



# **STAR Receiver**

**Generation 2  
For Audio Networks**

## **User's Guide**

Revision 1.4

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## Safety Warnings



DANGER  
Electric Shock  
Hazard

THE UNIT MUST BE INSTALLED BY A QUALIFIED SERVICE PERSON AND THE EXTERNAL EARTH CONNECTION MUST BE MADE BEFORE CONNECTING THE AC SUPPLY. USE A GROUNDED POWER OUTLET ONLY.



DANGER  
Electric Shock  
Hazard

AN ANTI-SHOCK DEVICE MUST BE INSTALLED ON THE ANTENNA CABLE CONNECTING TO THE UNIT.



DANGER  
Electric Shock  
Hazard

THE UNIT MUST BE GROUNDED AT THE REAR PANEL GROUND CONNECTION.



CAUTION  
Please Read  
Carefully

DO NOT OPERATE THE UNIT IN DIRECT SUNLIGHT, A DUSTY OR DAMP ENVIRONMENT AND DO NOT BLOCK THE VENTILATION HOLES. THE UNIT IS DESIGNED TO OPERATE IN A TEMPERATURE RANGE OF 0°C TO 40°C. THE POWER RATING AND HEAT GENERATION OF THE UNIT ARE SUCH THAT IT CAN BE PLACED IN A 19" CABINET WITHOUT SPECIAL COOLING FACILITIES. HOWEVER, SUFFICIENT CLEARANCE MUST BE MAINTAINED BETWEEN THE UNIT AND OTHER EQUIPMENT (A 1RU GAP).



CAUTION  
Please Read  
Carefully

DO NOT OPEN THE UNIT FOR ANY REASON. THIS IS DANGEROUS AND MAY VOID YOUR WARRANTY.



CAUTION  
Please Read  
Carefully

IF THE UNIT FAILS TO OPERATE CALL YOUR SERVICE PROVIDER CUSTOMER SUPPORT.



CAUTION  
Please Read  
Carefully

THE STAR IS A 19" 1U RACK-MOUNTING UNIT WITH CONNECTOR ACCESS AT THE REAR. THE UNIT CAN BE MOUNTED AT THE FRONT OF A 19" RACK USING AN APPROPRIATE MOUNTING SET. HOWEVER, THE USE OF LATERAL SUPPORT IS STRONGLY RECOMMENDED.

# Getting Started

International Datacasting Corporation (IDC) would like to thank you for purchasing this STAR Generation 2 receiver (herein referred to as the “receiver”). This User's Guide provides step by step instructions on how to connect the receiver, access satellite services, and set system and audio output configurations.

## *Models*

Your STAR Generation 2 receiver is one of a family of STAR receivers. A datasheet at the end of this document provides the Technical Specifications of your STAR receiver. Readers of this manual who use a STAR-Two receiver should ignore any references to audio 3 & 4, decoder 3 & 4 or channel 3 & 4.

## *How to Use This Guide*

This guide describes the operation of your receiver through the GUI and through the keypad interface. Within the document you will find:

- a **Quick Start** section about connecting to the receiver and what the displays mean.
- a **User Interface** section explaining how to use the GUI interface to configure the receiver and enable the outputs.
- an **Advanced Topics** section on how to use the Professional Media Recorder (if installed).
- a **GUI Tips** section explaining extra information and on-screen choices.
- a **FAQ** section.
- a **Keypad Control** section for local control of your receiver.

# Quick Start

If you have installed IDC products before, you can skip this section. If not, you will be familiarized with the status and controls of the STAR receiver prior to being shown how to find the receivers IP Address and how to connect to it through the GUI to configure the receiver for use.

## *What You Should Have Received*

You should have received the following package:

- One (1) STAR- Generation 2 Receiver;
- One (1) power cord, suitable for use in your country;
- One (1) copy of this User's Guide – also available online from the IDC Customer Service FTP site.

You will need audio cables to connect the receiver to your system. Please keep one set of packaging that your receiver came in, to allow for a safe return for repair if required.

## The Front Panel

The STAR front panel contains nine LED indicators, a headphones jack and a keypad LCD combination.



### [1] Headphones

### [2] Status information: STAR-Four      STAR-Two

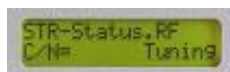


The status information of the receiver is shown in the LEDs as described in the table below. A blank cell shows an unused status/colour combination.

LED status indication

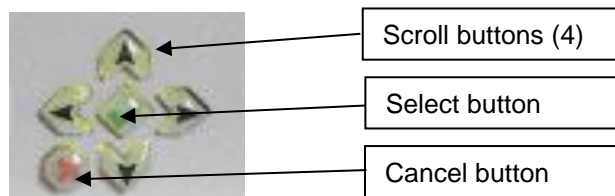
Indication	OFF	GREEN / Flashing Green	RED	YELLOW
LOCK	Unit disconnected or power failure	Locked to carrier	Not locked to carrier	
WARNING	No warning			Warning
ALARM	No alarm		Alarm	
AUDIO 1/2	No service	Audio OK / Playing local file	PID/MPE-IP or audio error	
REMOTE	No M & C link	Link connected remotely	Local control; link available	
AUDIO 3/4	No service	Audio OK / Playing local file	PID/MPE-IP or audio error	
OPTION	Future Use			
RECORD	Recording	/ Recording programming		

### [3] LCD

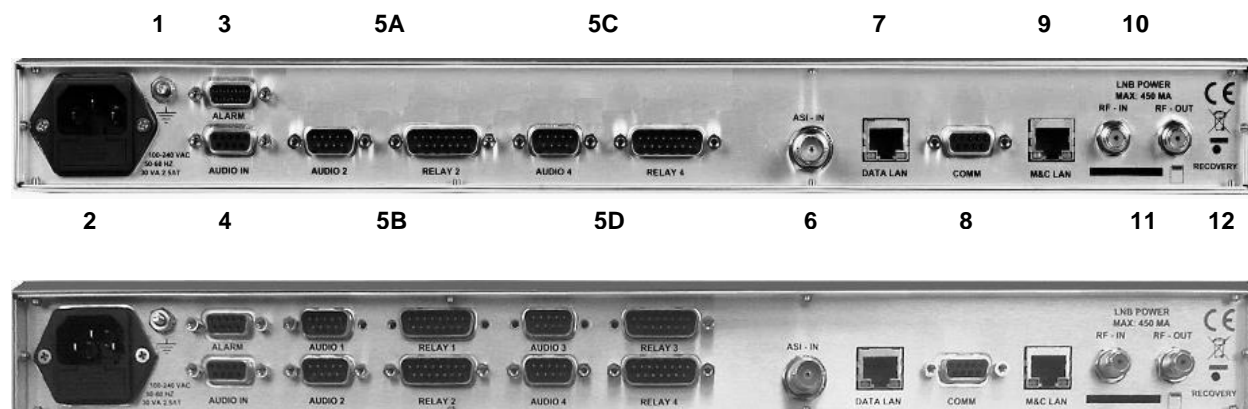


The LCD display is used to view receiver status, view receiver configurations and/or set receiver configurations. How to access these settings is described in the section Keypad Control.

### [4] Keyboard



## The Rear Panels – STAR-Four & STAR-Two



- [1]     **Grounding**
- [2]     **Mains AC 100-240v built in fuse 2.5A**
- [3]     **Alarm contacts (3)**
- [4]     **Audio In (Future use)**
- [5]     **Audio Channels & Relays 1, 2, 3 & 4**
- [6]     **ASI In or ASI Out [Factory installed option]**
- [7]     **Data LAN**
- [8]     **RS232 Comm port**
- [9]     **Monitor & Control LAN**
- [10]    **L-band input and loopthrough**
- [11]    **SD card slot**
- [12]    **Recovery reset**

### Default Settings

Your STAR receiver is supplied with these default settings:

1. Control mode is: **remote**
2. IP mode is: **DHCP**

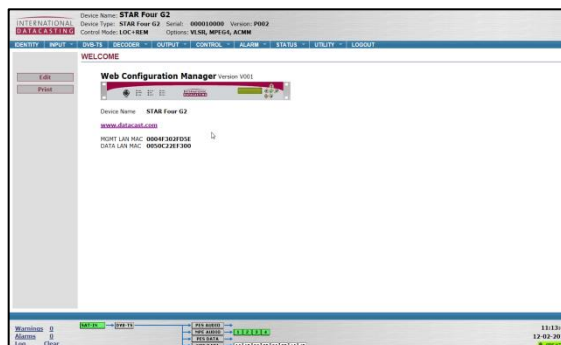
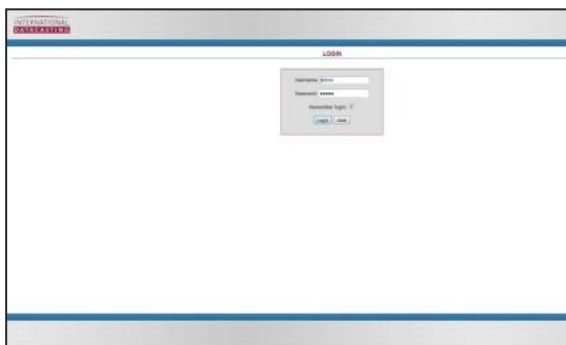
### First Installation and Configuration of the STAR

1. Connect power to the power inlet without connecting the L-band cable to your STAR receiver. The front panel LCD will show "**Star Four G2 Booting OS**". The LEDs on the front panel show (on the left):
2. After a few seconds all LEDs flash once and the LCD screen will display "**Initializing**". When initialization is complete after a few seconds, the LEDs show (on the right), with no external connections:

INDICATIONS	COLOR	
LOCK	NONE	
WARNING	YELLOW	
ALARM	RED	
AUDIO 1	NONE	
AUDIO 2	NONE	
REMOTE	NONE	
AUDIO 3 /OPTION 1	NONE	NONE
AUDIO 4 /OPTION 2	NONE	NONE
RECORD	NONE	

INDICATIONS	COLOR	
LOCK	RED	
WARNING	RED	
ALARM	RED	
AUDIO 1	RED	
AUDIO 2	RED	
REMOTE	NONE	
AUDIO 3 /OPTION 1	RED	NONE
AUDIO 4 /OPTION 2	RED	NONE
RECORD	NONE	

3. Connect the STAR to a DHCP IP network. If a DHCP network is not available you can use the LCD to configure a static IP address (Control>MGMT> IP Static Address). The STAR default is 192.168.0.1. Then connect the STAR with a switch or computer; and set your computer IP address in the same range.
4. Connect a personal computer to the receiver, open a web browser and connect to the receiver by typing the IP address of the receiver in your browsers address bar.
5. Login with: Username: **admin**. Password: **12345**. You can change the login username and password with the web GUI in the "CONTROL>MGMT>IP" menu under "Web".



Your STAR receiver is now ready for use.

*Note: On subsequent startup of the STAR receiver a comprehensive check of the SD card structure and content takes place. This can delay the appearance of Trigger information on the Utility Trigger page by up to 20 seconds.*



# User Interface

The receiver can be configured through the Graphical User Interface or from the front panel Keypad.

## Remote Control with a WEB Browser

When you have logged in, you will see the Web Configuration Manager page.

Device name, Device type, Serial number, Firmware version and activated Options.

Follow the Link to an online Manual. Define the link in the "IDENTITY" menu. See next page.

Menu bar (see below for details).

Monitoring Status & Routing.

Warning & alarms indicator. Log and Syslog viewing links.

