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Cat. No. 20-225

OWNER'S MANUAL

Please read before using this equipment.

# DX-395

FM/AM/SW1/SW2 PLL Synthesized Receiver







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# FEATURES

Your Radio Shack DX-395 FM/AM/ SW1/SW2 PLL Synthesized Receiver is designed for your active lifestyle. Its portable, lightweight design lets you listen to music, sports, or news on AM, FM, and two international shortwave broadcast bands almost anywhere you go. The alarm clock and sleep timer features add to this radio's usefulness, practicality, and portability.

Its features include:

**Four Band Selection** — lets you listen to your choice of FM stations, AM stations, and SW1 and SW2 (shortwave) stations.

**20 Station Memory** — lets you store five stations in each band into memory for easy access.

**LCD Display** — shows the time and the currently selected station.

Alarm Clock — lets you set a time for the radio to turn on automatically.

**Sleep Timer** — plays the radio for 59 minutes and automatically turns it off.

**PLL Tuning** — digital phase locked loop synthesizer provides drift-free frequency tuning with the highest degree of accuracy and stability.

**Earphone Jack** — lets you connect earphones or any headphones with a  $1/_{8}$ -inch plug to the radio.

**Built-In Speaker** — means you can listen to your radio without an ear-phone.

**Lock Switch** — prevents accidentally changing the tuned frequency.

**Display Light** — lets you see the display in dark surroundings.

**Sensitivity Switch** — lets you improve reception by adjusting the signal strength and distance.

Three Power Sources — lets you power your radio either from internal batteries, your vehicle's cigarette lighter socket (using an optional DC adapter), or AC power (using an optional AC adapter).

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# PREPARATION

## SUPPLYING POWER

### Using Internal Battery Power

When you use battery power, your radio requires four AA batteries for operation and two AAA batteries for clock and memory station backup. We recommend alkaline batteries such as Radio Shack Cat. No. 23-552 and 23-555.

Follow these steps to install batteries.

 Slide the battery compartment cover in the direction of the arrow and remove the cover.

 Insert the two AAA batteries into the battery compartment, as indicated by the polarity symbols (+ and -) inside the compartment.

**Note:** To make it easy to remove the batteries later, place the batteries on top of the ribbon.

**Caution:** Always use fresh batteries of the required size and type.

- Insert the four AA batteries into the battery compartment, as indicated by the polarity symbols (+ and –) above the compartment.
- 4. Replace the cover.

**Note:** If the radio operates erratically or does not receive strong FM stations, replace the batteries.

## Using Vehicle Battery Power

To power the radio from your vehicle's cigarette lighter socket, you need a DC adapter (not supplied) such as Radio Shack Cat. No. 14-844.

#### Cautions:

 You must use an adapter that supplies 6 volts with the center tip set to negative, delivers at least 300 milliamps, and has a plug that correctly fits the radio's DC 6V jack. The recommended adapter meets these requirements. Using an adapter that does not meet these specifications could seriously damage the radio.



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 Always plug the adapter into the radio before you plug it into the cigarette lighter socket. Always unplug the DC adapter from the cigarette lighter socket before you unplug it from the radio.

1. Set the adapter's voltage switch to 6V.

- 2. Insert the adapter's barrel plug into the radio's **DC 6V** jack.
- 3. Insert the adapter's cigarettelighter plug into the vehicle's cigarette lighter socket.

### **Using AC Power**

To power the radio with AC power, you need an AC adapter (not supplied). We recommend Radio Shack Cat. No. 273-1650.

#### Cautions:

 You must use an adapter that supplies 6 volts with the center tip set to negative, delivers at least 300 milliamps, and has a plug that correctly fits the radio's DC 6V jack. The recommended adapter meets these requirements. Using an adapter that does not meet these specifications could seriously damage the radio.

 Always plug the adapter into the radio before you plug it into the AC outlet. Always unplug the AC adapter from the AC outlet before you unplug it from the radio.

**Note:** Follow the adapter's instructions to set the voltage switch to 6 volts and select the proper adaptaplug.

- 1. Insert the adaptaplug into the radio's **DC 6V** jack.
- 2. Plug the adapter into a standard AC outlet.

# SETTING THE CLOCK

After you connect power, **SEC** flashes on the display and the clock begins to run.

Follow these steps to set the time.

1. Press and hold **TIME ADJ**. ADJ appears.

## **USING EARPHONES**

You can use the built-in speaker to listen to the radio. Or, you can use stereo earphones (not supplied) with a 1/8-inch plug to listen in private.

Insert the earphones' 1/8-inch plug into the radio's earphone jack.

- 2. While holding down **TIME ADJ**, press **HR** to set the hour.
- 3. While holding down **TIME ADJ**, press **MIN** to set the minute.

#### Notes:

- To advance the settings rapidly, press and hold HR or MIN.
- **PM** appears when the clock displays a PM hour. **AM** appears when the clock displays an AM hour.
- 4. Release TIME ADJ. ADJ disappears.

**Note:** The built-in speaker disconnects when you plug in earphones.

#### Listening Safely

To protect your hearing, follow these guidelines when you use earphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended highvolume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.



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## **Traffic Safety**

Do not wear earphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and is illegal in some areas.

Even though some earphones are designed to let you hear some outside sounds when listening at normal volume levels, they still present a traffic hazard.

## **USING THE STAND**

You can use the stand on the back of the radio to prop it up so you can easily see the clock display. Simply lift the stand away from the radio and set the radio on a flat surface.





