

Studebaker

Personal CD Player with FM Stereo Radio and Wireless FM Transmission

Also Plays CDs Wirelessly Through Your
Car Radio with Breakthrough Technology*

SB3705 OWNER'S MANUAL

* Patent Pending



Please read this Instruction Manual carefully before using
the unit and retain it for future reference

COMPLIANCE WITH FCC REGULATIONS

FCC ID: 2AWRTSB-3705

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

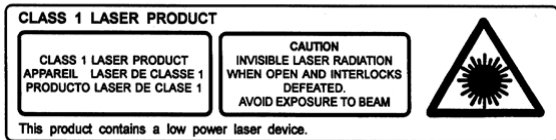
This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION



Follow the advice below for safe operations.

ON PROTECTION AGAINST LASER ENERGY EXPOSURE

- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the casing.
- Stop operation immediately if any liquid or solid objects should fall into the cabinet.
- Do not touch the lens or poke at it. If you do, you may damage the lens and the player may not operate properly.
- Do not put anything in the safety slot. If you do, the laser diode will be ON when the CD door is still open.
- If the unit is not to be used for a long period of time, make sure that all power sources are disconnected from the unit. Remove all batteries from the battery compartment.
- This unit employs a laser. The use of controls or adjustment or performance of procedures other than those specified here may result in exposure to hazardous radiation.

Should any trouble occur, remove the power source and refer servicing to qualified personnel.

DEAR STUDEBAKER CUSTOMER

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing. Sound can be deceiving. Overtime your hearing "comfort level" adapts to high volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.
- Once you have established a comfortable sound level: Set the dial and leave it there. Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For a Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise.

Customer's Record:

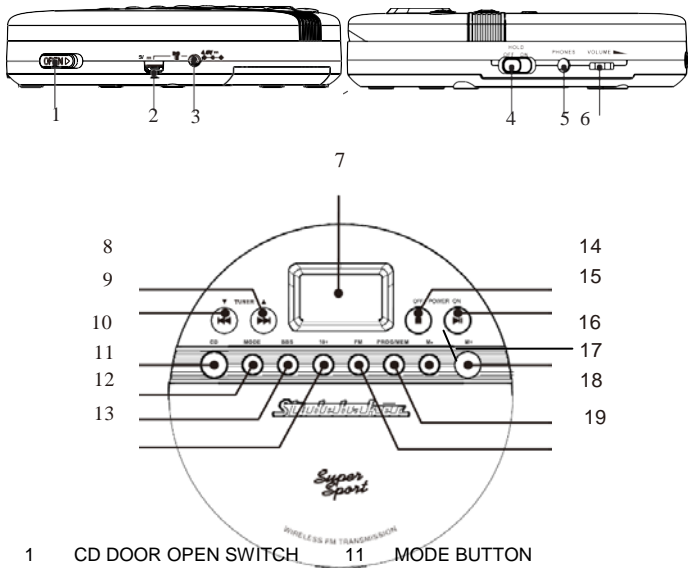
The serial number of this product is found on its bottom cover. You should note the serial number of this unit in the space provided as a permanent record of your purchase to aid in identification in the event of theft or loss.



Model Number: SB3705

Serial Number:

LOCATION OF CONTROLS



- | | | | |
|----|----------------------|----|-------------------|
| 1 | CD DOOR OPEN SWITCH | 11 | MODE BUTTON |
| 2 | MICRO USB JACK | 12 | BBS ON/OFF BUTTON |
| 3 | DC IN JACK | 13 | 10 + BUTTON |
| 4 | HOLD OFF/ON SWITCH | 14 | ■ / OFF BUTTON |
| 5 | STEREO EARPHONE JACK | 15 | ▶ / ON BUTTON |
| 6 | VOLUME CONTROL | 16 | M + BUTTON |
| 7 | LCD DISPLAY | 17 | M - BUTTON |
| 8 | TUNER ▲ / ►►► BUTTON | 18 | PROG / MEM BUTTON |
| 9 | TUNER ▼ / ◄◄◄ BUTTON | 19 | FM BUTTON |
| 10 | CD BUTTON | | |

BATTERY OPERATION

Notes: If you are using an external AC adapter (not included) for powering the unit, disconnect it before installing batteries.