Time, Date & Synchronization with SNTP server.

## The Menu Bar

There are 8 top level menus and a logout button in the menu bar presented here in order left to right.

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
----------	-------	--------	---------	--------	---------	-------	--------	---------	--------

## Identity

In the Identity page you can fill in specific information that will be visible on the Welcome page and you can also include a link that points to a manual.

<b>IDENTITY</b>	
<b>Cancel</b>	DEVICE NAME STAR Pro Audio
<b>Save</b>	DEVICE LOCATION
<b>Print</b>	DEVICE CONTACT
	DEVICE INFO 1 http://www.datacast.com
	DEVICE INFO 2
	DEVICE INFO 3
	DEVICE INFO 4
	DEVICE INFO 5
	DEVICE INFO 6
	DEVICE INFO 7
	DEVICE INFO 8
	DEVICE INFO 9
	DEVICE INFO 10
	DEVICE INFO 11
	DEVICE INFO 12
	DEVICE MANUAL LINK

## Input

IDENTITY

INPUT

DVB-TS

DECODER

OUTPUT

CONTROL

ALARM

STATUS

UTILITY

LOGOUT

SAT-IN

IP-IN

Edit

Print

LNB

MODE

LO-FREQ

SUPPLY OFF

0 MHz

1

RF-IN

## SAT-IN

The preferred carrier setting is useful when a transition to a carrier is needed. This function is also supported and controlled by NCC. If only one Carrier setting is required the Preferred can be set to "Carrier A (or B) only."

The options to set the other carrier will be removed from the receivers interface when "Carrier A (or B) only" is selected. This feature is not controlled by NCC.

The 12 digit BISS session keys A and B are normally provided from the head end. They can be entered here and show as " - - - - " when not present and " \* \* \* \* " when present.

INPUT SAT-IN	
<b>Edit</b>	
<b>Print</b>	
<b>LNB</b>	
MODE	<b>SUPPLY OFF</b>
LO-FREQ	<b>0 MHz</b> ⓘ
<b>RF-IN</b>	
PREFERRED	<b>CARRIER A</b>
<b>CARRIER A</b>	
FREQUENCY	<b>1210000 kHz</b>
MODE	<b>DVB-S1 AUTO</b>
RATE	<b>20000000 sym/s</b>
NCC PID	<b>6657 dec</b> ⓘ
BISS SESSION KEY A	<b>*****</b>
<b>CARRIER B</b>	
FREQUENCY	<b>1100000 kHz</b>
MODE	<b>DVB-S1 AUTO</b>
RATE	<b>10000000 sym/s</b>
NCC PID	<b>4152 dec</b> ⓘ
BISS SESSION KEY B	<b>*****</b>

## IP-IN

INPUT IP-IN	
<b>Edit</b>	
<b>Print</b>	
<b>LOCAL PORT</b>	
MODE	<b>AUTO (UP TO 1GB)</b>
IP ADDRESS	<b>192.168.1.101</b>
<b>INPUT STREAM</b>	
IP ADDRESS	<b>225.0.0.1</b> ⓘ
UDP PORT	<b>5004</b>

LOCAL PORT Mode: Select between AUTO (up to 1Gbit) or 100 Mbit (Half or Full duplex).

LOCAL PORT IP Address: This is the IP Address in the LAN network.

INPUT STREAM IP Address/UDP Port: This is the IP Address/Port number on which the MPEG2 TSoverIP stream is received.

## DVB-TS

INPUT: Decoder input can be selected between SAT-IN (L-band tuner), IP-IN (TSolP) or ASI-IN (As Factory installed option only).

PID LIST: This allows you to enter and enable the Network Time Protocol (NTP) PID, the Network Control Channel (NCC) PID, the Electronic Channel Guide (ECG) PID and the FlexKey (ECM) PID if the option is installed. MPE PIDs that are required to decode IP Audio services are automatically loaded to each decoder's PID list and are not shown here.

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL
<b>DVB-TS</b>					
<b>Edit</b>		INPUT <b>SAT-IN</b> ①			
<b>Print</b>		<b>PID LIST</b>			
		PID 1 MODE <b>ENABLED</b>			
		PID 1 OUTPUT <b>NONE</b>			
		PID 1 <b>400</b> dec			
		PID 2 MODE <b>ENABLED</b>			
		PID 2 OUTPUT <b>NONE</b>			
		PID 2 <b>4097</b> dec			
		PID 3 MODE <b>ENABLED</b>			
		PID 3 OUTPUT <b>NONE</b>			
		PID 3 <b>4098</b> dec			
		PID 4 MODE <b>ENABLED</b>			
		PID 4 OUTPUT <b>NONE</b>			
		PID 4 <b>4099</b> dec			
		PID 5 MODE <b>ENABLED</b>			
		PID 5 OUTPUT <b>NONE</b>			
		PID 5 <b>4100</b> dec			
		PID 6 MODE <b>ENABLED</b>			
		PID 6 OUTPUT <b>NONE</b>			
		PID 6 <b>4101</b> dec			
		PID 7 MODE <b>ENABLED</b>			
		PID 7 OUTPUT <b>NONE</b>			
		PID 7 <b>1111</b> dec			
		PID 8 MODE <b>DISABLED</b>			

DVB-TS FLEXKEY: (Optional) This setting is needed to identify the IP address and port number which contains the ECM messages sent by Flexkey Encryptor. Requires ECM PID.

<b>FLEXKEY</b>	
IP ADDRESS	<b>224.7.7.9</b>
UDP PORT	<b>7779</b>

## Decoder

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS
<div>Edit</div> <div>Print</div>	INPUT	<b>DVB-TS</b>	AUDIO	CHANNEL 1			
			BACKUP	CHANNEL 2			
			DATA	CHANNEL 3			
				CHANNEL 4			
		<b>PID LIST</b> PID 1 MODE <b>ENABLED</b> PID 1 OUTPUT <b>NONE</b> PID 1 <b>400 dec</b>					

## Decoder Audio

<b>DECODER AUDIO CHANNEL 1</b>		
<div>Edit</div> <div>Print</div>	STREAM	<b>MPE</b>
	MODE	<b>CHAN. GUIDE</b>
	SERVICE	<b>Channel 2</b>
	15kHz LOWPASS	<b>OFF</b>
	GAIN	<b>0 dB</b>
	STEREO/MONO	<b>ST/DUAL</b>
	DELAY	<b>0 ms</b>

### CHANNEL x Audio:

STREAM: when stream is set to MPE then select from:

MODE: OFF, CHAN.GUIDE, USER DEFINED, TONE.

*Note: If Channel Guide mode is selected, the receiver will populate the service list automatically. The channel information is provided by the SDP packets from the Event Managers at the head-end. The MPE PID (ECG PID) for the SDP packets must be added to the receiver PID list to get the list of Services. The Channel Guide is the list of programs you can select in MPE mode. The user selects the wanted service, and the unit will select the appropriate IP address and PORT number. In MPE mode this address and port has to be done manually.*

*Note: If tone is selected the receiver outputs a 1Khz note.*

STREAM: when stream is set to PES then select from:

MODE: OFF, PSI, PID, TONE.

*Note: In PSI mode the receiver will populate its service list from the PSI table in the DVB carrier. The user selects the wanted service, and the unit will select the appropriate PID. In PID mode this PID has to be set manually.*

*Note: If tone is selected the receiver outputs a 1Khz note.*

SERVICE: shows the list of services available. When there is no list "SIGNAL?" will be shown.

15 kHz LOWPASS: ON/OFF. Enabling the low pass filter limits the upper frequency range to 15Khz with a 3db/octave attenuation.

GAIN: Set the gain from -18 to +18 dB, in steps of 1 dB.

STEREO/MONO: Select Stereo (Dual), Mono L+R, Mono L, Mono R.

DELAY: Input presentation delay from 0 to 8000 milliseconds.

**OPTIONAL (not shown):**

LIMITER ENABLED: ON/OFF.

LIMITER LEVEL: -50 to 0 dBFS, in steps of 1 dB.

LIMITER RECOVERY: 20 (Fast) to 100 (Slow) Milliseconds recovery time.

## Decoder Backup Channel x

The backup for each audio channel can be enabled/disabled and the order of choice for the backup source can be defined. Additionally each backup source can be viewed and or configured. As delivered there are no audio backup files on the SD card. Multiple audio files (.mp2 or .mp3) can be stored in the SD card root directory, but only one can be identified as the default file for each decoder. If the Service Operator has delivered a backup playlist this will be played instead of the default file (If enabled). Consult Service Operator for full details.

DECODER BACKUP CHANNEL 1	
<b>Edit</b>	ENABLED <b>YES</b>
<b>Print</b>	PRIORITY <b>BACKUP PLAYLIST-&gt;IP STREAM</b>
<b>BACKUP PLAYLIST</b>	
	ENABLED <b>YES</b>
	DEFAULT FILE <b>audio1.mp3</b>
<b>IP STREAM</b>	
	SOURCE <b>MPEG TS OVER IP</b>
	ENABLED <b>YES</b>
	IP ADDRESS <b>225.0.0.1</b>
	UDP PORT <b>5000</b>
	PID MODE <b>AUTO</b>

PRIORITY: Select the order of the available backup sources.

BACKUP PLAYLIST: Select the audio file from the SD card to be played as backup for this Decoder.

*Note: If a Backup Playlist is available from the Head end it will be played instead. If the Backup Playlist has any missing content, that content will be skipped over and the playlist will continue to play (loop playback). If there is no Backup Playlist the receiver will go to the next priority Backup.*

IP STREAM: Choose the SOURCE of the Backup audio from: INTERNET SERVICE; RTP/IP AUDIO or MPEG TS OVER IP. Once selected the required SOURCE calls up the appropriate set of parameters to specify the addressing.

*Note: In INTERNET SERVICE source, Port Mapping uses the Service ID+10,000 as the port number (User equipment configuration is required). User Defined allows the user to specify the port number.*

*Note: In MPEG TS over IP, Auto in PID Mode uses as backup any PID in the IP-IN transport stream that matches the current program. Manual allows the user to specify the PID played.*

## Decoder Data

DECODER DATA CHANNEL 1A	
<b>Edit</b>	MODE <b>ANC. DATA AUDIO CH1</b>
<b>Print</b>	PROCESS <b>OFF</b>
	BAUD <b>9600</b>

### CHANNEL x Data:

STREAM: when stream = MPE (in menu DECODER>AUDIO) then:

MODE: OFF, ANC. DATA AUDIO CH1 (Data on Channel xA), ASYNC. DATA (Data on channel xB).

*Note: ANC. DATA is data transport in the ancillary field of coded audio. ASYNC. DATA is data transport in the MPE RTP header of audio stream.*

STREAM: when stream = PES (in menu DECODER>AUDIO) then:

MODE: OFF, ANC. DATA (data on Channel xA), PRIV. DATA (data on Channel xB).

*Note: ANC. DATA is data transport in the ancillary field of coded audio. PRIV. DATA is data transport in a separate PID of the transport stream.*

FORMAT: IRT, J.52.

*Note: these formats for embedded Async data are only available if Device Special 2 is installed.*

PROCESS: MUX, OFF.

BAUD: Output baud rate of the Anc/Async data: 1200, 2400, 4800, 9600, 19k2, 38k4, 57k6 baud.

