

XM Commander
Universal Satellite Radio Receiver

User Manual

XM-RVR-FM-001



Warning: This manual contains important safety and operating information. Please read and follow the instructions in this manual. Failure to do so could result in personal injury or damage to your XMCommander or to your vehicle.

Welcome

Thank you for purchasing an XMCommander Satellite Radio FM Modulator and Receiver System. Your XMCommander gives you access to over 100 XM Satellite Radio channels of music, news, and information.*

Your XMCommander must be used with the enclosed connecting devices to ensure maximum performance and safety. **Professional installation is highly recommended.**

*XM subscription required for reception. Not available in Alaska or Hawaii.

About XM

One big idea can change everything. And XM Satellite Radio is one big idea: Radio to the Power of X®. America's most popular satellite radio service gives you the power to choose what you want to hear—wherever and whenever you want it. XM offers 70 music channels—more than any other satellite radio service—plus 30 channels of news, talk, sports, and entertainment. That's 100 basic channels in all, for a low monthly subscription. Additional devices may qualify for a reduced subscription fee through the XM Family Plan.

Exploring the radio dial was never like this. Find the spirit and the passion that made radio fun, now reborn in all-digital sound without endless commercial interruptions. Get to know the richness and range of 100 channels of continuous programming. XM is a sonic frontier where you'll discover a new kind of radio.

About XMCommander

XMCommander allows you to receive and play XM's 100 digital channels over your existing vehicle audio system. Integrated seamlessly into your existing vehicle sound system**, the XMCommander provides endless hours of rich radio entertainment—Radio to the Power of X®!

**Professional installation is highly recommended.



Important: The serial number for this device is located on the top of the receiver unit. For your own security and convenience, be sure to record this number on the enclosed warranty card.

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Getting Started: Activating XMCommander

To quickly begin enjoying XM Satellite Radio, follow these simple steps:

1. Set up your XMCommander using the instructions in the installation guide or with the help of a professional installer.
2. Press the power button to turn the XMCommander on and verify that it is playing Channel 1, the XM Preview Channel.
3. Select Channel 0. The receiver's eight-character XM Satellite Radio ID number will appear on the display. Write the number here:

--	--	--	--	--	--	--	--

Note: Carefully check your XM Radio ID. The letters I, O, S, and F are not used.

4. Activate your XM Satellite Radio service. To subscribe, make sure you have a major credit card and your XM Satellite Radio ID number handy and log onto <http://activate.xmradio.com>. You can also activate your service by calling 1-800-852-9696. Reduced fees apply for online activation.

Note: You will need to keep your XMCommander on for at least one hour after requesting activation to receive the full channel line-up.



Warning: When using this product it is always important to keep your eyes on the road and your hands on the wheel. Not doing so could result in injury to you or to others or in property damage.



Caution: Failure to properly follow all installation instructions may result in personal injury or damage to your XMCommander or to your vehicle.

Technical Information

Dimensions

Controller..... 4.5 in W x 1.75 in x H .83 in D (115 mm x 45 mm x 21 mm)
Receiver..... 3.75 in W x 4.3 in x H 1.25 in D (95 mm x 109 mm x 32 mm)

Weight

Controller..... 2 oz (75 g)
Receiver..... 11.8 oz (335 g)

Inputs/Outputs

Antenna..... 1 RF SMB Connector
Power..... P13 connector, 12V DC, 500 mA maximum
Audio output..... 3.5 mm diameter ministereero jack

XMCommander

Controls

Figure 1. XMCommander



The XMCommander unit has a power button, two control buttons, tuning wheel, enter button and 10 number keys.

- ① Turns the XMCommander on or off.

The display/menu button toggles between three display options:



1. Channel name, channel number, and artist name
2. Channel name, channel number, and song name
3. Artist name and song title

②



Switches between DIRECT entry, Preset A, Preset B and Preset C.



Use the tuning wheel to scroll through and select a channel or a menu option. Pressing the center of the tuning wheel acts as an enter function and selects channels or menu options.



Number keys are used to select a channel directly (when in DIRECT entry mode) by entering its number. Select presets (when in Preset A, Preset B, or Preset C mode) by entering the number of the preset.

XMCommander

Remote Control

Figure 2. XMCommander Remote Control.



Turns the XMCommander on or off.



Highlights different channel/menu options on the screen.



The enter button is used in selecting channels and menu options. Press and hold to activate TuneSelect™ feature.



