

# EAW ADAPTive API

Version 1.0



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# 1 Introduction

EAW's ADAPTive API allows installers to create custom software to control and/or monitor certain aspects of ADAPTive modules over the network. The API is built on the Constrained Application Protocol (CoAP).

## 1.1 Document History

2023-11-14	Initial Version
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# 2 Resources

## 2.1 Resource Discovery

Resource	Type	Methods	Unit	Range/Notes
/.well-known/core		GET		

## 2.2 Parameter Resources

Resource	Type	Methods	Unit	Range/Notes
/param/input/1/source	Integer	GET, PUT	Enum	0 = none 1 = analog 2 = aesL 3 = aesR 4 = net
/param/input/1/gain	Float	GET, PUT	dB	-100dB to 20dB
/param/input/1/mute	Integer	GET, PUT	Binary	0 = Unmuted 1 = Muted

## 2.3 Action Resources

Resource	Type	Methods	Unit	Range/Notes
/action/preset	Integer	GET, PUT	Preset Index	1 to 10
/action/identify	N/A	PUT	N/A	N/A
/action/ping	N/A	PUT	N/A	N/A

## 2.4 Status Resources

Resource	Type	Methods	Unit	Range/Notes
/status/diagnostics	N/A	GET	N/A	<b>Subscribable.</b> Returns a comma separated list of faults for each channel.
/status/input_meter	N/A	GET	dB	<b>Subscribable.</b> Returns input meter in dB

# 3 Resource Examples

The following examples use coap-client.exe which is an example program distributed with libcoap (<https://github.com/obgm/libcoap>).

In the following commands, the IP address 192.168.1.1 is used as an example. To determine the actual IP address of an ADAPTive module, use EAW Resolution or Dante Controller.

### 3.1 /.well-known/core

This resource discovery method will return the list of supported resources.

### 3.1.1 GET

```
coap-client.exe -m get coap://192.168.1.1/.well-known/core
```

```
</param/input/1/source>,</param/input/1/gain>,</param/input/1/mute>,</  
action/preset>,</action/identify>,</action/ping>,</status/diagnostics>  
;obs,</status/input_meter>;obs
```

## 3.2 /param/input/1/source

This parameter resource will set or get the input source parameter.

The input source parameter is an integer value that represents the input type.

- 0 = none
- 1 = analog
- 2 = aesL
- 3 = aesR
- 4 = net

### 3.2.1 GET

```
coap-client.exe -m get coap://192.168.1.1/param/input/1/source
```

```
1
```

Query the current input source (1 = analog).

### 3.2.2 PUT

```
coap-client.exe -m put -e 2 coap://192.168.1.1/param/input/1/source
```

Set the current input to aesL (2).

## 3.3 /param/input/1/gain

This parameter resource will set or get the input gain parameter. A value between -100 and 20 is accepted.

### 3.3.1 GET

```
coap-client.exe -m get coap://192.168.1.1/param/input/1/gain
```

```
0.000000
```

Query the current input gain.

### 3.3.2 PUT

```
coap-client.exe -m put -e "-20" coap://192.168.1.1/param/input/1/gain
```

Set the current input gain to -20.0dB.

## 3.4 /param/input/1/mute

This parameter resource will set or get the input mute parameter.

0 = unmuted

1 = muted

### 3.4.1 GET

```
coap-client.exe -m get coap://192.168.1.1/param/input/1/mute
```

```
0
```

Query the current input mute state.

### 3.4.2 PUT

```
coap-client.exe -m put -e 1 coap://192.168.1.1/param/input/1/mute
```

Set the current mute state (1 = muted).

## 3.5 /action/preset

This action recalls a preset that has previously been stored through EAW Resolution. A valid preset number is between 1-10.

### 3.5.1 PUT

```
coap-client.exe -m put -e 1 coap://192.168.1.1/action/preset
```

Recall preset 1

## 3.6 /action/identify

The identify LED will illuminate for 10 seconds.

### 3.6.1 PUT

```
coap-client.exe -m put coap://192.168.1.1/action/identify
```

Send identify command.

## 3.7 /action/ping

Ping the ADAPTive module.

### 3.7.1 PUT

```
coap-client.exe -m put coap://192.168.1.1/action/ping
```

This command will output a blank line if successful or an error if unsuccessful.

## 3.8 /status/diagnostics

Query diagnostic information. This resource allows subscription. Subscribers will receive an update every 5 seconds.

### 3.8.1 GET

```
coap-client.exe -m get -s 60 coap://192.168.1.1/status/diagnostics
```

```
channel,temperature_fault,impedance_fault,amp_protect,limiter_on,amp_mute,dsp_unresponsive,temperature,impedance
1,0,0,0,0,0,0,0,-128
2,0,0,0,0,0,0,0,-128
3,0,0,0,0,0,0,0,-128
4,0,0,0,0,0,0,0,-128
5,0,0,0,0,0,0,0,-128
6,0,0,0,0,0,0,0,-128
7,0,0,0,0,0,0,0,-128
8,0,0,0,0,0,0,0,-128
9,0,0,0,0,0,0,0,-128
10,0,0,0,0,0,0,0,-128
11,0,0,0,0,0,0,0,-128
12,0,0,0,0,0,0,0,-128
13,0,0,0,0,0,0,0,-128
14,0,0,0,0,0,0,0,-128
```

Query diagnostic information. Subscribe for 60 seconds.

## 3.9 /status/input\_meter

Query input meter value. This resource allows subscription. Subscribers will receive an update every second.

### 3.9.1 GET

```
coap-client.exe -m get coap://192.168.1.1/status/input_meter
```

```
-40.000000
```

Query input meter. Subscribe to this resource to receive an update every second.