



**ESR-T100**

**SIRIUS Satellite Radio Tuner**

**User's Manual**

Thank you for purchasing this product.

- ★ Please read this user's manual in its entirety before operating this equipment.
- ★ After reading this manual, be sure to keep it in a handy place (e.g., glove compartment).
- ★ Check the contents of the enclosed warranty card and keep it carefully with this manual.

## **Contents**

<b>1. FEATURES .....</b>	<b>1</b>
<b>2. PRECAUTIONS .....</b>	<b>2</b>
<b>3. INSTALLATION AND WIRING CONNECTIONS .....</b>	<b>4</b>
<b>4. SYSTEM EXAMPLES .....</b>	<b>7</b>
<b>5. CONTROLS .....</b>	<b>8</b>
<b>6. SIRIUS OPERATION .....</b>	<b>10</b>

## **1. FEATURES**

- **CD-Changer (CDC) Cable Connection**
- **RCA Output**
- **Single Antenna Terminal**
- **18 Channel Presets**
- **CD-Changer (CDC) Pass-through Function**

## 2. PRECAUTIONS

1. Upon initial startup or when starting after turning off the backup power supply, the receiver will take longer to play audio and may take up to 30 seconds after reception of the SIRIUS signal before audio is heard.
2. Channel names are stored in memory 30 to 60 seconds after start of normal operation. If the power is turned off before the text data is written, it may not be correctly displayed on the next power up. Perform a reset operation if no text data is displayed.
3. If the receiver ever stops functioning or appears unresponsive, reset it.  
● **Resetting:** Disconnect the SIRIUS Receiver power cable (the CDC cable if connected to the CDC and the 4-pin power cable during standalone operation), wait 10 seconds and connect it again. The last channel, preset memory and other data stored in the receiver are deleted returning it to its default settings.
4. A CDC and standalone operation switch is provided on the underside of the receiver. The switch is set to CDC position at the time of shipment. Do not set this switch to the standalone position when using the CDC cable (headunit operation).
5. The receiver becomes warm during operation; this is normal and not a cause for concern.
6. Do not touch the connector pins on the receiver as this may damage the ICs inside the unit.
7. No station is selected when the [DSP] button is pressed quickly after a channel is changed. This is because button operations are not accepted until the channel is confirmed. It takes between 1.5 to 5 seconds to change channels.

This equipment has been tested 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 consult the dealer or an experienced radio/TV technician for help.

### **CAUTION**

**USE OF CONTROLS, ADJUSTMENTS, OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN, MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

**THE COMPACT DISC PLAYER or COMMANDER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE TECHNICIANS.**

**CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**

#### **INFORMATION FOR USERS:**

**CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY AND WILL VIOLATE FCC APPROVAL.**



## **What is SIRIUS Satellite Radio?**

**Over 110 channels of the best entertainment and completely commercial-free music for your car, home or office.**

Only SIRIUS has over 60 original music channels, from today's hits to R&B oldies to classical masterpieces. From authentic country and real bluegrass to cool jazz, hot latin, reggae, rock, and many more. Best of all, it's all completely commercial free.

Sirius also has over 50 channels of world-class sports, news and entertainment. Included as part of your subscription you get up to 16 NFL games a week, up to 40 NBA games a week and up to 40 NHL games a week. Coupled with great sports news from ESPN, the SIRIUS sports offering is unrivaled. And don't forget a host of other great news and entertainment like CNBC, Fox News, Radio Disney and E! Entertainment Radio.

With SIRIUS, the emphasis is on the music and entertainment you want. The music is hosted by Sirius Jockeys, who are true experts. They back up the music with compelling information about the song being played, and they understand that sometimes it's best to just let the music speak for itself.

