

Thank you for purchasing our product.

POLYTRON

WORLDSPACE Satellite Radio, stereo radio & cassette

Precautions

- Read this instruction manual carefully and completely before operating the unit.
- Follow all warnings and cautions, as well as the safety instruction below.

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Introduction



WORLDSPACE®

Welcome to the **WORLDSPACE™** Broadcast Experience. Congratulations your purchase of this fine *WorldSpace* digital receiver. It is an exciting way to receive Satellite Radio throughout Africa, the Middle East, Asia and most of Europe. And the variety is tremendous! In your *WorldSpace* region, you get dozens of *WorldSpace* Satellite Radio channels, including some of the most respected international broadcasters, and important local and regional programming, plus unique music and audio arts services produced just for you, the *WorldSpace* listener.

By adding a *WorldSpace* PC Adaptor kit to this unit, you can also plug excitement into your personal computer! The *WorldSpace* Direct Media Service assembles the best of the Internet and custom programming from marquee content developers and delivers it directly to your PC. No telephone connection. No network congestion. Just a clear digital signal and a small monthly fee puts select web content as near as your keyboard and mouse.

For assistance with your purchase or additional information on available subscription services, please contact your local *WorldSpace* distributor, go to www.worldspace.com and visit the customer service section, or email at customerservice@worldspace.com.

Thank you for choosing *WorldSpace*.

We hope you will enjoy countless hours of informing, entertaining, and enlightening programs from around the world.

Features

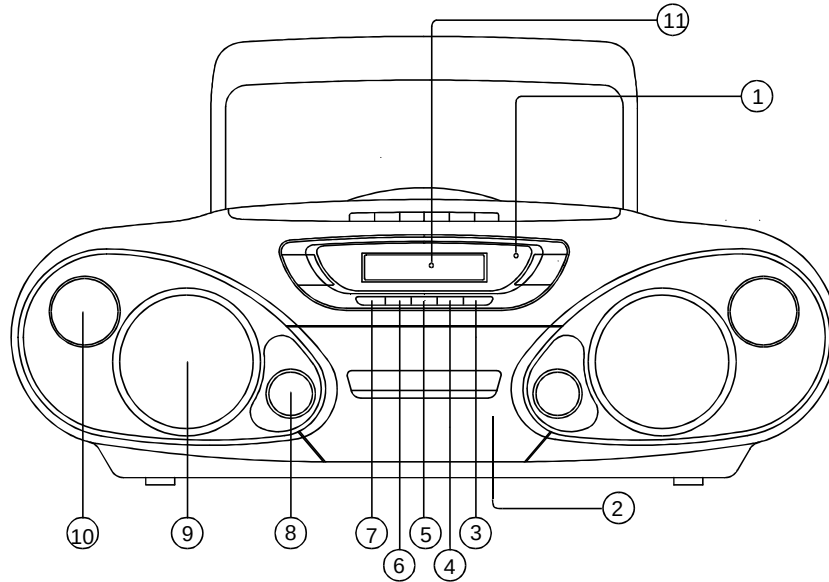
The POLYTRON digital receiver PWS is filled with exciting features:

- Receives directly the *WorldSpace* Satellite Radio service throughout the vast *WorldSpace* satellite coverage areas.
- 10 memory presets for fast access to your favorite channels.
- Last Channel Memory Recall.
- Stereo output for external amplifier.
- Data port for the *WorldSpace* Direct Media service.
- Audio
 - Cassette / Tape player.
 - AM / FM Radio Receiver.
 - 5 channels Graphic Equalizer.
 - Karaoke function.
 - Bazzoke.

Warning & Cautions

1. Do not use this unit near water, such as near bath tube, swimming pool and the lake.
2. Do not use the unit near sources of heat, including heating vents, stoves, or other appliances that generate heat.
3. Place the unit on a flat even surface.
4. The unit should be situated with adequate space around, so that proper ventilation is assured.
5. Do not place the unit in a bookcase, cabinet or airtight rack where ventilation may be impeded.
6. Take care that objects or liquids do not get inside the unit through the ventilation openings.
7. Condensation may occur when :
 - The unit is moved from a cold spot to warm spot.
 - The heating system has just been turned on.
 - The unit is used in a very humid room.

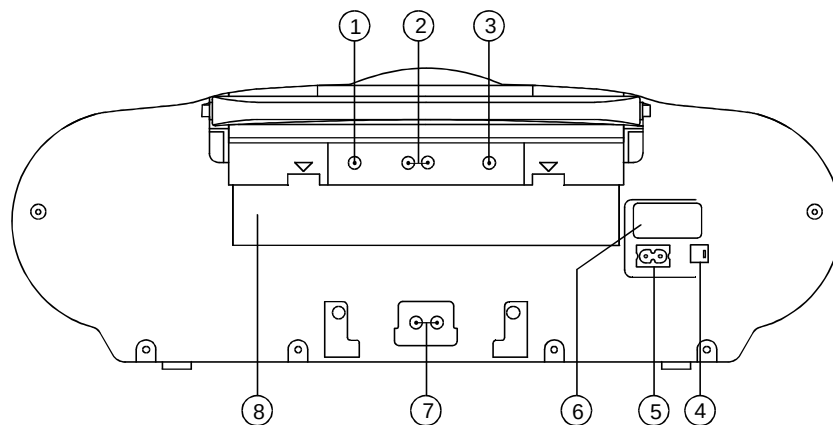
Front Panel



Description:

- | | |
|-------------------------|---------------------|
| 1. FM Stereo Indicator | 7. SC - Button |
| 2. Cassette Compartment | 8. Bass Reflex Port |
| 3. BC UP Button | 9. Woofer |
| 4. BC DOWN Button | 10. Tweeter |
| 5. PRESET Button | 11. LCD Panel |
| 6. SC + Button | |

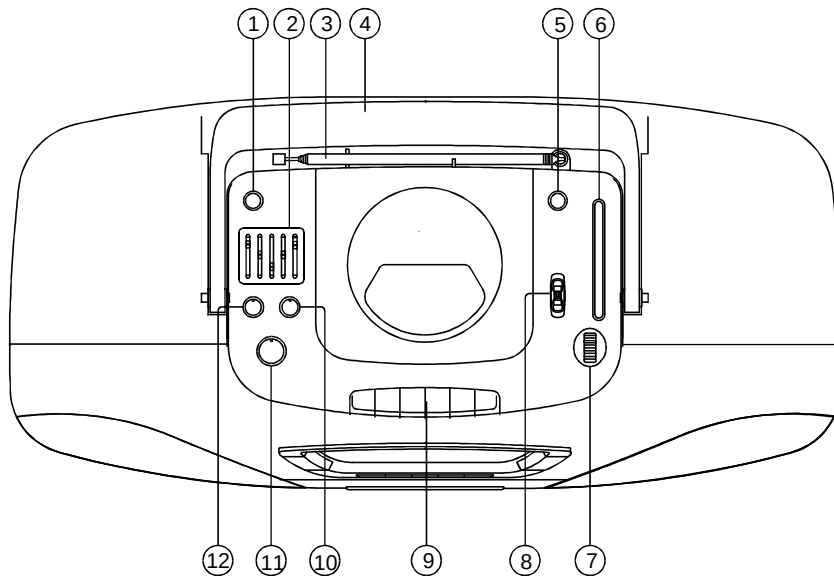
Rear Panel



Description:

- | | |
|--|----------------------------|
| 1. DATA OUT Terminal | 5. AC IN Terminal |
| 2. LINE OUT Terminal (L, R) | 6. Fuse Holder |
| 3. ANTENNA Terminal for <i>WorldSpace</i> | 7. SUB-WOOFER OUT Terminal |
| 4. V-SELECT for selecting voltage (110/220V) | 8. Battery Compartment |

Top Panel

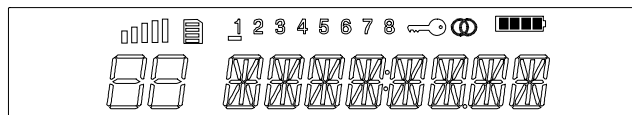


Description:

- | | |
|----------------------------|-------------------------|
| 1. POWER Button | 7. TUNING Dial |
| 2. Graphic Equalizer | 8. FUNCTION Selector |
| 3. Antenna for FM/AM radio | 9. Tape Operation Knobs |
| 4. Handle | 10. MIC LEVEL Control |
| 5. MIC Jack | 11. VOLUME Control |
| 6. FM/AM Radio Scale | 12. BAZZOKE Button |



LCD Panel



Description:



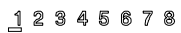
Shows broadcast channel information (BC information, such as BC number, service name or status)



Shows received satellite signal strength (More bars indicate better reception).



Indicates preset mode is on.



Indicates number of service components within the selected BC.



Indicates selected BC is encrypted and accessed through subscription only. Contact your local WorldSpace distributor or visit www.worldspace.com for more details.



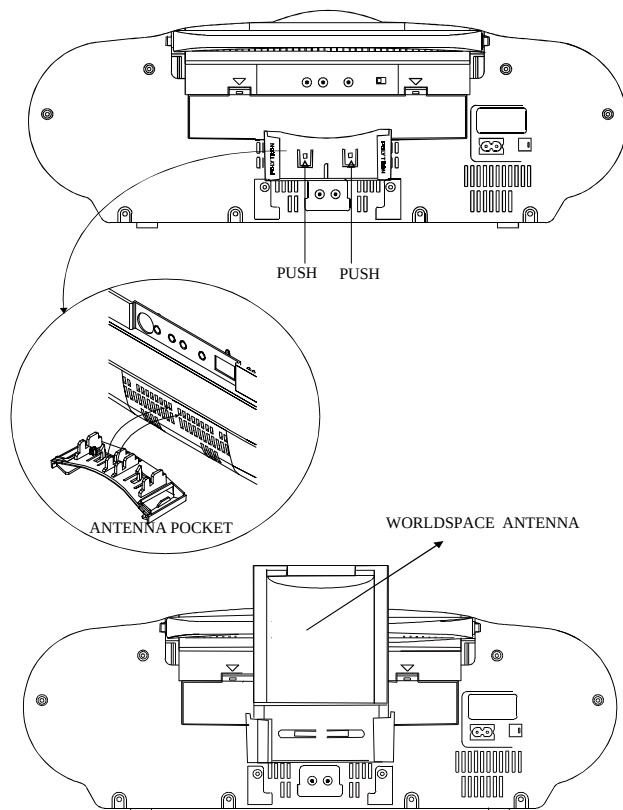
Indicates stereo reception.



