SSP220 Quick Setup Guide

Introduction

Video setup
When setting up the SSP220 it is important to know and understand the capability of the display input options and the source (DVD player) output options. These options must be taken into account to optimise the SSP220 audio and video performance and the home theatre system setup. In many cases making the connections is not enough. With much of the equipment on the market **the HDMI/DVI inputs must be enabled in the DVD and display setup menus.**

Many signal sources, A/V processors and displays, have built-in scalers and de-interlacers. When integrating a home theatre system the installer will need to choose which scaler and de-interlacer gives the maximum picture quality. **Do not use two scalers when it is not necessary.**

Failing to activate selected display inputs and source (DVD) outputs will prevent the system from working as required.

You must know the following about your display before you start setting up the SSP220

- What is the display native resolution, 480/576, 720, 1080
- Is the display input analog (component video) or Digital (DVI or HDMI)
- If the display is using the DVI input and the source material is encrypted, HDCP must be included in the display
- Does the video input connection need to be activated in the display setup menu

You must know the following about your video source output options

- Is the source output analog or digital
- What resolution is to be used, 480/576, 720 or 1080
- Do the following need to be activated in the source setup menu
    - Digital audio output
    - Digital audio format output, Dolby Digital / DTS
    - DVI / HDMI
- Does the source have a scaler
- Does the source have a de-interlacer

SSP220

- The video input format recognition is automatic i.e. 480i/p, /576i/p, 720p, 1080i/p
- Composite, S-Video and Audio sources must set the Video type to Up-convert
- It is not possible to down-convert from HDMI to analog video (component)
- If the SSP video input is component video the Upconversion to HDMI is automatic.
- The component video and HDMI inputs are assigned to the SSP source inputs using the Source setup / Video type setting. If the video source does not have a component or HDMI output, the Up-conversion option needs to be selected. Up-conv. will up-convert the composite and S-Video signals to component video and HDMI outputs.
- The OSD is not superimposed on the Component and HDMI video outputs. However it is superimposed on the Composite and S-Video outputs. (Do not forget to select Up-convert)

Audio Setup

- When the SSP220 input is HDMI the digital audio is included along with the video. The HDMI digital audio is assigned to the SSP audio DSP in the “Source setup” menu. Set the “Digital input” to HDMI or HDMI MPCM.
- When the source output is DVI or component video the digital audio output needs to be used and assigned in the “Source setup” menu. Assign the digital input used with Source setup / Digital input.
- When the audio and video inputs and outputs are confirmed to be working the setup fine-tuning can begin.

Front Panel Display

The purpose of the front panel is to facilitate setup without the need of activating the main system display. The front panel display will only display a video input that is interlaced, standard definition and under certain conditions. It is recommended that the OSD is not superimposed on top of the video as it can be difficult to read over the video..

The front panel display will display video only with standard definition, interlaced video.

Composite input: Front panel will show video when

- Interlaced input
- Standard definition
- Video type set to Up-conv

S-Video input: Front panel will show video when

- Interlaced input
- Standard definition
- Video type set to Up-conv

Component input: Front panel will be active when

- Interlaced input
- Standard definition
- Video type Comp 1 to Comp 4
- HDMI rear panel output not connected

