

Service Manual

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MTNC030312A1

B05

Service Manual

Color Television



- CT-2733HF

NA8MS

This simplified service manual is issued to add listed models to the simplified service manual order MTNC020203A1 (CT-27SX12F). Unique settings and parts list are included in this simplified manual. Please file and use this simplified service manual together with the simplified service manual order MTNC020203A1 (CT-27SX12F) and the main service manual order No. MTNC010527C1 (CT-27SX11E).



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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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4 Receiver feature table

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FEATURE/MODEL	CT-2733HF
CHASSIS	GP368
TUNNING SYSTEM	GEN III
CLOSE CAPTION	X
V-CHIP	X
CHANNEL COUNT	181
75 OHM INPUT	X
REMOTE	NOT INCLUDED
CRT SUPPLIER	SAMSUNG (FLAT)
CHASSIS	NA8MS
COMB FILTER	3 DIG
HEC/VEC (X=BOTH)	VEC
VM	X
V/A NORM (X=BOTH)	V
COLOR TEMP	X
AUTO ON	X
MTS/SAP/DBX	X
BUILT-IN AUDIO POWER	7WX2
No. OF SPEAKERS	2
SPEAKER TYPE	DOME
BASS/BALANCE/TREBLE CONTROL	X
AI SOUND	X (ALWAYS ON)
SURROUND/BBE	BBE
A/V (REAR/FRONT)	3(2/1)
S-VHS INPUT (REAR/FRONT)	1/1
COMPONENT INPUT (REAR/FRONT)	1/0
SMART PLUG INTERFACE	SMART PLUG (RJ-11)
AUDIO LINE OUT	STEREO
MISC	GEN 3 MICRO FOR SPECTRADYNE
EPJ/HPJ/MISC	HPJ

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6 Clone Box Use

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The clone box uploads (LEARN) the settings of one television and downloads (TEACH) them to other televisions. This places the television into Hotel Mode.

NOTE:

The Clone Box is not supplied with the set. It can be purchased separately.

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6.1 Setting the “Master” Television

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The features listed in the HOTEL Mode table must be adjusted before cloning can begin.

1. Turn the television ON.
2. Access the Main Menu by pressing the ACTION button.
3. Access the Set Up menu.
 - Use the CH and VOL buttons to highlight the Set Up icon, then press the ACTION button
 - Use the CH buttons to highlight AUTO PROG (Auto Channel Programming), then press the VOL button to begin programming.

NOTE:

This step is mandatory.

- If necessary, use MANUAL PROG (Manual Channel Programming) to delete any undesired channels.
 - Press the ACTION button to return to the Main Menu.
4. If necessary, access the Picture menu.
 - Use the CH and VOL buttons to highlight the Picture icon, then press the ACTION button.
 - Use the CH buttons to highlight a feature, then press the VOL buttons to adjust them.
 - Press the ACTION button to return to the Main Menu.
 5. If desired, access the CHANNELS menu
 - Use the CH and VOL buttons to highlight CHANNELS icon, then press the ACTION button.

- Highlight MANUAL CAPTION and press VOL →.
 - Use numeric keypad or Vol buttons to select desired channels. Use the CH buttons to highlight the character position, then press the VOL buttons to select characters for the channel caption.
 - Press the ACTION button to return to the Main Menu.
6. If desired, access the SET UP menu to set the Energy Management feature. This feature lets you program the television to turn OFF after a pre-determined period of time from the last keyed-in instruction (pressing any buttons on the TV or on the remote control) received by the television.
- Use the CH and VOL buttons to highlight the Setup icon, then press the ACTION button.
 - Use the CH buttons to highlight the Energy Management feature.
 - Press VOL ← or → button to select OFF or 1 through 15 Hours.
7. Exit the Main Menu by pressing the ACTION button.
8. If necessary, set the maximum volume level.
9. If the hotel has hotel “barker” channel, tune the set to the “barker” channel.

NOTE:

Auto Power On feature setting, Audio settings and Channels menu settings can also be cloned.

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6.2 Uploading Television Settings into the Clone Box (LEARN)

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1. Press the POWER ON button on the clone box.
 - The LEDs will flash red and green to confirm power is ON.
2. Connect the clone box to the Digital Interface port on the back of the television.
 - The television must be plugged into an AC outlet but can be either OFF or ON.
3. Hold the ALT button while pressing the LEARN button.
 - The red LED will flash while the data is uploaded to the box. The green LED will light for about two (2) seconds when the procedure is complete.

NOTE:

The television is now in HOTEL Mode.

4. Disconnect the clone box from the television and turn it OFF.

NOTE:

Data is not lost even if the battery is removed.

