	57
Italy	13	40	Syria	-29	45
Ivory Coast	75	58	Tanzania	-115	72
Jemen	-62	54	Togo	68	65
Jordan	-28	50	Tunisia	20	48
Kenya	-89	70	Turkey	-22	43
Kriti (Greece)	-6	49	Turkmenistan	-51	30
Kuwait	-45	45	Uganda	-84	76
Lebanon	-26	47	Unit.Arab.Emirate	-59	44
Lesotho	-166	55	Vatican City	13	41
Liberia	79	54	Western Sahara	59	42
			Zambia	-154	72
			Zimbabwe	-155	65