

SM35A

MP3-COMPATIBLE IN-DASH CD RECEIVER

01.2007

User's Manual



SOUND STORM®
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SM35A

**MP3-COMPATIBLE IN-DASH CD RECEIVER
WITH FRONT PANEL AUXILIARY INPUT**



SM35A

*MP3-Compatible
In-Dash CD Receiver*

**Congratulations on your purchase
of a Sound Storm Laboratories
CD Receiver.**

It has been designed, engineered
and manufactured to bring you the
highest level of performance and
quality, and will afford you years of
listening pleasure.

Thank you for making Sound Storm
your choice for car audio
entertainment!

USER'S MANUAL

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Installation

Before installing your new Sound Storm Laboratories CD Receiver, please become familiar with all the information contained in this manual.

Choose a mounting location where the unit will not distract or otherwise interfere with the driver's ability to control the vehicle.

Use only the installation parts and hardware provided with the unit to ensure proper installation. Using other parts can cause malfunction and possible damage to your Sound Storm CD receiver.

Do not install this unit at an angle in excess of 30° from horizontal, as it may affect performance.

Avoid installing the unit in a location which is subject to high temperatures, direct sunlight, hot air from such sources as heaters or exhaust lines, or where it will be subject to contact with dust, dirt, moisture or excessive vibration.

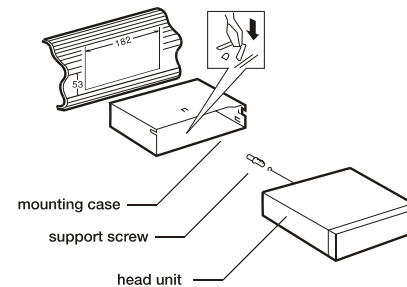


Figure 1 Bending the support tabs

DIN front mount installation

For details about installing the head unit, read the instructions below and refer to the diagrams for further clarification.

Insert and tighten the “headless” support screw into the back of the head unit where shown.

Insert the mounting case for the head unit into the dashboard. Inspect the dashboard material to determine its approximate thickness. Select the appropriate support tabs and bend them outward to secure the bracket in place (**Figure 1**).

Bend the backstrap to conform to the mounting case and the dashboard surface to which you plan to secure the backstrap (**Figure 2**). Slide one of the utility holes on the backstrap onto the support screw and fasten it with the spring washer and nut provided.

Using the 5 x 25mm screw and the plain washer, secure the backstrap to the dashboard surface as shown in the diagram. Tighten, secure, and check the overall mounting to be sure it is safe and will not release in an emergency stop or other sudden movement of the vehicle.

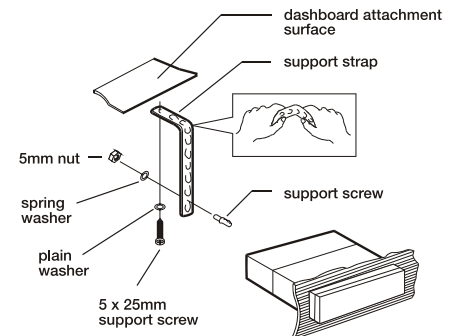


Figure 2. Forming the support bracket

DIN rear mount installation (uses factory radio mounting bracket)

Select a position on the head unit housing where the screw holes of the factory radio bracket align with the threaded screw holes on sides of the head unit (**Figure 3**).

select two mounting hole positions on each side of head unit

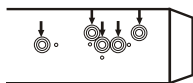


Figure 3. Select mounting holes

Insert screws in two such locations on each side, and tighten securely (**Figure 4**).

NOTE: For the rear-mount installation, do not use the trim piece, backstrap or mounting case.

use two mounting screws on each side

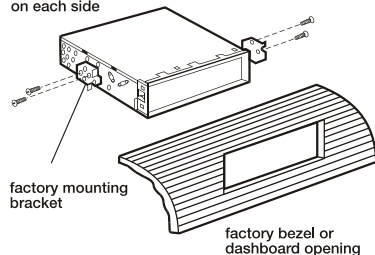


Figure 4. Insert screws and tighten

Detaching the front panel

Press the RELEASE button to release the panel from the right side of the head unit (**Figure 5**).

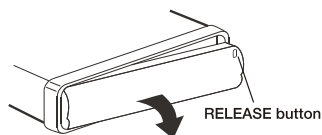


Figure 5 Press RELEASE to release the front panel

Grasp the panel and pull it forward and then to the right to disengage it from the main unit. (**Figure 6**).