## Output

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
				<b>OUTPUT IP-OUT</b>	<b>ASI-OUT</b> <b>IP-OUT</b>				
				<b>LOCAL PORT</b>					
				MODE <b>AUTO (UP TO 1GB)</b>					
				IP ADDRESS <b>192.168.1.101</b>					
				<b>OUTPUT STREAM</b>					
				ENABLED <b>NO</b>					

MODE: Auto (up to 1GB), 100Mb HD, 100Mb FD.

IP ADDRESS: The source address of the output stream.

OUTPUT STREAM: Enabled,

*Note: In Disabled mode the (multicast) IP Address and UDP Port are not available.*

OUTPUT ASI-OUT	
<b>Edit</b>	ENABLED <b>NO</b>
<b>Print</b>	

*Note: ASI-OUT is available only with Factory installed option: ASI-OUT.*

## Control

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
					<b>OUTPUT IP-OUT</b> MGMT I/O ACMM		IP NOTIFICATION MODE PRIORITY DESTINATION 1 DESTINATION 2 DESTINATION 3		
					<b>LOCAL PORT</b> MODE: AUTO (UP TO 1GB) <input type="checkbox"/> IP ADDRESS: 192.168.1.101				
Cancel Save Print									

### Control MGMT IP

Choose the parameters to configure the network connections, utilize SNMP, specify the SNTP server, a Syslog server, configure the web access and change the username/password combination.

CONTROL MGMT IP	
Warning: Saving these settings will reboot the device and then service downtime.	
<b>TCP/IP</b> MODE: MANUAL LINK: Auto-negotiation STATIC ADDRESS: 192.168.2.25 SUBNET MASK: 8 GATEWAY ADDRESS: 0.0.0.0 PRIMARY DNS ADDRESS: 0.0.0.0 SECONDARY DNS ADDRESS: 0.0.0.0	
<b>NAME</b> DHCP NAME: STAR	
<b>SNMP</b> ENABLED: YES PORT: 161 READ COMMUNITY 1: usr_read_access WRITE COMMUNITY 1: usr_write_access READ COMMUNITY 2: usr_read_access WRITE COMMUNITY 2: usr_write_access	
<b>WEB</b> ENABLED: YES PORT: 80 USERNAME: admin PASSWORD: 12345	
<b>SNTP</b> ENABLED: YES PRIMARY SERVER: 193.67.79.202 SECONDARY SERVER: 193.79.237.14 INTERVAL: 30 seconds	
<b>SYSLOG SERVER</b> IP ADDRESS: 0.0.0.0	
Warning: Saving these settings will reboot the device and then service downtime.	



MODE: DCHP, MANUAL

*Note: In DCHP mode Static Address, Subnet Mask and Gateway Address are not available. .*

## Control MGMT Notification Mode

Choose the parameter (ALL; HEARTBEAT; SETTING CHANGED; CONTROL MODE CHANGED; CONTROL MODE LOCAL SUPPRESS) that produces a notification and the type of that notification (OFF; WARNING; WARNING+ALARM) to the SNMP trap set under Control>MGMT>Notification>Destination.

CONTROL MGMT NOTIFICATION MODE	
<b>Edit</b>	ALL OFF ①
	HEARTBEAT OFF
<b>Print</b>	SETTING CHANGED OFF
	CONTROL MODE CHANGED OFF
	CONTROL MODE LOCAL SUPPRESS OFF
<b>ALARM MODE</b>	
	INPUT SAT-IN RF-LOCK OFF
	INPUT SAT-IN POWER OFF
	INPUT SAT-IN BER OFF
	INPUT SAT-IN C/N OFF
	INPUT SAT-IN Eb/No OFF
	INPUT SAT-IN TS OFF
	DECODER PSI OFF
	DECODER AUDIO1 LEFT OFF
	DECODER AUDIO1 RIGHT OFF
	DECODER AUDIO1 L+R OFF
	DECODER AUDIO1 STREAM OFF
	DECODER AUDIO2 LEFT OFF
	DECODER AUDIO2 RIGHT OFF
	DECODER AUDIO2 L+R OFF
	DECODER AUDIO2 STREAM OFF
	DECODER AUDIO3 LEFT OFF
	DECODER AUDIO3 RIGHT OFF
	DECODER AUDIO3 L+R OFF
	DECODER AUDIO3 STREAM OFF
	DECODER AUDIO4 LEFT OFF
	DECODER AUDIO4 RIGHT OFF
	DECODER AUDIO4 L+R OFF
	DECODER AUDIO4 STREAM OFF
	DECODER BACKUP1 MPEG TS OVER IP OFF
	DECODER BACKUP1 RTP/IP AUDIO OFF
	DECODER BACKUP2 MPEG TS OVER IP OFF
	DECODER BACKUP2 RTP/IP AUDIO OFF
	DECODER BACKUP3 MPEG TS OVER IP OFF
	DECODER BACKUP3 RTP/IP AUDIO OFF
	DECODER BACKUP4 MPEG TS OVER IP OFF
	DECODER BACKUP4 RTP/IP AUDIO OFF
	DECODER DATA1A TIMEOUT OFF
	DECODER DATA1A OVERFLOW OFF
	DECODER DATA1B TIMEOUT OFF
	DECODER DATA1B OVERFLOW OFF
	DECODER DATA2A TIMEOUT OFF
	DECODER DATA2A OVERFLOW OFF
	DECODER DATA2B TIMEOUT OFF
	DECODER DATA2B OVERFLOW OFF
	DECODER DATA3A TIMEOUT OFF
	DECODER DATA3A OVERFLOW OFF
	DECODER DATA3B TIMEOUT OFF
	DECODER DATA3B OVERFLOW OFF
	DECODER DATA4A TIMEOUT OFF
	DECODER DATA4A OVERFLOW OFF
	DECODER DATA4B TIMEOUT OFF
	DECODER DATA4B OVERFLOW OFF

## Control MGMT Notification Priority

Select the priority for the notification of an alarm in a parameter. Each parameter shown on the Control MGMT Notification Mode Alarm Mode list can be assigned a priority between 1 and 4294967295 with 1 being the highest priority. The default value is 0 and indicates No Priority

## Control MGMT Notification Destination

Enable/Disable notifications to the chosen SNMP destinations.

## Control I/O

This will allow operators to view and change the status of the contacts manually for testing. Please note that Decoder Data Process needs to be switched to OFF. (Support depends on the device configuration).

CONTROL I/O CHANNEL 1	
<b>Edit</b>	CONTACT 1 <b>OPENED</b>
	CONTACT 2 <b>OPENED</b>
	CONTACT 3 <b>OPENED</b>
	CONTACT 4 <b>OPENED</b>
	CONTACT 5 <b>OPENED</b>
	CONTACT 6 <b>OPENED</b>
	CONTACT 7 <b>OPENED</b>
	CONTACT 8 <b>OPENED</b>
	CONTACT 9 <b>OPENED</b>
	CONTACT 10 <b>OPENED</b>

## Control ACMM

View and enter the Trigger PID parameters and the PID, IP address and corresponding port for each of the XD packet streams received by your Star receiver. Do not change these parameters without consulting your Service Operator.

ENABLE /DISABLE: Enable/Disable participation in network-wide trigger activation.

*Note: Allow or prevent triggering of receiver by head end regardless of channel being played.*

TRIGGER PID: PID containing trigger list.

CONTROL ACMM	
<div> <div>Edit</div> <div>Print</div> </div>	
<b>Warning: Changing the number service downtime. Changing the</b>	
<b>TRIGGER PID</b>	
ENABLED	<b>YES</b>
PID	<b>4154 dec</b>
<b>XD INPUT 1</b>	
ENABLED	<b>YES</b>
PID	<b>6000 dec</b>
IP ADDRESS	<b>226.6.6.6</b>
UDP PORT	<b>3133</b>
<b>XD INPUT 2</b>	
ENABLED	<b>NO</b>
<b>XD INPUT 3</b>	
ENABLED	<b>NO</b>
<b>XD INPUT 4</b>	
ENABLED	<b>YES</b>
PID	<b>112 dec</b>
IP ADDRESS	<b>230.0.14.123</b>
UDP PORT	<b>2126</b>
<b>Warning: Changing the number service downtime. Changing the</b>	

## Alarm

The following settings are available in the ALARM submenus:

<b>MODE</b>	: OFF	=	Warning and Alarm are switched off.
	: Warning Only		Upon an error condition the Warning light on the front panel will be activated.
	: Warning+RelayA		Upon an error condition, after the warning delay period has passed, the Warning light on the front panel will illuminate. It will remain illuminated until the alarm delay period has passed, at which point the Warning LED will turn off, the Alarm Led will flash red and relay A will become active.
	: Warning+RelayB		Upon an error condition, after the warning delay period has passed, the Warning light on the front panel will illuminate. It will remain illuminated until the alarm delay period has passed, at which point the Warning LED will turn off, the Alarm Led will flash red and relay B will become active.
	: Warning+RelayC		Upon an error condition after the warning delay period has passed, the Warning light on the front panel will illuminate. It will remain illuminated until the alarm delay period has passed, at which point the Warning LED will turn off, the Alarm Led will flash red and relay C will become active.

## LEVEL

Not present for all parameters. When present it is programmable between the limits revealed when you hover your mouse over the Level field.

## W- DELAY

Delay in seconds before the warning light will be activated.

## A- DELAY

Delay in seconds before the alarm light and relay will be activated.

**Note:** to receive an alarm on the relay outputs, the alarms must be properly configured.

1. Warning Delay (W-DELAY) is programmable between 0 and 599 seconds.
2. Alarm Delay (A-DELAY) is programmable between 1 and 600 seconds.

The warning-delay should always be less than the alarm-delay. When a warning-delay is entered which is larger than the alarm-delay, the alarm-delay will automatically be set to the warning-delay-time + 1 second.

It is good practice to disable Alarms for items that do not need to be monitored. For example, if you are using IP- IN and are not connected to a Satellite feed, then disable the SAT- IN related alarms.

## Alarm Menus and Sub Menus

Shows information about and allows setting of the alarms for input and audio levels including backup and data. The alarm information can also be printed. Three sub-menus with multiple sub-menus contain the information:

- **INPUT:** the ASI- IN, SAT- IN or IP- IN parameters.
- **DECODER:** the PSI, AUDIO, BACKUP and DATA parameters for all channels.
- **PMR:** the Recording and Playback parameters for the PMR.

		Device Name: <b>STAR Four G2</b> Device Type: <b>STAR Four G2</b> Serial: <b>000010000</b> Version: <b>V005</b> Control Mode: <b>LOC+REM</b> Options: <b>VLSR, MPEG4, ACMM, PMR</b>							
IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
<b>ALARM INPUT SAT-IN</b>						INPUT DECODER PMR	PSI AUDIO BACKUP DATA		
<b>RF-LOCK</b> MODE WARNING DELAY <b>1</b> seconds ALARM DELAY <b>2</b> seconds						<b>Warning+RelayA</b> CHANNEL 1 CHANNEL 2 CHANNEL 3 CHANNEL 4			

The Alarm mode contains multiple pull down menus for selection of the item to monitor.

After selection, in the **EDIT** mode, each selected item (MODE, LEVEL, WARNING DELAY and ALARM DELAY) can be independently set (see examples below). Hover over a field underlined "....." to see the valid range. Individually alarmed items (RF LOCK, POWER etc.,) on a page can be saved individually or the page can be completed then saved.

