



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

- ALWAYS disconnect your entire system from the AC mains before cleaning any component. The product frame (SFR18 or SFR04) must be terminated with three-conductor AC mains power cord that includes an earth ground connection. To prevent shock hazard, all three connections must always be used.
- NEVER use flammable or combustible chemicals for cleaning components.
- NEVER operate this product if any cover is removed.
- NEVER wet the inside of this product with any liquid.
- NEVER pour or spill liquids directly onto this unit.
- NEVER block airflow through ventilation slots.
- NEVER bypass any fuse.
- NEVER replace any fuse with a value or type other than those specified.
- NEVER attempt to repair this product. If a problem occurs, contact your local Axon distributor.
- NEVER expose this product to extremely high or low temperatures.
- NEVER operate this product in an explosive atmosphere.

Warranty: Axon warrants their products according to the warranty policy as described in the general terms. That means that Axon Digital Design BV can only warrant the products as long as the serial numbers are not removed.

Copyright © 2001 – 2013 AXON Digital Design B.V.

Date created: 25-03-2010

Date last revised: 19-04-2013

Axon, the Axon logo and Synapse are trademarks of Axon Digital Design B.V.

This product complies with the requirements of the product family standards for audio, video, audio-visual entertainment lighting control apparatus for professional use as mentioned below.



EN60950	Safety
EN55103-1: 1996	Emission
EN55103-2: 1996	Immunity

Axon Digital Design
GAF900
HAF900



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

This device complies with part 15 of the FCC Rules
Operation is subject to the following two conditions:
(1) This device may cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Table of Contents

Introduction to Synapse	5
An Introduction to Synapse	5
Local Control Panel	5
Remote Control Capabilities	5
Unpacking and Placement	6
Unpacking	6
Placing the card	6
A Quick Start	7
When Powering-up	7
Changing settings and parameters	7
Front Panel Control	7
Example of changing parameters using front panel control	8
Axon Cortex Software	9
Menu Structure Example	9
The GAF500/900 Card	10
Introduction	10
Features	10
Applications	10
Block schematics	11
Settings Menu	12
Introduction	12
Control	12
GPI-Ctrl	12
ExtMode	12
PrstEditView	12
Active-Preset	12
Edit-Preset	13
#Preset_Name	13
Input-Select	13
Switch-Back	13
Lock-Mode	13
Line-Lock	13
Out-Frmt	13
Input_Loss	14
Freeze_Mode	14
P60-P50_Sync	14
F-delay_1	14
V-delay_1	14
H-delay_1	14
#Delay-Bypass	15
#F-delay_2	15
#V-delay_2	15
#H-delay_2	15
Delay-Status	15
Gain	15
Y-Gain	15
Cb-Gain	16
Cr-Gain	16
Black	16
Y-Black	16
Cb-Black	16
Cr-Black	16
#Rail1	16
#Rail2	16
#Emb-Mode	16
#Emb_A_Sel ~ #Emb_D_Sel	17
#SourceEmb-A1 ~ #SourceEmb-A4	17
#Emb-A1 ~ #EmbA4	17
#SourceEmb-B1 ~ #SourceEmb-B4	17
#Emb-B1 ~ #EmbB4	17
#SourceEmb-C1 ~ #SourceEmb-C4	17
#Emb-C1 ~ #EmbC4	18
#SourceEmb-D1 ~ #SourceEmb-D4	18
#Emb-D1 ~ #EmbD4	18
EmbA1_Gain ~ EmbD4_Gain	
EmbA1_Phase ~ EmbD4_Phase	
EmbA1_Delay ~ EmbD4_Delay	
SRC_AES-A1/2 ~ SRC_AES-A7/8	

NonPCM-Bypass	18
Fade-Time	19
Audio-Phase	19
AudioStatusBits	19
Silence_time	19
Silence_level	19
S2020-Emb	19
Insert_Line	19
Insert_Method	20
Insert_Ass_Ch	20
Status Menu	21
Introduction	21
SDI-Input_1	21
SDI-Input_2	21
SDI-Freq_1	21
SDI-Freq_2	21
CRC-Stat_1	21
CRC-Stat_2	21
Ref-Format	22
Locked-To	22
Active-Out1	22
Active-Out2	22
IO-Delay_1	22
IO-Delay_2	22
GPI	22
ATC-Stat	22
ANC_Stat	22
GrpInUse	22
Grp-Ins	22
LocStatInA1 ~ LocStatInA8	23
LocFrmtInA1/2 ~ LocFrmtInA7/8	23
EmbStatOutA1 ~ EmbStatOutD4	23
EmbFrmtOutA1/2 ~ EmbFrmtOutD3/4	23
Ext_Metadata	23
Progr_Config	24
FPGA-Stat	24
DM-A_Type	24
DM-A_Status	24
DM-B_Type	24
DM-B_Status	24
Events Menu	25
Introduction	25
What is the Goal of an event?	25
Events	25
Announcements	25
Input_A	25
Input_B	25
Ref-Status	25
What information is available in an event?	25
The Message String	25
The Tag	26
Defining Tags	26
The Priority	26
The Address	26
LED Indication	27
Error LED	27
Input_1 LED	27
Input_2 LED	27
ANC Data 1 LED	27
ANC Data 2 LED	27
Reference LED	27
Data Error 1 LED	27
Data Error 2 LED	27
Connection LED	27
Error LED	27
DM Pres 1	27
DM pres 2	27
DM Error 1	27
DM Error 2	27
Block Schematic	28

Connector Panels	29
GPI pinning	29
GNU Public License version 2	30

1 Introduction to Synapse

An Introduction to Synapse

Synapse is a modular system designed for the broadcast industry. High density, intuitive operation and high quality processing are key features of this system. Synapse offers a full range of converters and processing modules. Please visit the AXON Digital Design Website at [_____](#) to obtain the latest information on our new products and updates.