For best performance and longer operating time, we recommend the use of alkaline batteries.


1. Open the BATTERY DOOR on the bottom of the unit.
2. Follow the polarity diagram shown in the BATTERY COMPARTMENT to insert 2 X 'AA' size (UM-3) batteries and close the BATTERY DOOR.
3. The LCD backlight last for 30 seconds when you press the buttons if you are using battery powered.



BATTERY WARNING

1. Be sure the batteries are installed correctly. Wrong polarity may damage the unit.
2. Use only the size and type of batteries specified.
3. Do not mix old and new batteries.
4. Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium) batteries.
5. If the unit is not to be used for an extended period of time, remove the batteries. Old or leaking batteries can cause damage to the unit and may void the warranty.
6. Do not try to recharge batteries not intended to be recharged; they can overheat and rupture. (Follow battery manufacturer's directions).
7. Do not dispose of batteries in fire, batteries may leak or explode.

AC ADAPTOR OPERATION (adaptor not included)

This unit can also be powered using an AC adaptor (not included) with an input voltage of AC 120V-60Hz, and output voltage of DC 4.5V \approx 700mA .

1. Plug the AC adaptor (not included) into a normal AC power outlet socket.
2. Insert the DC plug of the AC adaptor cord into the DC IN JACK (#3).
3. When the unit is operated using AC adaptor, the battery source will automatically be disconnected.

WARNING: Before connecting to the power supply, ensure that the supply corresponds to the information on the rating label at the back of the apparatus.

USB POWER

This unit can also be powered using the built-in MICRO USB JACK (#2) and a USB power source (not included) like a cell phone charger, computer USB port or USB power bank. USB cord is also required.

1. Use a USB power source with a minimum output of DC 5V \approx 700mA.
2. Plug one end (micro USB plug) of the USB cable into the MICRO USB JACK (#2) and the other end of the cable to the USB charger/power bank/computer (not included).
3. The battery source will automatically be disconnected when using the USB port for powering the unit.

Caution: When not using USB power, disconnect the USB cable.

EARPHONES CONNECTION

Connect the plug of the stereo earbuds (included) into the STEREO EARPHONE JACK (#5).

Notes:

- Without insert the earphones, the unit will enter CD and FM transmit mode.
- When earphones is inserted, the FM transmission is stop. Press CD MODE BUTTON (#10) to select CD mode. Press FM MODE BUTTON (#19) to select FM radio mode..

CAUTION

- Avoid excessive volume levels for long period of time when using the earphones. Prolonged use at high levels may impair your hearing.
- Do not use earphones while operating a motorized vehicle, as it may create a traffic hazard and is illegal in many areas.

CD / MP3 CD OPERATION

PLEASE READ THIS IMPORTANT INFORMATION:

CD mechanisms used in devices like this are designed to fully read all commercial CDs. They will also read self-compiled CD-R/CD-RW discs but it may take up to 10 seconds for playback to start. If playback does not start, it is likely due to the quality of the CD-R/RW disc and/or the compatibility of the CD compilation software. Manufacturer is not responsible for the playback quality of CD-R/RW discs.



Do not attach a label or seal to either side of the CD-R/RW disc. It may cause a malfunction.

FOR WINDOWS USERS:

When using the "Burn a CD" feature to create an MP3 CD in Windows, you must select the "With a CD/DVD player" option when it asks "How do you want to use the disc?" The MP3 CD will not play on this unit if you select the "Like a USB flash drive" option or if the MP3 CD is not finalized