Cancel  
Save  
Print

### ALARM INPUT SAT-IN

#### RF-LOCK

MODE Warning+RelayA

WARNING DELAY OFF seconds

ALARM DELAY Warning Only seconds

#### POWER

MODE Warning+RelayA

Warning+RelayB

Warning+RelayC

OFF

With the mouse cursor in the editable field, an information field will pop up with the value limits:

Cancel  
Save  
Print

### ALARM INPUT SAT-IN

#### RF-LOCK

MODE Warning+RelayA

WARNING DELAY 1 seconds

ALARM DELAY 2 seconds

#### POWER

MODE OFF

LEVEL -70 dBm

WARNING DELAY 1 seconds

ALARM DELAY 5 seconds

Enter a numeric value in the range 1 to 600 seconds

## Status

Information about the input and audio levels and the status information can also be printed. Five submenus contain the information:

- INPUT:** the ASI- IN, Satellite SAT- IN and IP- IN parameters:

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
<h3>STATUS INPUT ASI-IN</h3> <p>TRANSPORT STREAM RATE <b>2.83</b> Mb/s</p>							INPUT DECODER NETMANAGER DEVICE CONFIG	ASI-IN SAT-IN IP-IN	

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
<h3>STATUS INPUT SAT-IN</h3> <p>ACTIVE CARRIER <b>B</b></p> <p>L-BAND FREQ <b>4134901</b> kHz</p> <p>C/N --- dB</p> <p>FE <b>2145725</b> kHz</p> <p>BER ---</p> <p>POWER --- dBm</p> <p>Eb/No --- dB</p> <p>TRANSPORT STREAM RATE --- Mb/s</p>							INPUT DECODER NETMANAGER DEVICE CONFIG	ASI-IN SAT-IN IP-IN	

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
<b>STATUS INPUT IP-IN</b>								INPUT	ASI-IN
								DECODER	SAT-IN
								NETMANAGER	IP-IN
								DEVICE CONFIG	

Print

TRANSPORT STREAM RATE --- Mb/s

- **DECODER:** the source indication with Transport Stream info, four channels of audio with the left/right dynamic level and the selected service. Transport Stream and RTP/IP audio show their respective data rates if used as the input.

INPUT: shows the live source.

TRANSPORT STREAM: shows the data rate; Network name or “- - -”, if unavailable.

MEMORY SLOT: shows the presence or absence of the SD memory card.

*Note: Audio files for backup can be written to the root directory of the SD card using a PC. The file used by each decoder can be chosen on page DECODER>BACKUP>Channel x.*

**Warning:** Before removing the SD card, all write access must be halted. If you can accept a break in service, alter the INPUT>SAT-IN>Carrier Frequency to cause an Out of Lock condition and then remove the card. If a break in service is not possible, contact your Service Provider for a quiet time when no write accesses are planned.

*Failure to do this may prevent proper operation of both triggers and the audio backup*

#### **CHANNEL x Audio:**

AUDIO: shows Service type, SID, and BACKUP type

CONTACTS: shows relay contacts as “C” Closed or “O” open, L to R; 1 to 10

BACKUP PLAYLIST: shows as AVAILABLE if the default audio file “audiox.mp3” (or an alternative as specified on page DECODER>BACKUP>Channel x) is present on the SD Card.

MPEG TS over IP; RTP/IP audio show their respective data rates or NOT AVAILABLE,

INTERNET SERVICE shows as AVAILABLE/NOT AVAILABLE

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS
<b>STATUS DECODER</b>							
<b>Print</b>		INPUT SAT-IN					
<b>TRANSPORT STREAM</b>							
RATE		27.65 Mb/s					
NETWORK		HISPASAT					
<b>MEMORY SLOT</b>							
SDCARD		RECOGNIZED					
<b>CHANNEL 1</b>							
AUDIO		SERVICE=Test Tone, SID=2					
CH1		IN dBFS -40 -30 -20 -15 -12 -9 -6 -3 0					
CONTACTS		0000000000 ⓘ					
BACKUP PLAYLIST		NOT AVAILABLE					
MPEG TS OVER IP		--- Kb/s					
<b>CHANNEL 2</b>							
AUDIO		SERVICE=Music, SID=4					
CH2		IN dBFS -40 -30 -20 -15 -12 -9 -6 -3 0					
CONTACTS		0000000000 ⓘ					
BACKUP PLAYLIST		NOT AVAILABLE					
MPEG TS OVER IP		--- Kb/s					
<b>CHANNEL 3</b>							
AUDIO		BACKUP=NO SERVICE					
CH3		IN dBFS -40 -30 -20 -15 -12 -9 -6 -3 0					
CONTACTS		--- ⓘ					
BACKUP PLAYLIST		NOT AVAILABLE					
MPEG TS OVER IP		--- Kb/s					
<b>CHANNEL 4</b>							
AUDIO		BACKUP=NO SERVICE					
CH4		IN dBFS -40 -30 -20 -15 -12 -9 -6 -3 0					
CONTACTS		--- ⓘ					
BACKUP PLAYLIST		NOT AVAILABLE					
MPEG TS OVER IP		--- Kb/s					

- **NETMANAGER:** indicates if the receiver is connected to a Network Command Channel (NCC) and the date and time when this receiver last accepted a valid set of NCC-commands. To operate correctly, the NCC PID must be included in the DVB-TS>PID List.

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
<b>STATUS NETMANAGER</b>									
<b>Print</b>		NCC FOUND	<b>NO</b>						
		LAST UPDATE	<b>NOT SYNCHRONIZED</b>						
									<input type="button" value="INPUT"/> <input type="button" value="DECODER"/> <input type="button" value="NETMANAGER"/> <input type="button" value="DEVICE CONFIG"/>

- **DEVICE CONFIG:** shows all device specific information:

<b>Print</b>		<b>STATUS DEVICE CONFIG</b>	
		DEVICE FIRMWARE	<b>V005.347c*</b>
		DEVICE DECODER	<b>00.042.01.47.47</b>
		NCC ADDRESS	<b>BB2EF3000A</b>
<b>GLOBAL XD LICENSE INFO</b>			
		NET ID	<b>777</b>
		SITE ID	<b>16</b>
		EXPIRY DATE	<b>Oct 21, 2016</b>
		CLASS ID	<b>0</b>
		SERVICE PRODUCT	---
<b>DECODER 1 XD LICENSE INFO</b>			
		NET ID	<b>777</b>
		SITE ID	<b>0</b>
		EXPIRY DATE	<b>Oct 20, 2016</b>
		CLASS ID	<b>0</b>
		SERVICE PRODUCT	---
<b>DECODER 2 XD LICENSE INFO</b>			
		NET ID	<b>777</b>
		SITE ID	<b>0</b>
		EXPIRY DATE	<b>Oct 20, 2016</b>
		CLASS ID	<b>0</b>
		SERVICE PRODUCT	---
<b>DECODER 3 XD LICENSE INFO</b>			
		NET ID	<b>777</b>
		SITE ID	<b>0</b>
		EXPIRY DATE	<b>Oct 20, 2016</b>
		CLASS ID	<b>0</b>
		SERVICE PRODUCT	---
<b>DECODER 4 XD LICENSE INFO</b>			
		NET ID	<b>777</b>
		SITE ID	<b>0</b>
		EXPIRY DATE	<b>Oct 20, 2016</b>
		CLASS ID	<b>0</b>
		SERVICE PRODUCT	---
<b>DEVICE OPTIONS</b>			
		VLSR	<b>INSTALLED</b>
		MPEG4	<b>INSTALLED</b>
		LIMITER	---
		ACMM	<b>INSTALLED</b>
		PMR	<b>INSTALLED</b>
<b>DEVICE SPECIALS</b>			
		SPECIAL1	---
		SPECIAL2	---
Note: Device options which are not installed will be displayed as "----". obtained by contacting International Datacasting (website: <a href="http://www.datacasting.com">www.datacasting.com</a> ).			



## Utility

There are 9 submenus: CLOCK, CLEAR LOG, PRINT SETTINGS, DEFAULT SETTINGS, IMPORT/EXPORT, FORMAT SD CARD, SCHEDULE, TRIGGER, INSTALL OPTIONS, UPDATE FIRMWARE & REBOOT DEVICE.

- **CLOCK:** The unit clock can be switched on. The clock can be set Manually; synchronized with the NTP or with SNTP over the management LAN. To use NTP, the NTP PID must be configured in the DVB-TS PID List. The IP address/Port for the SNTP server and the refresh interval can be configured in the menu CONTROL>MGMT IP.

IDENTITY	INPUT	DVB-TS	DECODER	OUTPUT	CONTROL	ALARM	STATUS	UTILITY	LOGOUT
<div> <div> Edit Print </div> <div> <h3>UTILITY CLOCK</h3> <p>SOURCE <b>NTP over MPE</b></p> <p>TIMEZONE <b>(UTC-05:00) Eastern Time (US and Canada)</b></p> <p>DST <b>ON</b></p> <p><b>NTP</b></p> <p>IP ADDRESS <b>224.0.1.1</b></p> <p>UDP PORT <b>123</b></p> </div> <div> CLOCK  CLEAR LOG  PRINT SETTINGS  DEFAULT SETTINGS  IMPORT/EXPORT  FORMAT SDCARD  SCHEDULE  TRIGGER  INSTALL OPTIONS  UPDATE FIRMWARE  REBOOT DEVICE </div> </div>									

- **CLEAR LOG:** The log file can be cleared.
- **PRINT SETTINGS:** The complete settings of the unit can be printed in one overview.
- **DEFAULT SETTINGS:** The default settings can be loaded.

**Warning:** Loading the default settings reboots the receiver resulting in IP service downtime. The settings of the LINK, TCP/IP and NAME group of [CONTROL IP TCP/IP](#) will **not** be reset to the default value in order to be able to reconnect to the device again.

- **IMPORT/EXPORT:** All settings of this unit can be exported in a file (binary format) to a selectable location and a user editable filename. The same settings file can be imported as well, to make an easy copy possible. When imported, a tickbox can be selected to choose if the IP settings and Identity have to be excluded.
- **FORMAT SD CARD:** Erase all files on the card and refresh the file structure. Equivalent to a disk format. All content files are lost.
- **SCHEDULE:** A channel can be recorded and the recording played back anytime within 24 hours of the recording start time on the decoder of choice using the Time Shift option. For longer playback delays, or multiple playbacks of the same recording use the Date and Time option. The Reports option allows viewing or printing of all recorded events and playbacks with complete status information. The use of the Schedule tab is fully explained in the Advanced Topics section.
- **TRIGGER:** A decoder or All Decoders can be selected. A full list of all utility triggers can be viewed from the All Decoders page or by using the View the full List for ALL decoders radio button on any decoder trigger page. No triggers can be fired from the full list page; triggers can be selected from a list of available triggers loaded by the head end and fired on the specific decoder page only.

## UTILITY TRIGGER, DECODER:ALL

View the full list of triggers for ALL decoders ☒Selected decoder to view or to fire its triggers ☐ #1 ☐ #2 ☐ #3 ☐ #4[Refresh](#)[Show Details](#)[Fire Trigger](#)

Select Trigger ID	Trigger Type	Description
<input type="radio"/> 20031	Single	20005
<input type="radio"/> 20032	Playlist	20015
<input type="radio"/> 20033	Playlist	20016
<input type="radio"/> 20034	Single	20001
<input type="radio"/> 20035	Playlist	20017
<input type="radio"/> 20036	Percent	20018
<input checked="" type="radio"/> 20037	Timed Playlist	N/A

[Show Details](#)[Fire Trigger](#)[Refresh](#)

In the capture below, trigger 20035 is missing one or more content files as shown by the red blocking. Selecting the trigger and clicking “Show Details” reveals which file (or files) is missing. If this trigger is fired, the missing file will be skipped over, regardless of its position in the Playlist.

