



Recorder API

RS-232 Interface for
VGA Grid and VGA Broadcaster Pro/Std,
VGADVI Recorders, LectureRecorders

Each status line is terminated with an LF (ASCII code 10) character.

Serial Interface Settings VGA Recorder's serial port configuration is as follows:

Parameter	Value
Speed	<i>19200 bps</i>
Data bits	<i>8</i>
Parity	<i>None</i>
Stop bits	<i>1</i>
Flow control	<i>Hardware</i>

Commands

VGA Grid, VGA Broadcasters, VGADVI Recorders, LectureRecorders use different set of RS232 commands comparing to VGA Recorder Std/Pro. Some commands require channel name as an argument.

Channel name should be separated from the command name by a '.'. Either channel name or channel index can be specified. Empty channel name can be provided for some commands in which case it is interpreted as all channels.

If more than one channel has the same name the command will apply only to one channel, so channel index should be used instead. The commands are:

STOP.<channel>	Stop recording for the channel by setting rec_enabled to "". This has the same effect as SET.<channel>.rec_enabled="" SAVECFG.
STOP	Stop recording for all channels
START.<channel>	Start recording for the channel by setting rec_enabled to "on". This has the same effect as SET.<channel>.rec_enabled=on SAVECFG.
START	Start recording on all channels
SNAPSHOT.<channel>	Take snapshot on the specified channel (must be MJPEG)
SNAPSHOT	Take snapshot on all channels (must be MJPEG)
GET.<channel>.<key>	Get value of a broadcasting parameter <key> as described in VGABroadcaster HTTP API.
SET.<channel>.<key>=<value>	Set value of a broadcasting parameter as described in VGABroadcaster HTTP API. Parameter values containing spaces must be enclosed in quotation marks (either single or double). New values might not take effect immediately and will be lost after the reboot unless SAVECFG command is issued later.
SAVECFG	Save parameters values modified by SET command.
STATUS.<channel>	Report status of recording service for the channel. Status values are: "Running", "Stopped", "Unitialized".
STATUS	Report status of recording service for all channels.
FREESPACE	Report free space on the data partition, in bytes.
RECTIME.<channel>	Report elapsed time for the current file being recorded.
RECTIME	Report elapsed time for the current recording file for all channels.

Serial port configuration is the same as for VGA Recorder.

VGABroadcaster HTTP API

Some of the configuration parameters of VGA Broadcaster Lite can be queried and modified non-interactively via http. The point is to be able to control Broadcaster remotely from a script or from a program. This feature appeared in release 1.0.14.

The syntax of get/set requests is as follows:

```
http://<address>/admin/get_params.cgi?key  
http://<address>/admin/set_params.cgi?key=value
```

The following keys are currently supported:

Device info (readonly)

vendor	Always "Epiphan Systems Inc." - by NICE request
product_name	
firmware_version	
mac_address	

Broadcasting

framesize	e.g. 1024 x 768 (spaces required)
bcast_disabled	'on' or empty, broadcasting (not recording) will be disabled if on
streamtype	0 - Flash, 1 - Flash+h.264, 2 - ASF, 3 - ASF+h.264, 4 - MJPEG, 5 - RTSP
vbitrate	e.g. 65536, 64K, 1M
audio	'on' or empty
usenosignal	'on' or empty - enable/disable "No signal" image when signal is off
vbufmode	0 - Relaxed, 1 - Balanced, 2 - Strong
fastvideo	'on' or empty
timelabel	'none', 'date', 'hms', 'date_hms', 'hms_ms' or 'date_hms_ms'
streamport	
htmlrefresh	page refresh period in seconds
vgopsiz	minimum interval between key frames
fpslimit	video frame rate limit
allowips	IP-based access filter: allow list (syntax: IP; IP1,IP2,...; IP1-IP2,...)
denyips	IP-based access filter: deny list (syntax: IP; IP1,IP2,...; IP1-IP2,...)

RTP Unicast

unicast_enabled	'on' or empty
unicast_address	
unicast_apt	
unicast_vport	

ASF encoder

title
author
copyright
comment

Recorder

rec_enabled	'on' or empty
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One can specify several parameters in one URL, for example:

```
http://<address>/admin/get_params.cgi?streamtype&framesize&title&author  
http://<address>/admin/set_params.cgi?framesize=1280%20x%201024&streamtype=2
```

Then, for example to start and then stop recording using wget utility one can do the following:

```
wget 'http://admin:@<address>/admin/set_params.cgi?rec_enabled=on'  
wget 'http://admin:@<address>/admin/set_params.cgi?rec_enabled='
```

Perhaps, the same or similar mechanism should be supported by all our products that have web config.

To take snapshot (the channel MUST be configured as MJPEG)

```
http://<address>/admin/snapshot.cgi  
http://<address>/admin/snapshot.cgi?channel=1
```

VGA Grid multichannel support

You can control VGA Grid with same way, but you have to use channelN in URL, where N is zero-based channel index:

```
http://<address>/admin/channelN/get_params.cgi?key
http://<address>/admin/channelN/set_params.cgi?key=value
```

3.8.6d and after can use

Start all-in-one recorder:

```
curl "http://admin:@192.168.1.86/admin/set_params.cgi?_c=_multiplexed&rec_
enabled=on"
```

Stop:

```
curl "http://admin:@192.168.1.86/admin/set_params.cgi?_c=_multiplexed&rec_
enabled="
```

To control multiple systems the following can be used:

```
#!/bin/sh

for ip in <ip1> <ip2> <ip3>

do

curl "http://admin:@$ip/admin/set_params.cgi?_c=_multiplexed&rec_enabled=on" &

done
```