## **Rely on SIRIUS rocket science for superior coverage**

Only SIRIUS has **three** powerful satellites that fly directly over the US ensuring coast-to-coast coverage with high elevation angles. This gives the satellites a "clear line of sight" to your

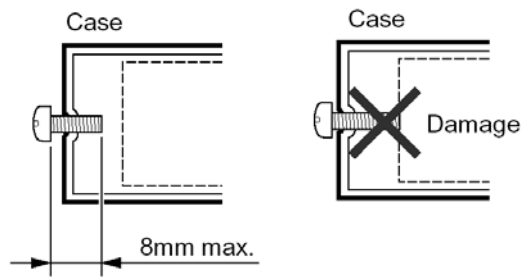
car or home with much less concern for buildings, trees or other objects that might block conventional satellite signals.

Once you experience over 110 channels of digital entertainment, you'll never want to leave your car. For more information, visit [www.sirius.com](http://www.sirius.com).

### 3. INSTALLATION AND WIRING CONNECTIONS

#### ■ Before Installation

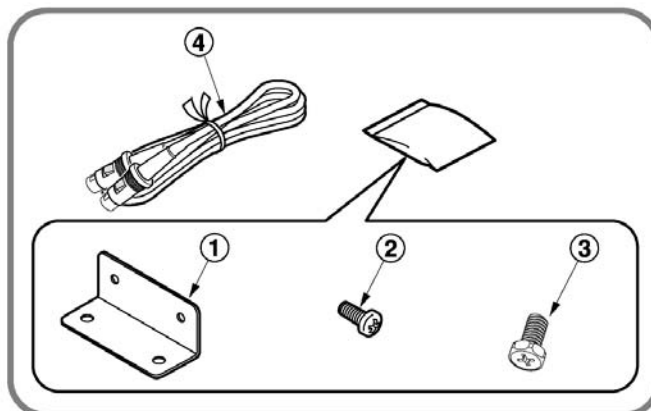
1. Before starting, be sure to disconnect the battery's negative “-” terminal to prevent accidents due to short-circuits.
2. Location – Consider safety and operability when selecting a place for installation. Avoid the following.
  - Locations where the unit will hamper or interfere with driving.
  - Locations where the unit could injure passengers if the car stops suddenly.
  - Locations exposed to direct sunlight or hot air from the heater, etc.
  - Locations where the unit may be exposed to rain or water.
3. Be sure to use the included screws and brackets. Screws other than those supplied could damage the unit.



4. When drilling holes to mount the receiver, be sure to check beforehand that there are no obstructions or items on the other side that could be damaged (fuel tank, wire harnesses or other electronic devices).

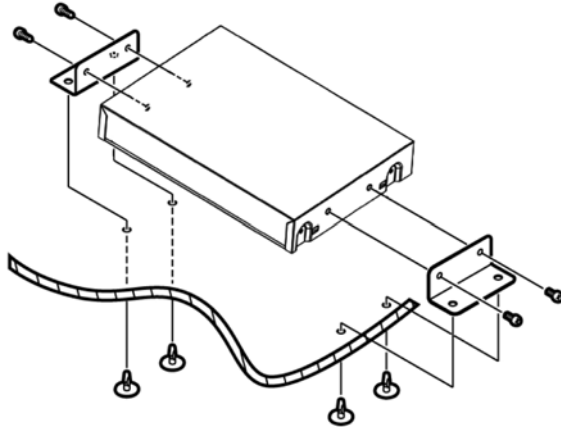
#### ■ Accessories

- |                           |          |                   |          |
|---------------------------|----------|-------------------|----------|
| ① Mounting bracket .....  | 2 pieces | ③ Screw(M6) ..... | 4 pieces |
| ② Mounting screw(M4)..... | 4 pieces | ④ CDC cable ..... | 1 piece  |



### **Installation Example (Installing the unit under the driver's seat)**

1. Attach the mounting brackets① to the sides of the ESR-T100 using the screws② provided.
  2. Select the location on the floor mat. Drill holes in the floor mat to match the positions of the holes in the mounting brackets①.
  3. Insert the canoe clips③ from the rear of the floor mat and install the SIR-CL1.
- ★ There are three mounting holes on each side of the SIR-CL1. Select the appropriate holes to match to the installation location.