## Trigger Info

**Trigger ID: 20035**

Earliest Valid	Expiry	Fade(Type,Time)	Repeat	Recurrence	Start Method
08-02-2013 00:00:00	11-02-2013 23:59:59	Enabled (X, 0.0s)	No	N/A	TRIGGERED
Elem ID	Action				
0	Play Local File /data/xdcache/Ad1.mp3				
1	Play Local File /data/xdcache/Ad2.mp3				
2	Play Local File /data/xdcache/Ad3.mp3				
3	Play Local File /data/xdcache/Ad4.mp3				
4	Play Local File /data/xdcache/Shame.mp3				
5	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Coney_Island_Penny_Machine.mp3				
6	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Good_n_Plenty_Choo_Choo_Charlie.mp3				
7	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Mr_Clean_Mr_Clean.mp3				
8	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Ipana_Toothpaste_Bucky_Beaver_58s680ms.mp3				
9	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Ford.mp3				
10	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Fitch.mp3				
11	CANNOT Play Local File /data/xdcache/Commercials.19xx.xx.xx_Fatima_Cigarettes.mp3				
12	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Exlax.mp3				
13	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Energine_Shoe_White.mp3				
14	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Elgin_American.mp3				
15	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Dodge.mp3				
16	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Crestablanca.mp3				
17	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Cream_Of_Wheat.mp3				
18	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Creamo_Cigars.mp3				
19	Play Local File /data/xdcache/Commercials.19xx.xx.xx_Contadina_Tomato_Paste.mp3				
<div>Close</div>					

Timed Playlists (e.g. 20037) can not be triggered. Attempting to fire the trigger will give an error message. The fields revealed by the Show Details button are explained below:

**EARLIEST VALID:** The earliest date on which the action becomes valid.

**EXPIRY:** The latest date on which this action may be commenced. May show "Does not expire".

**FADE (TYPE ,TIME):** The type and duration of the fading used. (X-fade, V-fade or ½ fade).

**REPEAT:** If this trigger is to be repeated.

**RECURRENCE:** The days of the week within the Earliest Valid up to the Expiry date on which this action will be valid.

**START METHOD:** How the action is commenced.

**ELEM ID:** Internally allocated reference.

ACTION: What the receiver will do when the action is triggered.

- **INSTALL OPTIONS:** In this section all options can be activated or de-activated with code from an .xml file.
- **UPDATE FIRMWARE:** Firmware can be uploaded from any accessible location and will result in service downtime.
- **REBOOT DEVICE:** This will trigger a reboot of the device, which will result in a service downtime. The unit will start up again with the last saved settings.

## Logout

You will be asked to confirm your log out.


# Advanced Topics

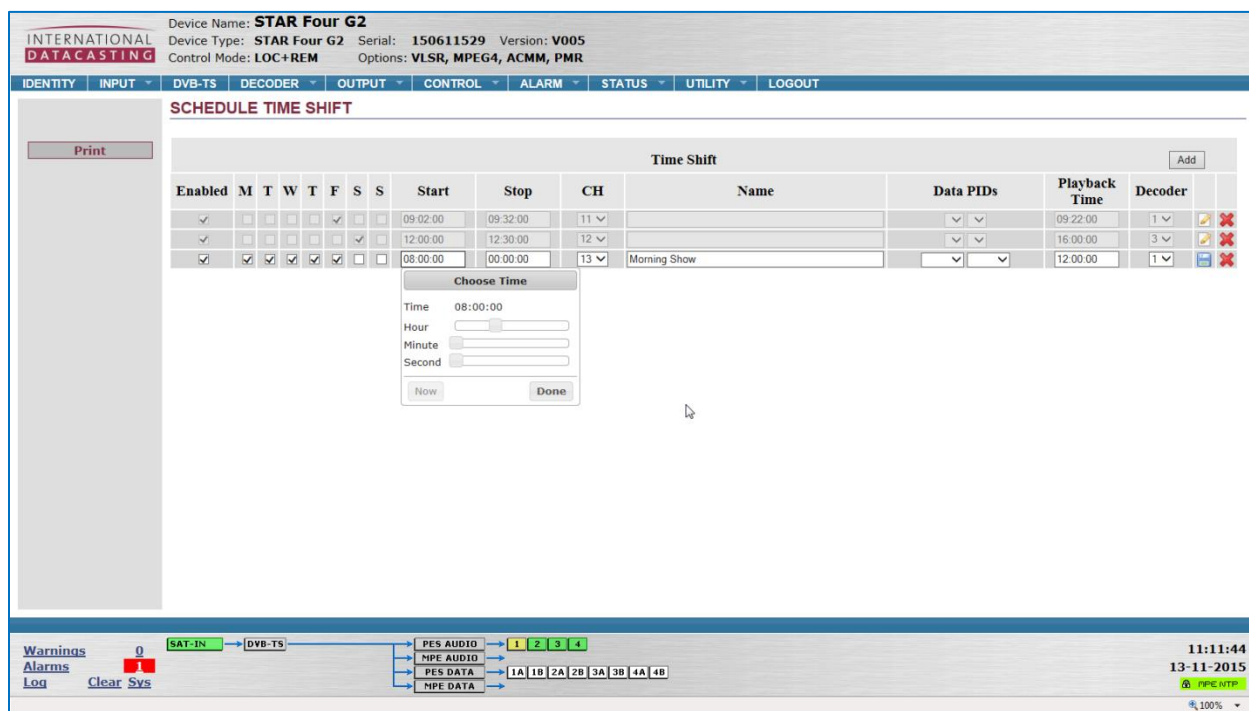
## Using your PMR

The PMR capabilities of the Star 4 G2 audio receiver are subject to license restrictions and these pages and option tabs will not appear in your receiver unless properly licensed. To see which options are installed on your unit go to STATUS>DEVICE CONFIG and look under Device Options at the bottom of the page.

## Time Shifting

Time shifting allows programming to be recorded and played back at a later time within the next 24 hours. To create a Time shift event go to UTILITY>Schedule>Time Shift and click the Add button to open up a new event line in the schedule (see below). Complete the entries for Days of the Week; Start and Stop time; Channel to be recorded, Name, up to 16 characters (if required) and Data PIDs. This specifies the programming that will be recorded.

To setup the playback, chose a playback time and decoder for the playback and click the disc symbol  to save the entry. Up to 20 such Time Shift events can be created.



Device Name: **STAR Four G2**  
 Device Type: **STAR Four G2** Serial: **150611529** Version: **V005**  
 Control Mode: **LOC+REM** Options: **VLSR, MPEG4, ACMM, PMR**

**SCHEDULE TIME SHIFT**

Enabled	M	T	W	T	F	S	S	Start	Stop	CH	Name	Data PIDs	Playback Time	Decoder
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	09:02:00	09:32:00	11			09:22:00	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12:00:00	12:30:00	12			16:00:00	3
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:00:00	00:00:00	13	Morning Show		12:00:00	1

**Choose Time**  
 Time: 08:00:00  
 Hour:   
 Minute:   
 Second:   
 Now Done



Warnings 0 SAT-IN → DVB-TS → PES AUDIO 1 2 3 4  
 Alarms 0 NPE AUDIO 1A 1B 2A 2B 3A 3B 4A 4B  
 Log Clear Sys PES DATA  
 NPE DATA

11:11:44  
 13-11-2015  
 0 NPE OUTPUT  
 100%

### NOTE:


- Recordings may not overlap
- The minimum time shift is 10 seconds and the maximum 24hours (from the recording start time).
- If the entered playback time is less than the recording time, playback will be on the following day.
- Playback start time uses receiver time.
- Recording can be set as disabled until required.
- Only one playback is allowed per recording.
- Simultaneous playback of two programs on one decoder is not allowed.


- Your receiver responds normally to triggers received during playback except for channel changes which are ignored.
- Time Shifted recordings are deleted within 24 hours of their playback. This deletes the recording schedule, the playback schedule and their associated recording files.
- The schedule may be printed out using the print button.

The event can be edited  or deleted  using the appropriate buttons. For the rules governing the editing of recordings and playbacks see FAQ – “Why can I not always edit active time shift recording or playbacks?”

## Using Date and Time

Date and Time shifting allows programming to be recorded and played back at a later date and time. To create a Date and Time shift event goto UTILITY>Schedule>Date & Time and click the Add button to open up a new event line in the schedule (see below). Complete the entries for Date; Start and Stop time; Channel to be recorded, Name, up to 16 characters (if required) and Data PIDs. This specifies the programming that will be recorded.

To setup the playback, chose a playback date, time and decoder for the playback and click the  symbol to save the entry. Each recording can support up to five playback schedules. Up to 20 such Date and Time Shift events can be created.



Device Name: **STAR Four G2**  
Device Type: **STAR Four G2** Serial: **150611529** Version: **V005**  
Control Mode: **LOC+REM** Options: **VLSR, MPEG4, ACMM, PMR**



IDENTITY INPUT DVB-TS DECODER OUTPUT CONTROL ALARM STATUS UTILITY LOGOUT

Print

### SCHEDULE DATE & TIME

Time & Date												Add
Enabled	Date	Start	Stop	CH	Name	Data PIDs			Playback	Time	Decoder	
<input checked="" type="checkbox"/>	12/11/2015	13:40:59	13:50:59	11								
<input checked="" type="checkbox"/>	12/11/2015	13:54:00	14:04:00	11		612						
<input checked="" type="checkbox"/>	13/11/2015	08:13:00	08:33:00	11								
<input checked="" type="checkbox"/>	13/11/2015	14:00:00	15:00:00	11								
<input checked="" type="checkbox"/>	16/11/2015	12:00:00	12:05:00	11								
<input checked="" type="checkbox"/>	16/11/2015	00:00:00	00:00:00									

- Recordings may not overlap
- The minimum time shift is 10 seconds (from the recording start time).
- Playback start time uses receiver time.
- Recording can be set as disabled until required
- Up to five playbacks are allowed per recording.
- Simultaneous playback of two programs on one decoder is not allowed.
- Your receiver responds normally to triggers received during playback except for channel changes which are ignored.
- Date and Time Shifted recordings and playbacks must be deleted by the user. This deletes the recording schedule, the playback schedule and their associated recording files.
- The schedule may be printed out using the print button.

The recording and playback events can be separately edited  or deleted . For the rules governing the editing of recordings and playbacks see “Why can I not always edit active time shift recording or playbacks?” in the FAQ section.



