# KENWOOD

# KTC-SR901

SIRIUS SATELLITE RADIO TUNER ► page 2- 12

# INSTRUCTION MANUAL

SINTONIZADOR DE RADIO POR SATÉLITE SIRIUS
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# MANUAL DE INSTRUCCIONES

KENWOOD CORPORATION

**SIRIUS**
Satellite Radio

**Take the time to read through this instruction manual.
Familiarity with installation and operation procedures will help
you obtain the best performance from your new sirius satellite
radio tuner.**

**For your records**
Record the serial number, found on the back of the unit, in the spaces
designated on the warranty card, and in the space provided  below.
Refer to the model and serial numbers whenever you call upon your
KENWOOD dealer for information or service on the product.
Model  KTC-SR901   Serial number _____

# *Contents*

✼ Displays shown in this manual are for descriptive purposes only, and may differ from actual displays.

# *Safety precautions*

### ⚠WARNING

#### *To prevent injury and/or fire, take the following precautions:*

- When extending the battery, or ground wires, make sure to use automotive-grade wires or other wires with a 0.75mm² (AWG18) or more to prevent wire deterioration and damage to the wire coating.
- Insert the unit all the way until it is fully locked in place. Otherwise it may fly out of place during collisions and other jolts.
- To prevent short circuits, never put or leave any metallic objects (e.g., coins or metal tools) inside the unit.
- If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.
- Be careful not to drop the unit or subject it to strong shock.

### ⚠CAUTION

#### *To prevent damage to the machine, take the following precautions:*

- Make sure to ground the unit to a negative 12V DC power supply.
- Do not open the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.
- During installation, do not use any screws except for the ones provided. The use of improper screws might result in damage to the main unit.
- When drilling a hole in the car to fix the brackets, make sure not to damage the fuel tank, brake tube, wiring harnesses, etc. on the other side.

### NOTE

- If you experience problems during installation, consult your Kenwood dealer.
- If the unit does not seem to be working right, try pressing the reset button on the control unit first. If that does not solve the problem, consult your Kenwood dealer.

### FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

#### *Cleaning the Unit*

If the front panel is dirty, wipe it clean with a silicon cloth or soft dry cloth with the power off.

### ⚠CAUTION

Do not use hard cloths or paint thinner, alcohol, or other volatile solvents. These may damage external surfaces or remove indicator characters.

### IMPORTANT INFORMATION

#### *About the disc changer to be connected:*

To connect a disc changer having the "O-N" switch to this unit, set the "O-N" switch to "N". To connect a disc changer having no "O-N" switch to this unit, the converter cord CA-DS100 and/or switching adapter KCA-S210A are required as options.

## What is Sirius Satellite Radio?

Sirius is radio the way it was meant to be: up to 100 new channels of digital quality programming delivered to listeners coast to coast via satellite. That means 60 channels of completely commercial-free music. Plus up to 40 more channels of news, sports, and entertainment from names like CNBC, Discovery, SCI-FI Channel, A&E, House of Blues, NPR, Speedvision and Comedy World.

Sirius is live, dynamic entertainment, completely focused on listeners. Every minute of every day of every week will be different. All 60 commercial-free music channels are created in-house and hosted by DJs who know and love the music. Do you like Reggae? How about Classic Rock or New Rock? Sirius has an array of choices spanning a vast range of musical tastes including the hits of the 50's, 60's, 70's, & 80's as well as Jazz, Country, Blues, Pop, Rap, R&B, Bluegrass, Alternative, Classical, Heavy Metal, Dance and many others…

From its state-of-the-art, digital broadcasting facility in Rockefeller Center, New York City, Sirius will deliver the broadest, deepest mix of radio entertainment from coast to coast.

Sirius will bring you music and entertainment programming that is simply not available on traditional radio in any market across the country. It's radio like you've never heard before. So Get Sirius and Listen Up! For more information, visit siriusradio.com.

## Operations

There are three kinds of actions (A, B and C) that have different functions depending on Control units to be connected.
See the description below to identify which action, A, B or C, your Control unit perform.

