

# Audio sources commands manual

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# Introduction

Welcome to the commands user manual of the Audac audio players. This manual describes the commands whereby the range of audac audio players can be controlled using their remote control ports. Depending on the model of audio player (and/or the type of main unit where connected when using SourceCon™ modular technology), the supported control interfaces might be different. The supported models including their available control interfaces are listed in the table below.

<b>MODEL</b>	<b>AVAILABLE CONTROL INTERFACES</b>
XMP44	TCP/IP & RS-232
TMP40	TCP/IP & RS-232 (when inserted to supporting main unit)
TSP40	RS-232
DMP40	TCP/IP & RS-232 (when inserted to supporting main unit)
DSP40	RS-232
IMP40	TCP/IP & RS-232 (when inserted to supporting main unit)
ISP40	RS-232
MMP40	TCP/IP & RS-232 (when inserted to supporting main unit)
MSP40	RS-232

# Using the commands

Depending of the type of device the different kinds of communication ports are:

- RS–232 port
- TCP/IP port

RS232 Configuration details	
<b>CONNECTION</b>	Standard RS232
<b>PIN 2</b>	Audiosource TX
<b>PIN 3</b>	Audiosource RX
<b>PIN 5</b>	GND
<b>Settings</b>	19200 Baud 8 Bit 1 Stop bit No parity No Handshaking

  

TCP/IP Configuration details	
<b>IP Address</b>	User configurable
<b>Port</b>	5001
<b>Max connections</b>	1

## Command overview

*Startsymbol | Destination | Source | Command | Argument(s) | Checksum | Stopsymbol*

Each command is followed by an 'x' character, which represents the number of the slot whereto the command is sent. If the audio player doesn't support multiple slots, the number '1' shall always be used.

Example:       Set output gain to –20 dB for module 1  
                  ASCII: #ID001/web/SOG1/28/U/return  
                  HEX: 237C443030317C7765627C534F47317C32387C3766666617C0D0A

Notes
<ul style="list-style-type: none"><li>• The address of the audio player is fixed at 'D001'</li><li>• The checksum is CRC–16 excluding the '#'. The checksum can always be replaced by 'U', which is always accepted.</li><li>• Return in ASCII : &lt;CR&gt; &lt;LF&gt; HEX : 0x0D 0x0A (carriage return &amp; line feed)</li><li>• Source address has a maximum length of 4 characters and cannot contain 'l' or '#'</li></ul>

## Command flow

- 1) The client sends a command to the audio player (Command)
- 2) The audio player acknowledges the command by returning the same command and a '+' as Argument. (Acknowledge)
- 3) The audio player updates all client's with the new information (Update)

For modular audio players featuring both RS–232 and TCP/IP communication ports, the update feedback is only available on the TCP/IP command port (not on RS–232).

## GTPS

Gives feedback about the type of audio player and/or installed modules and their software versions

Command: GTPS  
Arguments: None (0)  
Feedback: DMP40/DSP40 = 1  
IMP40/ISP40 = 2  
MMP40/MSP40 = 3  
IMP40/ISP40 = 4  
FMP40 = 6  
No module installed = 15

Example:

Get info about the type of audio player and/or installed modules:

Command: #ID001lwebIGTPSI0lUreturn  
Answer: #IALlID001lTPSI4^1^15^6^IMP40 V 1.0.4^DMP40 ^No Module ^  
FMP40 V1.4.29la3f8lreturn

## SOGx

Set the output gain level

Command: SOGx (with 'x' the number of slot)  
Arguments: Output gain in dB (range depending of the module type)  
Remark: Max output gain is +8 dB, which corresponds with argument '0'.  
Always increment negative output gain in dB with 8  
Set gain to +8 dB -> Argument = '0'  
Set gain to 0 dB -> Argument = '8'  
Set gain to -20 dB -> Argument = '28'

Example:

Set output gain for slot 1 to -20 dB

Command: #ID001lwebISOG1l28lUreturn  
Acknowledge: #lwebID001lSOG1l+lUreturn  
Update: #IALlID001lOG1l28l1b88lreturn

## GOGx

Get output gain level

Command: GOGx (with 'x' the number of slot)  
Arguments: None (0)

Example:

Get output gain for slot 1 (-20 dB)

Command: #ID001lweblGOG1l0lUreturn  
Answer: #IALlID001lOG1l28l9dd8lreturn

### **SFREQx**

Set tuning frequency for FM tuner

Command: SFREQx (with 'x' the number of slot)  
Arguments: Tuning frequency in integers

Example:

Set tuning frequency to 104.10 MHz for slot 1

Command: #ID001|web|SFREQ1|10410|UI|return  
Acknowledge: #|web|ID001|SFREQ1|+|UI|return  
Update: #|ALL|ID001|FREQ1|10410|927c|return

### **SFSUPx**

Automatic tuning frequency search up

Command: SFSUPx, (with 'x' the number of slot)  
Arguments: None (0)  
Remark: Multiple frequencies will be given as update while searching. The last given update is the finally tuned station.