Local Control Panel

The local control panel gives access to all adjustable parameters and provides status information for any of the cards in the Synapse frame, including the Synapse rack controller. The local control panel is also used to back-up and restore card settings. Please refer to the RRC18, RRC10, RRC04, RRS18 and RRS04 manuals for a detailed description of the local control panel, the way to set-up remote control over IP and for frame related settings and status information.

Remote Control Capabilities

The remote control options are explained in the rack controller (RRC18/RRC10/RRC04/RRS18/RRS04) manual. The method of connection to a computer using Ethernet is described in the RRC/RRS manual.



CHECK-OUT: “AXON CORTEX” SOFTWARE WILL INCREASE SYSTEM FLEXIBILITY OF ONE OR MORE SYNAPSE FRAMES

Although not required to use Cortex with a Synapse frame, you are strongly advised to use a remote personal computer or laptop PC with Synapse Cotrtex installed, as this increases the ease of use and understanding of the modules.

2 Unpacking and Placement

Unpacking

The Axon Synapse card must be unpacked in an anti-static environment. Care must be taken NOT to touch components on the card – always handle the card carefully by the edges. The card must be stored and shipped in anti-static packaging. Ensuring that these precautions are followed will prevent premature failure from components mounted on the board.

Placing the card

The Synapse card can be placed vertically in an SFR18 frame or horizontally in an SFR04 and SFR08 frame. Locate the two guide slots to be used, slide in the mounted circuit board, and push it firmly to locate the connectors.

Correct insertion of card is essential as a card that is not located properly may show valid indicators, but does not function correctly.

NOTE: On power up all LED's will light for a few seconds, this is the time it takes to initialise the card.

3 A Quick Start

When Powering-up

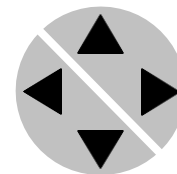
On powering up the Synapse frame, the card set will use basic data and default initialisation settings. All LED's will light during this process. After initialisation, several LED's will remain lit – the exact number and configuration is dependant upon the number of inputs connected and the status of the inputs.

Changing settings and parameters

The front panel controls or the Axon Cortex can be used to change settings. An overview of the settings can be found in chapter 5, 6 and 7 of this manual.

Front Panel Control

Front Panel Display and Cursor



Settings are displayed and changed as follows;

Use the cursor 'arrows' on the front panel to select the menu and parameter to be displayed and/or changed.

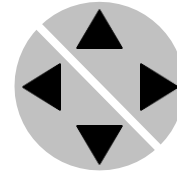
- Press ► To go forward through the menu structure.
- Press ◀ To go back through the menu structure.
- Press ▲ To move up within a menu or increase the value of a parameter.
- Press ▼ To move down through a menu or decrease the value of a parameter.

NOTE: Whilst editing a setting, pressing ► twice will reset the value to its default.

Example of changing parameters using front panel control

With the display as shown below

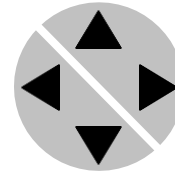
```
RRC18 [Select Card]
>S01=SFS10
```



Pressing the ► selects the SFS10 in frame slot 01.

The display changes to indicate that the SFS10 has been selected. In this example the `Settings` menu item is indicated.

```
SFS10 [Select Menu]
>Settings
```

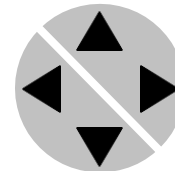


Pressing the ► selects the menu item shown, in this example `Settings`.

(Pressing ▲ or ▼ will change to a different menu eg `Status`, `Events`).

The display changes to indicate that the SFS10 `Settings` menu item `SDI-Format` has been selected and shows that its current setting is `Auto`.

```
SFS10 [Settings]
>SDI-Format=Auto
```

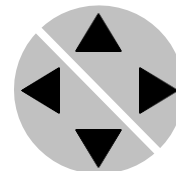


Pressing the ► selects the settings item shown, in this example `SDI-Format`.

(Pressing ▲ or ▼ will change to a different setting, eg `Mode`, `H-Delay`).

The display changes to indicate that the SFS10 `Edit Setting` menu item `SDI-Format` has been selected.

```
SFS10 Edit Setting]
SDI-Format>Auto
```



To edit the setting of the menu item press ▲ or ▼.

All menu items can be monitored and/or changed in this way. Changing a setting has an immediate effect.

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/526242103234010035>