DSR-4450/DSR-4470 Decoder Quick Start Guide

1. Rack Mounting

It is recommended the DSR-4450 / DSR-4470 be installed and secured in a standard EIA 19" rack. Refer to the DSR-4450/DSR-4470 User Manual included in the box for detailed information on installation and cable connection.

- Electrical connection: The DSR Decoder is powered by an AC power supply
- Temperature: This equipment is intended for a maximum operating ambient temperature of 50° C.

2. Cable Connections

Once you have installed and configured the XOS IRD, and assigned the desired program(s) to one or more ASI output ports, you are ready to proceed with connecting and configuring the DSR Decoder for your analog service(s)

Please refer to the DSR Decoder backplane and sample wiring diagrams on Page 2 of this guide.

Note: Eight (8) Mini-BNC to BNC adapter cables are provided with each XOS IRD.

1. Connect the ASI cable from the XOS IRD ASI port to the DSR Decoder ASI input. If you have more than 8 analog channels, cascading the ASI as illustrated in the Sample Wiring Diagram (Section 7 of this guide)

2. Connect the composite video and audio cables to your analog modulator or analog Ad Insertion system. You may initially connect to a monitor to verify composite output.

3. Navigating the Front Panel Menu System

Please refer to the Front Panel Hierarchy diagram in Section 4. For detailed instructions, please consult the full User Guide.

The Status/Instruction bar at the bottom of the screen serves three purposes:
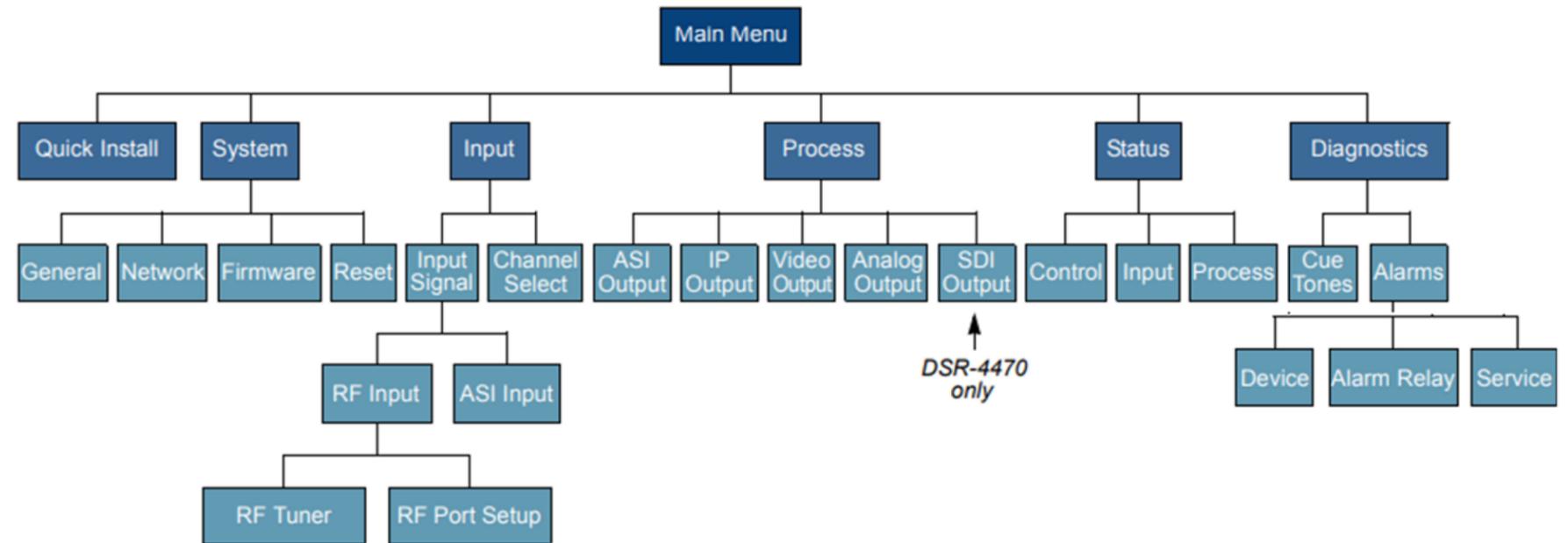- Instructions (white text) assist the operator with helpful tips for operation.
- Parameter name (white text) shows the name of the currently-highlighted parameter.
- Navigation icons (in the bottom right corner) show which of the five front-panel buttons may be   used to navigate the menu system.

To navigate the menu system
1. Use the up/down buttons to move the highlight up or down.
2. Once the desired menu item is highlighted, press **OK** to enter the menu.
3. If it is necessary to exit the current menu and move to the previous menu, press button.

4. DSR-4450/DSR-4470 Front Panel Menu Hierarchy

5. Configuring the Decoder Input & Output

1. The Input menu has two submenus: Input Signal and Channel Select
   a. Press **menu** until the **Main Menu** appears
   b. Select **Input**
   c. Press **OK**
   d. Select **Input Signal**
   e. Press **OK**

2. Under Input Signal, there are two submenus: RF Input and ASI Input
   a. Select **ASI Input**.
   a. Press **OK**.

3. To configure output, navigate back to the M**ain Menu**,
   a. Select **Input**.
   b. Press **OK**.
   c. Select **Channel Select**
   d. Press **OK**

4. Under the **CHANNEL SELECT** menu, update the input from **Tuner 1** (default) to **ASI IN**:

5. Under the **Channel Select** submenu are eleven fields. The gray box next to the menu shows the name and location of each field.

