

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.

MODEL	AVAILABLE CONTROL INTERFACES
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
FMP40	TCP/IP & RS-232 (when inserted to supporting main unit)
BMP40	TCP/IP & RS-232 (when inserted to supporting main unit)

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	
CONNECTION	Standard RS232
PIN 2	Audiosource TX
PIN 3	Audiosource RX
PIN 5	GND
Settings	19200 Baud 8 Bit 1 Stop bit No parity No Handshaking

TCP/IP Configuration details	
IP Address	User configurable
Port	5001
Max connections	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
• The address of the audio player is fixed at ‘D001’ • The checksum is CRC–16 excluding the ‘#’. The checksum can always be replaced by ‘U’, which is always accepted. • Return in ASCII : <CR> <LF> HEX : 0x0D 0x0A (carriage return & line feed) • Source address has a maximum length of 4 characters and cannot contain ‘!’ or ‘#’

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
TMP40/TSP40 = 2
MMP40/MSP40 = 3
IMP40/ISP40 = 4
FMP40 = 6
BMP40 = 8
No module installed = 15
Not supported = 255

Example:

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

Command: #ID001|web|GTPS|0|U|return
Answer: #|ALL|ID001|TPS|4^1^15^6^IMP40 V 1.0.4^DMP40 ^No Module ^
FMP40 V1.4.29|a3f8|return

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: #ID001|web|SOG1|28|U|return
Acknowledge: #|web|ID001|SOG1|+|U|return
Update: #|ALL|ID001|OG1|28|1b88|return

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: #ID001|web|GOG1|0|U|return
Answer: #|ALL|ID001|OG1|28|9dd8|return

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|U|return
Acknowledge: #|web|ID001|SFREQ1|+|U|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|U|return
Acknowledge: #|web|ID001|SFSUP1|+|U|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|U|return
Acknowledge: #|web|ID001|SFSDN1|+|U|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|U|return
Acknowledge: #|web|ID001|SELPR1|+|U|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: #ID001IwebISSBND1I0IUlreturn
Acknowledge: #IwebID001ISSBND1I+IUlreturn
Update: #IALLID001IBND1I1I927clreturn

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: #ID001IwebIGPRGN1I0IUlreturn
Answer: #IALLID001IPRGN1I<<program name in string>>Ichecksumlreturn

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: #ID001IwebIGPRGT1I0IUlreturn
Answer: #IALLID001IPRGT1I<<program text in string>>Ichecksumlreturn

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: #ID001IwebIGFREQ1I0IUlreturn
Answer: #IALLID001IFREQ1I10410I927clreturn

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: #ID001lwebIGCH1l0lUlrreturn
Answer: #lALLlD001lCH1l5l460elreturn

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: #ID001lweblGBND1l0lUlrreturn
Answer: #lALLlD001lBND1l1l927clreturn

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: #ID001lweblGSIGS1l0lUlrreturn
Answer: #lALLlD001lSIGS1l85l360alreturn

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: #ID001lweblGSTST1l0lUlrreturn
Answer: #lALLlD001lSTST1l1l56c1lreturn

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: #ID001lwebIGSON1l0lUreturn
Answer: #IALlID001lSON1l<<track name text in string>>lchecksumlreturn

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: #ID001lwebIGSTN1l0lUreturn
Answer: #IALlID001lSTN1l<<station name text in string>>lchecksumlreturn

GFAVx

Get favourite stored stations (10 stations will be given)

Command: GFAVx, (with 'x' the number of slot)
Arguments: Index in favourites list
Feedback: Favourites station index + name + pointer (for 10 subsequent stations)

Example:

Get favourite stored stations on slot 3, starting with index '0' (10 stations will be given)

Command: #ID001lwebIGFAV3l0lUreturn
Answer: #IALlID001lFAV3l0^<<station0 name in string>>^<<pointer 0>>
^1^station1 name in string>>^<<pointer 1>>^2^station2 name in
string>>^<<pointer 2>> ...