Example:

Automatic tuning frequency search up for slot 1

Command: #ID001|web|SFSUP1|0|UI|return  
Acknowledge: #|web|ID001|SFSUP1|+|UI|return  
Update: #|ALL|ID001|FREQ1|10410|927c|return

### **SFSDNx**

Automatic tuning frequency search down

Command: SFSDNx, (with 'x' the number of slot)  
Arguments: None (0)  
Remark: Multiple frequencies will be given as update while searching. The last given update is the finally tuned station.

Example:

Automatic tuning frequency search down for slot 1

Command: #ID001|web|SFSDN1|0|UI|return  
Acknowledge: #|web|ID001|SFSDN1|+|UI|return  
Update: #|ALL|ID001|FREQ1|10410|927c|return

### **SELPRx**

Select tuner frequency preset (stored radio station)

Command: SELPRx, (with 'x' the number of slot)  
Arguments: Number of preset (1 to 10)

Example:

Select tuner frequency preset 4 for slot 1

Command: #ID001|web|SELPR1|4|UI|return  
Acknowledge: #|web|ID001|SELPR1|+|UI|return  
Update: #|ALL|ID001|FREQ1|10410|927c|return

## **SSBNDx**

Toggle band between FM and DAB

Command: SSBNDx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: DAB = 0  
FM = 1

Example:

Toggle band between FM and DAB for slot 1

Command: #ID001|web|SSBND1|0|U|return  
Acknowledge: #|web|ID001|SSBND1|+|U|return  
Update: #|ALL|ID001|BND1|1|927c|return

## **GPRGNx**

Get station / program name of the currently playing station

Command: GPRGNx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently playing station / program name in string

Example:

Get station / program name for radio tuner on slot 1

Command: #ID001|web|GPRGN1|0|U|return  
Answer: #|ALL|ID001|PRGN1|<<program name in string>>|checksum|return

## **GPRGTx**

Get station / program additionally carried text information of currently playing station

Command: GPRGTx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently playing station / program text in string

Example:

Get station / program text for radio tuner on slot 1

Command: #ID001|web|GPRGT1|0|U|return  
Answer: #|ALL|ID001|PRGT1|<<program text in string>>|checksum|return

## **GFREQx**

Get tuning frequency for FM tuner

Command: GFREQx (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently tuned frequency in integers

Example:

Get tuning frequency for FM tuner on slot 1

Command: #ID001|web|GFREQ1|0|U|return  
Answer: #|ALL|ID001|FREQ1|110410|927c|return

### **GCHx**

Get tuning channel for DAB tuner

Command: GCHx (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently tuned channel in integers

Example:

Get tuned channel for DAB tuner on slot 1

Command: #ID001|web|GCH1|0|U|return  
Answer: #IALLID001|CH1|5|460e|return

### **GBNDx**

Get band info (FM or DAB) for FM & DAB tuner

Command: GBNDx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: DAB = 0  
FM = 1

Example:

Get status for band for FM & DAB tuner on slot 1

Command: #ID001|web|GBND1|0|U|return  
Answer: #IALLID001|BND1|1|927c|return

### **GSIGSx**

Get signal reception strength

Command: GSIGSx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Signal reception strength (percentage) in integers

Example:

Get signal reception strength for tuner on slot 1

Command: #ID001|web|GSIGS1|0|U|return  
Answer: #IALLID001|SIGS1|85|360a|return

### **GSTSTx**

Get stereo output state

Command: GSTSTx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Mono = 0  
Stereo = 1

Example:

Get stereo output state for audio player on slot 1

Command: #ID001|web|GSTST1|0|U|return  
Answer: #IALLID001|STST1|1|56c1|return



### **GSONx**

Get name of currently playing audio track

Command: GSONx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently playing track name text in string

Example:

Get name of currently playing audio track on slot 1

Command: #ID001|web|GSON1|0|U|return  
Answer: #IALLID001|SON1|<<track name text in string>>|checksum|return

### **GSTNx**

Get station name (from database) of the currently playing station

Command: GSTNx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently playing station name text in string

Example:

Get name of currently playing station on slot 1

Command: #ID001|web|GSTN1|0|U|return  
Answer: #IALLID001|STN1|<<station name text in string>>|checksum|return

### **SPPLAYx**

Start audio track playing

Command: SPPLAYx, (with 'x' the number of slot)  
Arguments: None (0)

