SM43UA
MP3-COMPATIBLE IN-DASH CD RECEIVER

01.2007

User's Manual

SOUND STORM®
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SM43UA
MP3-COMPATIBLE IN-DASH CD RECEIVER
WITH FRONT PANEL USB AND AUXILIARY INPUTS

SM43UA

*MP3-Compatible
In-Dash CD Receiver
with USB Input*

**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!

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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.
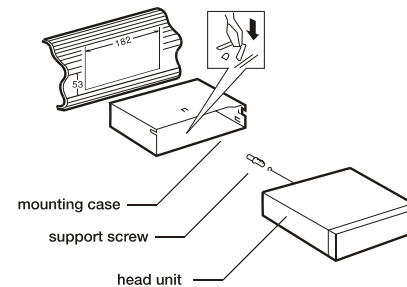

Figure 1 Bending the support tabs

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.
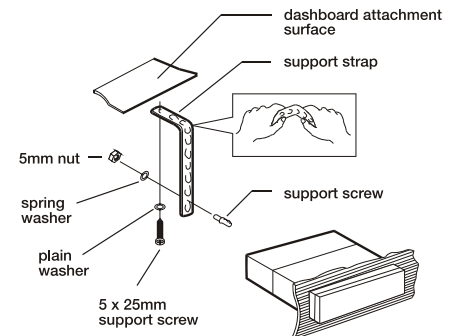

Figure 2. Forming the support bracket

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)**.

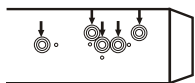select two mounting hole positions on each side of head unit

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.
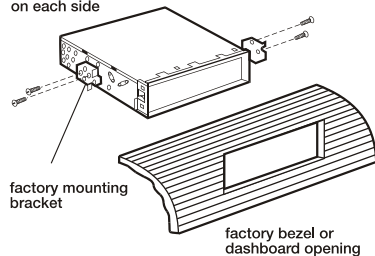
use two mounting screws on each side

factory mounting bracket

factory bezel or dashboard opening

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)**.
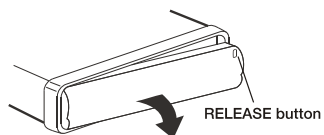

RELEASE button

Figure 5 Press RELEASE to release the front panel

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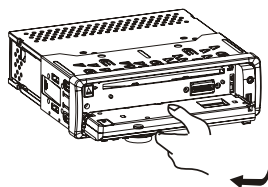

Figure 6 Pull panel forward and slide to the left

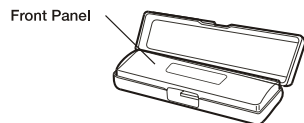Immediately place the front panel in its protective case for safe and clean storage **(Figure 7)**.

Front Panel

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 left side of the panel with the tab on the main unit and slide it on until you feel a "click." **(Figure 8)**.
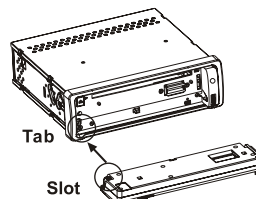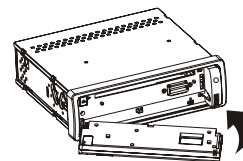

Tab

Slot

Figure 8 Align the panel and main housing

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

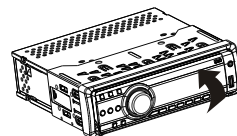Lift the front edge of the panel to close it. **(Figure 10)**.

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)**.
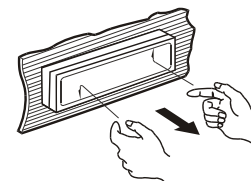
Figure 11 Pull out to remove bezel

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)**.
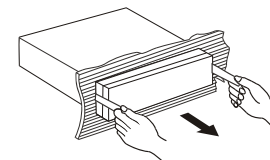
Figure 12 Insert levers until "click" occurs, then use levels to pull out head unit.