1. Press **▶/||** ON BUTTON to turn on the unit.
2. Press CD BUTTON to enter CD mode if necessary.
(For power saving, the unit will turn off automatically after idled 60 seconds.)
3. Slide the CD DOOR OPEN SWITCH (#1) to open the CD door.
4. Carefully place an audio CD/MP3 CD with its label side up in the CD compartment and close the CD door.
5. The player will start reading TOC of the disc.
6. The total number of tracks and time on the CD will appear on the LCD DISPLAY (#7) after a few seconds.
Note: The total number of folders and tracks on the MP3 CD will appear on the LCD DISPLAY (#7).
7. Tap the **▶/||** ON BUTTON (#15) to start to play.
8. Adjust the VOLUME CONTROL (#6) to obtain the desired sound level.
9. To suspend playing, tap the **▶/||** ON BUTTON (#15) again. To resume playing, tap the **▶/||** ON BUTTON (#15) again.
10. You can choose to play your favorite track directly by pressing either the **▲** / **▶/||** BUTTON or **▼** / **||◀** BUTTONS (#8 or #9) repeatedly. The LCD Display (#7) will indicate the correct track number selected.
Tap the 10+ BUTTON to select the next 10 tracks
11. To locate a particular passage within a track, keep the **▲** / **▶/||** BUTTON or **▼** /

II **BUTTONS** (#8 or #9) depressed until it is found.

- 12 To repeat a particular track, tap the MODE BUTTON (#11) repeatedly until the "REPEAT" indicator lights on the LCD DISPLAY.
Note: To repeat the entire folder of the MP3 CD, tap the MODE BUTTON (#11) repeatedly until the "DIR" indicator lights on the LCD DISPLAY (# 7).
- 13 To repeat all the songs on the disc, tap the MODE BUTTON (#11) repeatedly until the "ALL" indicator light on the LCD display.
- 14 To play the first 10 seconds of each song on the disc, tap the MODE BUTTON (#11) repeatedly until the "INTRO" indicator light on the LCD display.
- 15 To play songs randomly, tap the MODE BUTTON (#11) repeatedly until the RAND indicator light on the LCD display.
- 16 To stop playing, tap the  / OFF BUTTON (#14).
- 17 Press and hold the  / OFF BUTTON (#14) to turn off the unit

PROGRAM OPERATION

This function allows the tracks to be played in a programmed sequence.

Programs can be set in STOP mode.

1. Tap the **PROG / MEM BUTTON** (#18) once. The Program Channel Number "01P" will appear and the "PROG" indicator and track number "00" will blink on the LCD DISPLAY (#7) to prompt for input.
[For MP3 CD, track number "000" will blink on the LCD DISPLAY (#7) to prompt for input.]
2. Tap **▲/▶▶|B**UTTON or **▼/|◀◀B**UTTON (#8 or #9) repeatedly to select the track to be programmed.
3. Tap the **PROG/MEM** button (#18) again to store selection. The Program Channel number will change to 02P and the track number will return to 00 (000 for MP3 CD) to prompt for input.
4. You may repeat steps 2-3 to program as many as 20 tracks.
5. Tap **▶▶|B**UTTON (#15) to start the programmed play, the "PROG" indicator will show up in the LCD DISPLAY (#7).
6. You may repeat the current programmed track or all programmed tracks by pressing the **MODE** button (#11) repeatedly to select repeat 1 or repeat all at programmed play mode.
7. Tap **■/OFF** BUTTON (#14) once to stop playback.
8. Tap **■/|/ ON** BUTTON (#15) to resume programmed play.
9. To cancel programmed play, press **■/OFF** BUTTON (#14) twice.

ANTI-SHOCK PROTECTION

This player incorporates an electronic anti-skip circuit to prevent interruption of the sound output when the unit is subjected to shock, vibration or rolling during CD playback. The anti-shock system will automatically activate when a disc is played.

Once anti-skip buffer is full, it will give you approximately 60 seconds (CD disc) or 120 seconds (MP3 disc) of protection against interruption of sound output. If the player is subjected to shock or rolling for longer than the buffer memory, some interruption of sound output will occur. This is normal and to be expected and the sound will resume once the player has stabilized from the shock or rolling disturbance.

Note: The anti-skip function provides for continues sound output when the unit is subjected to shock or vibration. It will not compensate for errors arising from the use of defective, scratched or dirty discs.

