

Operation Manual

XM satellite digital tuner

GEX-P910XM

**PIONEER CORPORATION**  
4-1, MEGURO 1-CHOME, MEGURO-KU, TOKYO 153-8654, JAPAN

**PIONEER ELECTRONICS (USA) INC.**  
P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.  
TEL: (800) 421-1404

**PIONEER EUROPE NV**  
Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium  
TEL: (0) 3/570.05.11

**PIONEER ELECTRONICS ASIACENTRE PTE. LTD.**  
253 Alexandra Road, #04-01, Singapore 159936  
TEL: 65-6472-1111

**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.**  
178-184 Boundary Road, Braeside, Victoria 3195, Australia  
TEL: (03) 9586-6300

**PIONEER ELECTRONICS OF CANADA, INC.**  
300 Allstate Parkway, Markham, Ontario L3R OP2, Canada  
TEL: (905) 479-4411

**PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.**  
San Lorenzo 1009 3er. Piso Desp. 302  
Col. Del Valle Mexico, D.F. C.P. 03100  
TEL: 55-5688-52-90

Published by Pioneer Corporation.  
Copyright © 2002 by Pioneer Corporation.  
All rights reserved.



Dear 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. Over time your hearing “comfort level” adapts to higher 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. This list of sound levels is included for your protection.

Decibel

Level Example

30	Quiet library, soft whispers.
40	Living room, refrigerator, bedroom away from traffic.
50	Light traffic, normal conversation, quiet office.
60	Air conditioner at 20 feet, sewing machine.
70	Vacuum cleaner, hair dryer, noisy restaurant.
80	Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower.
100	Garbage truck, chain saw, pneumatic drill.
120	Rock band concert in front of speakers, thunderclap.
140	Gunshot blast, jet plane.
180	Rocket launching pad.

Information courtesy of the Deafness Research Foundation.



Before You Start

Introducing XM Satellite Radio

There's a world beyond AM and FM. XM Satellite Radio. Up to 100 channels. Coast-to-coast coverage. Digital quality sound. With many commercial-free music channels. Plus the best sports, comedy, talk, news and entertainment. Questions? Visit [www.xmradio.com](http://www.xmradio.com). The future is waiting.



Note

XM Radio is responsible for the channel lineup and categories, and may change at any time. Please contact XM Radio for the latest channel lineup and category information. [ ]

How to subscribe

Listeners can subscribe by visiting XM on the web at [www.xmradio.com](http://www.xmradio.com) or by calling XM's Listener Care at (800) 852-9696. Customers should have their Radio ID ready; for details, refer to "Display the ID code". Customers are able to receive a limited number of free-to-air channels without activation.

**Technology.** It is prohibited to copy, decompile, disassemble, reverse engineer or manipulate any technology incorporated in receivers compatible with the XM Satellite Radio system. Furthermore, the AMBE® voice compression software included in this product is protected by intellectual property rights including patent rights, copyrights, and trade secrets of Digital Voice Systems, Inc. The user of this or any other software contained in an XM Radio is explicitly prohibited from attempting to copy, decompile, reverse engineer, or disassemble the object code, or in any other way convert the object code into human-readable form. The software is licensed solely for use within this product. [ ]

About the XM mark



The "XM" mark on this unit indicates that it is an XM satellite radio receiver. You can receive XM satellite radio broadcasts by connecting the unit as shown in the installation manual.



Note

The XM name and related logos are trademarks of XM Satellite Radio Inc. [ ]

About this manual

This unit features a number of sophisticated functions ensuring superior reception and operation. All the functions have been designed for the easiest possible use, but many are not self-explanatory. This operation manual will help you benefit fully from this unit's potential and to maximize your listening enjoyment.

We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using this unit. It is especially important that you read and observe precautions. [ ]

Important

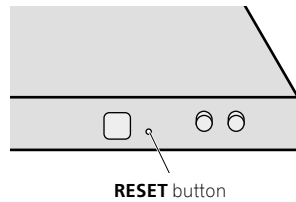
The serial number of this device is located on the bottom of this unit. For your own security and convenience, be sure to record this number on the enclosed warranty card. [ ]

Resetting the microprocessor

The microprocessor must be reset under the following conditions:

- Prior to using this unit for the first time after installation
- If the unit fails to operate properly
- When strange or incorrect messages appear on the display

- Press RESET on the unit with a pen tip or other pointed instrument.



Precautions

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.

**Information to User**  
Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so you can hear sounds outside of the car.
- Protect this product from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed. [ ]

After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased this unit for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the company listed below:  
Please do not ship your unit to the company at the addresses listed below for repair without advance contact.

