ATLONA
a PANDUIT company

50 Watt Mixer Amplifier

Application Programming Interface

Version Information

Version	Release Date	Notes
1	Oct 2024	Initial release

Commands

General

This document provides an alphabetical list of commands available for AT-GAIN-M50-LZ series of products. Commands are case-sensitive. If the command fails or is entered incorrectly, then the feedback is "Command FAILED". Commands are sent using RS-232. There should be a 500 millisecond delay between each command sent to the unit.

> ⚠️ **IMPORTANT:** Each command is terminated with a carriage-return (0x0d) and the feedback is terminated with a carriage-return and line-feed (0x0a).

Command	Description
APwrOffTime	Sets the power-off time.
AudFuncPort	Selects the desired input/output.
Cspara	Sets the baud rate, data bits, parity bit, and stop bits for the serial port.
help	Displays the list of available commands.
MIC	Sets the microphone settings.
Mreset	Resets the unit to factory-default settings.
PASense	Sets PA sense system release delay, in seconds.
PATrigger	Returns the open (no) or closed (nc) status of the PA sense trigger port.
PATriggerMode	Sets the state of the PA sense trigger port.
PWCTRL	Enables or disables the power save mode.
PWOFF	Execute this command to power-off the unit.
PWON	Execute this command to power-on the unit.
PWSTA	Displays the power state of the unit.
Reboot	Performs a soft reboot of the AT-GAIN-M50-LZ.
STNDBY	Places the AT-GAIN-M50-LZ in low-power mode.
System	Displays the status of the unit.
Type	Displays the model of the unit.
Version	Displays the current firmware version of the unit.
VIN	Sets the input volume level.
VolKnobBusy	Returns the state of the volume knob on the AT-GAIN-VOL.
VOUTMute	Enables / disables muting of the output audio signal.
VOUT	Sets the output volume level.

APwrOffTime

Sets the power-off time. Time is specified in integer minutes. By default, the power-off time is set to 15 minutes. Specify the `sta` argument to display the current setting.

Syntax
APwrOffTime X

Parameter	Description	Range
X	Time	1...240, sta

Example
APwrOffTime 20

Feedback
APwrOffTime 20

AudFuncPort

Selects the desired input/output.

Syntax
AudFuncPort X

Parameter	Description	Range
X	Port	in1, in2, out, sta

Example
AudFuncPort in1

Feedback
AudFuncPort in1

Cspara

Sets the baud rate, data bits, parity bit, and stop bits for the serial port. Use the `sta` argument to display the current serial port settings. Each argument must be separated by a comma; no spaces are permitted. Brackets must be used when executing this command. There is no space between the backeted arguments and the command. The default baud rate is `115200`.

Syntax
Cspara[W,X,Y,Z]

Parameter	Description	Range
W	Baud rate	4800, 9600, 19200, 38400, 57600, 115200
X	Data bits	7, 8
Y	Parity bit	None, Odd, Even
Z	Stop bits	1, 2

Example
Cspara[115200,8,0,1]
Cspara sta

Feedback
Cspara[115200,8,0,1]
Cspara [115200,8,0,1]

help

Displays the list of available commands. To obtain help on a specific command, enter the `help` command followed by the name of the command.

Syntax
help X

Parameter	Description	Range
X	Command name (optional)	Command

Example
help

Feedback
Command List

APwrOffTIme
AudFuncPort
Cspara
...
...

MIC

Sets the microphone settings. Specify the `sta` argument to return the current settings.

Syntax
MIC X Y

Parameter	Description	Range
X	Parameter	on, off, atime, rtime, sens, reduce, sta
Y	Range	Refer to range values in table, below.

The range of each of parameter is as follows:

Parameter	Description	Range
on	Enables microphone	N/A
off	Disables microphone	N/A
atime	Attack time (ms)	1...1000
rtime	Release time (ms)	1...3000
sens	Microphone sensitivity level (dB)	-60...0
sens	Background noise reduction (dB)	-60...0

Example
```
MIC atime 100

MIC sta
```

Feedback
```
MIC atime 100

MIC sens -30
MIC reduce -20
MIC atime 100
MIC rtime 1000
```

Mreset

Resets the unit to factory-default settings.

Syntax
Mreset

This command does not require any parameters

Example
```
Mreset
```

Feedback
```
Mreset
```

PASense

Sets PA sense system release delay, in seconds. Specify the `sta` argument to return the current setting.

Syntax
PASense X Y

Parameter	Description	Range
X	Parameter	rtime, sta
Y	Range	Refer to range value in table, below.