RADIO OPERATION

1. Press **▶/||** ON BUTTON to turn on the unit.
2. Press FM MODE BUTTON(#19) to select FM mode.
3. The "FM" indicator and radio frequency light on the LCD DISPLAY (#7).
4. To manually tune to a specific radio station, tap **▲** / **▶▶** BUTTON or **▼** / **◀◀** BUTTON (#8 or #9). Use the manual tuning method to tune in weaker stations that are bypassed during Automatic Tuning.
5. To automatically tune to the next available radio station, press and hold the **▲** / **▶▶** BUTTON or **▼** / **◀◀** BUTTON (#8 or #9) 1-2 seconds until frequency readout on the display begins to scan and then release the button. The tuner will stop scanning when it receives the next broadcasting station of adequate signal strength.
6. Adjust the VOLUME CONTROL (#6) to the desired volume level.

PRESET RADIO STATIONS

1. Tune to the desired radio station either by "manually" or "automatically" tuning method.
2. After receiving a station, press and hold the PROG/MEM BUTTON (#18), the "MEM" indicator and the preset memory number P-01 will blink on the LCD DISPLAY (#7) to prompt for input, press the M + BUTTON (#16) or M - BUTTON (#17) repeatedly to select the preset number you want to assign the station to.
3. Tap the PROG/MEM BUTTON (#18) to confirm the setting.
4. Repeat above steps 1 - 3 to preset up to 20 stations.

TIPS FOR BEST RECEPTION

- The cord of the earphone acts as an antenna for the radio and must be fully extended for best reception.
- Unplug the earphone, the unit will change to CD mode automatically.

FM TRANSMISSION

1. Press **▶/||** ON BUTTON to turn on the unit.
2. Disconnect the earphones if necessary. The unit will enter CD and FM transmit mode automatically.
3. Adjust the radio (car radio) to the white space (i.e. the channel without any broadcast). The reference is clear rustling.
4. Press M+ BUTTON (#16)/ M- BUTTON (#17) to adjust the transmission frequency (87.5-108MHz) to the same as the radio (car radio).
(The transmit frequency will show on the LCD display (#7) and last 2 seconds,
5. Now you can enjoy the CD/CDMP3 music from the SB3705 through your radio (car radio).

Notes:

- The transmit frequency of the factory preset is 88.1 MHz. For quick connect with your radio (car radio), just play CD without insert the earphones. Radio (car radio) search down to find the transmit frequency (88.1 MHz) would be OK.
- Once earphones inserted, the unit will stop the transmission.

BASSBOOSTFUNCTION

Tap the BBS ON/OFF BUTTON (#12) to turn on the BBS to enhance the bass effect of the music. Tap again to turn off the BBS.

HOLDFUNCTION

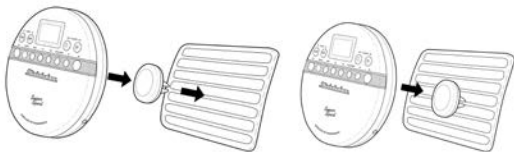
To prevent accidental function changes during active use, this unit is fitted with a function hold. After the unit has been powered on and playing in CD or FM mode, slide the HOLD ON/OFF SWITCH (#4) to ON position. The hold indicator will light on the LCDDISPLAY (#7). Slide the HOLD ON/OFF SWITCH (#4) to OFF position to turn off the hold function.

RESETTING THE UNIT

In case of malfunction due to electrostatic discharge, reset the unit by disconnecting the DC plug of the AC Adapter from the DC IN JACK (#3) and remove the batteries. Wait at least for 3 minutes before reconnecting the DC plug to the DC IN JACK (#3) or insert the batteries.

INSTALLING CAR MOUNT

Attach the magnetic mount to air vent by sliding the vent claw onto a single air vent flap. There is one metal plate installed inside the unit. Place your unit on the magnetic car mount.



CARE AND MAINTENANCE

1. Clean your unit with a damp (never wet) cloth. Solvent or detergent should never be used.
2. Avoid leaving your unit in direct sunlight or in hot, humid or dusty places.
3. Keep your unit away from heating appliances and sources of electrical noise such as fluorescent lamps or motors.
4. If drop-outs or interruptions occur in the music during CD play, or if the CD fails to play at all, its bottom surface may require cleaning. Before playing, wipe the disc from the center outwards with a good soft cleaning cloth.