**U.S.A.**  
Pioneer Electronics (USA), Inc.  
CUSTOMER SUPPORT DIVISION  
P.O. Box 1760  
Long Beach, CA 90801-1760  
800-421-1404

For warranty information please see the Limited Warranty sheet included with this unit. [ ]

Product registration

Visit us at the following site:



- 1 Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
- 2 Receive updates on the latest products and technologies.
- 3 Download owner's manuals, order product catalogues, research new products, and much more.

Operating with different head units

Operate this unit (for XM reception) with the connected head unit. For illustration, instructions in this manual use the "DEH-P6400" as an example of head unit.

- When using a remote control, you can operate these head units marked with \* in the same way as the "DEH-P6400". For details concerning operation with the head unit itself, refer to the head unit's operation manual.

Head unit group 1

Operation when using the following head unit is the same as with the "DEH-P6400", operate following the instructions in this manual.

DEH-P9400MP*	DEH-P940MP*
DEH-P8400MP	DEH-P840MP
DEH-P7400MP	DEH-P740MP
DEH-P640	DVH-P7000

Head unit group 2

When using this unit with these head units, operate while referring to the head unit group 2 function compatibility chart.

- These head units control this unit as an external unit.

DEH-P90HDD*	DEH-P4400
DEH-P440	DEH-P44
FH-P4100	

Head unit group 3

When using this unit with these head units, operate while referring to the head unit group 3 function compatibility chart.

AVH-P6400CD	AVH-P6400
-------------	-----------

Function compatibility charts

Operate using the same buttons on the head unit itself or the remote control.

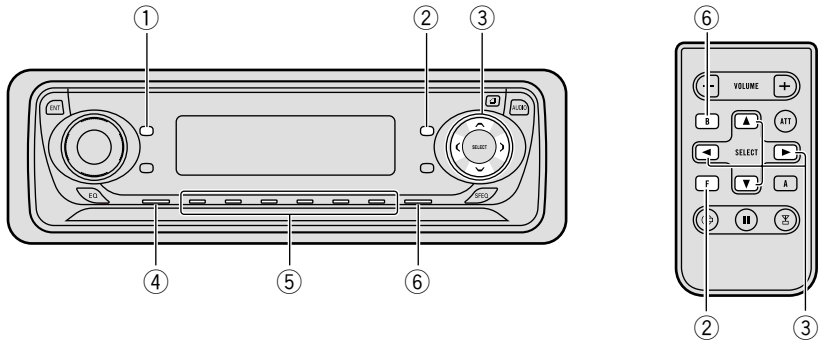
Head unit group 2

Function	Button	Operation
Source switching	<b>SOURCE</b>	:Select
Select the channel	◀ or ▶	:Select
Changing the band	<b>BAND</b>	:Select
Preset memory	<b>1-6</b> (hold for 2 seconds)	:Memory
Direct recall	<b>1-6</b>	:Recall
Sequential recall (Channel number select mode)	▲ or ▼	:Recall
Select the category (Channel category select mode)	▲ or ▼	:Select
Entering the function menu (See "Introduction of advanced tuner operation".)	<b>FUNCTION</b>	:Select
Switching the display (FUNC1)	▲ or ▼	:Select
Scrolling the display (FUNC1)	▲ or ▼ (hold for 2 seconds)	:Scroll
Scrolling the display	<b>DISPLAY</b> (hold for 2 seconds)	:Scroll
Switching the channel select mode (FUNC2)	▲ or ▼	:Select

Head unit group 3

Function	Button	Operation
Source switching	<b>SOURCE</b>	:Select
Select the channel	◀ or ▶	:Select
Changing the band	<b>BAND</b>	:Select
Switching the display	<b>DISPLAY</b>	:Select
Scrolling the display	<b>DISPLAY</b> (hold for 2 seconds)	:Scroll
Display the MENUS	<b>A.MENU</b>	:Display
Preset memory (PCH MEMORY)	1. ▲ or ▼ 2. <b>A.MENU</b>	:Select number :Memory
Direct recall (PCH RECALL)	1. ▲ or ▼ 2. <b>A.MENU</b>	:Select number :Recall
Switching the channel select mode (CH MODE)	◀ or ▶	:Select
Select the category (Channel category select mode)	▲ or ▼	:Select





Head unit (e.g. DEH-P6400)