A:KDC-X859,KDC-X759,KDC-MP919,
   KDC-MPV7019,KDC-MPV619,KDC-X959,
   KDC-X659,KDC-MP819,KDC-719,KDC-X559
B:KDC-X917,KDC-X817,KDC-9017,
   KDC-X717,KDC-V7017,KDC-716S,KRC-535,
   KRC-435,KDC-519,KDC-X459,KDC-419,
   KDC-5019,KDC-4019, KDC-319
C:Z828,Z727,Z910DVD

❃:KVT-M700,KVT-911DVD
   See each instruction manual for details on the operation of KVT- M700 and KVT- 911DVD.

### Sirius ID [ESN] display

**<A models>**
Select the ESN (Electronic Serial Number) item in MENU of Control unit to display ESN.

**<B models>**
Press the [DISP] button repeatedly until ESN mode is displayed.

**<C models>**

1 Press the [S.A] button to enter the display control mode.

2 Press the [◄◄] or [►►I] button to select the "ESN" display.

3 Press the [S.A] button.

### Serial & Sirius ID [ESN]
It is especially important to retain the unit serial number and the electronic Sirius Identification number for service activation and potential future service changes.

### Selecting Sirius Mode

Press the [SRC] button. Select the "SIRIUS" display.

- You need to subscribe to SIRIUS to receive the service by Sirius Satellite Radio. Consult SIRIUS if "CALL 888-539 SIRIUS TO SUBSCRIBE"/"CALL 888 539-SIRI" appears.
- It may take a little time to start receiving after you selected the SIRIUS source.
- If the signal receiving fails, "Acquiring Signal"/"Linking" appears.
- Select the SIRIUS/DAB setting item in MENU for Control unit B, and then set "SIRIUS ".

## Switching Seek Mode

Sets the seeking mode.

### <A models>
Press the [AUTO] button.
Each time the button is pressed the Seek mode switches as shown below.

| Display | Operation |
| --- | --- |
| "Channel" | Normal manual seeking control. |
| "Preset" | Search in order of the channels in the Preset memory. |

> You cannot operate this unit during switching Channel or Category.

### <B models and C models>
Select Seek Mode in the MENU items of Control unit to press the [I◄◄]or [►►I] button.
Each time the button is pressed the Seek mode switches as shown below.

| Display | Operation |
| --- | --- |
| "AUTO1" | Press the [ ►►I ] button to seek for channels up the band. Press the [ I◄◄ ] button to seek for channels down the band. |
| "AUTO2" | Press the [ ►►I ] button to move to the next preset channel. Press the [ I◄◄ ] button to move to the last preset channel. |
| "MANUAL" | Press the [ ►►I ] button to increase Press the [ I◄◄ ] button to decrease. |

## Selecting the Preset Band

### <A models>
Press the [FM] button.
Each time the button is pressed the preset band switches between the SR1,SR2,SR3 and SR4.

### <B models and C models>
Press the [FM] button.
Each time the button is pressed the preset band switches between the SR1/Si1,SR2/Si2 and SR3/Si3.

## Channel Preset Memory

Putting the channel in the memory.

### <KDC-X859,KDC-X759,KDC-MP919>

**1 Select the preset band**
Press the [FM] button.

**2 Enter Memory mode**
Press the [#3] button for at least 1 second.
"Preset Memory" is displayed.

**3 Select the channel to put in the memory**
Press the [I◄◄] or [►►I] button.

**4 Select the preset number**
Press the [FM] or [AM] button.

**5 Put the channel in the memory**
Press the [#3] button for at least 2 seconds.
The preset number display blinks 1 time.

**6** Repeating steps 3 to 5 and putting the desired channel in the memory.
On each band, 1 channel can be put in the memory on each [#1] — [#6].

**7 Exit Memory mode**
Press the [#3] button.

### <Others>

**1 Select the preset band**
Press the [FM] button.

**2 Select the channel to put in the memory**
Press the [I◄◄] or [►►I] button.

**3 Put the channel in the memory**
Press the [#1] — [#6] button for at least 2 seconds.
The preset number display blinks 1 time.
On each band, 1 channel can be put in the memory on each [#1] — [#6] button.

> • Only the channel number is stored. Category information is not stored.
> • You can set up to 6 memories even on a control unit with 8 preset buttons.