Example:

Start audio track playing on slot 1

Command: #ID001|web|SPPLAY1|0|U|return  
Acknowledge: #|web|ID001|SPPLAY1|+|U|return

### **SPSTOPx**

Stop audio track playing

Command: SPSTOPx, (with 'x' the number of slot)  
Arguments: None (0)

Example:

Stop audio track playing on slot 1

Command: #ID001|web|SPSTOP1|0|U|return  
Acknowledge: #|web|ID001|SPSTOP1|+|U|return

### **SPPAUSx**

Pause audio track

Command: SPPAUSx, (with 'x' the number of slot)  
Arguments: None (0)

Example:

Pause audio track on slot 1

Command: #ID001|web|SPPAUS1|0|U|return  
Acknowledge: #|web|ID001|SPPAUS1|+|U|return

### **SPGTSTx**

Go to begin of audio track

Command: SPGTSTx, (with 'x' the number of slot)  
Arguments: None (0)

Example:

Go to begin of audio track on slot 1

Command: #ID001IwebISPGTST1I0IUreturn  
Acknowledge: #IwebID001ISPGTST1I+IUreturn

### **SPNEXTx**

Browse to next audio track

Command: SPNEXTx, (with 'x' the number of slot)  
Arguments: None (0)

Example:

Browse to next audio track on slot 1

Command: #ID001IwebISPNEXT1I0IUreturn  
Acknowledge: #IwebID001ISPNEXT1I+IUreturn

### **SPPREVx**

Browse to previous audio track

Command: SPPREVx, (with 'x' the number of slot)  
Arguments: None (0)

Example:

Browse to previous audio track on slot 1

Command: #ID001IwebISPPREV1I0IUreturn  
Acknowledge: #IwebID001ISPPREV1I+IUreturn

### **SPFFWx**

Fast forward audio track

Command: SPFFWx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Fast forward speed (1 = 1x; 4 = 4x; 16 = 16x)  
Remark: If multiple fast forward commands are given, the speed will be increased in following sequence: 1x (play) > 4x > 16x

Example:

Fast forward audio track on slot 1

Command: #ID001IwebISPFFW1I0IUreturn  
Acknowledge: #IwebID001ISPFFW1I+IUreturn  
Update: #IALLD001IPFFW1I4Idb13Ireturn

## **SPFRWx**

Fast rewind audio track

Command: SPFRWx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Fast rewind speed (1 = 1x; 4 = 4x; 16 = 16x)  
Remark: If multiple fast rewind commands are given, the speed will be increased in following sequence: 1x (play) > 4x > 16x

Example:

Fast rewind audio track on slot 1

Command: #ID001|web|SPFRW1|0|U|return  
Acknowledge: #|web|ID001|SPFRW1|+|U|return  
Update: #|ALL|ID001|PFRW1|4|da47|return

## **SPRPx**

Set repeat mode

Command: SPFRWx, (with 'x' the number of slot)  
Arguments: Repeat one = 0  
Repeat folder = 1  
Repeat x times = 2  
Repeat off = 3  
Repeat all = 4

Example:

Set repeat mode to 'Repeat all' on slot 1

Command: #ID001|web|SPRP1|4|U|return  
Acknowledge: #|web|ID001|SPRP1|+|U|return  
Update: #|ALL|ID001|PRP1|4|acabl|return

## **SPRNDx**

Set random mode

Command: SPRNDx, (with 'x' the number of slot)  
Arguments: Random off = 0  
Random on = 1

Example:

Set random mode on for slot 1

Command: #ID001|web|SPRND1|1|U|return  
Acknowledge: #|web|ID001|SPRND1|+|U|return  
Update: #|ALL|ID001|PRND1|1|01c0|return

## GPSIx

Get playing song info from currently playing audio track

Command: GPSIx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently playing song info  
(songname, artist, album, length seconds, seconds played)

Example:

Get playing song info of playing audio track on slot 1

Command: #ID001IwebIGPSI1I0IUreturn  
Answer: #IALLID001IPSI1I<<songname^artist^album^length seconds^seconds played>>IchecksumIreturn

## GPSTATx

Get player status info

Command: GPSTATx, (with 'x' the number of slot)  
Arguments: None (0)  
Feedback: Currently player status info (playing, paused, stop)  
Playing = 0^1  
Paused = 1^0  
Stopped = 0^0  
Remark: The player status feedback command (PSTAT) is continuously given when changed the player status

Example:

Get player status info for audio track on slot 1

Command: #ID001IwebIGPSTAT1I0IUreturn  
Answer: #IALLID001IPSTATI<<paused^playing>>IchecksumIreturn