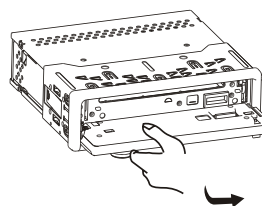


Figure 6 Pull panel forward and slide to the right

Immediately place the front panel in its protective case for safe and clean storage (**Figure 7**).

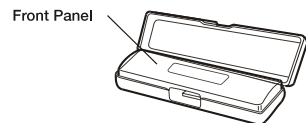


Figure 7 Place the front panel in its protective case

Reinserting the front panel

Hold the panel in front of the main unit as shown. Align the slot on the right side of the panel with the tab on the main unit and slide it on until you feel a “click.” (**Figure 8**).

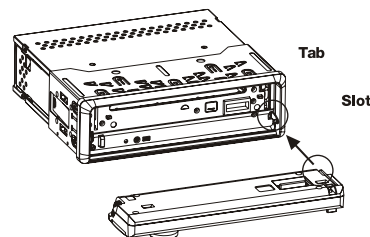
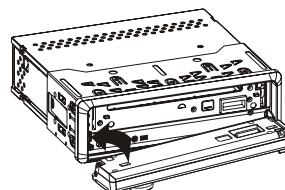


Figure 8 Align the panel and main housing

Lift the lower left edge of the panel and place it into the frame until it seats fully (**Figure 9**).



Lift the front edge of the panel to close it. (**Figure 10**).

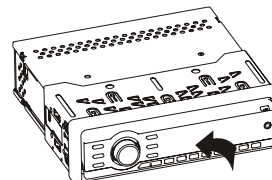


Figure 10 Lift the front edge of the panel and close it.

Removing the head unit

Should you need to remove the head unit, first remove and store the front panel as described on the preceding page.

After you have removed the front panel, insert your fingers into the groove along the right side or the left side of the frame (not both!) and pull out to remove the bezel (**Figure 11**).

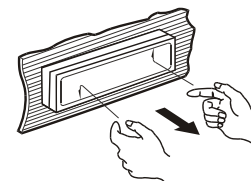


Figure 11 Pull out to remove bezel

Then, insert the levers supplied with the head unit into the grooves on both sides of the unit as shown in the drawing until you feel a “click.” You can now use the levers to pull the unit from the dashboard (**Figure 12**).

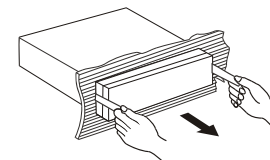
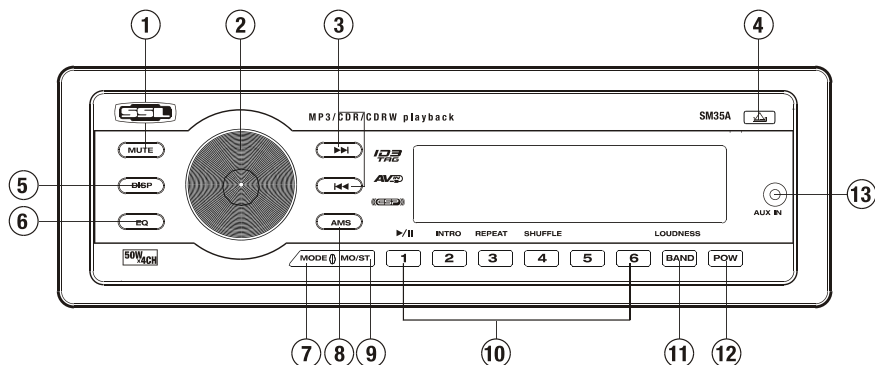


Figure 12 Insert levers until “click” occurs, then use levers to pull out head unit.

Be careful when handling the front panel!

1. Do not drop front panel.
2. When detaching or reinstalling, do not put pressure on the display.
3. Do not touch the contacts on the panel or the main unit body – doing so may result in poor electrical contact.
4. Dirt or foreign substances can be removed with a clean, dry cloth.
5. Do not expose the panel to high temperatures or direct sunlight.
6. Do not permit volatile agents or solvents to contact the front panel.
7. Do not attempt to disassemble the front panel.

General and Tuner Controls



1 MUTE

Press this button to turn off the audio. Press again to resume listening at the prior volume level.

2 VOLUME UP/DOWN KNOB (turn) SELECT/ENTER (push)

In normal mode, use this knob to increase or decrease the volume level.