Locates channels by various scanning methods.



Switches between DIRECT entry, Preset A, Preset B and Preset C.



Reverts to channel played prior to current selection.



Number keys are used to select a channel directly (when in DIRECT entry mode) by entering its number. Select presets (when in Preset A, Preset B or Preset C mode) by entering the number of the preset.



The display/menu button toggles between three display options:

1. Channel name, channel number, and artist name
2. Channel name, channel number, and song name
3. Artist name and song title



Memory saves artist name and song title for the currently playing song which can later be recalled. Press and hold memory key to recall information.



Enters category search and scrolls through available categories.

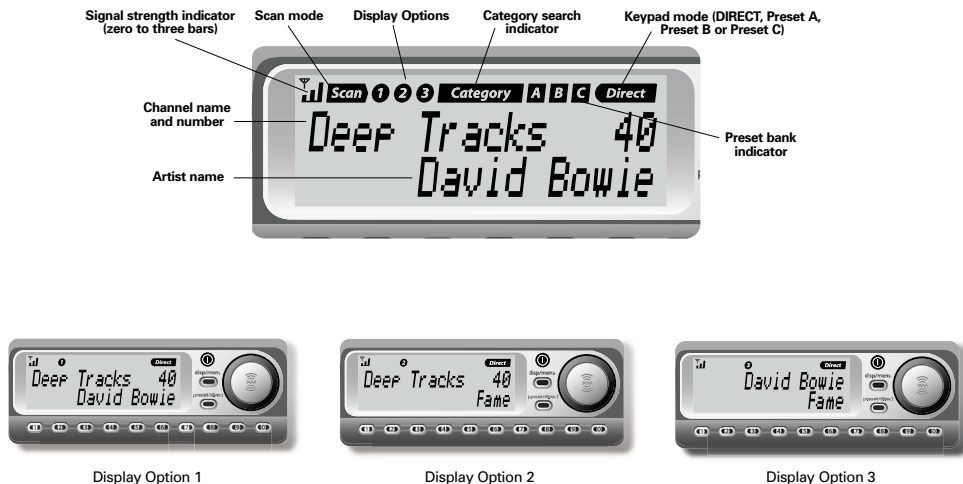
XMCommander

Display Screen

While tuned to an XM channel, the XMCommander default display contains information about that channel and the XMCommander settings. See figure 3.


Your XMCommander display can be customized. See page 7.

Figure 3. XMCommander display screens.




Basic Operations

Turning XMCommander On and Off

Press  to power the unit on or off. When first turned on, the receiver will automatically tune in to the last channel listened to and recall the previous settings.

Basic Channel Selection


Select a channel by number

1. Verify that XMCommander is in DIRECT entry mode. DIRECT should appear in the upper right corner of the display. If A, B or C appears, press  until the display says DIRECT.
2. Enter channel number using the number keys.


Select using presets

Your XMCommander can store up to 30 preset channels. They are organized into three different groups, or memory banks (Preset A, Preset B and Preset C), each with 10 channels corresponding to the 10 number keys.


Select channel presets



Press  until an A, B, or C appears in the upper right corner of the display. Press the number key corresponding to the desired preset.

Setting channel presets



1. Tune in the channel you want to register as a preset.
2. Select either Preset A, Preset B or Preset C by pressing  until an A, B, or C appears in the upper right corner of the display.
3. Press and hold the number key corresponding to the preset you would like to set. The channel name and number will highlight and the audio will mute for 2 seconds to indicate that the preset is registered.






Tune to a channel using Tuning Wheel

Tune up and down the channel list by turning the tuning wheel .

Turn the tuning wheel  one increment or decrement to progress through a list of channels. Continue to turn the wheel to scroll through the list and display a new channel with each increment. To select a channel, press .

Select a channel by remote control

When in DIRECT entry mode the up/down arrow buttons   on the remote control can be used to move up or down the channel list one channel at a time. When in PRESET mode they can be used to move up or down the preset channels in the current bank. Each new channel will be displayed for your preview without leaving your current selection.



1. To display a new channel using the up/down arrow buttons, press   buttons.
2. To select a channel, press . If a channel is not selected within 6 seconds, the unit reverts to the current selection.
3. For a fast tuning through the channel listing, hold down the   buttons continuously.






Caution: Set the volume control at a comfortable sound level—one that can be heard clearly without distortion. The Electronics Industry Association's Consumer Electronics Group suggest that you avoid prolonged exposure to excessive noise to reduce the risk of hearing damage or loss.