Indicates broadcast channel preset number.

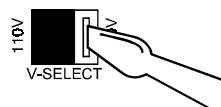
Mounting the Antenna Pocket

The antenna pocket can be mounted on rear of the unit. Insert and push the antenna pocket until locked. Insert *WorldSpace* antenna into antenna pocket.



Power Source

1. Connect this unit only to a power source specified in this Instruction Manual, and as marked on the unit. Please check it before plug in the cord to the mains.
2. When disconnecting the AC Cord, pull it out by the AC power plug.
Do not pull the cord itself.
3. Unplug the AC Cord from power source and remove the batteries from the battery compartment if the unit will not be used for a long period of time.
4. Avoid overloading AC power plug or extender cords beyond their capacity, as this could result in fire or shock.

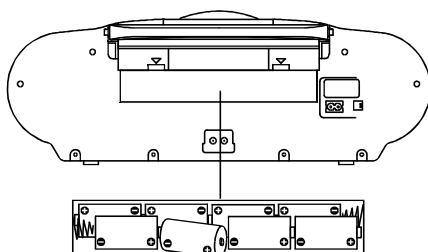


Powering from the mains.

Check the main voltage to matches this unit. To match to the main voltage, switch the Voltage Selector (110/220V) on the rear panel with screw driver or similar tool.

Powering from Battery

Insert 8 batteries R20S/UM-1/D-Size, and disconnect the AC cord from the unit. Make sure to insert the batteries in the right polarities.

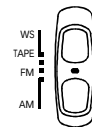


To turn the unit on/off

- Press POWER button to turn on the unit and the unit is ready to operate.
- Press POWER button again to turn the unit off.

Operating FM/AM

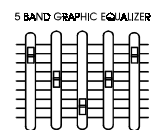
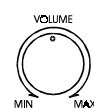
1. Set the FUNCTION selector to FM or AM.



2. Turn the TUNING dial to select the desired radio station.

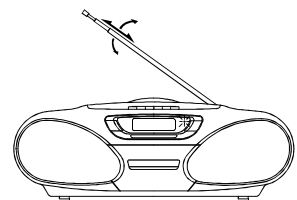


3. Adjust the volume and equalizer graphic to your preference.



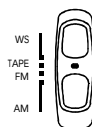
Notes :

- Adjust length and Antenna direction to get the best reception of FM signal. And rotate unit direction to get the best reception of AM signal.
- The FM STEREO indicator will lit during FM stereo reception.

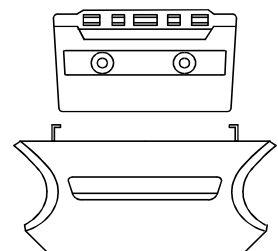


Playing a Tape

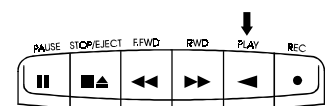
1. Set FUNCTION selector to TAPE position.



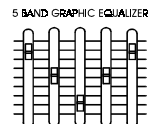
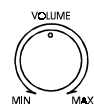
2. Insert a cassette into cassette compartment.



3. Press PLAY button to play the tape.



4. Adjust volume and graphic equalizer to your preference.



Other Tape Operations:

- To fast forward the tape, press FFWD ().
- To rewind the tape, press RWD ().
- To pause for a moment, press PAUSE ().
- To stop play and remove the cassette, press STOP/EJECT button.

When the tape reaches the end, PLAY is released automatically.

Playing WorldSpace

1.Connecting The WorldSpace Antenna

Precaution

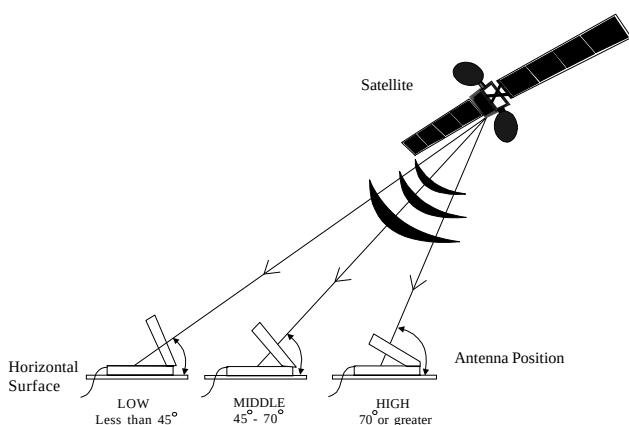
- Turn off the unit when making connection or releasing WorldSpace Antenna.
- Place the antenna in a position to acquire the satellite signal. If a line of sight is obstructed, the unit may not receive signals, Because a signal weakened by window glass, etc. Place the antenna near the window when reception is poor.
- The supplied antenna is water proof. But the antenna is not usable under extreme weather condition.
- Use only the supplied antenna or an antenna of WorldSpace specification. Do not use other conventional TV or FM antennas, or the unit may be damaged.

Antenna Pointing Guide

1. Connect the WorldSpace antenna to the ANTENNA terminal.
2. Using the WorldSpace coverage area on this page as a guide. Try to position the antenna in a line of sight with the satellite as few obstruction as possible.
3. Adjust the antenna by directing and tilting to direct the WorldSpace antenna in the general direction of the satellite broadcasting to your region.