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6.3 Downloading Settings into Other Televisions (TEACH)

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1. Press the POWER ON button on the clone box.
 - The LEDs will flash red and green to confirm power is ON.
2. Connect the clone box to the Digital Interface port on the back of the television.
 - The television must be plugged into an AC outlet but can be either OFF or ON.
3. Press the TEACH button.
 - The green LED will flash while data is downloaded to the television. The green LED will light for about two (2) seconds when the procedure is complete.

NOTE:

The television is now in HOTEL Mode.

4. Disconnect the clone box from the television and turn it OFF.
5. Repeat steps 1 through 4 to set up other televisions.

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6.4 Setting Individual Volume Limits

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This procedure allows the maximum volume level to be changed on individual televisions.

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[6.4.2 For higher volume](#)

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6.4.1 For lower volume

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The television must be in HOTEL mode.

1. Turn television ON.
2. Adjust the television volume to desired level.

NOTE:

This will become the new maximum volume level

3. Press the POWER ON button on the clone box.
 - The LEDs will flash red and green to confirm power is ON.
4. Connect the clone box to the Digital Interface port on the back of the television.
5. Hold the ALT button while pressing the LEARN button on the clone box.
 - The red LED will flash while the data is uploaded into the box. The green LED will light for about two (2) seconds when the procedure is complete.
6. Disconnect the clone box from the television and turn it OFF.
7. Reset the volume on the television.
8. Refer to the section entitled Downloading Settings into Other Televisions (TEACH).

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6.4.2 For higher volume

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The television must be in Normal TV mode. Refer to the section entitled Resetting the Television to Normal TV mode.

1. Turn television ON.
2. Adjust the television volume to the minimum setting.
3. Press the POWER ON button on the clone box.
 - The LEDs will flash red and green to confirm power is ON.
4. Connect the clone box to the Digital Interface port on the back of the television.
5. Adjust the television volume to maximum desired level.
6. Hold the ALT button while pressing the LEARN button on the clone box
 - The red LED will flash while the data is uploaded into the box. The green LED will light for about two (2) seconds when the procedure is complete.
 - If the green LED does not light for about two (2) seconds, retry by holding the ALT button while pressing the LEARN button.
7. Disconnect the clone box from the television and turn it OFF.
8. Reset the volume on the television.
9. Refer to the section entitled Downloading Settings into Other Televisions (TEACH).

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6.5 Testing the Settings in the Clone Box

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This test compares the clone box settings with the television settings. The television must be in HOTEL mode

1. Press the POWER ON button on the clone box.
 - The LEDs will flash red and green to confirm power is ON.
2. Connect the clone box to the Digital Interface port on the back of the television.
 - The television must be plugged into an AC outlet but can be either OFF or ON.
3. Press the TEST button.
 - The LEDs will flash red and green while the data is compared. The green LED will light for about two (2) seconds if the settings in the box match the television.
4. Disconnect the clone box from the television and turn it OFF.

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6.6 Testing the Clone Box Battery

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1. Press the POWER ON button on the clone box.
 - The LEDs will flash red and green to confirm power is ON.
2. Hold the ALT button while pressing the TEST button.
 - The LEDs will alternately flash red and green while the box is tested.

NOTE:

Replace the 9 volt battery if the LEDs do not flash red and green.

- The green LED will light for about two (2) seconds, if battery is charged.

NOTE:

If the green LED does not light for about two (2) seconds at the end of the test, new data must be downloaded into the box.

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6.7 Resetting the Television to Normal TV Mode

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1. Press the POWER ON button on the clone box
 - The LEDs will flash red and green to confirm power is ON
2. Connect the clone box to the Digital Interface port on the back of the television.
 - The television must be plugged into an AC outlet but can be either OFF or ON
3. Press the AMS button.

NOTE:

Insert a slender tool about 3/4 inch (paper clip) into the opening.

- The green LED will flash while the television is reset to TV mode. The green LED will light for about two (2) seconds when the procedure is complete.
4. Disconnect the clone box from the television and turn it OFF.
 5. Press the ACTION + POWER buttons on the front of the set for 5 seconds to reset the TV to factory default mode. Any programed channel, channel caption and other user defined settings will be lost.

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6.8 Setting the Television without a Clone Box

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[6.8.1 Switching to Hotel Mode \(All Models\)](#)

[6.8.2 Switching to Normal TV Mode](#)

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6.8.1 Switching to Hotel Mode (All Models)

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Adjust the features listed in the HOTEL Mode Feature Chart before switching modes.

1. Press the ACTION and the VOL → buttons on the front control panel simultaneously.
2. Within a second, press the ACTION and the CH ↑ buttons on the front control panel simultaneously.
3. ON will flash in red in the lower corner of the screen, indicating HOTEL Mode.

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6.8.2 Switching to Normal TV Mode

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1. Repeat steps 1 and 2 from the previous section.
2. OFF will flash in red in the lower corner of the screen, indicating Normal TV Mode.

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