## Recording and Playback Reports

The status of recordings and playbacks can be explored under the UTILITY>Schedule>Reports tab. Up to 100 scheduled recordings and playbacks are shown beginning 7 days prior to today's date. The report can be sorted on any column, and shows the status of each recording and playback as one of:

- Recording Status
  - OK (recording complete, no alarms or warnings)
  - Warning
  - Alarm
  - in progress (recording active without warning or alarm)
  - no status (recording has not started yet)
- Playback Status
  - OK (playback complete, no alarms or warnings)
  - Warning
  - Alarm
  - in progress (playback active without warning or alarm)
  - no status (playback has not started yet)

Device Name: **STAR Four G2**  
 Device Type: **STAR Four G2** Serial: **150611529** Version: **V005**  
 Control Mode: **LOC+REM** Options: **VLSR, MPEG4, ACMM, PMR**

IDENTITY INPUT DVB-TS DECODER OUTPUT CONTROL ALARM STATUS UTILITY LOGOUT

### SCHEDULE REPORTS

Print

Default Information						Expanded Information						
Dec	Playback Date	Playback Time	Length	Name	Missed (sec)	Recording	Playback	CH	Rec Date	Rec Start	Rec Stop	Trigger ID
1	12/11/2015	11:35:00	00:10:00		0.14	Ok	Ok	11	12/11/2015	11:20:00	11:30:00	11056
1	12/11/2015	11:55:00	00:10:00		0.00	Ok	Ok	11	12/11/2015	11:50:00	12:00:00	11057
1	12/11/2015	13:10:00	00:10:00		0.00	Ok	Alarm	11	12/11/2015	12:55:00	13:05:00	11057
1	12/11/2015	14:05:00	00:10:00		0.00	Ok	Ok	11	12/11/2015	13:54:00	14:04:00	11057
1	13/11/2015	08:38:00	00:20:00		0.00	Ok	Ok	11	13/11/2015	08:13:00	08:33:00	11003
1	13/11/2015	09:22:00	00:30:00		0.00	Ok	Ok	11	13/11/2015	09:02:00	09:32:00	10001
1	13/11/2015	10:16:10	00:01:00		0.00	Alarm	Alarm	10	13/11/2015	10:16:00	10:17:00	10002
1	13/11/2015	14:00:00	00:30:00		0.00	Ok	Alarm	13	13/11/2015	09:00:00	09:30:00	10004
3	13/11/2015	16:00:00	00:20:00		0.00	Ok	Ok	11	13/11/2015	08:13:00	08:33:00	11003
1	16/11/2015	14:00:00	00:30:00		0.00	Ok	-	13	16/11/2015	09:00:00	09:30:00	10004

1/2 10

**Recording Status : Ok**

Time into recording 00:10:00

Time left in recording 00:00:00

**Missed Audio**

Total 0.00 secs

**Playback Status : Alarm**

Time into playback 00:10:00

Time left in playback 00:00:00

**Missed Audio**

Total 600.00 secs

Warnings 0 SAT-IN → DVB-TS → PES AUDIO → 1 2 3 4  
 Alarms 7 NPE AUDIO → 1A 1B 2A 2B 3A 3B 4A 4B  
 Log Clear Sys NPE DATA →


11:40:26  
 16-11-2015  
 0 TYPE NTP  
 95%

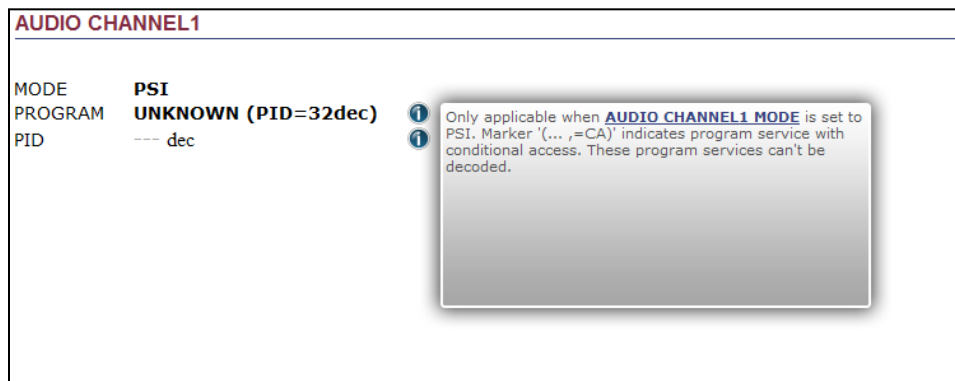
Click the individual status to open a detailed window for that event (see above) showing the Time into Recording or Playback, Time left in Recording or Playback, the total Missed Audio and the 10 largest audio outages, their time and duration.

The report page size can be selected and the selected page printed using the Print button. Multiple prints may be required to print the complete report.

# GUI Tips

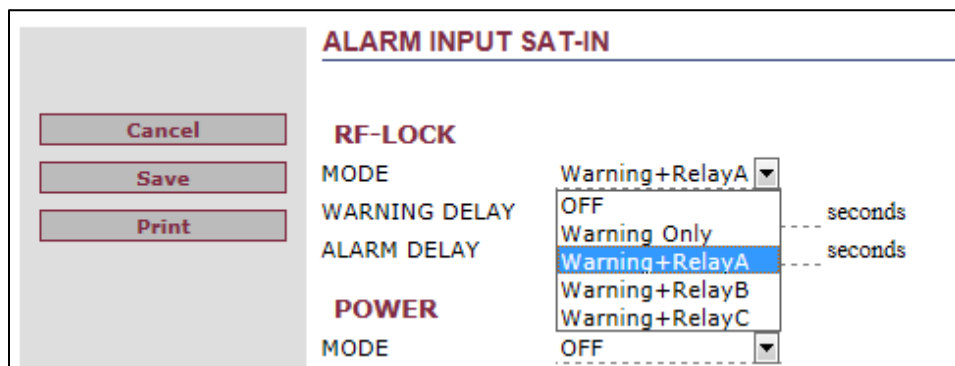
## Finding extra Help

On many Web pages, hovering your mouse pointer over the information button  will produce extra information related to the parameter:



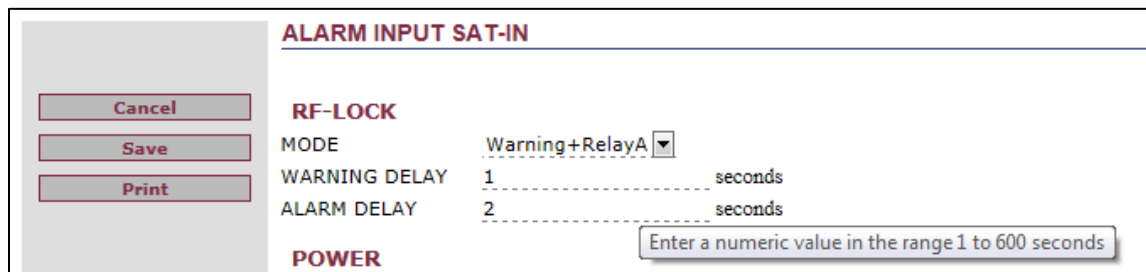
## Drop down Menus

In several menus, drop down sub-menus are available to help in selecting a value.



## Valid numeric Ranges

In other cases a value can be set in an edit field shown as “.....” (the valid range is shown if you hover over the field with the mouse pointer).



## Text in Red

When saving a change, if the GUI refreshes with the change shown in red the changes were not made. An explanation bar will appear with specific details of the error.



## FAQ's

### *Why are there periods of silence in my playback?*

If a signal loss occurs during recording (for example due to a loss of signal, a reboot or a loss of data) then silence is played out for the periods where no audio frames were available.

### *If a reboot occurs during playback what happens to the playback?*

A reboot during a playback of a file results in silence being played out for the duration of the reboot and then the original file playout restarts at the same point in time as if it had continued to play during the outage and terminates at the original expected time.

### *Why can I not always edit active time shift recording or playbacks?*

To maintain the integrity of both content and output playbacks some restrictions are placed on editing and deletion actions as follows:

- Recording is active
  - Do not allow
    - Recording edits
  - Allow
    - Playback edits
    - Deletes (issue a warning prompt, playback stops and content deleted)
- Playback is active
  - Do not allow
    - Recording edits
    - Playback edits
  - Allow
    - Deletes (issue a warning prompt, playback stops and content deleted).

### *I changed my SD card; do I lose all the recording and playback schedules?*

No, when you change an SD card, you keep both the recording and playback schedules, but all content recorded on the original SD card is lost.

### *How many recordings can I store?*

Up to 20 Time shift and 20 Date and Time shift recordings can be stored by your Star receiver.

### *Can I take information off the receiver?*

Yes, two methods of extracting data are available on your STAR G2 receiver: The Time Shift, Date and Time, and the Reports screen all feature a Print button, allowing the page content to be sent to a printer connected to your PC. Secondly, the Syslog file, sent to the Syslog server at the address specified in Control>Management IP>Syslog contains additional information.

### *If a playback is interrupted, what will happen?*

- If a playback on a decoder is interrupted by another playback, the last playback takes precedence and the playback terminates at the end of the interrupting playback, even if the end of the original playback was later.

- If a playback is interrupted by a channel change, timed playlist, local activation of triggers on a decoder, the playback shall stop and the live channel will take precedence.

### *How many playbacks can I add to a scheduled event?*

For a time shifted event only 1 playback is allowed. For a Date and Time shifted event up to 5 playbacks can be added. A warning is given if this number is exceeded.

### *How long does the recording and playback information stay on the receiver?*

Playback and the associated recording status information remains on the Utility>Schedule>Report page of the receiver for a period starting 7 days before the present and lasting for 7 days from today up to a maximum of 100 entries.

### *What happens to recordings over Daylight Savings Time changes and on a leap year?*

The recording last the entire demanded duration regardless of leap year and daylight savings time and will playback for the exact period of time recorded (+/- 250ms).

### *The Warning LED is illuminated, what does this mean?*

The Warning (Orange) LED illuminates for interrupted record and playback warning conditions:

- Warning RECORDING conditions occur when:
  - Missing audio frames received greater than 1 second (i.e. no lock, RF interference, no TS input)
  - The receiver is not powered at start time
    - Warning state occurs after power up
  - The receiver reboots during recording
    - Warning state occurs after power up
- Warning PLAYBACK conditions occur when:
  - The decoder channel change occurs during playback
  - The receiver is not powered at start time
    - Warning state occurs after power up
  - The receiver reboots during recording
    - Warning state occurs after power up
- When a recording or playback warning condition takes place:
  - A Warning log entry will be created
  - The Warning LED will be activated (if programmed)
  - The Warning LED remains on for the period of the recording or playback

### *The Alarm LED is showing, what does this mean?*

The Alarm (Red) LED shows for interrupted record and playback alarm conditions:

- Alarm RECORDING conditions occur when:
  - Recording channel does not exist at start time
  - No SD card available during recording (at start and during recording)
  - No more space is available on SD card.
- Alarm PLAYBACK conditions occur when:

- Content is unavailable (i.e.no SD card, content deleted).
- When an alarm condition takes place the following occurs:
  - Playback or recording is aborted
  - Alarm log entry is created
  - Alarm LED is activated (if programmed)
  - Alarm LED remains active for the period of the recording or playback
  - Alarm Relay is activated (if programmed)
  - Alarm Relay remains active for the period of the recording or playback.

## Remote control by SNMP

SNMP is the abbreviation for "Simple Network Management Protocol". It is connected over the Monitor & Control LAN connector at the rear of the unit. To have a list of all functions supported in this device, a MIB file is available on request.

Remote control is based upon different types of messages: GET, SET, TRAPS, INFORMS etc. To define further communication between the STAR and other SNMP devices/applications, a package with MIB files is made available on request. Included in the MIB package is an application note describing all available settings.

Please note that all SNMP connection related settings are available in the CONTROL/MGMT/IP and CONTROL/MGMT/NOTIFICATION menus.

The STAR supports SNMP v1 TRAPS, SNMP v2c TRAPS and SNMP v2c INFORMS.