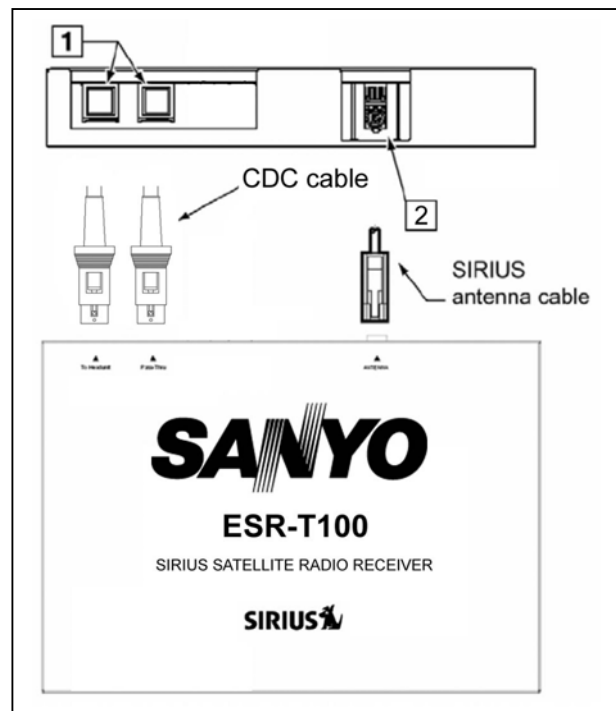
### **Connection Example and Identification of Parts**

#### **1 CDC input/output terminal**

Connect to the main unit or CD/MD changer using the CDC cable as specified④.

#### **2 ANTENNA terminal**

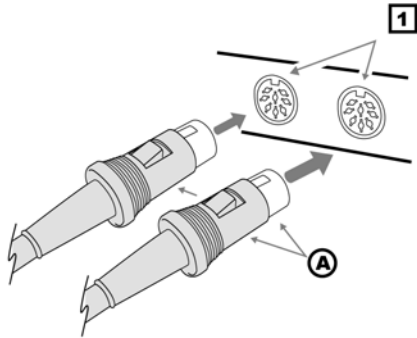
Connect to the SIRIUS antenna (sold separately)



## **How to Connect**

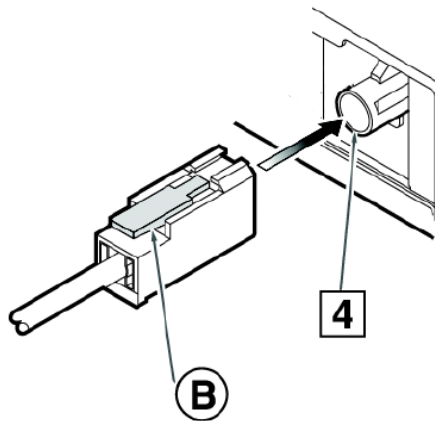
### **1. CDC Cable**

Orient the CDC cable in the direction shown in the figure and insert it until it is locked in position. To remove the CDC cable, pull it by lightly grasping the slide cap **A** in your fingers.