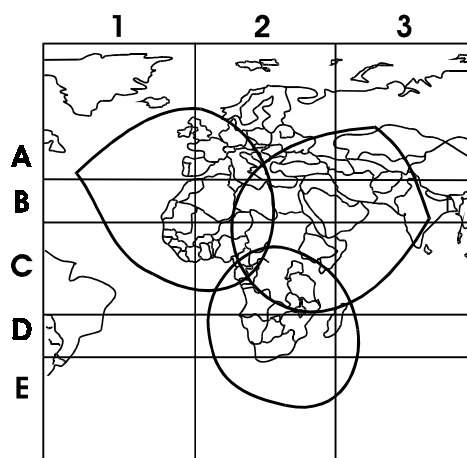
The Elevation of the WorldSpace Antenna

The illustration below correspond to the recommended elevation setting listed in the graph on this page. Set the WorldSpace antenna accordingly.



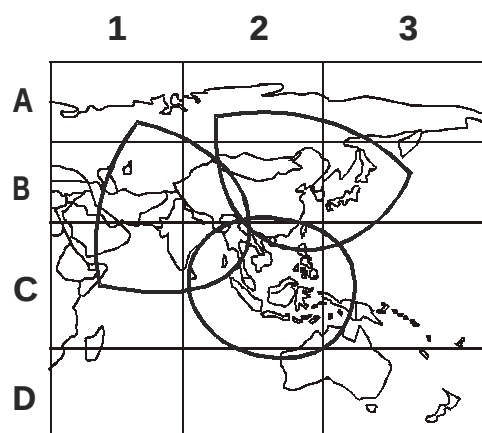
WorldSpace Coverage Area

AFRISTAR™ Satellite



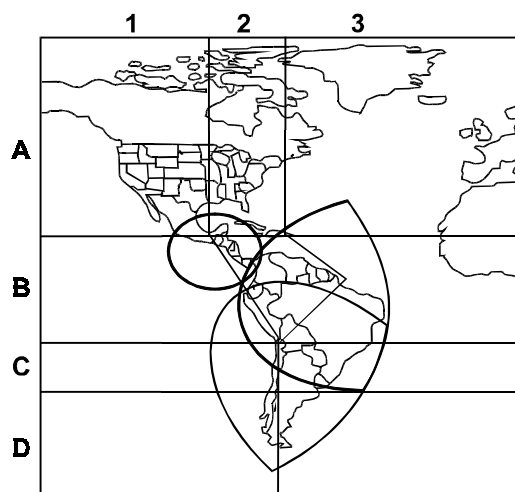
Region	Antenna Position	Antenna Direction
A1	Low	Southeast
A2	Low	South
A3	Low	Southwest
B1	Middle	Southeast
B2	Middle	South
B3	Low	Southwest
C1	Middle	East
C2	High	Any
C3	Middle	West
D1	Middle	Northeast
D2	Middle	North
D3	Low	Northwest
E2	Low	North

ASIASTAR™ Satellite



Region	Antenna Position	Antenna Direction
A1	Low	Southeast
A2	Low	South
A3	Low	Southwest
B1	Middle	Southeast
B2	Middle	South
B3	Middle	Southwest
C1	Middle	East
C2	High	Any
C3	Middle	West
D2	Middle	North

AMERISTAR™ Satellite



Region	Antenna Position	Antenna Direction
A1	Middle	South
A2	Middle	Southwest
B1	High	North
B2	Middle	West,Northwest
B3	Low	West
C1	Middle	Northwest
C3	Low	Northwest
D1	Low	North
D3	Low	Northwest

Note : AmeriStar is scheduled for future launch.

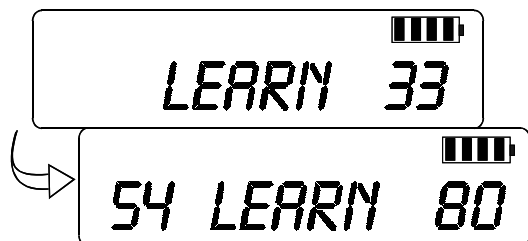
2. WORLDSPACE Operating Guide

Turn the unit on and move FUNCTION selector to WS position. The LCD panel will show “SAT” for a second. Wait until “SAT” disappear.

By running the LEARN mode, your unit automatically scans and stores all *WorldSpace* broadcast channels available in your area. We strongly recommend that you run the LEARN mode the first time you turn on the unit or when the unit is moved to a new country or region.

Using LEARN Mode To Find Broadcast Channels

LEARN Mode



- Press and hold the SC - button for 2 second and release.
- The LCD panel shows “LEARN”. On releasing the button, the LEARN mode begins scanning for available broadcast channels (BCs) in your area. This process takes one minute. Once completed, the first available BC will play.

Note:

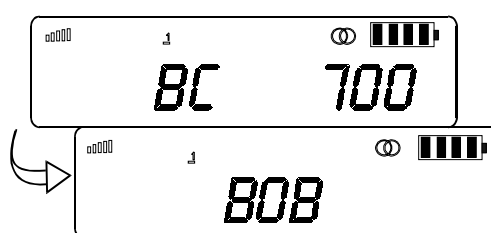
The LEARN mode will not reset or clear the channel presets.