6. Select the program number for the desired output.

7.The program number can be found in the XOS GUI under the Configure Broadcast tab. The output muxes display details on which program number matches which channel.
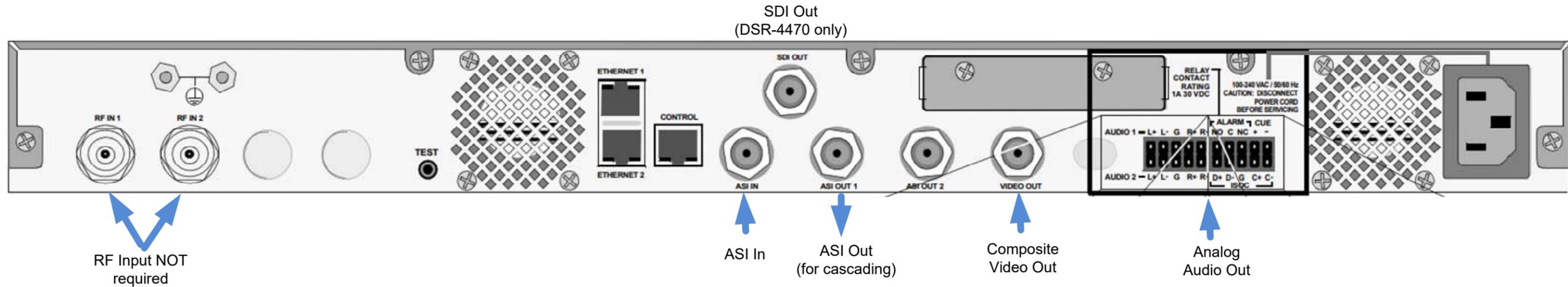
8. Verify the analog video and audio out.

FOR SITES WITH MORE THAN EIGHT ANALOG CHANNELS
Daisy chain the ASI feed per Sample Wiring Diagram (Section 7), then configure the upstream decoder for ASI pass-through. This can be accomplished by updating **ASI OUTPUT mode** from **PID Aliased** to **Passthru**

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6. DSR-4450 / DSR-4470 Back Panel

SDI Out
(DSR-4470 only)

RF Input NOT required

ASI In

ASI Out
(for cascading)

Composite Video Out

Analog Audio Out

7. Sample Wiring Diagram

Galaxy 30 at 125° W

G30 TP20 V (4.10Ghz)
16APSK 2/3
34.286Msps

NBA
TruTV-E
TNT-E
HLN
TOON-E
BOOM
CNN
TCM-E
TBS-E

(Scheduled Launch June 2022)

G30 TP21 H (4.120 GHz)
16APSK 2/3
34.286Msps

TNT-W
CNNi
TOON-W
CNNe
TBS-W
TCM CANADA
TruTV-W
WPCH
BOOM OTT

Galaxy 33 at 133° W

G33 TP18 V (4.060 GHz)
16APSK 2/3
34.286Msps

HBO East
HBO 2 East
HBO Comedy East
HBO Signature East
HBO Zone East
HBO Family East
HBO Latino East
ActionMAX East
ThrillerMAX East
MovieMAX East
Cinemax East
MAX Latino East
MoreMAX East

G33 TP19 H (4.080 GHz)
16APSK 2/3
34.286Msps

HBO West
HBO 2 West
HBO Comedy West
HBO Signature West
HBO Zone West
HBO Family West
HBO Latino West
ActionMAX West
ThrillerMAX West
5StarMAX East
Cinemax West
OuterMAX East
MoreMAX West

XOS IRD

RF Inputs
1
2
3
4

ASI Out
1
2
3
4
5
6
7
8

Mgmt   iLO   IP TS out

Notes:
- Each BNC output port on XOS IRD can be configured for ASI or SDI
- 8 mini-BNC to BNC adaptor cables are supplied with each XOS IRD

Direct ASI connection to up to 8 Analog Decoders

ASI In DSR-4450 #1 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #2 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #3 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #4 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #5 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #6 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #7 ASI Out → Composite Video Out / Analog audio out
ASI In DSR-4450 #8 ASI Out → Composite Video Out / Analog audio out

Cascaded ASI to Analog Decoders 9 to 16

ASI In DSR-4450 #9 → Composite Video Out / Analog audio out
ASI In DSR-4450 #10 → Composite Video Out / Analog audio out
ASI In DSR-4450 #11 → Composite Video Out / Analog audio out
ASI In DSR-4450 #12 → Composite Video Out / Analog audio out
ASI In DSR-4450 #13 → Composite Video Out / Analog audio out
ASI In DSR-4450 #14 → Composite Video Out / Analog audio out
ASI In DSR-4450 #15 → Composite Video Out / Analog audio out
ASI In DSR-4450 #16 → Composite Video Out / Analog audio out

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