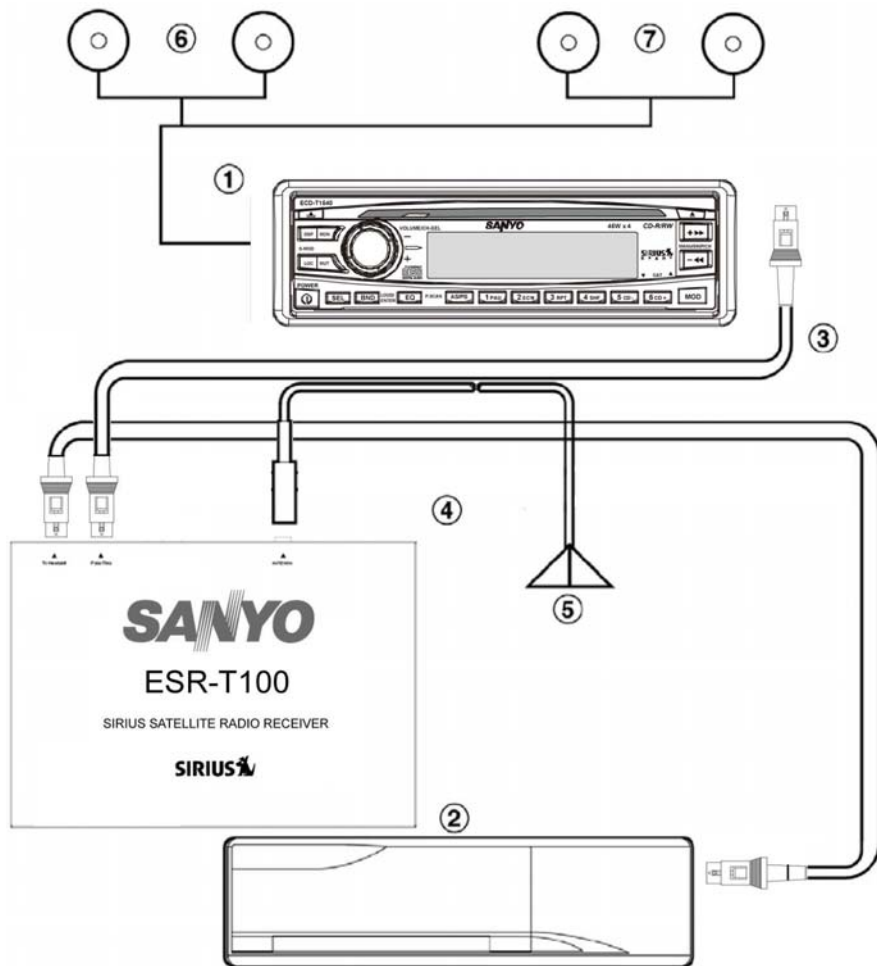
### **2. SIRIUS antenna**

★ Make sure power is “Off”.  
Connect a SIRIUS antenna (sold separately) to the SIRIUS antenna terminal and press until locking tab engages.



To disconnect, make sure power is “Off”, then press the rear of the locking tab **B** to release.