DWSESTx

Select favourite stored stations

Command: DWSESTx, (with 'x' the number of slot)
Arguments: Pointer of the selecting station
Feedback: Selected station name text in string

Example:

Select favourite radio station in slot 3 with pointer 4741

Command: #ID001lwebIDWSEST3l4712lUreturn
Acknowledge: #lwebID001lDWSEST3l+lUreturn
Update: #IALlID001lSTN3lStudio Brussell7e6blreturn

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: #ID001IwebSPPLAY1IOIUreturn

Acknowledge: #IwebID001ISPPLAY1I+IUreturn

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: #ID001IwebSPSTOP1IOIUreturn

Acknowledge: #IwebID001ISPSTOP1I+IUreturn

SPPAUSx

Pause audio track

Command: SPPAUSx, (with 'x' the number of slot)

Arguments: None (0)

Example:

Pause audio track on slot 1

Command: #ID001IwebSPPAUS1IOIUreturn

Acknowledge: #IwebID001ISPPAUS1I+IUreturn

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: #ID001IwebSPGTST1IOIUreturn

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: #ID001IwebSPNEXT1IOIUreturn

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: #ID001IwebISPPREV1I0IUlreturn

Acknowledge: #IwebID001ISPPREV1I+IUlreturn

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: #ID001IwebISPFFW1I0IUlreturn

Acknowledge: #IwebID001ISPFFW1I+IUlreturn

Update: #IALLID001IPFFW1I4Idb13Ireturn

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: #ID001IwebISPFRW1I0IUlreturn

Acknowledge: #IwebID001ISPFRW1I+IUlreturn

Update: #IALLID001IPFRW1I4Ida47Ireturn

SPRPx

Set repeat mode

Command: SPRPx, (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: #ID001IwebISPRP1I4IUlreturn

Acknowledge: #IwebID001ISPRP1I+IUlreturn

Update: #IALLID001IPRP1I4Iacablreturn

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: #ID001lwebISPRND1l1lUlreturn
Acknowledge: #lwebID001ISPRND1l+lUlreturn
Update: #IALlID001IPRND1l1l01c0lreturn

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, image available)

Example:

Get playing song info of playing audio track on slot 1

Command: #ID001lwebIGPSI1l0lUlreturn
Answer: #IALlID001IPSI1l<<songname^artist^album^length seconds^seconds played>>lchecksumlreturn

GPSTATx

Get player status info

Command: GPSTATx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Currently player status info (playing, paused, stop, recording)
Playing = 0^1^0
Paused = 1^0^0
Stopped = 0^0^0
Recording = 0^0^1
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: #ID001lwebIGPSTAT1l0lUlreturn
Answer: #IALlID001IPSTATl<<paused^playing^recording>>lchecksumlreturn

GRRMx

Get player / recorder mode

Command: GRRMx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Currently configured player / recorder mode
Player = 0
Recorder = 1

Example:

Get player / recorder mode on slot 2

Command: #ID001|web|GRRM2|0|UI|return
Answer: #|web|ID001|RRM2|1|checksum|return

SRRMx

Set player / recorder mode

Command: SRRMx, (with 'x' the number of slot)
Arguments: Player = 0
Recorder = 1

Example:

Set mode to recorder on slot 2

Command: #ID001|web|SRRM2|1|UI|return
Acknowledge: #|web|ID001|SRRM2|+|UI|return
Update: #|ALL|ID001|RRM2|1|7a67|return

SRSTAx

Start recording

Command: SRSTAx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Currently recording track name and filesize

Example:

Start recording on slot 2

Command: #ID001|web|SRSTA2|0|UI|return
Acknowledge: #|web|ID001|SRSTA2|+|UI|return

SRSTOx

Stop recording

Command: SRSTOx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Finished recording track name

Example:

Stop recording on slot 2

Command: #ID001|web|SRSTO2|0|UI|return
Acknowledge: #|web|ID001|SRSTO2|+|UI|return

SRPAUx

Pause recording

Command: SRPAUx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Finished recording track name

Example:

Stop recording on slot 2

Command: #ID001IwebISRPAU2I0IUlreturn
Acknowledge: #IwebID001ISRPAU2I+IUlreturn

SRCANx

Cancel recording

Command: SRPAUx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Finished recording track name
Remark: Cancel command stops and removes the recorded file

Example:

Cancel recording on slot 2

Command: #ID001IwebISRCAN2I0IUlreturn
Acknowledge: #IwebID001ISRCAN2I+IUlreturn

SSTRx

Start / stop trigger

Command: SSTRx, (with 'x' the number of slot)
Arguments: Argument 1: trigger number (integer)
Argument 2: 1 = Start trigger
0 = Stop trigger
Feedback: Triggered event track name
Remark: Depending of the configured playback mode for the selected trigger, the play / repeat function can be configured