## Preset Tuning

Calling up the channels in the memory.

### <KDC-X859,KDC-X759,KDC-MP919>

**1 Select the preset band**
Press the [FM] button.

**2 Call up the channel**
Press the [#1] — [#4] button.
The channels are called up as shown below.

| Press button | Call up number |
|---|---|
| [#1/5] | No.1 ⬌ No.5 |
| [#2/6] | No.2 ⬌ No.6 |
| [#3] | No.3 |
| [#4] | No.4 |

Each time the button is pressed, the called up channel switches cyclically.

### <Others>

**1 Select the preset band**
Press the [FM] button.

**2 Call up the channel**
Press the [#1] — [#6] button.

## Channel Scan (A models only)

Every receivable Channel is checked for 10 seconds.

### <KDC-X859,KDC-X759,KDC-MP919>
Select SCAN in the MENU items of Control unit, and press the [I◄◄] or [►►I] button for at least 1 second.

### Canceling Channel Scan
Press the [I◄◄] or [►►I] button for at least 1 second, or press the [MENU] button to release MENU.

### <Others>
Press the [AUTO] button for at least 2 seconds.

### Canceling Channel Scan
Press the [AUTO] button for at least 2 seconds.

## Channel Search (A models only)

You can switch from Up/Down of Channel in a category being selected to Previous/Next of Category that includes Channel being received and vice versa.

### <KDC-X859,KDC-X759,KDC-MP919>

**1 Enter Channel Search mode**
Press the [#2] button for at least 1 second.

**2 Select the Channel**
Press the [I◄◄] or [►►I] button.

**Select the Category**
Press the [FM] or [AM] button.

### Canceling Channel Search
Press the [#2] button.

### <Others>

**1 Enter Channel Search mode**
Press the [►II] button.

**2 Select the Channel**
Press the [I◄◄] or [►►I] button.

**Select the Category**
Press the [FM] or [AM] button.

### Canceling Channel Search
Press the [►II] button.

You cannot operate this unit until all the Category information is acquired.

## Switching Category (B models and C models)

The Category that includes the Channel received switches to the next.

Press the [AM] button.

• If there is no receivable Channel in Category, the Category switches to the next.
• You cannot operate this unit until all the Category information is acquired.
• Select category to switch to the first channel that contains that category. Select another channel in the same category, if necessary, on the display of the category name.

## Direct Access Tuning (A models only) (Function of remote)

Entering the channel and tuning.

**1 Enter Direct Access Tuning mode**
Press the [DIRECT] button on the remote.

**2 Enter the channel**
Press the number buttons.

**3 Do Channel Search**
Press the [◄◄] or [►►] button.

*Canceling Direct Access Tuning*
Press the [DIRECT] button on the remote.

- If you make no button operation for 10 seconds, the Direct Access Tuning mode is automatically canceled.
- You can set up to Channel number 223.
- If there is no signal in the input Channel, "NO CHANNEL "/"NO CH " appears.
- If you cannot receive any signal in the input Channel due to a bad condition on radio wave or another problem, "Acquiring Signal" appears.

## Switching Display

You can display various kinds of text data transmitted from broadcasting stations by switching as follows. (See the Display Switch items of Control unit for details on how to switch.)

What is displayed may partly depend on control units to be connected.

*<KDC-X859,KDC-X759,KDC-MP919, KDC-X959,KDC-X659, KDC-MP819,KDC-719,KDC-X559>*

**Information (Upper Part Display)**

| Band & Channel Number |
| --- |
| Channel Name |
| Song Title |
| Artist Name |
| Album Title |
| Category Name |

**Information (Lower Part Display)**

| Album Title |
| --- |
| Artist Name |
| Song Title |
| Channel Name |

You cannot apply the same setting to Upper Part and Lower Part.