## 4. SYSTEM EXAMPLE

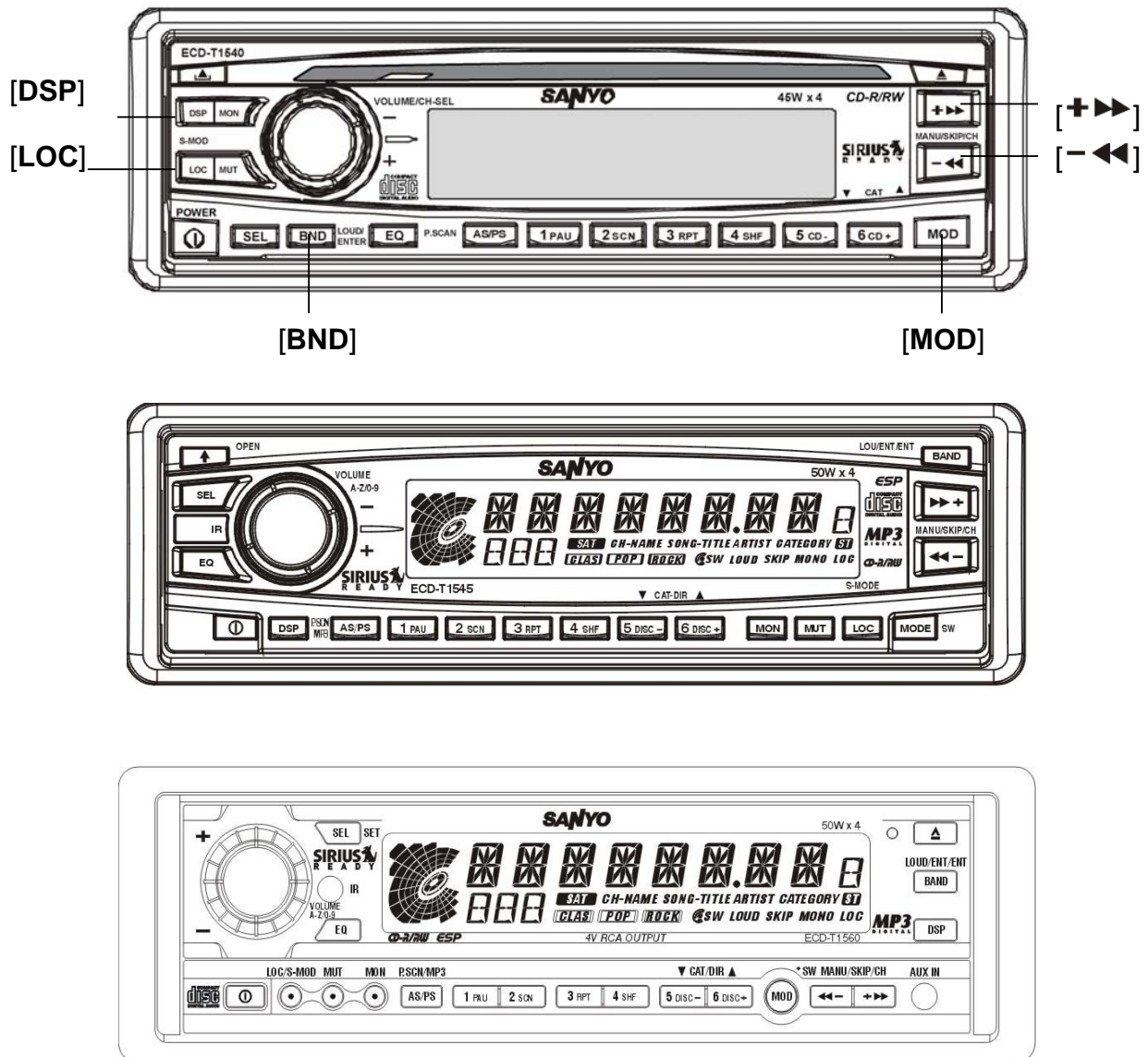


- ① Main unit compatible with CDC connection
- ② CD changer compatible with CDC connection
- ③ CDC cable (provided with the SIR-CL1)  
Using this cable, connect the

- SIR-CL1 to the main unit.
- ④ CDC cable (provided with the CD changer)
- ⑤ SIRIUS antenna (sold separately)
- ⑥ Front speakers
- ⑦ Rear speakers

## 5. CONTROLS

Source unit buttons, examples (ECD-T1540/ECD-T1545/ECD-T1560)

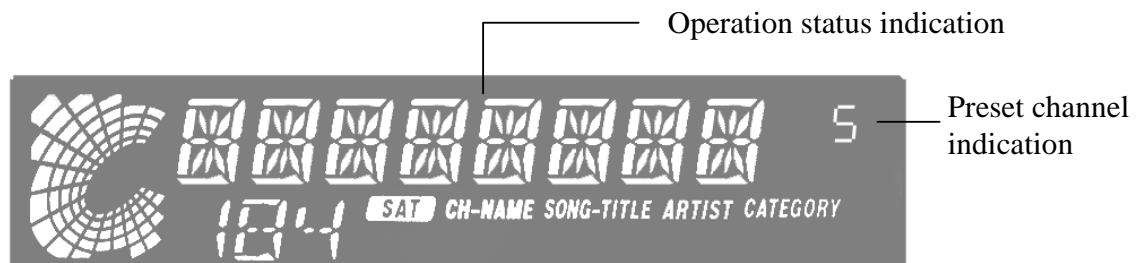


### Notes:

- Since this manual covers several models, the names of some buttons vary by model.