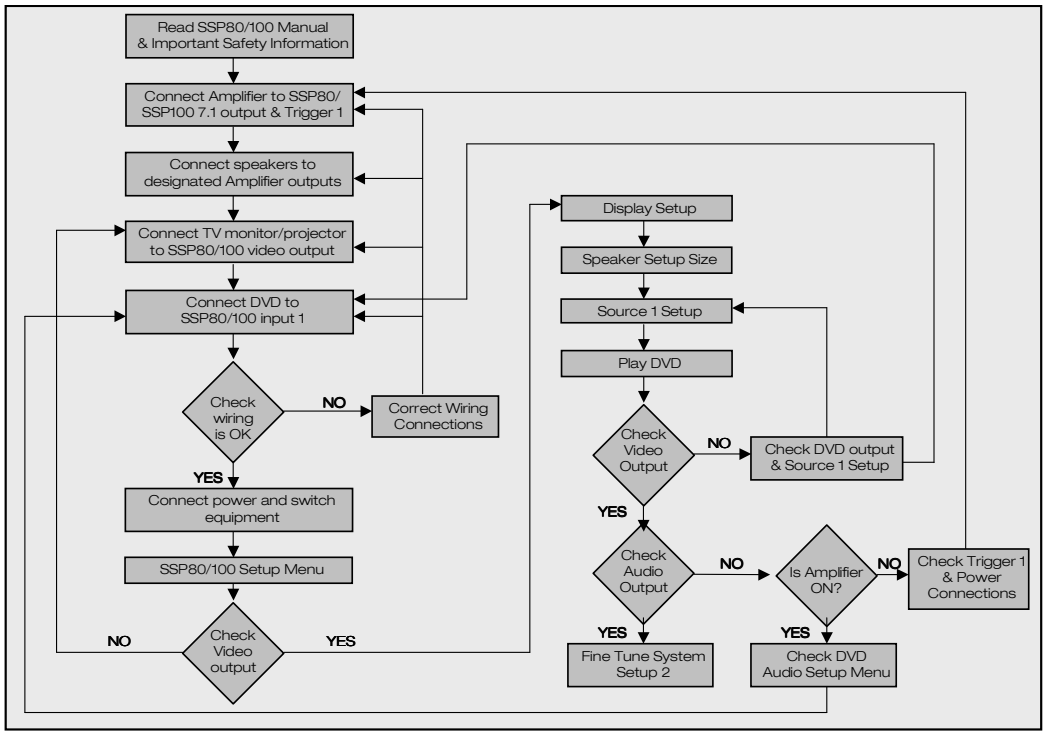
HDMI input: Front panel display will show video when

- Interlaced input
- Standard definition
- Video type HDMI 1 to HDMI 4

Please Note that all DVD players to not have analog video outputs when the HDMI output is activated.

Setup Overview

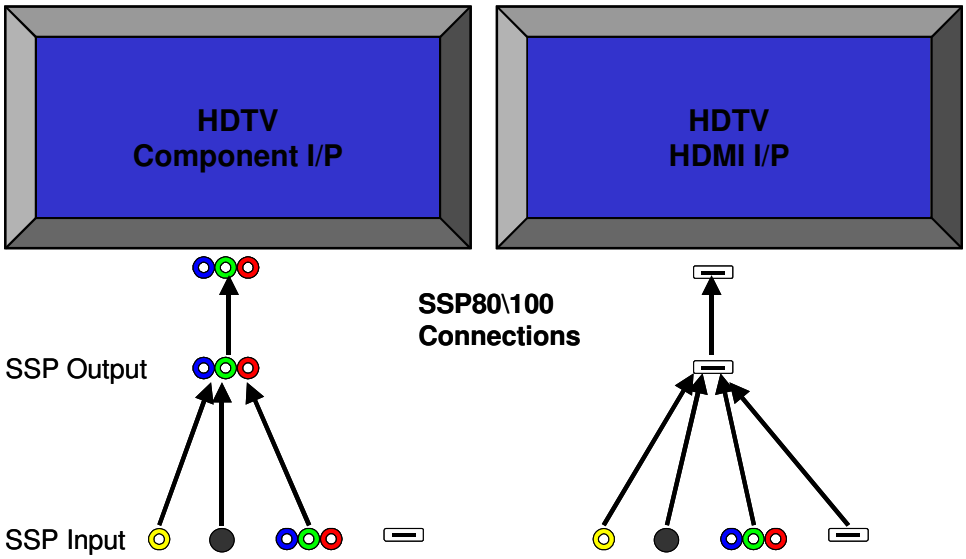
The flow chart below indicates typical steps required to get a home theatre connected and operational to the point where fine-tuning can commence. The flow chart assumes the audio system is in place. If the audio system is not in place connect a display and source to the SSP220 and continue with the setup.