*<KDC-MPV619,KDC-MPV7019>*

**Information**

| Band & Channel Number |
| --- |
| Channel Name |
| Song Title |
| Artist Name |
| Category Name |

*<Z828,Z727,Z910DVD>*

**Information (Upper Part Display)**

| Channel Number & Channel Name |
| --- |
| Song Title & Artist Name & Album Title |
| Category Name |
| ESN |
| Channel Number |

**Information (Lower Part Display)**

| Channel Number & Channel Name |
| --- |
| Song Title & Artist Name & Album Title |

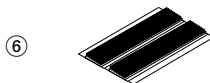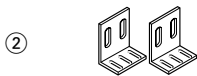You cannot apply the same setting to Upper Part and Lower Part.

*<Others (B model)>*

**Information**

| Channel Number & Channel Name / Channel Name |
| --- |
| Song Title & Artist Name & Album Title |
| Category Name |
| ESN |
| Channel Number |

## Accessories

①    ④ 

②    ⑤ 

③    ⑥ 

**⚠CAUTION**

The use of any accessories except for those provided might result in damage to the unit. Make sure only to use the accessories shipped with the unit, as shown above.
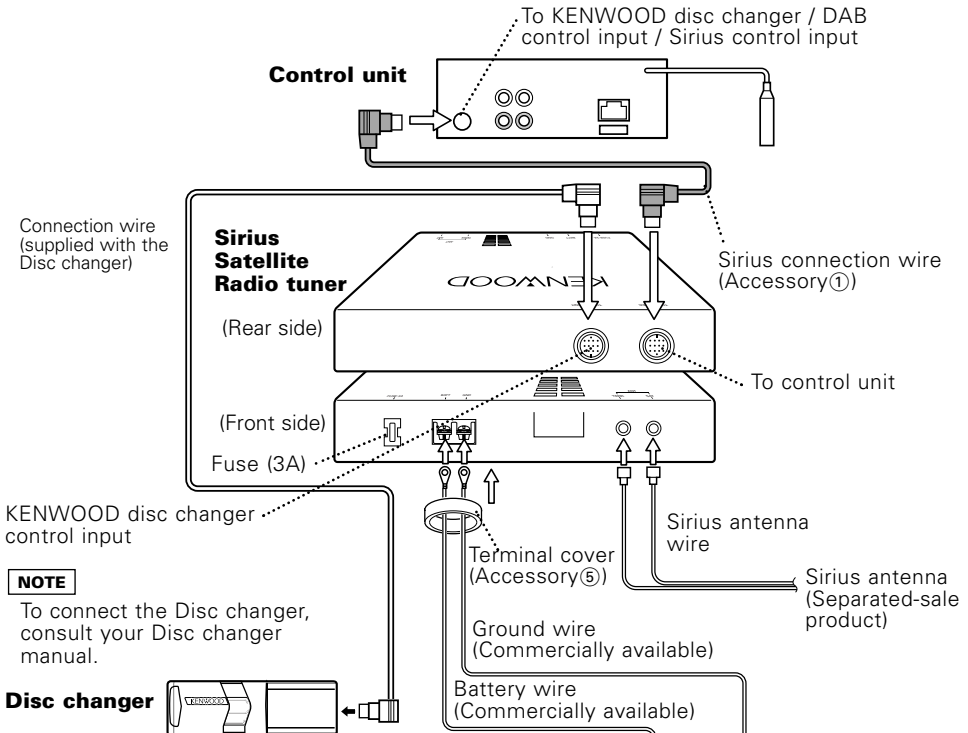
## Installation Procedure

1. To prevent short circuits, remove the key from the ignition and disconnect the ⊖ terminal of the battery.
2. Install the Sirius antenna and connect the antenna wire to the Sirius satellite radio tuner.
3. Connect the Sirius satellite radio tuner and the control unit using the provided Sirius connection wire.
4. Make the proper input and output wire connections for each unit.
5. Connect the battery wire and ground wire to the Sirius satellite radio tuner.
6. Install the unit in your car.
7. Reconnect the ⊖ terminal of the battery.
8. Press the reset button on the control unit.

**⚠CAUTION**

- Do not connect the Sirius control wire while the control unit is turned ON.
- Be sure to press the reset button on the control unit after installation.
- If your car is not prepared for this special connection-system, consult your Kenwood dealer.
- Make sure that all wire connections are securely made by inserting jacks until they lock completely.