EXTENDED LEARN Mode

- Press and hold the SC- button for 5 seconds and release.
- The EXTENDED LEARN Mode is necessary should *WorldSpace* launch additional satellites or install repeater services. Visit our website at www.worldspace.com for updates.

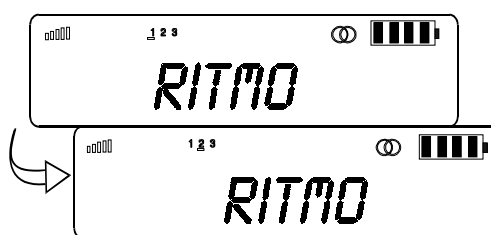
Selecting Broadcast Channels (BCs)

You can select BCs sequentially by pressing the BC UP/DOWN button. When selecting a BC, the LCD panel shows first its number followed shortly by its channel name.



Selecting Service Components (SCs) Within a BC

Some broadcast channels may have more than one service component. In this case, use the SC+ / - button to scroll and select the desired service component of that broadcast channel. For instance, if the “RITMO” channel decided to broadcast in three languages on multiple service component and you wanted to hear one of the alternative languages , you would select the appropriate service component using the SC +/-



3.PRESET Mode: Storing, Selecting, and Deleting BCs

The PRESET mode can be switched on and off by briefly pressing the PRESET button.

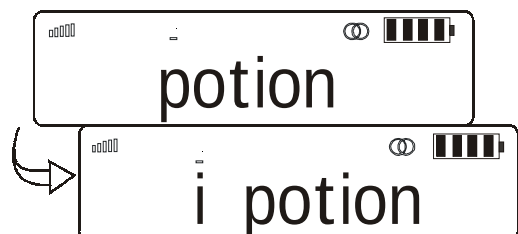
If the PRESET mode is switched on the LCD panel indicates the  symbol.

Storing BCs

You can store up to 10 of your favorite BCs in the units memory. To store a BC:

1. Make sure the PRESET mode is switched off.
2. Select the BC you wish to store.
3. Press and hold the PRESET button for 2 seconds.

The current BC is now stored in the next free position in the preset list. The preset number is shown on the LCD panel before the name.



Note:

If the preset list is full, the LCD panel will show “MEMFULL”.

Selecting Stored BCs

1. Briefly press the PRESET button to switch on the PRESET mode. The  symbol appears on the LCD panel.
2. Scroll through stored stations sequentially by pressing the BC UP/DOWN buttons.

Deleting Stored BCs From The Preset List

1. Switch on PRESET mode.
2. Select the BC you wish to delete from the preset list.
3. Press and hold the PRESET button for 2 seconds. The current channel is erased from the preset list. The LCD panel will no longer show the preset number before the channel name.
4. After the channel is erased the unit automatically switches the PRESET mode off.

When selecting a channel, the unit verifies that the channel is not already stored. If a channel is already stored, its memory location number appears on the LCD panel in front of the channel name, and it will not be stored twice.

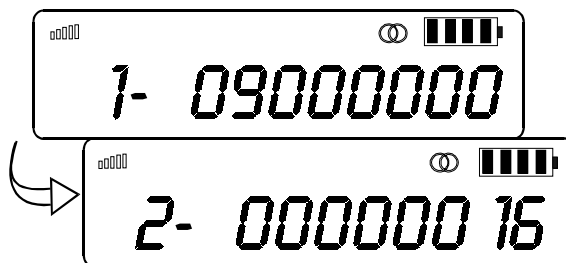
4.Encrypted Channels

Depending on your region, some or all channels are encrypted for audio subscription based listening. If you select a channel that is encrypted, a key symbol  appears on the LCD panel and no audio is heard. To access these channels a password must be entered. Your receiver has 10 unique ID number that is required for the distributor to set up your subscription. Contact your nearest WorldSpace distributor for more information about subscription-based services or visit our website at www.worldspace.com.

Displaying Your 16-Digit Unit ID

1. Press and hold the SC+ button more than 5 seconds.
The unit enters UNIT ID mode. The LCD panel shows “1-” followed by the first 8 digits of the unit ID.

2. Press the SC+ button. “2-” followed by the remaining 8 digits of the unit ID appear on the LCD panel.

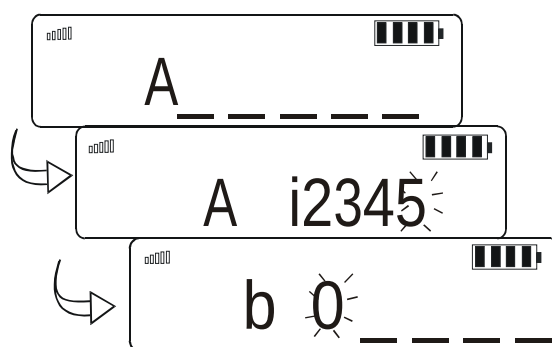


5.Password

You will be issued a unique password to your unit and cannot be used with another unit. Passwords are entered once and then stored. This password remains stored and valid for the whole subscription period. A password is either 22 or 25 digits in length. The unit can store up to 8 passwords for different services.