- ① **DISPLAY button**  
Press to select different displays.
- ② **FUNCTION button**  
Press to select functions.
- ③ **▲/▼/◀/▶ buttons**  
Press to do channel select, recalling channels and category select. Also used for controlling functions.
- ④ **SOURCE button**  
Head unit is turned on by selecting a source. Press to cycle through all of the available sources.
- ⑤ **1–6 buttons**  
Press for preset tuning.
- ⑥ **BAND button**  
Press to select among three XM bands and cancel the control mode of functions. ▢

Remote control (e.g. DEH-P6400)

You can operate in the same way with the remote control supplied with the head unit. For details, refer to the head unit's operation manual. ▢

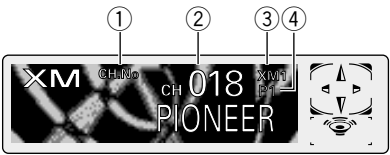
Selecting a XM source

- **Press SOURCE to select a XM source.**  
Press **SOURCE** repeatedly to switch between the following sources:  
**Built-in CD player—Television—Tuner—XM tuner—Multi-CD player—External unit 1—External unit 2—AUX** ▢

Turning the unit off

- **Press SOURCE and hold until the unit turns off.** ▢

Listening to XM



These are the basic steps necessary to operate the XM.

- ① **Channel select mode indicator**  
Shows what channel select mode has been selected. **CH.No** is displayed when **CH NUMBER** is selected, and **CAT** is displayed when **CATEGORY** is selected.
- ② **Channel number indicator**  
Shows to which channel number the tuner is tuned.
- ③ **Band indicator**  
Shows the band which has been selected.
- ④ **Preset number indicator**  
Shows what preset has been selected.

1 Press SOURCE to select a XM source.

2 Press BAND to select a band.  
Press **BAND** until the desired band is displayed, **XM1**, **XM2** or **XM3**.

3 Press ◀ or ▶ to select a desired channel.  
The channel number move up or down step by step.  
Channels that cannot currently be selected are skipped, and the next channel is selected.

- If you press and hold ◀ or ▶, you can increase or decrease channel number continuously.
- You can also select a channel from a desired channel category. (Refer to “Switching the channel select mode”.)

4 Press SOURCE and hold until the unit turns off.

Notes

- It may take a few seconds before you can hear anything while this unit acquires and processes the satellite signal when you turn power on, change the source to XM tuner, or select a channel.
- Display changes as follows when you switch channels or operate in other ways. The text of selected display\* is automatically scrolled.  
Channel number—Channel name—Selected display \*  
\* For details, refer to “Switching the display”. ▢

Storing and recalling channels

If you press any of the preset tuning buttons **1–6** you can easily store up to six channels for later recall with the touch of a button.

- Memory and recall are for broadcasts. If you recall a memorized broadcast that has been moved to another channel, the channel to which the broadcast was moved is selected.

● When you find a channel that you want to store in memory press a preset tuning button 1–6 and hold until the preset number stops flashing.

The number you have pressed will flash in the preset number indicator and then remain lit. The selected channel has been stored in memory. The next time you press the same preset tuning button **1–6** the channel is recalled from memory.

Notes

- Up to 18 channels, 6 for each of the three XM bands can be stored in memory.
- When channel number select mode is selected, you can also use ▲ and ▼ to recall channels assigned to preset tuning buttons **1–6**.
- If a channel you have recalled cannot be selected, a message is displayed for 2 seconds and the unit returns to the operating status before the channel was recalled. ▢

Switching the display

XM channels each have a channel number and channel name. XM programing also carries song or program title, artist name and category, when available.

● Press DISPLAY.

Press **DISPLAY** repeatedly to switch between the following settings:  
Channel name—Artist name/feature—Song/program title—Channel number—Channel category

Note

When you switch the display, the text is automatically scrolled.

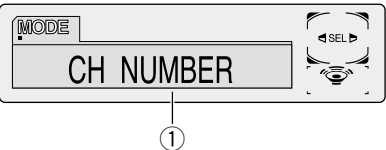
Scrolling the text in the display

You can scroll the text to the left so that the rest of the text can be seen.

● Press DISPLAY and hold until the text begins to scroll to the left.

The rest of the text will appear in the display. ▢

Introduction of advanced tuner operation



① Function display  
Shows the function status.

● Press FUNCTION to display the function name.

Press **FUNCTION** to display the following function:  
**MODE** (Channel select mode)  
▪ To return to the XM display, press **BAND**.

Note



When using this unit with one of head unit group 2, press **FUNCTION** to display the following function:  
**FUNC1** (Switching the display)—**FUNC2** (Switching the channel select mode)—**FUNC3** (No function)—**FUNC4** (No function)—**AUTO** (No function). ▢

Switching the channel select mode

You can switch if you select a channel with a channel number or from a channel category when you select a channel. Initially, channel number select mode is selected.