- Some disc changers need conversion wires for connection. See the section on "Safety Precautions" for details.
- Do not let unconnected wires or terminals touch metal on the car or anything else conducting electricity. To prevent short circuits, also do not remove the caps on the ends of the unconnected wires or the terminals.
- If the fuse blows, first make sure that the wires have not caused a short circuit, then replace the old fuse with one with the same rating.
- Insulate unconnected wires with vinyl tape or other similar material.
- Take care so that the antenna wire and other connection wires are not caught by mobile parts. Otherwise wire disconnection or other trouble may result.
- Do not apply too much force on the antenna wire, other connection wires and connectors by bending a wire, etc. Otherwise wire disconnection or other trouble may result.
- After the unit is installed, check whether the brake lamps, indicators, wipers, etc. on the car are working properly.
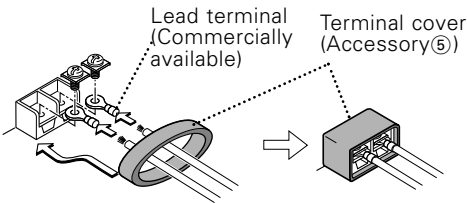
## Connecting Wires to Terminals

To KENWOOD disc changer / DAB control input / Sirius control input

**Control unit**

Connection wire (supplied with the Disc changer)

**Sirius Satellite Radio tuner**

(Rear side)

Sirius connection wire (Accessory①)

To control unit

(Front side)

Fuse (3A)

KENWOOD disc changer control input

Sirius antenna wire

Terminal cover (Accessory⑤)

Sirius antenna (Separated-sale product)

Ground wire (Commercially available)

Battery wire (Commercially available)

NOTE

To connect the Disc changer, consult your Disc changer manual.

**Disc changer**

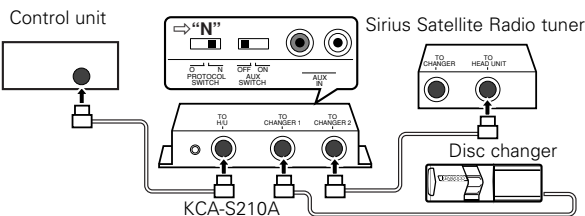Car fuse box (Main fuse)

Battery

*Power terminal*

Pass battery and ground wires through supplied terminal cover and connect to respective terminals. After completing connections, fasten terminal cover⑤ over terminal bracket.

Lead terminal (Commercially available)

Terminal cover (Accessory⑤)

■ *If you want to connect KCA-S210A*

Control unit

**"N"**

PROTOCOL SWITCH    AUX SWITCH    AUX IN

Sirius Satellite Radio tuner

TO CHANGER    TO HEAD UNIT

TO H/U    TO CHANGER 1    TO CHANGER 2

Disc changer

KCA-S210A

Connect the KTC-SR901 to the terminal labelled TO CHANGER 2.
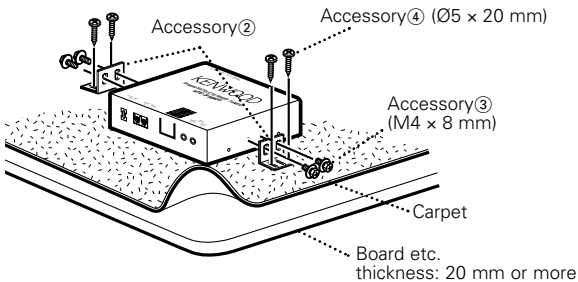
NOTE

Set the PROTOCOL selection switch to "N" position.

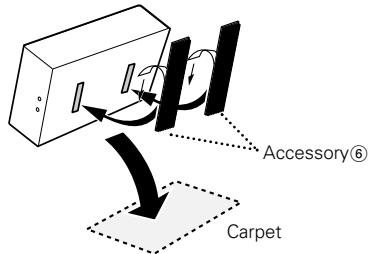## ■ *Mounting the Sirius Satellite radio tuner Unit*

**⚠CAUTION**

- Install the Sirius satellite radio tuner unit in a well-ventilated location and do not place objects on top of it.
- The Sirius satellite radio tuner unit is equipped with a cooling fan to lower the internal temperature. Do not block the holes of the cooling fan at the time of installation. Blocking the holes of the cooling fan will cease to allow the temperature to be lowered and will cause breakdown.
- When installing to the car, the unit should be securely fastened at a location that will not interfere with driving.

