

---

# **Xbox-Smartglass-Nano Documentation**

*Release 0.10.1*

**OpenXbox**

**Jul 31, 2021**



## CONTENTS:

<b>1 xbox.nano.manager module</b>	<b>1</b>
<b>2 xbox.nano.protocol module</b>	<b>3</b>
<b>3 Indices and tables</b>	<b>5</b>
<b>Python Module Index</b>	<b>7</b>
<b>Index</b>	<b>9</b>



## XBOX.NANO.MANAGER MODULE

```
exception xbox.nano.manager.NanoManagerError
    Bases: Exception

class xbox.nano.manager.NanoManager(console)
    Bases: xbox.sg.manager.Manager

    PROTOCOL_MAJOR_VERSION = 6

    PROTOCOL_MINOR_VERSION = 0

    async start_stream(config: dict = {'audioBufferLengthHns': '10000000', 'audioFecType': '0', 'audioSyncCompressFactor': '0.99', 'audioSyncCompressLatency': '100', 'audioSyncDesiredLatency': '40', 'audioSyncLengthenFactor': '1.01', 'audioSyncMaxLatency': '170', 'audioSyncMinLatency': '10', 'audioSyncPolicy': '1', 'dynamicBitrateScaleFactor': '1', 'dynamicBitrateUpdateMs': '5000', 'enableAudioChat': 'true', 'enableDynamicBitrate': 'false', 'enableOpusAudio': 'false', 'enableOpusChatAudio': 'true', 'enableVideoFrameAcks': 'false', 'inputReadsPerSecond': '120', 'sendKeyframesOverTCP': 'false', 'udpBurstDurationMs': '11', 'udpMaxSendPacketsInWinsock': '250', 'udpSubBurstGroups': '5', 'urcpFixedRate': '-1', 'urcpKeepAliveTimeoutMs': '0', 'urcpMaximumRate': '10000000', 'urcpMaximumWindow': '1310720', 'urcpMinimumRate': '256000', 'urcpType': '0', 'videoFecLevel': '3', 'videoFecType': '0', 'videoMaximumFrameRate': '60', 'videoMaximumHeight': '720', 'videoMaximumWidth': '1280', 'videoPacketDefragTimeoutMs': '16', 'videoPacketUtilization': '0'})

    async stop_stream()

    async start_gamestream(client)

    property client_major_version
    property client_minor_version
    property stream_connected
    property stream_state
    property streaming
    property stream_enabled
    property stream_can_be_enabled
    property server_major_version
    property server_minor_version
    property wireless
```

```
property transmit_linkspeed
property wireless_channel
property session_id
property tcp_port
property udp_port
```

## XBOX.NANO.PROTOCOL MODULE

**exception** xbox.nano.protocol.NanoProtocolError

Bases: Exception

**class** xbox.nano.protocol.NanoProtocol(*client*, *address: str*, *session\_id*, *tcp\_port: int*,  
*udp\_port: int*)

Bases: object

Client sends ChannelClientHandshake with generated connection id Server responds with ChannelServerHandshake with connection id

UDP protocol sends HandShakeUDP 0x1 with connection ID in RTP header

Server sends ChannelCreates and ChannelOpens Client responds with ChannelOpens (copying possible flags)

**async start** ()

**async stop** ()

**async connect** (*timeout=10*)

**get\_channel** (*channel\_class*)

Get channel instance by channel class identifier

**Parameters** *channel\_class* (ChannelClass) – Enum member of ChannelClass

**Returns** Instance of channel

**Return type** Channel

**channel\_control\_handshake** (*connection\_id=None*)

**channel\_create** (*name, flags, channel\_id*)

**channel\_open** (*flags, channel\_id*)

**channel\_close** (*flags, channel\_id*)

**udp\_handshake** ()

**exception** xbox.nano.protocol.ControlProtocolError

Bases: Exception

**class** xbox.nano.protocol.ControlProtocol(*address: str*, *port: int*, *nano:*  
*xbox.nano.protocol.NanoProtocol*)

Bases: object

**BUFFER\_SIZE** = 4096

**async start** ()

**async stop** ()

**async handle** (*data*)

**queue** (*msg*)

**flush** ()

**send\_message** (*msg*)

**exception** xbox.nano.protocol.StreamerProtocolError

Bases: [Exception](#)

**class** xbox.nano.protocol.StreamerProtocol (*nano*: [xbox.nano.protocol.NanoProtocol](#))

Bases: [object](#)