Entering password mode:

1. Press and hold the SC+ button for more than 2 seconds.
The LCD panel shows “A_____”. The blinking cursor indicates your current position.
2. Enter the first 5 digits.
Enter the first digit by using the BC UP/DOWN button to scroll through digits (0-9). When the proper digit is displayed in the field, use the SC+ and SC- button to move the cursor to the left or right.
3. After you have entered the fifth digit, press the SC+ button to move to the next screen.
The LCD panel shows “B_____”
4. Enter the next 5 digits.



As you complete each screen, press the SC+ button to move to next screen. When you are finished, you will have completed five screens, “Axxxxx” through “Exxxxx”. If you were given a 22-digit password, leave the last 3 digits of screen “Exx_ _ _” blank.

Completing the password entry process

To end the password entry process:

1. Press and hold the SC+ button for more than 2 seconds.
“CHECKING” appears on the LCD panel as the password is being verified. If the password is true, the LCD panel will show “ACCEPTED” for 3 seconds. If the password is false, the LCD panel will show “REJECTED”.



- When an encrypted station is selected, the receiver will automatically search for the necessary password. If the password is found in the memory, you will be able to hear the encrypted channel.

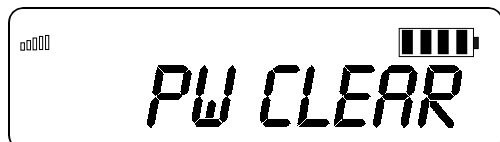
Remarks:

- During password verification, all buttons will be unavailable.
- If the unit is tuned to a decrypted BC, that channel will be muted during verification
- If the password list is full, the oldest password is replaced.

Clearing the entire password list

To clear the entire password list:

- Press and hold the SC+ button for more than 10 seconds.
The LCD panel will show "PW CLEAR".



- Press the SC+ button once to complete the password clearing process and assure that all passwords are cleared.

Note:

To cancel the password clearing process, press any button instead of SC+, or switch off the unit.

6.PC (Personal Computer) Connection

The DATA OUT terminal on the rear panel of your unit is a port to a new type of multimedia service. With a *WorldSpace* PC Adaptor kit, you can connect your unit to your PC (using its serial port or USB connector) and receive the *WorldSpace* Direct Media service, an exciting new way to receive select web content direct from satellite. Being a *WorldSpace* Direct Media service subscriber is like having a personalized CD-ROM delivered into your PC everyday. You interact with the content that you download, use it on your schedule, and surf from one area of interest to another. No telephone line required.

Contact your nearest *WorldSpace* distributor for more information, or visit website at www.worldspace.com.

7.Alternative Antenna Options

Beside the antenna supplied you may alternatively use a *WorldSpace* circular antenna or an outdoor Yagi cable antenna for *WorldSpace* reception. To do so you have to select the desired antenna option among the three which automatically sets the appropriate supply voltage. The three antenna options are: LINEAR, CIRCULAR or CABLE. LINEAR is the default voltage needed for the antenna that comes with the receiver. CIRCULAR is used for the *WorldSpace* circular antennas and CABLE is for the *WorldSpace* outdoor Yagi antennas.

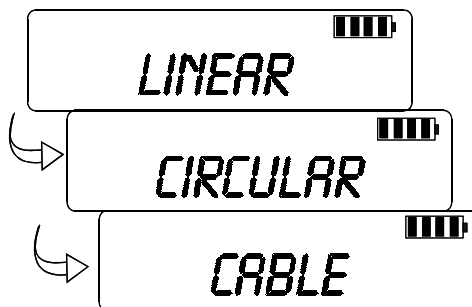
Note:

All antenna options require an unobstructed line-of-sight to the *WorldSpace* satellite so that the antenna can receive these transmissions.

Selecting Alternative Antenna Options

- While pressing the SC+ button, switch on the unit.
The LCD panel will show the antenna type.

- Scroll up or down with the BC UP/DOWN button, LINEAR, CIRCULAR, then CABLE appear on the LCD panel.



- When the desired setting is displayed, press the PRESET button to select it.

The setting are:

- LINEAR mode : the antenna supply voltage is always 3 volts. This mode is used for the included WorldSpace antenna.
- CIRCULAR mode: two voltage are possible. 3 volts and 2,4 volts. The voltage is selected automatically by unit to provides better reception quality. This mode is suited for a circular antenna.
- CABLE mode : the antenna supply voltage from the unit is switched off. This mode is suited if you have an in-house cable installation with separate power supply for an active outdoor Yagi antenna.

Karaoke

- Set the FUNCTION selector to TAPE
- Connect your microphone to MIC jack.
- Turn your microphone on and adjust mic level up to your preference. When your voice gets in to the microphone, the original vocal of karaoke cassette will be disappear. (*Automatic vocal changer/AVC*)
- Insert the karaoke cassette to cassette compartment.
- Press PLAY button.

Graphic Equalizer

To adjust the tone as your preference, this unit has 5 channels graphic equalizer with 100 Hz, 400Hz, 1KHz, 4KHz and 10KHz centre frequency. If you want to enjoy the music with domination bass and treble, adjust the graphic equalizer as "V" letter.

Bazzoke

Press BAZZOKE button to reinforce bass sound.
Press BAZZOKE button again to return to normal sound.