- When making a hole in the chassis, check that the gas tank, break pipe, wire harness, or other part is not located on the other side, and be careful not to cause scratches.
- When attaching the mounting fittings (Accessory②) to the Sirius satellite radio tuner unit, use only the supplied mounting screws (Accessory③) (M4 x 8 mm). Use of screws other than those supplied may result in internal damage or insecure mounting and is very dangerous.

• Installation using the self-tapping screws



Accessory②
Accessory④ (Ø5 × 20 mm)
Accessory③ (M4 × 8 mm)
Carpet
Board etc. thickness: 20 mm or more

• Installation using the velcro tapes



Accessory⑥
Carpet

**⚠CAUTION**

Please do not install the unit near the dashboard, the rear tray, or other important components. Doing so could lead to injury or accident should the unit come off due to a shock and strike a person or an important component.
Tapping screws should be used for mounting. (Attachment with velcro strips, although easy, can come off with a shock.)

## Troubleshooting Guide

**If you use this for the first time, it may be difficult to receive signals in the beginning. In such a case, leave the SIRIUS source ON for 3 minutes and turn it OFF and ON.**

**What might appear to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.**

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---|---|---|
| The Sirius mode cannot be selected. | The Sirius connection wire is not connected. | Use the Sirius connection wire to connect the control unit and the Sirius satellite radio tuner. |
| | Connect the power supply of the Sirius satellite radio tuner. | Connect the battery wire and ground wire to the Sirius satellite radio tuner. |
| | The PROTOCOL selection switch of the changer switching unit "KCA-S210A" is not set properly. | Set the PROTOCOL selection switch to "N" position. |
| | The changer switching unit "KCA-S210A" is not connected properly. | Connect the KTC-SR901 to the terminal labelled TO CHANGER 2. See the section on "Connecting Wires to Terminals". |
| | The fuse has blown. | After checking for short circuits in the wires, replace the fuse with one having the same rating. |
| Nothing happens when the buttons are pressed. | The computer chip in the unit is not functioning normally. | Press the reset button on the Control unit . |
| No sound can be heard, or the volume is low. | The input/output wires or wiring harness are connected incorrectly. | Reconnect the input/output wires and/or the wiring harness correctly. See the section on "Connecting Wires to Terminals". |
| No broadcast can be received. | The Sirius antenna is not connected. | Connect it properly by referring to "Connecting Wires to Terminals". |
| | No subscription is established. | Subscribe to SIRIUS. |

**The following messages are displayed when certain problems are occurring in your system. Take the recommended actions.**

***ANTENNA ERROR / ANT ERR :***
Antenna is not connected correctly.
⇨ Make sure the antenna is connected correctly and then turn OFF/ON of the SIRIUS source or Control unit.

***TUNER ERROR / TUNE ERR :***
Broadcast cannot be received due to an error in this unit.
⇨ Turn OFF/ON of the SIRIUS source or Control unit, or press the reset button of Control unit.

***ESN ERROR / ESN ERR :***
ESN (Electronic Serial Number) is not registered in this unit.
⇨ Consult your nearest service center.

## Specifications

**Specifications subject to change without notice.**

### *Sirius tuner section*

Frequency range (Overall) ...................................................2320 MHz – 2332.5 MHz

(TDM Channel#1(fc)) ................................................2322.293 MHz

(COFDM Channel(fc)) ..............................................2326.25 MHz

(TDM Channel#2(fc)) ...............................................2330.207 MHz

Usable sensitivity (TDM Channel) ........................................... - 74 dBm – - 46 dBm

(COFDM Channel) ........................................ - 80 dBm – + 4 dBm

### *General*

Operating voltage .........................................................14.4 V (11 – 16 V allowable)

Current consumption ....................................................................................800 mA

Operational temperature range.........................................................-20 °C – +70 °C

Installation size (W × H × D) ..............................................179.6 × 30.0 × 159.6 mm

7-1/16 × 1-3/16 × 6-1/4 in.

Weight: ...........................................................................................1.543 lbs (700 g)