

C-SPAN Networks

C-SPAN® C-SPAN2 C-SPAN3®

Supported Receiver Models:

Analog and Digital Single-Channel Output

- **DSR4410** with Firmware Version **1AE**
- **DSR4402X** with Firmware Version **15A**
- **DSR4550**

Digital Multi-Program Output

- **DSR4410MD** with Firmware Version **1B2**

High Definition

- **DSR6050** with Firmware Version **1C4**

DSR4410, 4402X, and 4550 have **Single** program output.
DSR4410MD has **Multiple** program output.

Motorola DSR4410 & DSR4402X IRDs provide both Analog and Digital (ASI) output of a single Standard Definition channel

DSR4410MD has only Digital output. (ASI & GIG)

MPEG-4 HD to MPEG-2 HD transcoding

Downlink Information

Satellite:

Galaxy 14 (125 Degrees West Longitude)

Polarity:

Vertical

Transponder:

C-Band Transponder 12

"Custom"/"LFreq" L-Band Tuning Frequency

1210

Modulation Mode:

DCII Manual

Symbol Rate:

29.27 Msps

FEC:

3/4 Combined

VCT ID

986



C-SPAN

Channel **101** Standard Definition

Channel **201** High Definition

C-SPAN2

Channel **102** Standard Definition

Channel **202** High Definition

C-SPAN3

Channel **103** Standard Definition

Channel **203** High Definition

C-SPAN Service Move From AMC10 To Galaxy 14

Receiver Setup Instructions

1.0 Service Move Fast Facts And Schedule

- Existing C-SPAN Services on AMC10 Transponder 19 are being moved to Galaxy 14 Transponder 12.
- Galaxy 14 is located at 125 degrees West Longitude.
- Transmission on Galaxy 14 Transponder 12 begins September 29, 2018 at 9:00 AM ET.
- Transmission on AMC10 Transponder 19 ends December 3, 2018 at 11:59:59 PM. ET.
- A new Virtual Channel Table (VCT = 986) number will be used to receive Galaxy 14 Transponder 12.
- Individual service numbers, bit rates and formats remain unchanged.
- A front panel factory reset is required on the receiver when transitioning from AMC10 to Galaxy 14. All manual configurations will be lost with the factory rest. Manual settings for audio levels, DSR4410MD ACPs and IP addresses will need to be documented so that they can be reentered at the receiver's front panel.
- All settings controlled by the uplink encoder system will return to their previous settings.

2.0 Satellite and Channel Information Chart

The Satellite and Channel Information Chart below, Figure 1, provides detailed information for all C-SPAN services on Galaxy 14. This information is required to properly configure any ARRIS Motorola receiver.

Galaxy 14 At 125 Degrees West Longitude					
Transponder 12 Vertical C-Band 3940 MHz					
L-Band Frequency 1210 MHz					
29.27 Msps ¾ Combined DCII Manual					
Virtual Channel Table (VCT) = 986					
Virtual Channel	Virtual Channel Name	MPEG Service Number	Video	Audio1	Commercial Insertion Cue Tone
101	C-SPAN	11	SD-525i	AC3 Stereo English	None
102	C-SPAN2	12	SD-525i	AC3 Stereo English	None
103	C-SPAN3	13	SD-525i	AC3 Stereo English	None
201	C-SPAN-HD	21	HD-1080i	AC3 Stereo English	None
202	C-SPAN2-HD	22	HD-1080i	AC3 Stereo English	None
203	C-SPAN3-HD	23	HD-1080i	AC3 Stereo English	None

Figure 1: Satellite and Channel Information Chart

3.0 Before The Service Move

1. Document existing receiver user settings which will be lost after factory reset. For example:
 - Audio Left And Right Levels
 - IP Addresses, Masks and Gateways
 - Multi-Decryter Manually set ACPs.
2. Pre-Install Galaxy 14 Vertical L-Band coax cable but do not connect to receiver.

4.0 Start The Service Move

1. Disconnect All L-Band cables from the receiver.
2. Connect Galaxy 14 Vertical L-Band coax cable.
3. From the Main Menu use the ◀▶ to select **Install**. Press **ENTER**.
4. Use the ▼▲ buttons to select the **RESET** menu. Press **ENTER**.
5. Use the ▼▲ buttons to select the **FACTORY** reset type. Press **ENTER**.
6. Use the ▼▲ buttons to select the **YES** proceed. Press **ENTER**.
7. The receiver will reboot. This will take a couple of minutes.