TROUBLESHOOTINGGUIDE

If you experience difficulties in the use of this CD / MP3 CD Player, please check the following or call 1-800-777-5331 for Customer Serviceand support

SYMPTOM	POSSIBLE	SOLUTION
Nosound	Battery nopower	Replace all batteries with new ones.
	Volume set atminimum	IncreaseVolume.
Noise or sound distorted on FM broadcast	Earphone cord is not extended	Extend earphonecord
Radio nosound	The unit is not in Radio mode	Insert the earphone and select Radiomode
	The station isweak	Retune the stationagain
CD player will notplay	Unit not in CDmode	Switch to CDmode
	CD is installedincorrectly	Insert CD with label sideup.
	Batteries becomeexhausted	Replace all batteries with new ones.
	It the CD is self-compiled, the media used may not be compatible with theplayer.	Use better quality blank media andretest.
CD skips whileplaying	Disc is dirty orscratched.	Wipe CD with clean cloth oruse anotherdisc.
	Dirty or defectivedisc	Clean or replace the defective disc
	Dirty pick uplens	Use a CD-lens cleaning disc to clean thelens
	Player is subject to excessive shock orvibration	Relocate the player away from shock orvibration
	Batteries becomeexhausted	Replace all batteries with new ones.

SPECIFICATION

Power Requirement	Battery: 2 x "AA"(UM-3) batteries(notincluded) AC Adaptor (not included): Input: AC 120V ~60Hz Output:DC4.5V \equiv 700mA \ominus \oplus
FMFrequency	USB Power Output: DC 5V \equiv 500mA 87.5 MHz– 108MHz
TM Transmission	87.5 MHz– 108MHz

**90 DAY LIMITED WARRANTY AND SERVICE
VALID IN THE U.S.A. ONLY**

SPECTRA MERCHANDISING INTERNATIONAL, INC. warrants this unit to be free from defective materials or factory workmanship for a period of 90 days from the date of original customer purchase and provided the product is utilized within the U.S.A. This warranty is not assignable or transferable. Our obligation under this warranty is the repair or replacement of the defective unit or any part thereof, except batteries, when it is returned to the SPECTRA Service Department, accompanied by proof of the date of original consumer purchase, such as a duplicate copy of a sales receipt.

You must pay all shipping charges required to ship the product to SPECTRA for warranty service. If the product is repaired or replaced under warranty, the return charges will be at SPECTRA's expense. There are no other express warranties other than those stated herein.

This warranty is valid only in accordance with the conditions set forth below:

1. The warranty applies to the SPECTRA product only while:
 - a. It remains in the possession of the original purchaser and proof of purchase is demonstrated.
 - b. It has not been subjected to accident, misuse, abuse, improper service, usage outside the descriptions and warnings covered within the user manual or non-SPECTRA approved modifications.
 - c. Claims are made within the warranty period.
2. This warranty does not cover damage or equipment failure caused by electrical wiring not in compliance with electrical codes or SPECTRA user manual specifications, or failure to provide reasonable care and necessary maintenance as outlined in the user manual.
3. Warranty of all SPECTRA products applies to residential use only and is void when products are used in nonresidential environment or installed outside the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. TO OBTAIN SERVICE please remove all batteries (if any) and pack the unit carefully and send it freight prepaid to SPECTRA at the address shown below. IF THE UNIT IS RETURNED WITHIN THE WARRANTY PERIOD shown above, please include a proof of purchase (dated cash register receipt) so that we may establish your eligibility for warranty service and repair of the unit without cost. Also include a note with a description explaining how the unit is defective. A customer service representative may need to contact you regarding the status of your repair, so please include your name, address, phone number and email address to expedite the process.

IF THE UNIT IS OUTSIDE THE WARRANTY PERIOD, please include a check for **\$30.00** to cover the cost of repair, handling and return postage. All out of warranty returns must be sent prepaid.

It is recommended that you contact SPECTRA first at 1-800-777-5331 or by email at custserv@spectrainintl.com for updated information on the unit requiring service. In some cases, the model you have may be discontinued, and SPECTRA reserves the right to offer alternative options for repair or replacement.

SPECTRA MERCHANDISING INTERNATIONAL, INC.

4230 North Normandy Avenue,
Chicago, IL 60634, USA. 1-800-777-5331

To register your product, visit the link on the website below to enter your information.
<http://www.spectrainintl.com/wform.htm>