Basic Operations





Select Channel by Category (remote control)

On the remote control, press either of the category keys   to enter category search.

1. Continue pressing one of the category keys until a category you are interested in appears.
2. Use the   buttons to display a channel within the given category.
3. Press  to select a channel.
4. If you do not select a channel, category search will time out after several seconds.

Save and Recall Functions

You can save the artist name, song title, channel name and channel number on the current channel for future reference.




1. Press  to save the information for the current song. Up to 15 different items can be saved at once, after which any new information that is saved will replace the oldest information in memory.
2. To recall saved information, press and hold  for 2 seconds. “Memory 1” is displayed on the first line. The channel name and number appear on the second line. Next, the artist name and song title are displayed. To advance through your list of favorites press   on the remote control.

Display Options




The DISP/MENU  button toggles between three display options:


1. Channel name, channel number, and artist name
2. Channel name, channel number, and song name
3. Artist name and song title

Menu Commands and Settings

Press and hold  enters the menu section of XMCommander. Here, you can change each of the following options using the tuning wheel or   on remote and pressing to select the highlighted option. Following are the settings that can be changed:

FM Frequency

In “FM Frequency” mode, the current frequency and five additional frequencies are displayed. To select another frequency, rotate tuning wheel  or press up or down   on the remote to highlight the desired frequency.

Press . “Set” and the new frequency number are displayed for 2 seconds.

Output Level

Use this to adjust the XMCommander audio-level output if it is too high, causing distortion, or too low for your car. Most users will NOT need to change this level from the factory setting. This is not a volume control. You should set the volume using the audio system connected to your XMCommander.


Contrast

This control allows you to adjust the contrast of your display.

TuneSelect™

See pg 8.

Direct Tune



This feature changes the functionality of the tuning wheel so that it automatically selects a channel each time it is rolled, without having to press tuning wheel  in. Note: XMCommander does not have a preview mode when this feature is active.

Special Features



TuneSelect™ — New Feature!

TuneSelect is a new XM feature which allows you to “tag” up to 15 songs you like and have your XM Radio alert you when any of those songs is playing on a different channel.



Activating TuneSelect

To activate TuneSelect, press and hold the ENTER  button at anytime during the playing of a particular song. When TuneSelect is activated, you will hear a beep and Song Selected will be displayed on the screen for 2 seconds and then the unit will revert to the previous screen information. When one of your designated songs begins playing on any other channel, your unit will beep and SONG FOUND and the channel number and song name will display on the screen. To go to that song, simply press the ENTER  button. If no action is taken within 8 seconds, your unit will revert to the previous screen information of the currently selected channel and TuneSelect will be de-activated for that song only until the unit is powered off and powered on for the next listening session.

Managing TuneSelect Songs

To erase some or all of the songs identified in memory with TuneSelect, press the DISP/MENU  button and using the tuning wheel, scroll to the TuneSelect option. Press ENTER  to select. You will have the option to erase all songs or only selected songs. TuneSelect can accommodate up to 15 selections. Once 15 songs are selected, adding new songs will automatically replace the oldest song in the list.


Jump

Pressing  on the remote causes the radio to revert to the last channel selected immediately prior to the current selection. A second press of  returns you to the original channel played prior to initiating the jump process. With this feature, you can cycle back and forth between two channels.


Scan

You can scan through channels in one of the following ways:


Scan presets







When in the PRESET mode (in preset bank A, B or C), pressing  scrolls you through the preset channels in the active bank only. The unit scans channels beginning with the next preset higher in number than the current preset.

Scan Category

When in the CATEGORY SEARCH mode, pressing  scrolls you through the channels in the current category only, beginning with the next higher channel than the current channel.

Scan All

When in DIRECT mode, pressing  scrolls you through all channels, beginning with the next higher channel than the current preset.

Each channel scanned will play audio for 5 seconds after which the radio tunes to the next channel in the scanning order. To lock onto a particular channel, press  or  within 5 seconds. Locking onto a channel automatically exits you from the scan mode. You can also exit the scan mode without making a selection by pressing any of the following , ,  or . XMCommander returns to the mode in which it operated prior to entering scan mode.

Reference

Taking Care of Your XMCommander

(Failure to follow these instructions may result in personal injury or damage to your XMCommander or to your vehicle.)