## Display Items

Source unit display, example



## 6. SIRIUS OPERATION

### Selecting SIRIUS SATELLITE RADIO modes

Press the [**MOD**] button to select the SIRIUS mode. The SIRIUS indication lights up when SIRIUS mode is selected.

#### Notes:

- The [**MOD**] button selects the external devices connected to the source unit in order, for example: AM/FM mode → AUX mode → SIRIUS mode → CD changer mode → etc.

### Selecting a band

Press the [**BND**] button to select a band. Each press of the button changes the display as shown below.

S1 → S2 → S3 → S1 ...

- ★ The currently received band is displayed in the function mode indication.
- ★ Models without a function mode indication display the band name and channel number in the display.

#### ■ Information displayed during reception

The following information is displayed when SIRIUS Satellite Radio cannot be received normally.

- **UPDATING**: when the receiver is turned on the first time or after a reset. Do not turn power off during this time as the receiver is downloading the channel guide.
- **LINKING**: when there has been a temporary loss of signal and the receiver is attempting to reacquire a signal. ("**LINKING**" is shown on an 8-digit display)
- **INVALID/ CHANNEL**: a channel without a broadcast has been selected (Message "INVALID" or "CHANNEL" is shown on an 8-digit display)
- **CALL 888/ 539-SIRI**: a channel not available in your subscription (Message "CALL 888" or "539-SIRI" is shown on the display)
- **NO ANT**: no antenna is connected or there is a problem with the antenna

### Switching the display

1. Press the [**DSP**] button to select the desired display.

The main display or the clock display appears each time you press the [**DSP**] button.

2. In the main display, press the [**DSP**] button to cycle between the following display modes:

Channel name → song title → artist name → category name → time → channel name → ...

#### Notes:

- The display shows the abbreviated channel name for 2 seconds when a station is selected before returning to the chosen display mode.

### Channel selection

Channels are selected with the following buttons.

- The **–◀◀** or **▶▶+** button (Seek Tuning)
- A **[LOC]** button

★ For details, see the following operation descriptions.

### Notes:

- The audio output is muted and other button operations are not accepted during the channel selection process (tuning).

### Seek Tuning

1. Press the **–◀◀** or **▶▶+** button. The receiver seeks the next available channel below or above the current channel.

The receiver moves to seek channels below or above the current channel. If the channel found when either button is released is available, that channel is received. Otherwise, seeking continues until an available channel is found.

### Recalling a preset station

A total of 18 SIRIUS stations can be stored (6-SR1, 6-SR2 and 6-SR3). This allows you to select your favorite SIRIUS stations and store them in memory for later recall.

1. Press the **[BND]** button and select the desired SIRIUS band (SR1, SR2 or SR3) to store the channel in.
2. To recall a stored SIRIUS station, press **[BND]** button to select the group (S1, S2 or S3) and then choose the station (from 1~6) that you prefer.

### Storing a preset station

1. Press the **[BND]** button and select the desired SIRIUS band (S1, S2 or S3) to store the channel in.
2. Select the desired station with seek tuning, manual tuning or preset tuning.
3. Press and hold one of **[DIRECT]** buttons for 2 seconds or longer to store the current station into preset memory.

### Notes:

- When the name of a channel stored in memory is changed by SIRIUS, the display will show the new channel name immediately. It will not be removed from the preset channel location.
- A channel stored in memory may be discontinued at the option of SIRIUS. If you attempt to access this channel from the preset location, the receiver will give you the **"INVALID"** or **"CHANNEL"** response. At that time, you may select another station to store in memory.

### **Category selection function**

SIRIUS allows you to select broadcast channel by category.