**connection\_made** (*transport*)

**datagram\_received** (*data, addr*)

**error\_received** (*exc*)

**connection\_lost** (*exc*)

**send\_message** (*msg*)

## INDICES AND TABLES

- genindex
- modindex
- search



## PYTHON MODULE INDEX

### X

xbox.nano.manager, 1  
xbox.nano.protocol, 3



## INDEX

### B

`BUFFER_SIZE` (*xbox.nano.protocol.ControlProtocol* attribute), 3

### C

`channel_close()` (*xbox.nano.protocol.NanoProtocol* method), 3

`channel_control_handshake()` (*xbox.nano.protocol.NanoProtocol* method), 3

`channel_create()` (*xbox.nano.protocol.NanoProtocol* method), 3

`channel_open()` (*xbox.nano.protocol.NanoProtocol* method), 3

`client_major_version()` (*xbox.nano.manager.NanoManager* property), 1

`client_minor_version()` (*xbox.nano.manager.NanoManager* property), 1

`connect()` (*xbox.nano.protocol.NanoProtocol* method), 3

`connection_lost()` (*xbox.nano.protocol.StreamerProtocol* method), 4

`connection_made()` (*xbox.nano.protocol.StreamerProtocol* method), 4

`ControlProtocol` (class in *xbox.nano.protocol*), 3

`ControlProtocolError`, 3

### D

`datagram_received()` (*xbox.nano.protocol.StreamerProtocol* method), 4

### E

`error_received()` (*xbox.nano.protocol.StreamerProtocol* method), 4

### F

`flush()` (*xbox.nano.protocol.ControlProtocol* method), 4

### G

`get_channel()` (*xbox.nano.protocol.NanoProtocol* method), 3

### H

`handle()` (*xbox.nano.protocol.ControlProtocol* method), 3

### M

module  
    *xbox.nano.manager*, 1  
    *xbox.nano.protocol*, 3

### N

`NanoManager` (class in *xbox.nano.manager*), 1  
`NanoManagerError`, 1  
`NanoProtocol` (class in *xbox.nano.protocol*), 3  
`NanoProtocolError`, 3

### P

`PROTOCOL_MAJOR_VERSION` (*xbox.nano.manager.NanoManager* attribute), 1  
`PROTOCOL_MINOR_VERSION` (*xbox.nano.manager.NanoManager* attribute), 1

### Q

`queue()` (*xbox.nano.protocol.ControlProtocol* method), 4

### S

`send_message()` (*xbox.nano.protocol.ControlProtocol* method), 4

`send_message()` (*xbox.nano.protocol.StreamerProtocol* method), 4

`server_major_version()` (*xbox.nano.manager.NanoManager* property), 1

`server_minor_version()` (*xbox.nano.manager.NanoManager* property), 1

`session_id()` (*xbox.nano.manager.NanoManager property*), 2  
`start()` (*xbox.nano.protocol.ControlProtocol method*), 3  
`start()` (*xbox.nano.protocol.NanoProtocol method*), 3  
`start_gamestream()` (*xbox.nano.manager.NanoManager method*), 1  
`start_stream()` (*xbox.nano.manager.NanoManager method*), 1  
`stop()` (*xbox.nano.protocol.ControlProtocol method*), 3  
`stop()` (*xbox.nano.protocol.NanoProtocol method*), 3  
`stop_stream()` (*xbox.nano.manager.NanoManager method*), 1  
`stream_can_be_enabled()` (*xbox.nano.manager.NanoManager property*), 1  
`stream_connected()` (*xbox.nano.manager.NanoManager property*), 1  
`stream_enabled()` (*xbox.nano.manager.NanoManager property*), 1  
`stream_state()` (*xbox.nano.manager.NanoManager property*), 1  
`StreamerProtocol` (*class in xbox.nano.protocol*), 4  
`StreamerProtocolError`, 4  
`streaming()` (*xbox.nano.manager.NanoManager property*), 1

## T

`tcp_port()` (*xbox.nano.manager.NanoManager property*), 2  
`transmit_linkspeed()` (*xbox.nano.manager.NanoManager property*), 1

## U

`udp_handshake()` (*xbox.nano.protocol.NanoProtocol method*), 3  
`udp_port()` (*xbox.nano.manager.NanoManager property*), 2

## W

`wireless()` (*xbox.nano.manager.NanoManager property*), 1  
`wireless_channel()` (*xbox.nano.manager.NanoManager property*), 2

## X

`xbox.nano.manager`  
module, 1  
`xbox.nano.protocol`  
module, 3