Connections & Placement

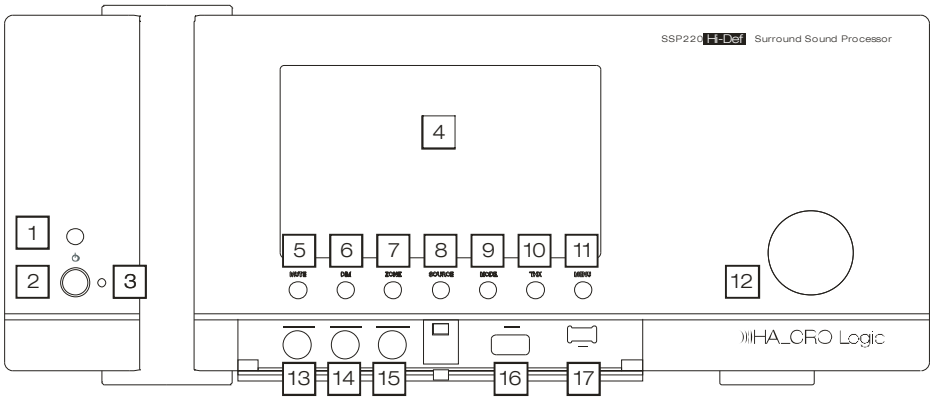
With a system setup we recommend the following

- Make all the SSP input and output connections
- Place the equipment into its intended location
- Use the remote control to setup the SSP180/220 as it is simpler than using the front panel controls.

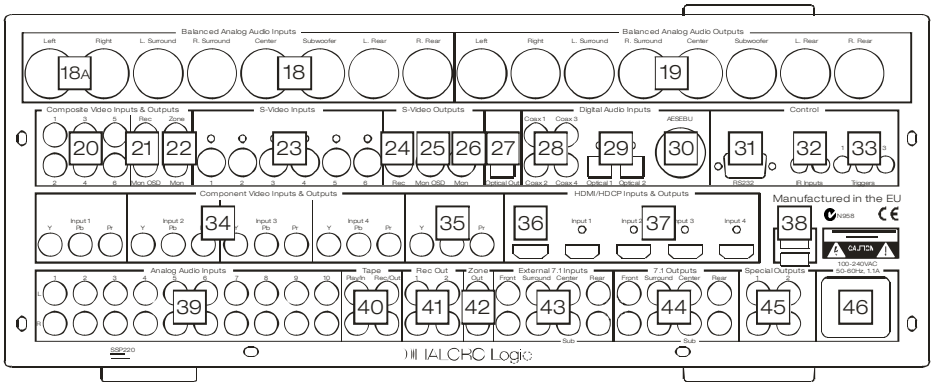


SSP180/220 Front and Rear Panels

Front Panel Controls



Rear Panel Connections



Front Panel

1 IR receiver
2 Standby/On button
3 Standby LED
4 Display
5 Mute Button
6 DIM button
7 Zone button
8 Source button
9 Mode button
10 THX button
11 Menu
12 Volume control
13 Headphone audio output 1
14 Headphone audio output 2
15 Microphone input socket
16 RS232 control interface
17 USB control interface

