Audio sources commands manual

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AUDAC

Audio streamer commands (NMP40)

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 I Destination I Source I Command I Argument(s) I Checksum I 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: *#ID001Iweb|SOG1|28|U|return*
             HEX: *237C443030317C7765627C534F47317C32387C376666617C0D0A*

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 'I' 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).

AUDAC

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:	#|D001|web|GTPS|0|U|return
Answer:	#|ALL|D001|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:	#|D001|web|SOG1|28|U|return
Acknowledge:	#|web|D001|SOG1|+|U|return
Update:	#|ALL|D001|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:	#|D001|web|GOG1|0|U|return
Answer:	#|ALL|D001|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: #|D001|web|SFREQ1|10410|U|return
> Acknowledge: #|web|D001|SFREQ1|+|U|return
> Update: #|ALL|D001|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: #|D001|web|SFSUP1|0|U|return
> Acknowledge: #|web|D001|SFSUP1|+|U|return
> Update: #|ALL|D001|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: #|D001|web|SFSDN1|0|U|return
> Acknowledge: #|web|D001|SFSDN1|+|U|return
> Update: #|ALL|D001|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: #|D001|web|SELPR1|4|U|return
> Acknowledge: #|web|D001|SELPR1|+|U|return
> Update: #|ALL|D001|FREQ1|10410|927c|return

SPRESx

Set tuner frequency to preset
        Command: SPRESx, (with 'x' the number of slot)
        Arguments: Number of preset (1 to 10)

Example:
Set tuner frequency to preset 1
        Command: #|D001|web|SPRES1|1|U|return
        Acknowledge: #|web|D001|SPRES1|+|a9b4|return
        Update: #|web|D001|PRES1|1^10360^103.60   ^1^10000^100.00
                      ^1^10000^100.00 ^1^10000^100.00 ^1^10000^100.00
                      ^1^10000^100.00 ^1^10000^100.00 ^1^10000^100.00
                      ^1^10000^100.00 ^1^10000^100.00 |0a26|return

GPRESx

Get tuner frequency
        Command: GPRESx, (with 'x' the number of slot)
        Arguments: All stored frequencies will be given for this slot

Example:
        Command: #|D001|web|GPRES1|1|U|return
        Answer: #|web|D001|PRES1|1^10360^103.60   ^1^10000^100.00
                      ^1^10000^100.00 ^1^10000^100.00 ^1^10000^100.00
                      ^1^10000^100.00 ^1^10000^100.00 ^1^10000^100.00
                      ^1^10000^100.00 ^1^10000^100.00 |0a26|return

SSTSEx

Set stereo state
        Command: SSTSEx (with x the number of the slot)
        Arguments: Mono = 0
                      Stereo = 1

Example:
        Command: #|D001|web|SSTSE1|1|U|return
        Aknowledge: #|web|D001|SSTSE1|+|89d9|return
        Update: #|ALL|D001|STSE1|1|59d8|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: #|D001|web|SSBND1|0|U|return
        Acknowledge: #|web|D001|SSBND1|+|U|return

Update: #|ALL|D001|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: #|D001|web|GPRGN1|0|U|return
Answer: #|ALL|D001|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: #|D001|web|GPRGT1|0|U|return
Answer: #|ALL|D001|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: #|D001|web|GFREQ1|0|U|return
Answer: #|ALL|D001|FREQ1|10410|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: #|D001|web|GCH1|0|U|return
Answer: #|ALL|D001|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: #|D001|web|GBND1|0|U|return

        Answer: #|ALL|D001|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: #|D001|web|GSIGS1|0|U|return

        Answer: #|ALL|D001|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: #|D001|web|GSTST1|0|U|return

        Answer: #|ALL|D001|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: #|D001|web|GSON1|0|U|return

        Answer: #|ALL|D001|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: #|D001|web|GSTN1|0|U|return
> Answer: #|ALL|D001|STN1|<<station name text in string>>|checksum|return

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: #|D001|web|GFAV3|0|U|return
> Answer: #|ALL|D001|FAV3|0^<<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: #|D001|web|DWSEST3|4712|U|return
> Acknowledge: #|web|D001|DWSEST3|+|U|return
> Update: #|ALL|D001|STN3|Studio Brussel|7e6b|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: #|D001|web|SPPLAY1|0|U|return
> Acknowledge: #|web|D001|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: #|D001|web|SPSTOP1|0|U|return
    Acknowledge: #|web|D001|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: #|D001|web|SPPAUS1|0|U|return
    Acknowledge: #|web|D001|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: #|D001|web|SPGTST1|0|U|return
    Acknowledge: #|web|D001|SPGTST1|+|U|return

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: #|D001|web|SPNEXT1|0|U|return
    Acknowledge: #|web|D001|SPNEXT1|+|U|return

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: #|D001|web|SPPREV1|0|U|return
    Acknowledge: #|web|D001|SPPREV1|+|U|return