To access the various sound parameters you may wish to adjust, push the knob (like a button) to cycle through the following adjustable settings:

VOLUME > BASS > TREBLE > BALANCE > FADER

Use the knob to increase or decrease the setting. To save it, press the knob. You can exit the system by pressing until you return to VOL, or simply do nothing and the unit will return to normal mode automatically.

3 TUNE/TRACK BUTTONS

In *Radio mode*, press these buttons briefly to step up or down the radio dial in single step increments. Press and hold for more than one-half second and the tuner will enter the SEEK mode. In this mode the tuner will stop at the next strong station available.

In *CD mode*, pressing these buttons briefly will advance the player to the next (or previous) track. Press and hold and the player will enter SEARCH mode.

4 OPEN

Press this button to lower the front panel and access the disc slot.

5 DISPLAY

Press this button briefly to display the current time. To reset the time, press and hold this button until it begins flashing. Then you can use the TUNE UP button to change the hour, and the TUNE DOWN button to change the minutes.

6 EQ (Preset Equalizer Curves)

Press repeatedly to cycle through five modes: FLAT, CLASSICAL, POP M, ROCK M or DSP OFF.

7 MODE (Input Select)

Press this button repeatedly to cycle through the audio input sources in the following order:

RADIO > CD > AUX IN

8 AMS

When pressed and held for several seconds, the tuner will search and store the first six strong stations as presets in each of the three FM bands.

9 MO/ST

Use this button to switch between mono and stereo reception of FM stations. If you are dissatisfied with the quality of the reception in stereo, switching to mono often improves the overall sound quality.

10 PRESETS 1-6 (Radio Mode)

These buttons are used to store the presets for radio stations. To set a preset, tune to the desired radio station. Then press and hold the preset to which you wish to assign that station for more than one second and release. To replace it with a different station, repeat the process and the new setting will override the previous one.

10 PLAY/PAUSE, INTRO, REPEAT, SHUFFLE (CD Play Mode)

These buttons control the CD playback and offer you some options.

PLAY/PAUSE: Discs will begin playback automatically upon insertion. To pause playback, press this button. Press again to resume playback.

INTRO: The Intro Scan function is a convenient way to find a particular track. Press this button and the player will play the first few seconds of a song, and then skip to the next song and play a few seconds of that song. This process continues until you press the INTRO button again, and the player will continue playing that song.

REPEAT: When you press this button, the player will keep repeating the same track until you press it again.

SHUFFLE: Pressing this button will cause the player to play all the songs on the current disc in random order.

11 BAND/LOUDNESS

Press briefly, repeatedly to cycle between the four radio bands:

FM1 > FM2 > FM3 > AM

Press and hold for more than one second to increase the level of bass output. Press and hold again to turn off the Loudness function.

12 POWER

Press any button to turn unit on. Press and hold POW to turn it off.

13 AUX IN JACK

This jack is a convenient way to play music from an MP3 music player such as an iPod through your car stereo.

Simply connect the headphone output of the MP3 player to this input jack, and use the CD Receiver's MODE button to select AUX as input source and begin playing music on the MP3 player.

Remote Control

① **POWER** Use to turn CD Receiver ON or OFF.

② **VOLUME** Use to increase or decrease volume level.

③ **TUNE/SEEK (◀ and ▶)**
In Radio Mode, press and release to activate automatic seek function ("AUTO" will appear on display). Press and hold to engage manual tuning mode ("MANUL" will appear on display).

In CD Mode, press and release to advance to the next track or to return to the beginning of the current track (track number will be displayed). Press and hold to fast forward or reverse. Play will begin at the point when you release the button.

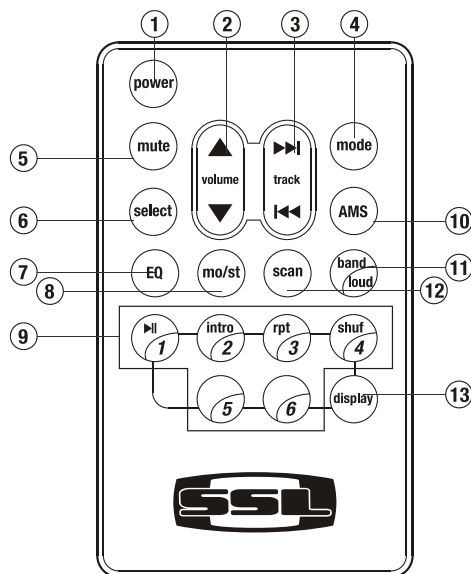
④ **MODE** Press to choose desired audio source (Radio, CD or AUX IN).