Example1:

Start trigger 1 on slot 4

Command: #ID001IwebISSTR4I1^1IUlreturn
Acknowledge: #IwebID001ISSTR4I+IUlreturn

Example2:

Stop trigger 1 on slot 4

Command: #ID001IwebISSTR4I1^0IUlreturn
Acknowledge: #IwebID001ISSTR4I+IUlreturn

GBMPIx

Get general BMP40 info

Command: GBMPIx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: BMP40 info
(version, name, address)

Example:

Get info of BMP40 on slot 2

Command: #ID001IwebIGBMPi2I0IUlreturn
Answer: #IwebID001IBMPI2I<<version^name^address>>IchecksumIreturn

GPAIRSx

Get BMP40 pairing state

Command: GPAIRSx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: BMP40 current pairing state
Pair success = 0
Pair time-out = 1
Pair failed = 2
Pair enabled = 3
Pair disabled = 4

Example:

Get pairing state of BMP40 on slot 2

Command: #ID001IwebIGPAIRS2I0IUlreturn
Answer: #IwebID001IPAIRS2I0IchecksumIreturn

SPAIRx

Set BMP40 pairing on (1) / off (0)

Command: SPAIRx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Pairing state (PAIRSx) and enabled pairing time (PAIREx)

Example:

Get pairing state of BMP40 on slot 2

Command: #ID001IwebISPAIR2I1IUlreturn
Acknowledge: #IwebID001ISPAIR2I+I20ablreturn
Answer: #IALLID001IPAIRS2I3I597flreturn
#IALLID001IPAIRES2I20If77elreturn
#IALLID001IPAIRES2I19Ia788lreturn
...
#IALLID001IPAIRES2I0I6a36lreturn

GPAIRLx

Get paired devices list

Command: GPAIRLx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Paired devices list (8 devices)

Example:

Get paired devices list of BMP40 on slot 2

Command: #ID001IwebIGPAIRL2I0IUlreturn
Answer: #IwebID001IPAIRL2I<<1^name^address>>IchecksumIreturn
#IwebID001IPAIRL2I<<2^name^address>>IchecksumIreturn
...
#IwebID001IPAIRL2I<<8^name^address>>IchecksumIreturn

GCONNLx

Get connected devices

Command: GCONNLx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Connected device information
(number, name, address)

Example:

Get connected devices information of BMP40 on slot 2

Command: #ID001IwebIGCONNL2I0IUlreturn
Answer: #IwebID001ICONNL2I<<number^name^address>>IchecksumIreturn

SDISCx

Disconnect device

Command: SDISCx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Connected device list (empty)

Example:

Disconnect device BMP40 on slot 2

Command: #ID001IwebISDISC2I0IUlreturn
Acknowledge: #IwebID001ISDISC2I+I20ablreturn
Answer: #IwebID001ICONNL2I<<1^^>>IchecksumIreturn

SFORGETx

Forget paired device [1–8]

Command: SFORGETx, (with 'x' the number of slot)
Arguments: [1 – 8]
Feedback: Paired devices list

Example:

Forget (unpair) device 3 on BMP40 slot 2

Command: #ID001IwebISFORGET2I3IUlreturn
Acknowledge: #IwebID001ISFORGET2I+Ib0a5Ireturn
Answer: #IwebID001IPAIRL2I<<1^DeviceName1^MacAddress1>>IchecksumIreturn
#IwebID001IPAIRL2I<<2^DeviceName2^MacAddress2>>IchecksumIreturn
#IwebID001IPAIRL2I<<3^^>>IchecksumIreturn
#IwebID001IPAIRL2I<<4^^>>IchecksumIreturn
...
#IwebID001IPAIRL2I<<8^^>>IchecksumIreturn

PPTIx

Broadcasts played time (from current playing track) in seconds

Command: PPTIx, (with 'x' the number of slot)
Arguments: None (0)
Feedback: Played time from current track (in seconds)

Example:

Broadcast played time from BMP40 on slot 2

Command: #ID001IwebIPPTI2I0IUlreturn
Answer: #IALLID001IPPTI2I<<playingseconds>>IchecksumIreturn