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: #|D001|web|SPFFW1|0|U|return
>   Acknowledge: #|web|D001|SPFFW1|+|U|return
>   Update: #|ALL|D001|PFFW1|4|db13|return

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: #|D001|web|SPFRW1|0|U|return
>   Acknowledge: #|web|D001|SPFRW1|+|U|return
>   Update: #|ALL|D001|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: #|D001|web|SPRP1|4|U|return
>   Acknowledge: #|web|D001|SPRP1|+|U|return
>   Update: #|ALL|D001|PRP1|4|acab|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: #|D001|web|SPRND1|1|U|return
>   Acknowledge: #|web|D001|SPRND1|+|U|return
>   Update: #|ALL|D001|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, image available)

Example:
Get playing song info of playing audio track on slot 1
        Command: #|D001|web|GPSI1|0|U|return
        Answer: #|ALL|D001|PSI1|<<songname^artist^album^length seconds^seconds played>>|checksum|return

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: #|D001|web|GPSTAT1|0|U|return
        Answer: #|ALL|D001|PSTAT|<<paused^playing^recording>>|checksum|return

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: #|D001|web|GRRM2|0|U|return
        Answer: #|web|D001|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: #|D001|web|SRRM2|1|U|return
        Acknowledge: #|web|D001|SRRM2|+|U|return
        Update: #|ALL|D001|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: #|D001|web|SRSTA2|0|U|return
      Acknowledge: #|web|D001|SRSTA2|+|U|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: #|D001|web|SRSTO2|0|U|return
      Acknowledge: #|web|D001|SRSTO2|+|U|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: #|D001|web|SRPAU2|0|U|return
      Acknowledge: #|web|D001|SRPAU2|+|U|return

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: #|D001|web|SRCAN2|0|U|return
      Acknowledge: #|web|D001|SRCAN2|+|U|return

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: #|D001|web|SSTR4|1^1|U|return
        Acknowledge: #|web|D001|SSTR4|+|U|return

Example2:
Stop trigger 1 on slot 4
        Command: #|D001|web|SSTR4|1^0|U|return
        Acknowledge: #|web|D001|SSTR4|+|U|return

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: #|D001|web|GBMPI2|0|U|return
        Answer: #|web|D001|BMPI2|<<version^name^address>>|checksum|return

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: #|D001|web|GPAIRS2|0|U|return
        Answer: #|web|D001|PAIRS2|0|checksum|return

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:	#|D001|web|SPAIR2|1|U|return
Acknowledge:| #|web|D001|SPAIR2|+|20ab|return
Answer:	#|ALL|D001|PAIRS2|3|597f|return
	#|ALL|D001|PAIRE2|20|f77e|return
	#|ALL|D001|PAIRE2|19|a788|return
	...
	#|ALL|D001|PAIRE2|0|6a36|return

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:	#|D001|web|GPAIRL2|0|U|return
Answer:	#|web|D001|PAIRL2|<<1^name^address>>|checksum|return
	#|web|D001|PAIRL2|<<2^name^address>>|checksum|return
	...
	#|web|D001|PAIRL2|<<8^name^address>>|checksum|return

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:	#|D001|web|GCONNL2|0|U|return
Answer:	#|web|D001|CONNL2|<<number^name^address>>|checksum|return

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:	#|D001|web|SDISC2|0|U|return
Acknowledge:| #|web|D001|SDISC2|+|20ab|return
Answer:	#|web|D001|CONNL2|<<1^^>>|checksum|return

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: #|D001|web|SFORGET2|3|U|return
     Acknowledge: #|web|D001|SFORGET2|+|b0a5|return
     Answer: #|web|D001|PAIRL2|<<1^DeviceName1^MacAddress1>>|checksum|return
                      #|web|D001|PAIRL2|<<2^DeviceName2^MacAddress2>>|checksum|return
                      #|web|D001|PAIRL2|<<3^^>>|checksum|return
                      #|web|D001|PAIRL2|<<4^^>>|checksum|return

                      ...
                      #|web|D001|PAIRL2|<<8^^>>|checksum|return

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: #|D001|web|PPTI2|0|U|return
     Answer: #|ALL|D001|PPTI2|<<playingseconds>>|checksum|return

GPNAMEx

Get player name

     Command: GPNAMEx (with 'x' as the slot number)
     Arguments: None
     Feedback: Player name

Example:

     Command: #|D001|web|GPNAME2|0|U|return
     Answer: #|web|D001|PNAME2|NMP40 player 1|cb91|return

SPNAMEx

Set player name

     Command: SPNAMEx (with 'x' as the slot number)
     Arguments: [New name]

Example:

     Command: #|D001|web|SPNAME2|NMP40 player 1|U|return
     Answer: #|web|D001|SPNAME2|+|72c7|return

GPIPx
Get IP

       Command: GPIPx (with 'x' as the slot number)
       Arguments: None
       Feedback: IP adress

Example:
       Command: #|D001|web|GPIP2|0|u|return
       Acknowledge: None
       Answer: #|D001|web|PIP2|10.2.3.99|+|u|return