⑤ **MUTE** Press this button to silence the audio. Press again to restore the previous audio volume level.

⑥ **SELECT** Press this button to cycle through the various sound parameters which are available for adjustment:

VOLUME > BASS > TREBLE >
BALANCE > FADER

⑦ **EQ (Preset Equalizer Curves)**
 Press repeatedly to cycle through five modes: FLAT, CLASSICAL, POP M, ROCK M or DSP OFF.



⑧ **MO/ST** In some areas, reception of an FM station may be weak. Changing the reception mode to MONO by pressing this button may improve the reception. Press again to return to STEREO mode.

⑨ **PRESETS 1-6 (Radio Mode)**
 These buttons are used to store the presets for radio stations. To set a preset, tune to the desired radio station. Then press and hold the preset to which you wish to assign that station for more than one second and release. To replace it with a different station, repeat the process and the new setting will override the previous one.

⑨ **PLAY/PAUSE, INTRO, REPEAT, SHUFFLE (CD Play Mode)**
 These buttons control the CD playback and offer you some options.

PLAY/PAUSE: Discs will begin playback automatically upon insertion. To pause playback, press this button. Press again to resume playback.

INTRO: The Intro Scan function is a convenient way to find a particular track. Press this button and the player will play the first few seconds of a song, and then skip to the next song and play a few seconds of that song. This process continues until you press the INTRO button again, and the player will continue playing that song.

REPEAT: When you press this button, the player will keep repeating the same track until you press it again.

SHUFFLE: Pressing this button will cause the player to play all the songs on the current disc in random order.

⑩ **AMS**
 When pressed and held for several seconds, the tuner will search and store the first six strong stations as presets in each of the three FM bands.

⑪ **BAND/LOUDNESS**
 Press briefly, repeatedly to cycle between the four radio bands:

FM1 > FM2 > FM3 > AM

Press and hold for more than one second to increase the level of bass output. Press and hold again to turn off the Loudness function.

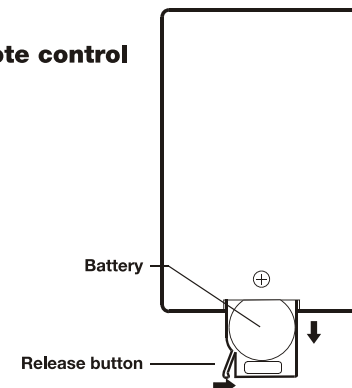
⑫ **STATION SCAN**
 Press this button to make the tuner search the frequency band for stations, playing each for five seconds before moving to next station.

⑬ **DISPLAY**
 Press this button briefly to display the current time. To reset the time, press and hold this button until it begins flashing. Then you can use the TUNE UP button to change the hour, and the TUNE DOWN button to change the minutes.

Changing the battery in the remote control

The remote battery is held in a small "drawer" on one edge of the remote. To open this drawer, press and hold the small button on the edge of this drawer (as shown below) and slide the drawer out.

Insert a new battery and push the drawer back fully into the remote.



MP3 Playback

Since MP3 files are named and accessed differently than CD files, it is necessary to employ some of the buttons for purposes of searching for and selecting audio files.

There are four different search modes. The AMS button is used to select the search mode by pressing it one, two, three or four times.

TRACK NUMBER SEARCH

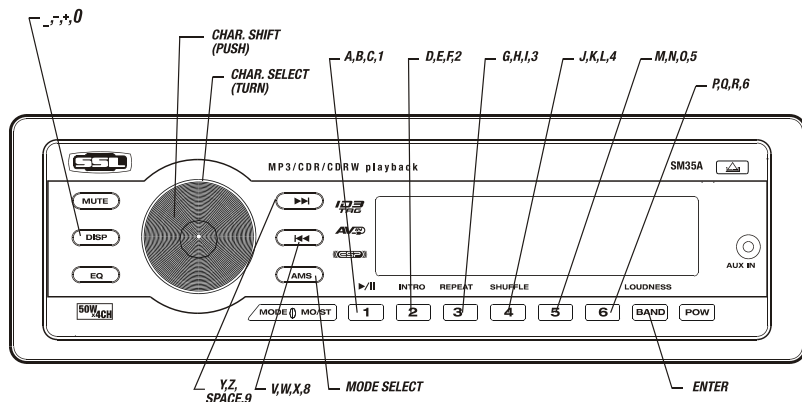
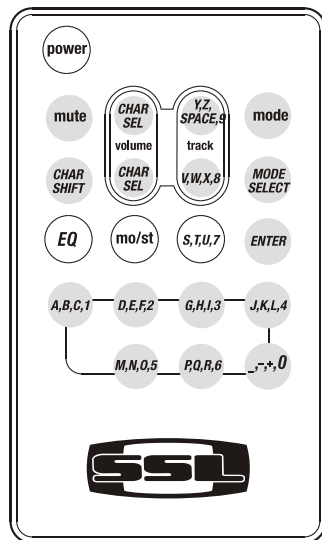
Press the AMS button once to enter the Searching Track Directory mode.