- Use only a soft, dry cloth to clean the outside of your XMCommander and any peripherals.
- Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia or abrasives.
- Do not allow liquids to spill on the unit.
- Do not use sprays near your XMCommander.
- It is best to keep XMCommander out of direct sunlight or other sources of extreme heat.
- Avoid placing XMCommander in a setting where air cannot circulate around the unit.

Warranty

1. **Warranty Statement** - This express warranty is extended by Terk Technologies Corporation, a New York corporation having its principal office at 63 Mall Drive, Commack, NY 11725 ("Terk") to the original end user purchaser. Terk warrants the XMCommander ("Commander") to be free of defects in material and workmanship for a limited period of one (1) year from the date of sale to the original end user purchaser, subject to the following conditions herein 2. **General Provisions** - This warranty sets forth the full extent of Terk's responsibilities and consumer's exclusive remedy regarding the Commander. Terk will, as its sole obligation under this warranty, replace any Commander that does not conform to this warranty. Such replacement unit may include factory rebuilt or refurbished parts.

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER STATUTORY, EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH TERK HEREBY DISCLAIMS. IN NO EVENT SHALL TERK BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE COMMANDER, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING

OUT OF THE USE OR INABILITY TO USE SUCH COMMANDER, TO THE FULL EXTENT AS MAY BE DISCLAIMED BY LAW. THIS WARRANTY IS NOT TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL CONSUMER PURCHASER OF THE COMMANDER.

3. **One (1) Year Standard Limited Warranty** - Commanders are shipped from the factory with a standard limited warranty of one (1) year from the date of purchase by the original end user purchaser, based on proof of purchase receipt. In the event of a defect, malfunction, or failure to conform to specifications during the warranty period, Terk will replace the Commander (replacements available through the retailer or dealership where the Commander was purchased, only if all component parts and original packaging and manual are returned). This warranty does not cover defects, malfunctions, performance failures or damages to the unit resulting from use in other than its normal and customary manner, misuse, accident or neglect, the use of non-conforming parts, failure to properly follow the Installation Guide, or alterations or repairs not authorized by Terk. This warranty is for a replacement Commander only and does not cover any costs of removal of the defective unit or installation of the replacement unit.

4. **Voiding of Warranty** - This warranty will be VOID if a Commander is received for return or refund by your retailer and: (a) is incomplete (i.e., components are missing), or does not include all original packaging and user manual; (b) has been opened by, or has had work performed by, anyone other than an XM-authorized service provider; (c) contains non-conforming or non-XM-approved housing or parts.

5. **How to Receive Warranty Service** - To obtain warranty service you must return the defective Commander with a copy of the original dated sales receipt to the retailer or dealership where the Commander was purchased, along with all component parts and original packaging, including user manual. Alternatively, you may call **1-800-543-5065** or visit <http://xmcommander.xmradio.com> for instructions to mail in your unit for warranty service.

6. **State Law Rights** - Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts. Therefore the above limitations or exclusions may not apply. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

Troubleshooting

Your XMCommander is designed and built to provide you with trouble-free performance without the need for service. If it does not appear to be functioning correctly, please make sure all connectors are properly attached and follow these troubleshooting steps:

If you see this on the display:

You should:

NO SIGNAL

Cause: The XM signal is being blocked.

The message should disappear as soon as you move out of an obstructed area such as an indoor garage. If the problem persists, make sure your antenna is mounted outside and on top of your car with a clear view of the sky.

ANTENNA

Cause: Antenna connector may not be securely seated. Cable may be damaged.

Make sure antenna is correctly attached to the receiver and that antenna cable is undamaged and free from kinks. Turn the XMCommander off and back on to reset this message.

OFF AIR

Cause: The channel selected is not currently broadcasting.

Tune to another channel.

If this happens:

You should:

You do not receive all XM channels. Cause: Your XMCommander is not activated.

Contact XM as described in "Getting Started: Activating XMCommander" on page 2.

The audio sounds distorted

Reduce audio output level as described under "Menu Commands and Settings: Set Level" on page 7.

The audio level is too low

Increase audio output level as described in "Menu Commands and Settings: Set Level" on page 7.


You cannot tune in to a channel

Verify that you are authorized to receive that channel as part of your subscription with XM and that you have not asked XM to block that channel on your XMCommander unit.

No song title or artist name displays

Nothing is wrong with your receiver. This is normal on many talk and news channels where there is no song playing. Also, this information may not be available for some music channels.

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