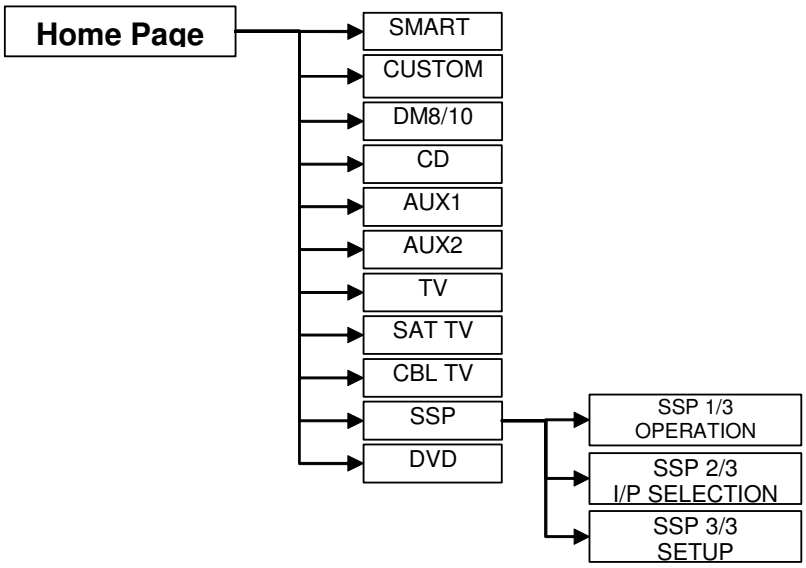
Rear panel

18 7.1 balanced audio input (SSP220)
18a Stereo balanced audio input (SSP180)
19 7.1 balanced audio outputs
20 Composite video inputs 1 to 6
21 Composite video outputs Rec & Mon+OSD
22 Composite video outputs Zone &Mon
23 S-Video inputs 1 to 6
24 S-Video REC output
25 S-Video monitor output (with OSD)
26 S-Video monitor output (without OSD)
27 Optical digital output
28 Coaxial digital audio inputs 1 to 4
29 Optical digital audio inputs 1 to 2
32 IR inputs
33 Trigger outputs 1 to 3
34 Component video inputs
35 Component video outputs
36 HDMI™ outputs
37 HDMI™ inputs
38 USB control interface
39 Analog audio inputs 1 to 10
40 Tape input/output
41 Record outputs 1 to 2
42 Zone audio output
43 External 7.1 audio input
44 7.1 unbalanced audio output

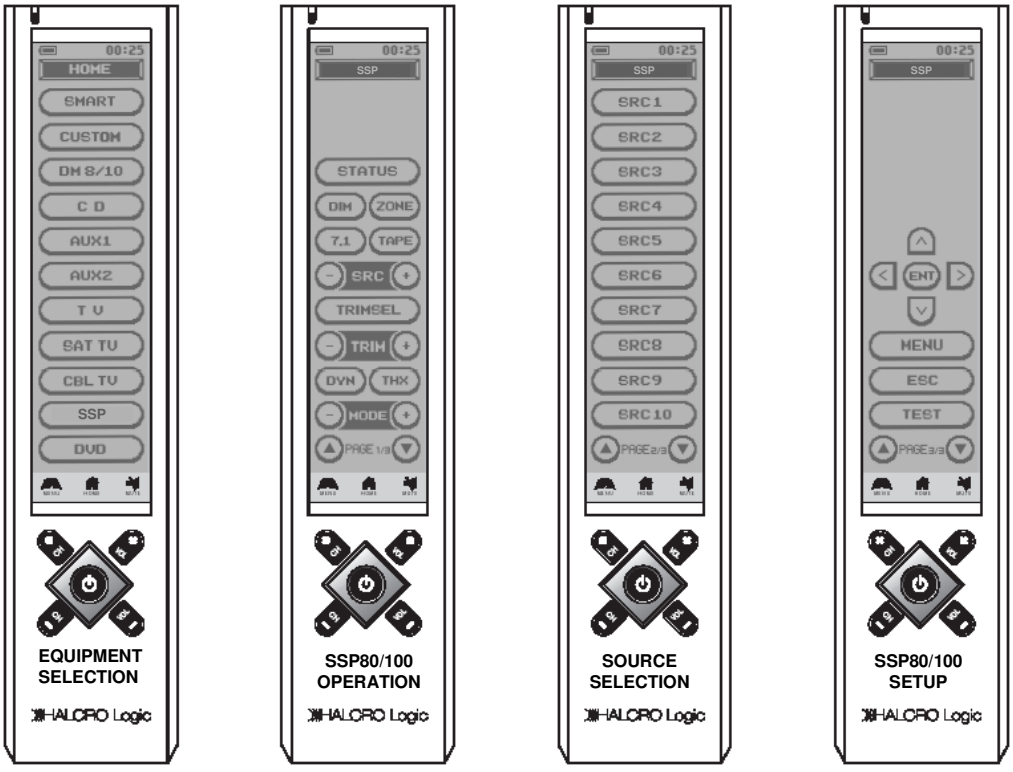
30 AES/EBU balanced digital audio input
31 RS232 control interface
45 Special audio outputs 1 & 2
46 Power socket and mains switch