“MP3 T” will flash in the display. Use the buttons in the table below (3 digits maximum) or use the knob to enter the desired track number.

Front panel control	Key assignment
AMS	Mode Select
Band	Enter
Preset 1	A, B, C, 1
Preset 2	D, E, F, 2
Preset 3	G, H, I, 3
Preset 4	J, K, L, 4
Preset 5	M, N, O, 5
Preset 6	P, Q, R, 6
SCAN*	S, T, U, 7
T-DOWN	V, W, X, 8
T-UP	Y, Z, SPACE, 9
DISP	_, -, +, 0
VOL KNOB (PUSH)	CHAR. SHIFT
VOL +/- (TURN)	CHAR. SEL, (A, B-8, 9, 0)

* Please note: This button is only present on Remote Control

To confirm the selected track, press the BAND/LOUDNESS button.



MP3 Playback, continued

SEARCH FOR FILE NAME

In File Name Search Mode, the unit searches for files whose names have the same characters inputted by the user. The unit displays these sorted files and directories.

Pressing the AMS button twice enters the Searching File Name mode. A star symbol will begin flashing when you enter this mode.

Enter the characters using the keys described on the previous page to spell out the first part of the file name. Then press BAND/LOUDNESS and the unit will begin searching and produce a preview list.

Press the I<< or turn the knob down to preview the results. If the search has found a folder, a folder symbol will be displayed.

When you find and stop on the desired track, press the BAND/LOUDNESS button to play it. If you stop on a folder and wish to open it, press BAND/LOUDNESS, and “\” will appear on the screen. Press BAND/LOUDNESS to enter the folder, and then press I<< (or turn the knob down) to begin looking in that folder.

Please note that each time you begin viewing a list, you must press I<< or turn the knob.

When you arrive at the desired track, press BAND/LOUDNESS to begin playback.

SEARCH ROOT FOLDER

Pressing the AMS button three times enters the Root Folder Search mode. When you have done this, the root folder name will be briefly displayed, after which the first track or subfolder name will be displayed.

If a folder is displayed, a folder symbol will appear. To preview the first track or subfolders in this folder, press the I<< button or turn the knob down.

To select a track for playback or to enter another subfolder, highlight it and press BAND/LOUDNESS. To navigate this new subfolder, press the I<< or turn the knob down.

NAVIGATE THE CURRENT FOLDER

This mode operates in the same manner as Search Root Folder method, except it starts out in the current folder being played.