The range for the rtime parameter is as follows:

Parameter	Description	Range
rtime	Release time (sec)	3...25

Example
PASense rtime 1

Feedback
PASense rtime 1

PATrigger

Returns the open (no) or closed (nc) status of the PA sense trigger port. Refer to PATriggerMode for more information. The `sta` argument must be specified.

Syntax
PATrigger X

Parameter	Description	Range
X	Required	sta

Example
PATrigger sta

Feedback
PATrigger open

PATriggerMode

Sets the state of the PA sense trigger port. The PA sense system uses a contact closure trigger port that can be interfaced to IP PA receivers that have contact closure outputs. When configured as Normally Open (NO), the trigger port is considered inactive when the two pins are <u>not</u> shorted. When configured as Normally Closed (NC), the pins are shorted. Specify the `sta` argument to return the current setting.

Syntax
PATriggerMode X

Parameter	Description	Range
X	State	NO, NC, sta

Example
PATriggerMode NO

Feedback
PATriggerMode NO

PWCTRL

Enables or disables the power save mode. Specify the `sta` argument to return the current setting.

Syntax
PWCTRL X

Parameter	Description	Range
X	State	on, off, sta

Example
PWCTRL on

Feedback
PWCTRL on

PWOFF

Executing this command will power-off the AT-GAIN-M50-LZ. Use the PWON command to power-on the unit.

Syntax
PWOFF

This command does not require any parameters

Example
PWOFF

Feedback
PWOFF

PWON

Executing this command will power-on the AT-GAIN-M50-LZ. Use the PWOFF command to power-off the unit.

Syntax
PWON

This command does not require any parameters

Example
PWON

Feedback
PWON

PWSTA

Displays the current power state of the AT-GAIN-M50-LZ.

Syntax
PWSTA

This command does not require any parameters

Example
PWSTA

Feedback
PWON

Reboot

Performs a soft reboot of the AT-GAIN-M50-LZ.

Syntax
Reboot

This command does not require any parameters

Example
Reboot

Feedback
Reboot

STNDBY

Places the AT-GAIN-M50-LZ in low-power mode. This complies with ErP power consumption limits of < 0.5 watts.

Syntax
STNDBY

This command does not require any parameters

Example
STNDBY

Feedback
STNDBY

System

Returns the status of the unit. The `sta` argument must be specified.

Syntax
System X

Parameter	Description	Range
X	Required	sta

Example
System sta

Feedback
Model AT-GAIN-M50-LZ
Version V0.7.13
VIN1 0
VIN2 0
VOUT1 -20
VIN2 LEVEL -85
VOUTMute1 off
AudFuncPort in1
MODE Stereo
LOAD 4(Ohm)
PWSTA on
PWCTRL on
STNDBY
APwrOffTime 15
MIC on
MIC sens -30
MIC reduce -20
MIC atime 100
MIC rtime 1000
PASense rtime 5
PASense inlevel 0
PATrigger Open
PATriggerMode NO

Type

Returns the model information of the unit.

Syntax
Type

This command does not require any parameters

Example
Type

Feedback
AT-GAIN-M50-LZ

Version

Displays the current firmware version of the unit.

Syntax
Version

This command does not require any parameters

Example
Version

Feedback
1.0.0

VIN

Increases / decreases the audio input volume. In addition to specifying an integer value, the + and - arguments can be used to increment or decrement the volume level by 1. The input must be specified and no spaces must exist between the first parameter and the command. Specify the sta argument to return the current setting.

Syntax
VINX Y

Parameter	Description	Range
X	Input	1, 2
Y	Value	+, -, -60...0, sta

Example
VIN2 -10

Feedback
VIN2 -10

VolKnobBusy

Returns the state of the volume knob on the AT-GAIN-VOL. If the AT-GAIN-VOL is connected to the AT-GAIN-M50-LZ, then `VolKnobBusy 1` will be returned. Otherwise, `VolKnobBusy 0` is returned.

Syntax
`VolKnobBusy`

This command does not require any parameters

Example	**Feedback**
`VolKnobBusy`	`VolKnobBusy 1`

VOUTMute

Enables / disables muting of the output audio signal. Specify the `sta` argument to return the current setting.

Syntax
`VOUTMuteX Y`

Parameter	Description	Range
X	Output	1
Y	Status	on, off, sta

Example	**Feedback**
`VOUTMute1 on`	`VOUTMute1 on`

VOUT

Increases / decreases the audio output volume. In addition to specifying an integer value, the + and - arguments can be used to increment or decrement the volume level by 1. The output must be specified and no spaces must exist between the first parameter and the command. Specify the `sta` argument to return the current setting.

Syntax
`VOUTX Y`

Parameter	Description	Range
X	Output	1
Y	Value	+, -, -60...0, sta

Example	**Feedback**
`VOUT1 -10`	`VOUT1 -10`