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 temperaturees 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
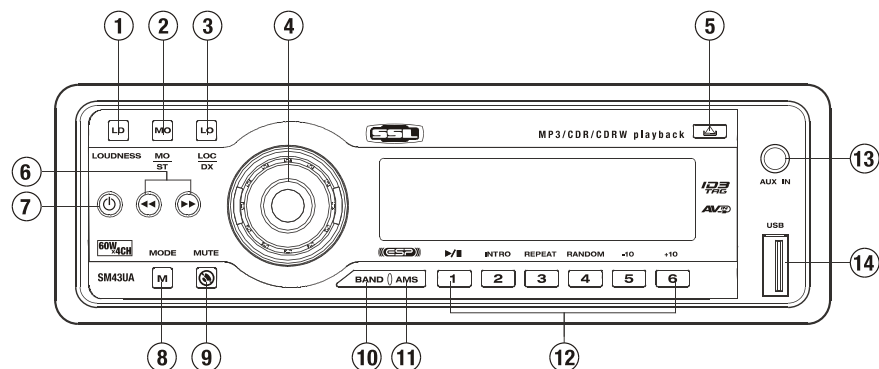
① LOUDNESS
Press to increase the level of bass output. Press and hold again to turn off the Loudness function.

② 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.

③ LOCAL/DISTANT SELECT
Press to select between strong (LOC) and weak (DIST) stations. *Please note: This function is active only on the FM band.*

④ 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.

⑤ OPEN
Press this button to lower the front panel and access the disc slot.

⑥ 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.

⑦ POWER
Press any button to turn unit on. Press and hold POWER to turn it off.

⑧ MODE (Input Select)
Press this button repeatedly to cycle through the audio input sources in the following order:

RADIO>CD>(USB)>AUX

⑨ MUTE
Press this button to turn off the audio. Press again to resume listening at the prior volume level.

⑩ BAND
Press briefly, repeatedly to cycle between the five radio bands:

FM1>FM2>FM3>AM1>AM2

⑪ 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.

⑫ 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.

⑫ PLAY/PAUSE, INTRO, REPEAT, RANDOM (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.

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

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.

⑭ USB PORT

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 ,USB 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 LOUDNESS
Press to increase the level of bass output. Press and hold again to turn off the Loudness function.
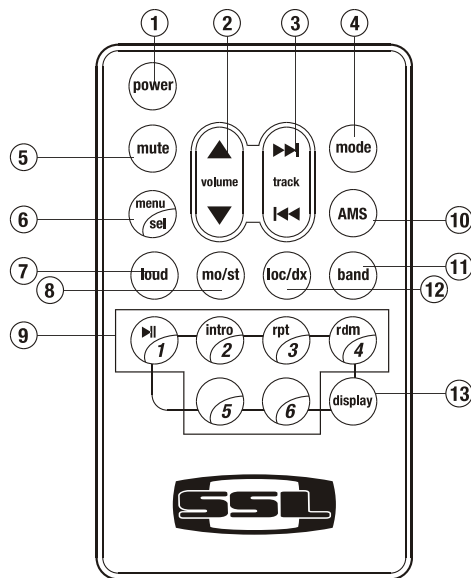
8 MO/ST In some areas, reception of an FM station may be weak. Changing the reception mode to MONO by pressing this button may improve the reception. Press again to return to STEREO mode.

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.

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RANDOM: 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
Press briefly, repeatedly to cycle between the five radio bands:

FM1>FM2>FM3>AM1>AM2

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.

Battery

Release button
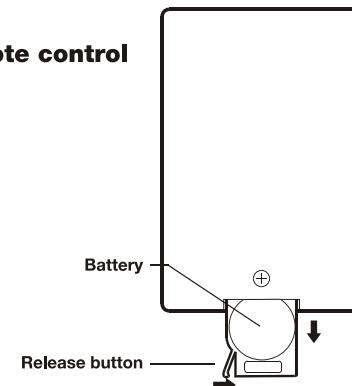
MP3 Playback

-An MP3 directory is shown in this manual as "Folder", and an MP3 file is shown as "Track".
-Maximum length of track name: 16 characters
-Maximum length off older name:16 characters
-Maximum depth off older levels: 8
-Maximum number of tracks per disc:448
-Maximum number of folders per disc:128
-Supported Bit Rates & Sampling Frequencies:
Bit Rates:
32,40,48,56,64,80,96,112,128,160,192,224,
256,320KHz
Sampling Frequencies:
MPEG1 32KHz/44.1KHz/48KHz
MGEG2 32KHz/44.1KHz/48KHz and 16KHz/
22.05KHz/24KHz
-Multi Session Recording is supported(CD-R, CD-RW only)
-Supports CD, CDR and CDRW.
-Disc written by Packet Write (UDF) is not supported.