5.0 Tuning Satellite Feed

1. From the Main Menu use the ◀▶ to select **Install**. Press **ENTER**.
2. Use the ▼▲ buttons to select the **MANUAL TUNE** menu. (if not there already)
3. On the **MANUAL TUNE** menu, press ▶ to **Mode** and press **ENTER**.
4. Use the ▼ or ▲ button to change the **Mode** from Xpndr to **L Freq**. Press **ENTER**.
5. Press the ▶ button to access the **LFreq** field and press **ENTER** to move the cursor down to the frequency value. Use ▲▼◀▶ buttons to edit to **1210.00**. Press **ENTER** to save.
6. Use the ◀▶ buttons to move the cursor to **MANUAL TUNE**. (upper left corner)
7. Press the ▼ button to access the **MODULATION** menu.
8. Use the ◀▶ buttons to select **Mode**, press **ENTER**.
9. Press the ▲ button once to select **DCII-MAN**. Press **ENTER**.
10. Use the ▶ button to select **Symbol Code Format**. Press **ENTER**.
11. Press the ▲ button **thirty times** to access the **29.27 3/4 Combined** choice. Press **ENTER** to save.
12. Press ▶ button once to move the cursor back to **MODULATION**. (upper left corner)
13. Press **ENTER** to display the **Main Menu**.

Wait for the green **SIGNAL** LED to illuminate. This can take up to 2 minutes. Do not proceed to the next step if the **SIGNAL** LED does not come on; proceed to Basic Troubleshooting Tips for No Signal Lock in Section 4.

6.0 Configuring Channel Parameters

Before viewing video and audio on the DSR-4410 IRD, the operator must select the correct Virtual Channel Table (VCT) ID and Channel number. In addition, the IRD must be authorized for the intended service. Follow the steps below to enter the correct VCT ID and Channel number.

1. From the Main Menu use the ◀▶ button to select **Channel**. Press **ENTER**.
2. Use the ▶ button to move the cursor to **VCT**, press **ENTER**.
3. Use the ▼▲ buttons to *reveal* the **VCT** number **986**. Press **ENTER** to save.
4. Use the ▶ button to move the cursor to **Chnl**, press **ENTER**.
5. Use the ▼▲ buttons to scroll through available channel numbers.
 - a. For SD use **101 for C-SPAN**, **102 for C-SPAN2** & **103 for C-SPAN3**.
 - b. For HD use **201 for C-SPAN-HD**, **202 for C-SPAN2-HD** & **203 for C-SPAN3-HD**.
 - c. Press **ENTER** to save.
6. Use the ◀▶ button to move the cursor to **CHANNEL**. Press **ENTER** to return to the **Main Menu**.

7.0 Finish The Service Move

From the receiver's front panel enter the user settings documented in step 2.0.

8.0 If You Have Trouble

Basic Troubleshooting tips for no DigiCipher/Signal lock

- Confirm the correct signal cable, Galaxy 14 Vertical, is connected to the L-Band input Port 0.
- Confirm LNB power settings.
- In the Installation→Modulation menu, verify Mode = DCII-MAN, Symbol Code Format = 29.27 ¾ Combined
- Verify Input Port 0 and L-Band Freq 1210.00 MHz is selected in the Installation→Manual Tune menu.
- Try a power reset.
- Try one more factory reset, which will remove all settings. Then proceed with the setup steps in section 4.0.

Before Contacting C-SPAN Retrieve Unit Address

The Unit Address can be obtained from a sticker on the bottom of unit, on the outside of the shipping carton.

Easier still, the Unit Address can be retrieved through the IRD menus. It is in the 16-digit format: 000-03XXX-XXXX-XXX

The final three digits are not needed for authorization.

1. From main menu use the ◀▶ to highlight **Diag(nostics)**. Press **ENTER** then use ▼ button to view the **Unit Address**.

			■							■								
--	--	--	---	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--

2. Provide this Unit Address to C-SPAN for Authorization. (See next step.)
Once the unit is authorized, the **AUTHORIZED** LED will illuminate and output will begin.

Calling for IRD Trip Or Authorization

C-SPAN will administer network authorizations for your IRD Monday through Friday 9 AM to 5PM EST. For authorization, have your new DigiCipher Unit Address(s), and contact C-SPAN, 1-202-626-4367. A C-SPAN IRD Specialist will authorize your new DigiCipher Unit Address.