STAR default community names are:

GET="usr\_read\_access"

SET="usr\_write\_access"

The community names are configurable in the CONTROL>MGMT>NOTIFICATION>DESTINATION menu.

*Note: None of the CONTROL>MGMT>IP settings are available on the SNMP tree, as each setting would cause a re-boot. Set these parameters through the GUI and save as a page once only.*

# Connector Specifications

## Alarm output connector

9-pole Sub-D female connector

Pin	Description
1	Relay A common
2	Relay A normally open
3	Relay B normally closed
4	Relay C common
5	Relay C normally open
6	Relay A normally closed
7	Relay B common
8	Relay B normally open
9	Relay C normally closed

Normally closed is the switch status when AC power is not connected or when power is connected and the alarm status is activated.

## Audio output connector (per channel)

9-pole Sub-D male connector

Pin	Description
1	Analog Left Out +
2	Analog Ground
3	AES +
4	Analog Ground
5	Analog Right Out +
6	Analog Left Out -
7	Analog Ground
8	AES -
9	Analog Right Out -

## RS232 comm connector

9-pole Sub-D female connector

Pin	Description
1	DCD
2	RX (In)
3	TX (Out)
5	DTR
6	Ground
7	RTS
8	CTS
9	RI

## Relay connector (per channel)

15-pole male connector

Pin	Description
1	Reserved (future RS-232 Data out)
2	Relay 1 NO
3	Relay 2 NO
4	Relay 3 NO
5	Relay 4 NO
6	Ground
7	Relay 5 NO
8	Relay 6 NO
9	TX data Out (RS-232 Data Out)
10	Common
11	Common
12	Relay 7 NO
13	Relay 8 NO
14	Relay 9 NO
15	Relay 10 NO

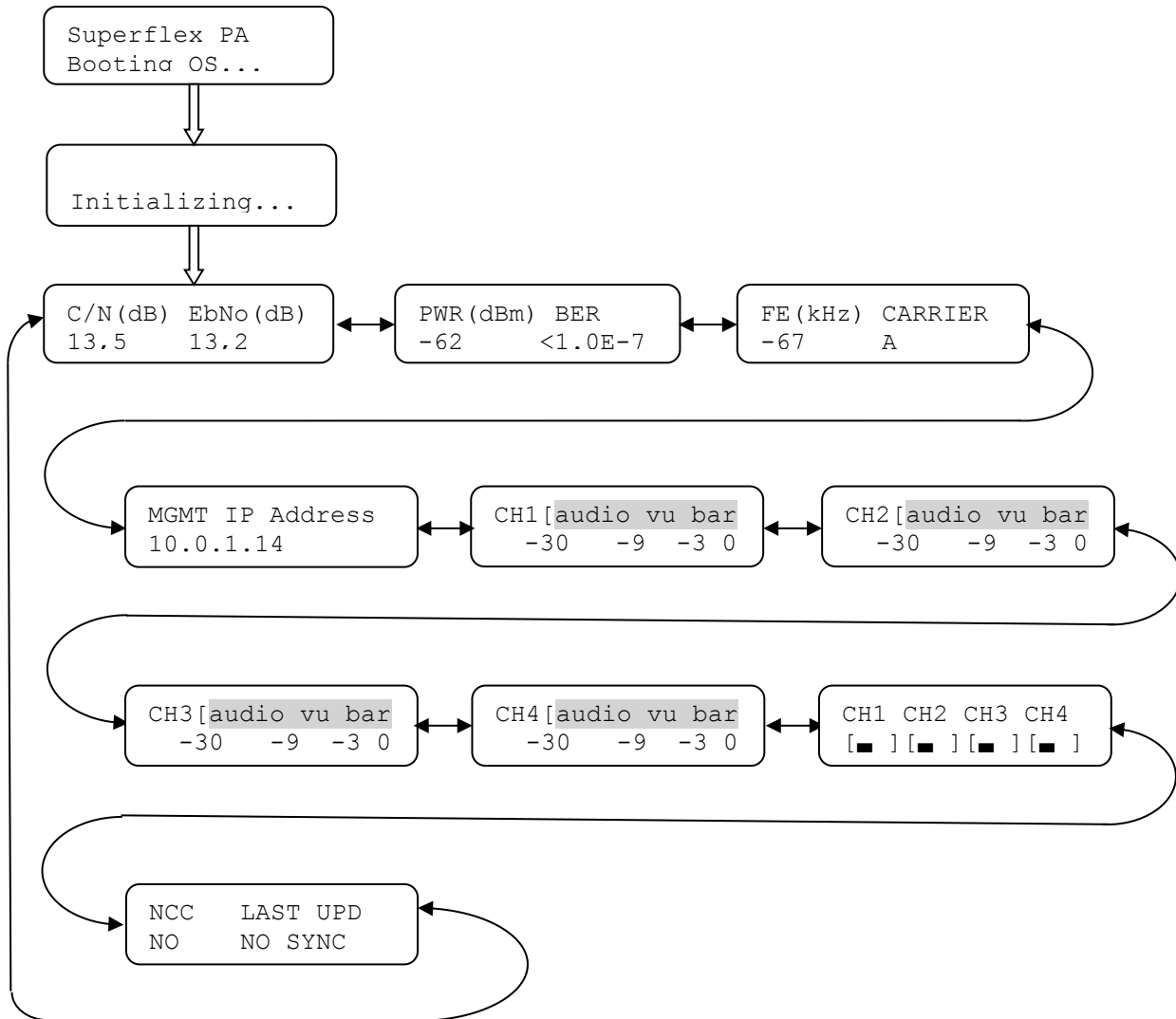
## ASI Connector (Option)

75 Ohm BNC Female

# Keypad Control

## Measurement Displays

Press the ◀/▶ keys to navigate through these measurement displays:



Press the ▲/▼ (up down) or enter key to show the Settings menu display mode.

## Settings Menu Flowchart

Grey shows Optional or Special Order Item

1 IDENTITY	<b>Control Mode</b>	LOCAL / REMOTE	
	<b>Device Type</b>	STAR G2	
	<b>Version</b>	V002	
	<b>Serial</b>	XXXX	
	Mgmt LAN MAC		
	Data LAN MAC		
2 INPUT	2.1 SAT-IN	2.1.1 LNB	<b>Mode</b>
		2.1.2 RF-IN	<b>Preferred</b>
	2.1.3 CARRIER A 2.1.4 CARRIER B		
		<b>Polarization</b>	
		<b>Frequency (kHz)</b>	
		<b>Mode</b>	
		<b>Rate (sym/s)</b>	
		<b>NCC PID</b>	
	2.2 IP-IN	2.2.1 LOCAL PORT	<b>Mode</b>
			<b>IP Address</b>
			<b>MAC Address</b>
		2.2.2 INPUT STRE	<b>IP Address</b>
			<b>UDP Port</b>
	2.3 ASI-IN		
3 DVB-TS	3.1 STREAM	<b>Input</b>	SAT-IN / IP-IN
	3.2 PID LIST	3.2.1 PID1	
		3.2.2 PID2	
		3.2.3 PID3	
		3.2.4 PID4	
		3.2.5 PID5	
		3.2.6 PID6	
		3.2.7 PID7	
		3.2.8 PID8	<b>Mode</b>
			<b>MPE PID</b>

3.3 FLEXKEY	IP Address
	UDP Port

4 DECODER	4.1 AUDIO	4.1.1 CHANNEL 1	
		4.1.2 CHANNEL 2	
		4.1.3 CHANNEL 3	
		4.1.4 CHANNEL 4	Stream
			Mode
			Service
			15KHz Lowpass
			Gain
			Stereo/Mono
			Delay
			Limiter

4.2 BACKUP	4.2.1 CHANNEL 1	
	4.2.2 CHANNEL 2	
	4.2.3 CHANNEL 3	
	4.2.4 CHANNEL 4	Enabled
		Priority

4.3 DATA	4.3.1 CHANNEL 1A	
	4.3.2 CHANNEL 1B	
	4.3.3 CHANNEL 2A	
	4.3.4 CHANNEL 2B	
	4.3.5 CHANNEL 3A	
	4.3.6 CHANNEL 3B	
	4.3.7 CHANNEL 4A	
	4.3.8 CHANNEL 4B	Mode
		Format
		Process
		Baud

IRT/J.52  
Process only in  
PES mode

5. OUTPUT	5.1 IP-OUT	5.1.1 Local Port	Mode
			IP Address
			MAC Address
		5.1.2 Output Str	Enable

6 CONTROL	6.1 MGMT	IP Mode
		IP Link
		IP Static Addr.
		IP Subnet Mask
		IP Gateway



7 ALARM	7.1 INPUT	7.1.1 SAT-IN	7.1.1.1 RF-Lock	Mode
				Warning Delay(s)
				Alarm Delay (s)
			7.1.1.2 POWER	Mode
				Level (dBm)
				Warning Delay(s)
				Alarm Delay (s)
			7.1.1.3 BER	Mode
				Level Mantissa
				Level Exponent
				Warning Delay(s)
				Alarm Delay (s)
			7.1.1.4 C/N	Mode
				Level (dB)
				Warning Delay(s)
				Alarm Delay (s)
			7.1.1.5 Eb/No	Mode
				Level (dB)
				Warning Delay(s)

If BER alarm  
 is set active,  
 all audio will  
 be muted.

		Alarm Delay (s)
7.1.1.6 TS	Mode	
	Warning Delay(s)	
	Alarm Delay (s)	
7.1.2 IP-IN	Mode	
	Warning Delay(s)	
	Alarm Delay (s)	
7.2 DECODER	7.2.1 PSI	Mode
		Warning Delay(s)
		Alarm Delay (s)

MODE; WARNING DELAY & ALARM DELAY are settable for 7.2.2 Audio, 7.2.3 Backup and 7.2.4 Data items. LEVEL is also settable for Audio LEFT, RIGHT and L+R

7.2.2 AUDIO	7.2.2.1 CH 1		
	7.2.2.2 CH 2		
	7.2.2.3 CH 3		
	7.2.2.4 CH 4	7.2.2.1.1 LEFT	
		7.2.2.1.2 RIGHT	
		7.2.2.1.3 L+R	
		7.2.2.1.4 STREAM	
7.2.3 BACKUP	7.2.3.1 CH 1		
	7.2.3.2 CH 2		
	7.2.3.3 CH 3		
	7.2.3.4 CH 4	7.2.3.4.1 MPEGTS	
		7.2.3.4.2 RTP/IP	
7.2.4 DATA	7.2.4.1 CH 1A		
	7.2.4.2 CH 1B		
	7.2.4.3 CH 2A		
	7.2.4.4 CH 2B		
	7.2.4.5 CH 3A		
	7.2.4.6 CH 3A		
	7.2.4.7 CH 4A		
	7.2.4.8 CH 4B	7.2.4.1.1 T.OUT	
		7.2.4.1.2 O.FLOW	

8 STATUS	8.1 CONFIG	Device Firmware
		Device Decoder
		NCC Address
	8.2 XD LICENSE	GLOBAL
		Decoder1
		Decoder2
		Decoder3
		Decoder4
		Net ID
		Site ID
		Expiry Date
		Class ID
		Serv. Prod.
	8.3 OPTIONS	VLSR
		MPEG4
		LIMITER
		ACMM
	8.4 SPECIALS	----
10 Phones	Channel Select	
	Level (dB)	
11 Display	Contrast	
	Backlight	
	Backl. Timeout	
	PID Editmode	