Record FM/AM radio station

- Insert a cassette into cassette compartment.
- Press PAUSE (II) button, then press REC (●) button.
- Set the FUNCTION selector to AM or FM.
- Turn the TUNING dial to select a radio station.
- Press PAUSE (II) button to start recording.
- Press PAUSE (II) button again to stop recording temporary.
- Press STOP/EJECT to finish the recording process.

Recording WorldSpace Satellite radio channels

- Insert a cassette into cassette compartment.
- Press PAUSE (II) button and then press REC (●) button, unit ready to record.
- Set the FUNCTION selector to WS.

4. Select your preferred *WorldSpace* station for recording (see *WorldSpace* operation guide).
5. Press PAUSE (II) button to starting record.
6. Press PAUSE (II) button again to stop recording temporary.
7. Press STOP/EJECT button to finish the recording process.

LINE OUT Terminal

This terminal provide stereo Audio output sinyal that can be connected to Audio amplifier , stereo audio system , etc.

SUB-W OUT Terminal

This terminal can be connected to active Sub-woofer to reinforce bass sound.

Maintenance, Safety, And Handling Precautions

Maintenance

- Use a soft damp cloth to clean the unit housing.
- Never use cleaning agents that contain alcohol, methylated spirits, ammonia or abrasives.

Safety Precautions

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN OR REMOVE THE CASING, EXCEPT FOR BATTERY COVER, NO USER SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

- Do not continue to use the unit if performance is abnormal.
- Do not insert any metallic objects into the unit.
- Unplug the power cord when there is a possibility of lightning.
- If liquid get inside the unit, unplug the power cord from the outlet and consult your nearest POLYTRON service station.
- Do not block the ventilation holes of the unit so that heat can escape.

Handling Precautions

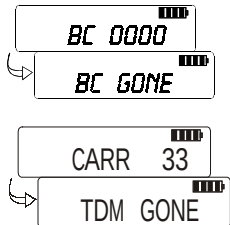
WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE OR ITS ACCESSORIES TO RAIN OR MOISTURE.

- Do not immerse in water or use in bathtub, shower, or swimming pool. Electrical shock could result. Do not allow the unit to become wet from rain or splashes.
- Do not expose the unit to extreme temperatures.
- Do not expose the unit to direct sunlight, extreme heat, or high humidity. Do not place it near heat sources, water, or in a sandy or dusty place.
- Do not drop the unit or cause damage to the cabinet.
- When the unit is not used for a long period, unplug from the wall outlet.

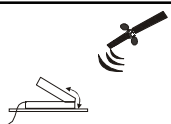
Trouble Shooting

Check the following item before calling for service, when the unit does not operate properly or damage. And do not try to repair it by yourself.

FUNCTION SELECTOR POSITION	PROBLEMS	POSSIBLE CAUSES	SOLUTIONS
ALL	The unit does not switch on.	• Power supply not connected properly.	• Check power supply connection.
		• Batteries not properly positioned or are empty.	• Ensure that the batteries are new and correctly inserted.
	Microphone does not functioning	• The microphone is switched off.	• Switch on the microphone.
		• The MIC LEVEL is minimum.	• Adjust MIC LEVEL up to preference.
		• The microphone batteries are empty.	• Replace new microphone batteries.
		• The microphone is broken.	• Change the microphone.
FM / AM	Poor quality of radio reception.	• The antenna is not well positioned.	• Adjust the antenna position.
		• TUNING position is not match.	• Turn the TUNING dial forward and backward until match with radio station frequency.
TAPE	Poor sound.	• Head capstans or pinch roller are dirty.	• Clear these parts with a cotton, swab moistened with commercial head/pinch roller cleaner or iso-propyl alcohol.

FUNCTION SELECTOR POSITION	PROBLEMS	POSSIBLE CAUSES	SOLUTIONS
WS	The unit does not receive <i>WorldSpace</i>. (LCD panel may show “BC GONE” or “TDM GONE”) 	- Antenna pointing is not correct. - There is an obstacle between the antenna and the satellite. - Antenna cable is not inserted. - The channel location has changed. - The channel is temporarily not available. - Unit has moved to another country or region.	- Check Antenna Connecting and Pointing Guide” (see page 5). - Set the antenna up in open-air or window for line-of-sight and to minimize interference. - Check the cable connections. - Perform the LEARN mode again to find the new BC location. - Contact your nearest <i>WorldSpace</i> customer service representative, see <i>WorldSpace</i> Offices list. - Perform the LEARN mode again to find the BC.
	The unit receives the <i>WorldSpace</i> signal but no sound is heard.	- Volume is set too low. - The LCD panel shows the  symbol which means that the station is encrypted. - Selected BC is for DATA. - The unit has a synchronization problem.	- Adjust the volume. - A password has to be entered to access this encrypted station. Contact your nearest <i>WorldSpace</i> distributor to subscribe. Select another BC. - Contact your nearest <i>WorldSpace</i> distributor to subscribe. - Select another BC.
	When enter the password, the LCD panel reads “REJECTED” 	The password is incorrect.	Confirm the password and reenter it. If you still receive the “REJECTED” message, contact your <i>WorldSpace</i> distributor.
	When enter the password, the LCD panel reads “REPLACED” 	There was already a password for the same service in the password list.	This is normal. No further action is required.