1 Press **FUNCTION** to select **MODE**. Press **FUNCTION** until **MODE** appears in the display.

2 Press ◀ or ▶ to select the desired channel select mode. Press ◀ or ▶ repeatedly to switch between the following settings: **CH NUMBER** (Channel number select mode)—**CATEGORY** (Channel category select mode)

 **Note**  
Depending on the head unit you are using, it may be possible to directly switch between the channel select modes using the allocated button. For details, refer to the head unit's manual. 

Selecting the channel in the channel category



Channels are organized into various program categories, e.g. Rock, Classic, Jazz. You can search between different categories, and then search among channels within each channel category.

1 Select the channel category select mode. (Refer to “Switching the channel select mode” above.)

2 Press **BAND** to return to the XM display.

3 Press ▲ or ▼ to select the desired channel category. Once you select a channel category, the unit searches for channels in that category. During search, the channel category doesn't immediately change even if you press the button. To successively change the channel category, continue pressing the button.

4 Press ◀ or ▶ to select the desired channel in the selected channel category. The channel number move up or down in the selected channel category. Channels that cannot currently be selected are skipped, and the next channel in that channel category is selected.

 **Note**  
If you select a channel of another category by channel recall, etc., during steps 3 and 4, the category selected in step 3 still remains in memory. If you press ◀ or ▶, the channel number moves up or down in the category selected in step 3 regardless of the category of the present channel. 

Display the ID code (Radio ID)


Each XM tuner is identified with a unique Radio ID. You will need the Radio ID when activating XM service or when reporting a problem. How to display the ID code depends on the channel select mode.

Channel number select mode  
If you select **CH 00**, the ID code is displayed.

● Press ◀ or ▶ to select the channel number zero (**CH 00**).

Channel category select mode  
**RADIO ID** is provided as a channel category for displaying the ID code.

● Press ▲ or ▼ to select the **RADIO ID** from channel category.

 **Notes**


- If you select another channel, display of the ID code is canceled.
- Display of the ID code repeats displaying **RADIO ID** and the ID code one after the other.

Radio ID

Refer to the following chart to verify each Radio ID, before displaying them on the following head units.

DEH-P4400	DEH-P440
DEH-P44	FH-P4100


ID	Display	ID	Display
1	1	I (Not used.)	—
2	2	J	J
3	3	K	K
4	4	L	L
5	5	M	M
6	6	N	N
7	7	O (Not used.)	—
8	8	P	P
9	9	Q	Q
0	0	R	R
A	A	S (Not used.)	—
B	B	T	T
C	C	U	U
D	D	V	V
E	E	W	W
F (Not used.)	—	X	X
G	G	Y	Y
H	H	Z	Z



Messages

When problems occur with XM tuner, a message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action.

Message	Cause	Action
ANTENNA	The XM antenna is not connected.	Check whether the XM antenna cable is attached securely.
	A short-circuit occurring in the antenna or the surrounding antenna cable.	Make sure that there is nothing unusual with the antenna or antenna cable. Turn the ignition off and then on.
UPDATING	Radio is being updated with latest encryption code.	Wait until encryption code is being updated. Channels 00 and 01 should function normally.
NOSIGNAL	XM signal is too weak at the current location.	Wait until the car reaches a location with a stronger signal.
LOADING	Unit is acquiring audio or program information.	Wait until the unit has received the information.
OFF AIR	The channel currently selected has stopped broadcasting.	Select another channel.
-----	The user has selected a channel number that does not exist or is not subscribed to.	Automatically switches to Channel 01.
----	There is no artist name/feature, song/program title, or channel category associated with the channel at that time.	No action needed.



Specifications

**General**  
Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)  
Grounding system ..... Negative type  
Max. current consumption ..... 2.0 A  
Dimensions (W × H × D) ..... 220 × 28 × 145 mm (8-5/8 × 1-1/8 × 5-3/4 in.)  
Weight ..... 0.85 kg (1.9 lbs)

**XM tuner**  
Frequency range ..... 2,332.50 – 2,345.00 MHz  
Usable sensitivity  
Satellite ..... – 94.0 dBm  
Terrestrial ..... – 90.0 dBm

**Audio**  
Signal-to-noise ratio ..... 92 dB (IHF-A network)  
Separation ..... 75 dB

 **Note**  
Specifications and the design are subject to possible modifications without notice due to improvements. 