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# RADIO OPERATION

## **TUNING THE RADIO**

- 1. Set the volume to its lowest setting, and lift up and extend the antenna.
- 4. Set SENS to DX or LOC.
  - DX to receive weak signals
  - LOC to receive strong (local) signals

2. Set **ON/OFF** to **ON** to turn on the radio. The last frequency tuned is automatically selected and displayed.

**Note: SENS** only functions for FM and shortwave reception.

 Press TUNING ∧ or ∨ to tune to the desired station.

**Note:** To automatically tune the radio to the next strong signal, press and hold **TUNING**  $\land$  or  $\checkmark$  for about 2 seconds.

- Adjust the volume to a comfortable level.
- 7. Set the tone switch to HI or LO.
  - HI to enhance music
  - LO to enhance speech
- FM to receive signals in the 87.5 to 107.9 MHz range
- AM to receive signals in the 530 to 1710 KHz range
- SW1 to receive signals in the 3.20 to 7.30 MHz range
- SW2 to receive signals in the 9.50 to 21.75 MHz range
- 8. Set **ON/OFF** to **OFF** to turn off the radio.



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3. Slide FM/AM/SW1/SW2 to the desired band.

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# STORING STATIONS

You can store up to 20 stations (5 each in FM, AM, SW1 and SW2) and recall them with the touch of a button. Follow these steps to store a station into memory.

- 1. Press **TUNING** ∧ or ∨ to tune to the station you want to store.
- 2. Press STORE. ch flashes.

## SETTING THE SLEEP FUNCTION

This feature allows you to go to sleep with the radio playing. The radio plays for 59 minutes, then turns off automatically.

- 1. Tune to the desired station.
- 2. Set ON/OFF to OFF.
- 3. Press **SLEEP**. **SLEEP** and the last selected frequency appear and the radio turns on.

 Within 5 seconds, press a number button (1-5) to store a station in that memory location. The button number appears on the display.

**Note:** If you do not store a station within 5 seconds, **ch** disappears. Repeat Steps 2-3.

To tune to a stored station, press the desired memory location button.

To turn off the sleep function before it automatically turns off, press **SLEEP** again. **SLEEP** disappears and the radio turns off.

## **USING LOCK**

To prevent accidentally changing the station, you can set the lock switch to **r-O**. This prevents manual tuning or selecting any of the preset memory buttons.



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## LIGHTING THE DISPLAY

To view the screen in dark surroundings, press and hold **LIGHT**.

## **USING THE ALARM**

The alarm feature lets you select a time for the radio to turn on. Follow these steps to set the alarm time.

1. Press ALARM. STANDBY and ONTIME appear with the current time.

- 2. Press and hold TIME ADJ. ADJ appears.
- 3. While holding down **TIME ADJ**, press **HR** to set the alarm hour.

4. While holding down **TIME ADJ**, press **MIN** to set the alarm minute.

**Note:** To advance the settings rapidly, press and hold **HR** or **MIN**.

5. Release TIME ADJ. ADJ and ONTIME disappear, but STANDBY remains.

**Note:** The alarm time is now set, and the alarm is on.

Follow these steps to turn the alarm on or off.

1. Turn on the radio, and tune to the station you want to hear at the set alarm time.

Adjust the volume to the desired level.

- 2. Turn off the radio.
- 3. Press ALARM until STANDBY appears on the screen.

At the set alarm time, the radio turns on and plays until you turn it off.

- 4. To turn off the alarm, press **ALARM** until **STANDBY** disappears.
- To turn the alarm back on to sound again the next day, press ALARM until STANDBY appears.

**Note:** Press **DISPLAY** at any time to see the alarm time and the station you set.



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# MAINTENANCE

Your Radio Shack DX-395 FM/AM/SW1/SW2 PLL Synthesized Receiver is an example of superior design and craftsmanship. The following suggestions will help you care for the receiver so you can enjoy it for years.



Keep the receiver dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Handle the receiver gently and carefully. Dropping it can damage circuit boards and cases and can cause the receiver to work improperly.



Use and store the receiver only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.



Keep the receiver away from dust and dirt, which can cause premature wear of parts.



Wipe the receiver with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the receiver.

Modifying or tampering with the DX-395's internal components can cause a malfunction and might invalidate the receiver's warranty and void your FCC authorization to operate it. If your receiver is not performing as it should, take it to your local Radio Shack store for assistance.





# THE FCC WANTS YOU TO KNOW

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn off your radio. If the interference goes away, your radio is causing the interference. Try to eliminate the interference by:

- Moving your radio away from the receiver
- Connecting your radio to an outlet that is on a different electrical circuit from the receiver
- Contacting your local Radio Shack store for help

If you cannot eliminate the interference, the FCC requires that you stop using your radio.



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# SPECIFICATIONS

#### Frequencies

AM	530–1710 KHz
FM	
	3.2–7.3 MHz
SW2	9.5–21.75 MHz
Power Sources 2 AAA batte	ries (for backup) (Cat. No. 23-555) and
	4 AA batteries (Cat. No. 23-552),
	DC Adapter (Cat. No. 14-844),
	AC Adapter (Cat. No. 273-1650)
Dimensions (HWD)	$4^{3}/_{8} \times 7^{5}/_{8} \times 1^{11}/_{16}$ Inches
	(111 $ imes$ 193 $ imes$ 42 mm)
Weight	1 lb. 7 oz. (771 gm)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

## RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 90 days from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage. EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO

EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES ARE LIM-ITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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