Frequently Asked Questions

QUESTION	ANSWER
What is line-of-sight? 	Line-of-sight means the unit satellite antenna has a direct and clear path to where the <i>WorldSpace</i> satellite is located in the sky.
Why is line-of-sight needed for satellite reception?	As with all satellite broadcasting, <i>WorldSpace</i> transmissions travel directly from the satellite to your unit antenna. This path must be unobstructed so that the antenna can receive these transmissions.
What do the BC UP/DOWN button do?	Allows listeners to scroll through available BCs. In PRESET mode, these buttons take you to the next or the previous stored channel. In PASSWORD entry mode, you increase or decrease the correct digit by pressing these buttons.
What is a service component?	A service component is a separate within a BC. One BC can have as many as eight service components. The LCD panel on your unit shows how many service components are available for the selected broadcast channel. For instance, if the “RITMO” channel decided to broadcast in more than one language on multiple service components and you wanted to hear one of the alternative languages, you would select the appropriate service component. 
Is a service component always an audio channel?	Some broadcasters may use a service component to transfer data other than audio. In the case, no sound will be audible upon selection of that service component and the LCD panel shows “DATA” every 2 seconds.
Do all broadcast channels have service components?	Yes. All broadcast channel have at least one service components. Some have more, up to eight service components. The LCD panel displays the number of available service components for the selected broadcast channel.
What do the SC+/- button do?	- Allows listeners to scroll through a broadcast channel’s available service components. Press the SC + and SC- buttons to scroll forward and backward, respectively, through available service components. - These buttons have some additional features. - Press the SC+ button and hold it 2 seconds to enter PASSWORD ENTRY mode. Once in PASSWORD ENTRY mode, press SC + again to move to the next password field screen, Press SC - to return to previous field screens. - Press the SC + button and hold it 5 seconds to enter UNIT ID mode. Once in UNIT ID mode, press SC + again to see the second 8 digits of the unit ID.
What is Last Channel Memory Recall?	If the unit remains tuned to a broadcast channel for at least 10 seconds, this broadcast channel are stored. When the unit is switched off and on again, the unit will tune to that last broadcast channel.
When use the LEARN mode, the LCD panel displays a series of numbers. What is the significance of these numbers?	<i>WorldSpace</i> uses, and the <i>WorldSpace</i> receiver recognizes, a predefined TDM carrier list (number 33, 38, 43, 48, 54, 59, 75, 80). The LEARN mode searches through these predefined TDM carriers to find the available broadcast channels and service components for your region and stores them.
When use the EXTENDED LEARN mode, the LCD panel displays a series of numbers. What is the significance of these numbers?	The EXTENDED LEARN mode scans all TDM carriers from 0-81 for available broadcast channels and service components in your region and stores them. This mode can be used any time, but is only necessary should <i>WorldSpace</i> launch additional satellites or install repeater services.

Additional Information

Technical Specification

Power Source	: AC 110/220 Volt, 50/60 Hz DC 8 x 1.5 V Battery UM-1
Graphic Equalizer	: 5 Bands
Frequency Response	: 20 - 20,000 Hz
Audio Output	: 2 x 8 Watt rms
Dimension, (w x d x h)	: 570 x 268 x 202 mm
Weight	: 6.2 kg (without battery)

Tape Section

Cassette Mechanism	: Single
Tape Speed	: 4.76 cm/sec
Wow and Flutter	: $\leq 0.4\%$
Channel Separation	: ≥ 35 dB
Signal to Noise Ratio	: ≥ 45 dB

FM/AM Radio Section

FM Frequency Range	: 88 ~ 108 MHz
Usable Sensitivity	: $\leq 15\ \mu\text{V}$
Image Rejection	: ≥ 20 dB
IF Rejection	: ≥ 40 dB
-3dB Limiting Sensitivity	: $\leq 3.5\ \mu\text{V}$
Stereo Indicator Sensitivity	: $\leq 10\ \mu\text{V}$
Stereo Separation	: ≥ 26 dB
AM Frequency Range	: 520 - 1650 kHz
Usable Sensitivity	: $\leq 1.3\ \text{mV/m}$
Image Rejection	: ≥ 30 dB
IF Rejection	: ≥ 35 dB

WorldSpace Section

Band	: <i>WorldSpace</i> Band
RF frequency	: 1453.384 - 1490.644 MHz
Modulation	: QPSK
Audio Coding	: MPEG 2.5 Layer 3
Memory	: - 10 Broadcast Channels - 8 Passwords
Antenna	: Linear patch antenna

Terminal

Input :	
Antenna	: F- type plug/50 ohm for <i>WorldSpace</i>
Output :	
Line Out	: 2 RCA jack
Data Out	: MINI DIP connector 9 pin for PC

Accessories

Extension cable for <i>WorldSpace</i> antenna
Instruction Manual Book
Antenna Pocket

Warranty

POLYTRON provides warranties to this *WorldSpace* digital receiver against any defect arising from faulty material or workmanship for a period of one year. This warranty is not valid in any of the following events:

- Warranty Card is not fully completed and returned to a POLYTRON office within 7 days of consumer purchase.
- Instructions given in the User's Guide are not strictly followed.
- Defects occur as a result of improper or reckless use or handling.
- Work or servicing is performed by a non-authorized dealer.
- Modifications or alterations are performed on any of the circuits of the unit.
- The receiver's serial number is tampered with or removed from unit.
- The warranty seal is removed or broken.

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