#### **Receiving stations selected by category**

1. Press the [**LOC**] button to enter the category selection mode.
2. Press [**CD-**] [**CD+**] to select the category.
3. Press **-◀◀** or **▶▶+** button to tune in a station from the Category.

#### **Notes:**

- When the category selection mode is entered, the category of the current or last received channel is displayed first.
- Press the **-◀◀** or **▶▶+** button within 7 seconds after a category has been set to continue seeking channels up or down. The category selection mode is canceled and normal reception is resumed if no operation is performed for 7 seconds.

**SANYO MOBILE AUDIO  
MODEL ESR-T100 LIMITED WARRANTY**

**OBLIGATIONS**

In order to obtain warranty service, the product must be delivered to and picked up from an Authorized Sanyo Factory Service Center at the user's expense, unless specifically stated otherwise in this warranty. The names and addresses of Authorized Sanyo Service Centers may be obtained by calling the toll-free number listed below.

**For product operation, authorized service center referral, service assistance or problem resolution, call:**

FACTORY SERVICE 1-800-421-6382  
Weekdays 8:00 AM - 5:00 PM Pacific Time

**THIS WARRANTY IS VALID ONLY ON SANYO PRODUCTS PURCHASED AND USED IN THE UNITED STATES OF AMERICA.**

THIS WARRANTY APPLIES ONLY TO THE ORIGINAL RETAIL USER, AND DOES NOT APPLY TO PRODUCTS USED FOR ANY INDUSTRIAL, PROFESSIONAL OR COMMERCIAL PURPOSE. THE ORIGINAL DATED BILL OF SALE OR SALES SLIP MUST BE SUBMITTED TO THE AUTHORIZED SANYO SERVICE CENTER AT THE TIME WARRANTY SERVICE IS REQUESTED.

Subject to the OBLIGATIONS above and EXCLUSIONS below, SANYO FISHER COMPANY (SFC) warrants this SANYO product against defects in materials and workmanship for the periods specified below. SFC will repair or replace (at its option) the product and any of its parts which fail to conform to this warranty with new or reconditioned products or parts. The warranty period commences on the date the product was first purchased at retail.

**LABOR: 1 YEAR**

**PARTS: 1 YEAR**

**EXCLUSIONS**

This warranty does not cover (A) the adjustment of customer-operated controls as explained in the appropriate model's instruction manual, or (B) the repair of any product whose serial number has been altered, defaced or removed.

This warranty shall not apply to the cabinet or cosmetic parts, knobs, batteries or routine maintenance.

This warranty does not apply to uncrating, setup, installation, removal of the product for repair or reinstallation of the product after repair.

This warranty does not apply to the elimination of car static or motor noise, correction of antenna problems, or damage to compact discs, speakers, accessories or vehicle electrical systems.

This warranty does not apply to repairs or replacements necessitated by any cause beyond the control of SFC including, but not limited to, any malfunction, defect or failure caused by or resulting from unauthorized service or parts, improper maintenance, operation contrary to furnished instructions, shipping or transit accidents, modification or repair by the user, abuse, misuse, neglect, accident, incorrect power line voltage, fire, flood or other Acts of God, or normal wear and tear.

The foregoing is in lieu of all other expressed warranties and SFC does not assume or authorize any party to assume for it any other obligation or liability.

THE DURATION OF ANY WARRANTIES WHICH MAY BE IMPLIED BY LAW (INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS) IS LIMITED TO THE TERM OF THIS WARRANTY. IN NO EVENT SHALL SFC BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OWNERSHIP OR USE OF THIS PRODUCT, OR FOR ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS UNDER THIS WARRANTY DUE TO CAUSES BEYOND ITS CONTROL. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

For your protection in the event of theft or loss of this product, please fill in the information below for your own personal records.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

(Located on back or bottom side of unit)

Date of Purchase \_\_\_\_\_

Purchase Price \_\_\_\_\_

Where Purchased \_\_\_\_\_