Loading MP3 File (CD, USB Drive)
Insert the MP3 as usual, if it is an MP3 device, the LCD will show "MP3xxx" after displaying the total track number,
where "xxx" is the total number of folders, then playback will start, beginning at first track in the first folder. The "MP3" icon on the LCD will turn on.
During MP3 play, the following information will be shown on the LCD repetitively in the following order, the corresponding icon will also turn on to help the user identify the message:
1.Current Track Number &Time Elapse of current track.
2.Current folder Name.
3.Current track Name.

If the disc is Id3 compatible, the following items will also be shown, otherwise they will be skipped.
4.Music Name.
5.Album Name.
6.Artist Name.
Each item will last for about 5 seconds.
Navigating through folders and tracks
There are three way to select your favorite folder/tracks
1. By track Up/Down Button
Press track up/down button to skip the current tracks or Press 10 tracks up(M6) or 10 tracks down button (M5) to skip 10 tracks at one time.
2. Using MP3 Search Button
3. Searching by track
Press track up/down button to skip the current tracks search mode, the LCD will show "REK SCH". If no action is taken for about 5 seconds, normal play will resume. At Track Search mode, press Enter Button once, the display will show "001", use Volume up/down Control to select the desired track. The track number can be either 1-digit, 2-digit or 3-digit They are selected by the following procedures.
A 1-Digit track number
   After selecting the desired track number press Enter Button for more than 1 second to confirm, playback will start.
B 2-Digit and 3-Digit track number
   Enter the left-most digit first (for example, if the track number is 123, enter "1" first, following by "2" and "3"), then press Enter Button for less than 1 second to shift the number by one digit, repeat this procedure until all digits has been entered. Long press Enter Button for more than 1 seconds to start playing if a wrong track number is entered, press AMS button to clear the digits. Then enter the correct number.

MP3 Playback, continued

4.Searching by folder
While the LCD is showing "TRK SCH", press MP3 Search Button one more time, the LCD changes to "FILE SCH" , the unit is at Folder Search mode, if no action is taken for about 5 seconds, normal play will resume. At Folder Search mode, press Enter Button once, the first folder will be shown, use Volume up/down Control to scroll through all folders. When the desired folder is found, press the Enter Button long to start playing the first track under selected folder, or press the Enter Button short less than 1 seconds to display the tracks or folders under this folder. Repeat this procedure to navigate through the folders up to 8 levels deep. During folder search, not only folders are shown but also the tracks, but they can be easily identified because they have their own icon display on LCD.
5.Searching by character
This model also has song name (character) search function for MP3 disc playback, Press MP3 search button three times until "CHAR SCH" is shown on display, then press Enter button once, character "A" blinks, use volume up or down to select desired character (1st letter), press Enter button to confirm your choice and second character "A" blinks to select other letters (max, 8 character). After entering your song name, press Enter button more than 1 second to start the search. If no such song, "NOT FND" will be shown.

ID3 TAG
Press BAND button repeatedly to Display Id3 TAG information.
If the MP3 file is available with Id3 TAG, pressing the BAND button repeatedly will show information in the following sequence:
FILE NAME >FOLDER NAME >SONG TITLE > ARTIST> ALBUM TITLE
If any of the Id3 -TAG information is not available, pressing the BAND button repeatedly will only show The FILE NAME &FOLDER NAME of the MP3 file and will scroll repeatedly through the display during the playing of the MP3 file.