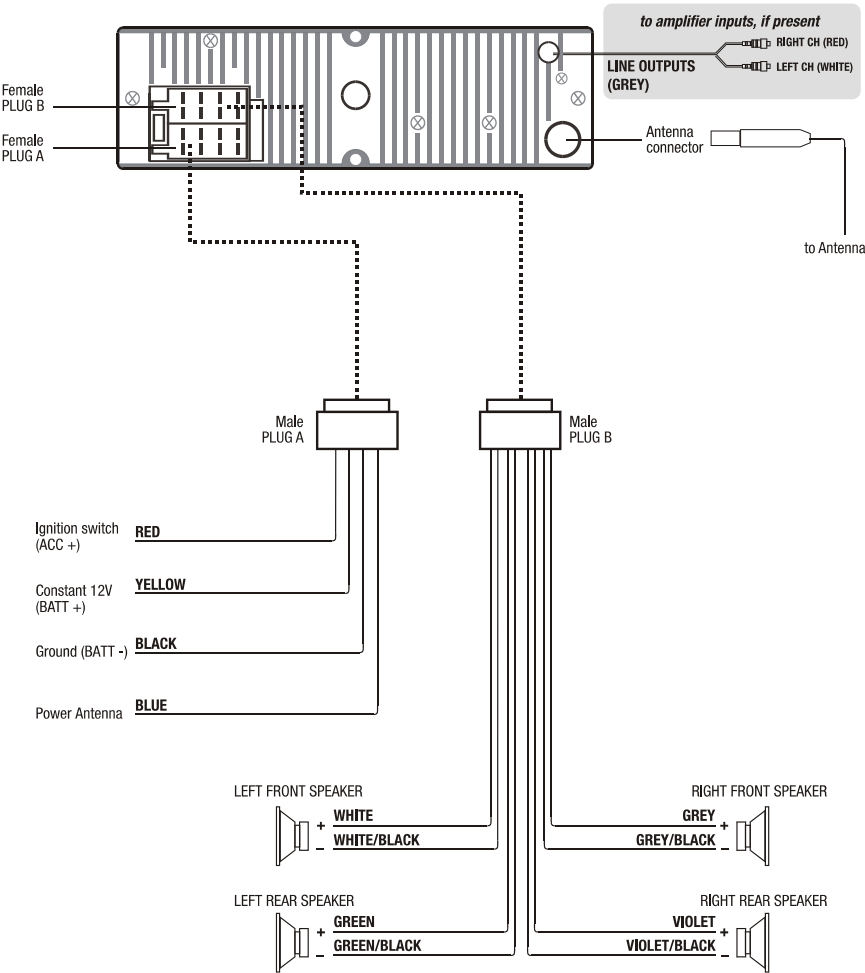
Pressing the AMS button four times enters this mode. When you have done this, the current folder name will be displayed, followed by the name of the current track being played.

To navigate in this mode, follow the steps above for Search Root Folder.

Wiring diagram

Follow the wiring illustration below closely to obtain proper performance from your CD receiver. Failure to make these connections properly may result in damage to your unit which will not be covered under your warranty.

This receiver contains a built-in high power four-channel amplifier. To use the built-in amplifier, connect the speaker wires as shown. To use the receiver as a head unit in a mobile audio system which includes an amplifier, use the RCA outputs to connect to the LEFT and RIGHT inputs of your amplifier(s).



Troubleshooting

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous page. If problems persist, read the following troubleshooting tips which may help eliminate the problems.

SYMPTOM	CAUSE	REMEDY
No power.	The car ignition switch is not on.	<i>If the head unit is properly connected to the car accessory power circuits, but the engine is running, switch the ignition key to the "ACC" position.</i>
	The fuse is blown.	<i>Replace the fuse.</i>
Disc cannot be loaded or ejected.	There is a disc already in the CD player.	<i>Remove disc in player and try again.</i>
	Disc is inserted upside down.	<i>Insert the disc with the label facing up.</i>
	Disc is dirty or defective.	<i>Clean the disc, or play a new one.</i>
	Car interior temperature is too high.	<i>Allow temperature to cool down to a normal level.</i>
	Excess atmospheric humidity or condensation is present.	<i>Leave player off for an hour or so, and then try again.</i>
No sound.	Volume is set to minimum.	<i>Adjust volume to desired level.</i>
	Wiring not properly connected.	<i>Check wiring connections.</i>
Sound skips.	Head unit is installed at an angle of greater than 30° from horizontal.	<i>Adjust installation angle to less than 30° from horizontal.</i>
	Disc is dirty or defective.	<i>Clean the disc, or play a new one.</i>
Buttons on front panel do not operate.	The built-in micro-processor is not operating properly due to noise.	<i>Press the RESET button.</i>
	Front panel is not properly fixed in place.	<i>Remove front panel, press RESET button, and re-insert front panel.</i>
Radio does not work, or the radio automatic selection function does not work.	Antenna cable not connected.	<i>Insert the antenna cable firmly into connector.</i>
	The signals are too weak to be received properly.	<i>Select station manually.</i>

Specifications



Notes

SM35A

MP3-Compatible In-Dash CD Receiver

CD PLAYER

Channel separation	Greater than 65 dB
Frequency response	100Hz - 20kHz

RADIO

FM Section:

Frequency range	87.5 - 107.9 MHz
Usable sensitivity	10dBf
Stereo separation	30dB
50dB quieting sensitivity	15dBf
Frequency response	100Hz - 8kHz

AM Section:

Frequency range	530 - 1710 kHz
Usable sensitivity	450 kHz 22uV

AMPLIFIER

Maximum output power	50 watts x 4 channels
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GENERAL

Power supply req.	11-16VDC , negative ground
Line out voltage	2V
Chassis dimensions	7.6" x 7.4" x 2.3" (193.3 x 188 x 58mm)

All specifications subject to change without notice.

Notes