Remote Control

The remote control layout is shown below. The home (top) page details the different pieces of equipment in the home theatre system, which can be controlled by the remote. When the SSP is selected the first of three SSP180/220 pages is activated. The up/down arrows at the bottom of the display can be used to scroll through them. Pages 1, 2 and 3 contain the keys for SSP180/220 operation, source input selection and setup keys.



Remote Control Layout



Input Sources 1- 10.

a. The first six source inputs are audio / video and the last four, 7 – 10 are audio only. It is important to remember that the composite video and S-Video inputs 1-6 are directly linked to analog audio inputs 1-6 and source 1-6 respectively.
b. Assignable audio and video inputs can be assigned to all 10 source inputs. Assignable inputs are

i. HDMI 1 – 4
ii. Component video 1 – 4
iii. Digital audio coaxial 1 – 4
iv. Digital audio optical 1 & 2
v. SPDIF

c. Always connect the composite video output of a source to the SSP composite inputs
d. To see the volume level from audio sources set the video type to Up-conv

System Setup (HDMI)

2. Connect the SSP audio output channels to the amplifier channel inputs (balanced or unbalanced). It is assumed the speakers are connected to the amplifier(s).

3. Connect trigger 1 to the MC amplifier trigger input

4. Connect the SSP HDMI output to the display HDMI input

5. Connect the DVD HDMI output to the SSP HDMI input 1

6. Connect the DVD composite output to the SSP composite input 1

7. Switch on power to the DVD player and display and switch them On

8. Set the display to operate from the HDMI input **(see display setup menu)**

9. Switch on power to the SSP and switch On

10. Check the required DVD output connections and formats are enabled in the DVD setup menu

11. The SSP needs to know how many and what type of speakers are connected. Speaker size has a major impact on the bass management as well as the audio processing and post-processing modes available to the user. Go to

Speaker setup
Size setup

Main speakers	Large
Center speaker	Large
Surround speakers	Small
Back speakers	2 Small
Subwoofer	Yes
Subwoofer filter	On
Subwoofer freq.	80Hz-THX
Enhanced bass	Off

12. SSP setup, select SRC 1 for HDMI input

Source setup

Source	1
Title	DVD
Digital input	HDMI
Preset	No change
Analog monitor	
Video type	HDMI 1

13. DVD setup
    a. Go to DVD setup menu
    b. Ensure the HDMI output is active
    c. Set the output format to SDTV (480/576)
    d. If using component video activate the component video and digital audio outputs
    e. Activate the DD and DTS multi channel outputs
    f. Play a DVD and audio and video should be present
    Or (for a DVD with component video output)

14. Component video input setup

Source setup

Source	4
Title	DVD
Digital input	Coax 1
Preset	No change
Analog monitor	
Video type	Comp 1
Scaler bypass	Off

15. Switch on a DVD and audio and video should be present

16. Set the SSP input source to SRC 4 component video input

Setting up a CD player

1. Select the source to which the CD player is to be connected e.g. SRC 8.
2. Go to Menu / Source setup menu and enter the following settings

Source setup

Source	8	
Title	CD	
Digital input	Coax 1	
Preset	No change	
Analog monitor		
Video type	Up-conv	(volume bar on front panel display)
Scaler bypass	Off	

To get the volume bar on the front panel display it is essential that the Up-conv(ersion) option be selected for Video type.

If you are not using a digital audio input from the CD player do not assign an active digital input from another source.

If you want to see the CD player setup menu connect the composite output to one of the SSP composite inputs and select that source.