USB Drive Playback

This receiver is programmed to give priority playback to a USB device when it is plugged into the port on the front panel. It will automatically mount the drive and switch the playback to the content on the USB.

The USB drive is located behind a protective cover on the right side of the faceplate. Before you insert the drive, take note of the polarity of the connector and orient the USB drive properly.
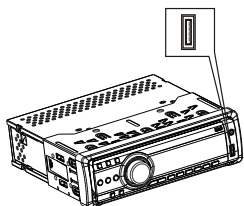
Gently insert the USB drive as shown. You can also use a cable to connect it. Using a cable is advised if your USB device is especially heavy.
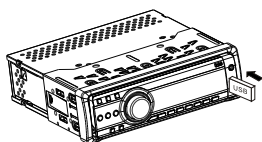
Once the drive is inserted, it may take a short time for the read the files. If the drive has been properly inserted and the file structure has been recognized, the display will show "USB-DRIV" indicating that downloading has begun.

Follow the instructions elsewhere in this manual for MP3 file playback to select and play files.

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).
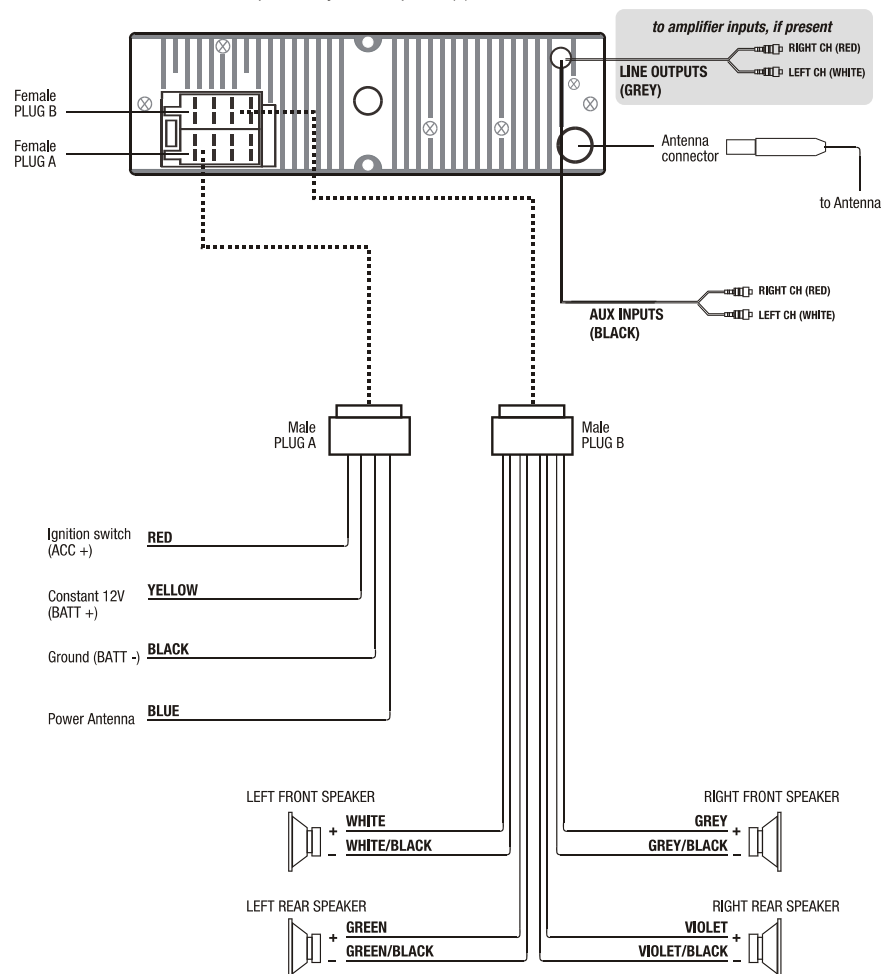
Troubleshooting

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

Specifications

SM43UA
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:	530 - 1710 kHz
Frequency range	450 kHz
Usable sensitivity	22uV

AMPLIFIER
Maximum output power	60 watts x 4 channels

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