## TECHNICAL SPECIFICATIONS— STAR Two & STAR Four Generation 2

OPTION	DESCRIPTION	TYPE
TS over IP Input	MPTS and SPTS TS over IP input	Included
AAC Decoding	MPEG-4 AAC HE/LC for bandwidth efficient audio delivery	Now Included
Very Low Symbol Rate	Symbol rates as low as 100 kSym/s are supported for space segment savings	Now Included
Professional Media Recording	Record and Playback of audio programming	Licensed
Audio Limiter	Limits audio output level for direct-to-transmitter deployments	Licensed
Advanced Content Management Module	ACMM supports IDC's Production Manager content management system, audio file/playlist playback, event based ad/programming insertion, fade control, in-band content delivery, SD memory card for local storage provided	Licensed



STAR Two G2



STAR Four G2

SATELLITE	
Standards Compliance	ETS 300421 (DVB-S) / ETSI EN 302 307 (DVB-S2)
RF Frequency Range	950 to 2,150 MHz
Input Level	-80 dBm to -30 dBm
VSWR	> 10 dB
Input Connector	F-female, 75Ω
Output Connector	F-female, 75Ω
Symbol Rate DVB-S/S2	100 kbaud – 45 Mbaud
FEC DVB-S	1/2, 2/3, 3/4, 5/6, 7/8
FEC DVB-S2 QPSK	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
FEC DVB-S2 8PSK	3/5, 2/3, 3/4, 5/6, 8/9, 9/10
FEC DVB-S2 16APSK	2/3, 3/4, 4/5, 5/6, 8/9, 9/10
Frame Length	Long, Normal, Short
LNB	13/18 V selectable, Universal LNB, Max. 450 mA
AUDIO SPECIFICATIONS	
Compression	MPEG Layer 2 (ISO/IEC 11173-3 & 13818-3) Live/File MPEG Layer 3 (ISO/IEC 11173-3 & 13818-3) File MPEG 4 AAC LC, LD & HE (ISO/IEC 14496-3) Live/File option
Level Reference	-9 dBFS pk (= ref at balanced output of 6 dBu)
Frequency Response	30 Hz to 17.5 kHz (Analog) < 0.5 dB 10 Hz to 18.2 kHz (Digital) < 0.5 dB
Signal to Noise @ 6dBu	> 80 dB
THD (IEC)	< 0.04%
Analogue Audio Output	DB-9M Balanced Output, < 30Ω
Analogue Audio Level	6 dBu(rms) reference, 21 dBu(pp) max.
Digital Output	DB-9M Balanced Output, AES 3 / EBU (all outputs upconverted to 48 kHz)
Monitoring Headphone	6.35mm (1/4") Headphone Jack

### NUMBER OF AUDIO DECODERS

STAR Two G2	2
STAR Four G2	4

### CONDITIONAL ACCESS

BISS-1	Can be set via GUI or in-band using Net Manager
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### DATA PORT

Number of Async Ports	2 per audio decoder (1.2 to 38.4 kb/s)
Port Type	RS-232, No parity, 8 bits, 1 stop bit, DB-15M
Data Format	IRT/DVB Standard TR 101 154 Private data Event Manager meta data J.52

### RELAYS

40 Form-A, NO	10 per audio decoder, DB-15M
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### ALARM CONTACTS

3 Form-C, NO & NC	Programmable (RF lock, BER, C/N, Eb/No, In TS, PSI, PID, L, R, L+R) DB-9F
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### COMM PORT

Console Port	RS232, DB-9F (test port)
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### ETHERNET PORTS

M&C LAN	IEEE 802.3, RJ45, 10/100 Mb/s (auto sensing) HTTP, SNMP
DATA LAN	IEEE 802.3, RJ45, 100/1000 Mb/s (auto sensing) TS over IP

### STORAGE

SD Card Interface	32 GB supplied with ACMM (option)
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### POWER REQUIREMENTS

Supply Voltage	85 to 264 VAC, 50/60 Hz, max. 30W
Power Connection	IEC panel-mount plug filter with fuse
Safety and EMC	According to CE regulations

### PHYSICAL PARAMETERS

Chassis	1 RU rackmount
Dimensions (H, W, D)	4.5 cm x 48 cm x 30 cm (1.75" x 19" x 11.8")
Weight	3 kg (6.6 lbs.)

### ENVIRONMENTAL CONDITIONS

Operating Temperature	0° to 50° C (32° to 122° F)
Storage Temperature	0° to 50° C (32° to 122° F)

International Datacasting Corporation is a technology provider for the world's premiere broadcasters in radio, television, data and digital cinema. IDC's products and solutions are in demand for radio and television networks, targeted ad insertion, digital cinema, 3D live events, VOD, and IPTV. IDC is headquartered in Ottawa, Canada, has installations in over 100 countries, and a strong world-wide network of value-added partners and distributors. For more information visit: [www.datacast.com](http://www.datacast.com).

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Datasheet version 06, updated November 2015

INTERNATIONAL  
DATACASTING

[WWW.DATACAST.COM](http://WWW.DATACAST.COM)

# WEEE Disposal Instructions

## Disposal Instructions

Do not dispose of this device with unsorted household waste.

Improper disposal may be harmful to the environment and human health.

Please refer to your local waste authority for information on return and collection systems in your area.

## Directives de mise au rebut

Ne mettez pas cet appareil au rebut avec les déchets ménagers non triés.

La mise au rebut incorrecte peut être nocive à l'environnement et à la santé humaine.

Veuillez vous renseigner auprès des autorités compétentes de votre localité sur les procédures de renvoi et de collecte dans votre région.

## Istruzioni per lo smaltimento

Smaltire questo dispositivo solo in un contenitore previsto per la raccolta municipale di rifiuti separata.

Uno smaltimento improprio può inquinare l'ambiente ed essere pericoloso per la salute delle persone. Per informazioni sui centre di raccolta locali rivolgersi alle autorità locali competenti per lo smaltimento dei rifiuti.

## Instruções de disposição

Não disponha a eliminação deste dispositivo como resíduo municipal não classificado.

Disposição imprópria pode ser danosa ao meio-ambiente e à saúde de seres humanos. Por gentileza consulte a sua autoridade local de eliminação de resíduos para informações sobre os sistemas de retorno e coleta na sua área.

## Instrucciones de deshecho

No tire este dispositivo en los contenedores municipales de basura no clasificados para reciclaje. Tirar residuos inapropia-damente puede resultar nocivo para el medio ambiente y para la salud de las personas. Por favor diríjase a las autoridades locales responsables de la eliminación de residuos para obtener información sobre los sistemas de devolución y recolección en su área.

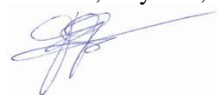
## Anweisungen für die Entsorgung

Dieses Gerät darf nicht mit unsortiertem Hausmüll entsorgt werden. Eine unangemessene Entsorgung kann sich schädlich auf die Umwelt und die Gesundheit auswirken. Bitte beachten Sie die Hinweise der für Ihren Ort zuständigen Behörden zu Rückgabe und Sammelverfahren.

To whom it may concern:

International Datacasting EMEA has done its utmost best to design and manufacture the family of STAR receivers in compliance to the latest current standards with the least environmental impact. They are a 100% RoHS free product, they are designed as "Green" (low power) and they are tested against and in compliance with FCC regulations and CE approvals.

Arnhem, July 18<sup>th</sup>, 2012



F. Peters-Sengers,  
Managing Director IDC EMEA

## Warranty & Service Information

International Datacasting Corporation (Seller) warrants the items manufactured and sold by the Seller to be free of defects in material and workmanship for a period of one (1) year from date of shipment to the original purchaser.

International Datacasting agrees to repair or replace the product, at no charge, within the warranty period, providing the product is delivered to IDC in its original packaging or equivalent, fully insured and with all shipping charges pre-paid.

To honor this warranty and to ensure the best possible service to you, IDC requires the following information to be included with the returned product:

- A detailed description of the problem and when it occurs;
- The model and serial number of the unit.
- A copy of the original invoice for the product
- Specify "Made In Canada" on your paper work
- An RMA number obtained prior to the return of the unit clearly printed on the exterior of your shipping container. To obtain an RMA number, log on to [www.datacast.com](http://www.datacast.com) and follow the link at the top of the page to "RMA Submission".

The following are expressly NOT COVERED under warranty. Any loss, damage and/or malfunction relating in any way to shipping, storage, accident, abuse, alteration, misuse, neglect, failure to use products under normal operating conditions, failure to use products according to any operating instructions provided by the Seller, lack of routine care and maintenance as indicated in any operating maintenance instructions, or failure to use or take any proper precautions under the circumstances.

This warranty is expressly in lieu of and excludes all other expressed and implied warranties, including but not limited to warranties of merchantability and of fitness for particular purpose, use or applications, and all other obligations or liabilities on the part of the Seller, unless such other warranties, obligations or liabilities are expressly agreed upon to in writing by the Seller. All obligations of the Seller under this warranty shall cease in the event of its products or parts thereof have been subject to accident, abuse, alteration, misuse or neglect, or which have not been operated and maintained in accordance with proper operating instructions. In no event shall the Seller be liable for incidental, consequential, special or resulting loss or damage of any kind howsoever caused. The Seller's responsibility for damages shall not exceed the payment, if any, received by the Seller for the unit or product or service furnished or to be furnished, as the case may be, which is the subject of claim or dispute.

If you have determined that the unit is malfunctioning, DO NOT ATTEMPT TO ALTER OR REPAIR THE UNIT. Please contact either your Network Service Provider or IDC at [www.datacast.com/customer-service/rma-submission](http://www.datacast.com/customer-service/rma-submission).

International Datacasting Corporation  
50 Frank Nighbor Place, Kanata, Ontario K2V 1B9 Canada  
Attn: Customer Service  
Tel: 613-596-4120 | Fax: 613-596-9208  
Email: [service@Datacast.com](mailto:service@Datacast.com)

## STAR Gen 2 User's Guide

### International Datacasting Corporation Part No. 92087070-50

This product ("Product") from International Datacasting Corporation (IDC) contains software (including firmware) origination from IDC and its suppliers and may also contain software from the open source community.

Software components from the open source community included in IDC products are covered by license terms identified at [www.datacast.com](http://www.datacast.com). By using the software, you or the entity or company you represent ("You") acknowledge that You have reviewed such license terms and that You agree to be bound by the terms of such licenses. Where such specific license terms entitle you to the source code of such software, that source code is available on request at cost from IDC for at least three years from the purchase date of this product.

For additional information on open source software in IDC products please visit the IDC website at:

[www.datacast.com](http://www.datacast.com)

If you would like a copy of the GPL or certain other open source software source code in this Software (if provided for in the applicable license) on a CD, IDC will mail to you a CD, with such code for U.S. \$9.99 plus the cost of shipping, upon request.

International Datacasting Corporation (TSX: IDC) is a global leader in digital content distribution for the world's premiere broadcasters in radio, television and digital cinema. IDC offers a broad portfolio of advanced solutions including Pro Audio, Pro Video, Pro Cinema and Pro Data for implementing broadcast content contribution and distribution applications. IDC's solutions are in demand for radio and television networks, digital cinema, 3D live events, satellite news gathering, sports contribution, and IPTV among others. IDC is headquartered in Ottawa, Canada, with regional offices in Arnhem, the Netherlands and in San Diego, California. IDC has installations in over 100 countries and service offices in Australia, Singapore and China with an international network of value-added partners and distributors.

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