

# How to read Bosch OSD Overlay

Bosch OSD Overlay is send in the RTP Payload type 97.

The structure of the Payload is the following:

<b>Tag ID</b> 2 Bytes	<b>Length</b> 2 Bytes	<b>Tag specific Options</b> 12 Bytes
<b>Tag Payload</b> N Bytes		

## Tag ID

Values	
Title OSD: Sector or Shot Title	0x0004
Camera OSD: Digital Zoom, Iris open/close, Focus near/far	0x0005
OSD User defined 1	0x0006
OSD User defined 2	0x0007
OSD User defined 3	0x0008
Time Information	0x0102
Hash Entry	0x0103
Signature Entry	0x0104
Bosch Internal Tags	All tags different from the one's above

## Length

Length of the Tag structure in byte (includes Tag and Length Bytes)

## Tag Specific Options

### Time Information

<b>Seconds since 2000</b> 4 Byte	<b>Milliseconds</b> 4 Byte	<b>RTP Timestamp</b> 4 Byte
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### Title, Camera and User defined OSD

<b>x Position</b> 1 Byte	<b>y Position</b> 1 Byte	<b>Reserved</b> 2 Byte
<b>OSD Attributes</b> 4 Byte		
<b>Coding Flags</b> 4 Byte		
<b>String</b> N x 1 Byte		

x Position

x-Coordinates of OSD, where 0 is left and 255 is right

y Position

y-Coordinates of OSD, where 0 is up and 255 is bottom

OSD Attributes

Values	
Default layout	0x00000000
Centered display	0x00008000
Big font	0x00020000
Big font and centered display	0x00028000

Coding Flags

Values	
ASCII	0x00000000
Unicode (UTF-16)	0x00000001

String

Displayed Text

Bosch Internal Tags

<b>Reserved</b> 12 Bytes
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Hash entry and Signature Entry

Hash ID 2 Byte	Signature ID 2 Byte	Flags 4 Bytes	Payload Sequence Number 4 Bytes
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Hash ID

Values	
MD5	0x0001
SHA-1	0x0002
SHA-256	0x0003

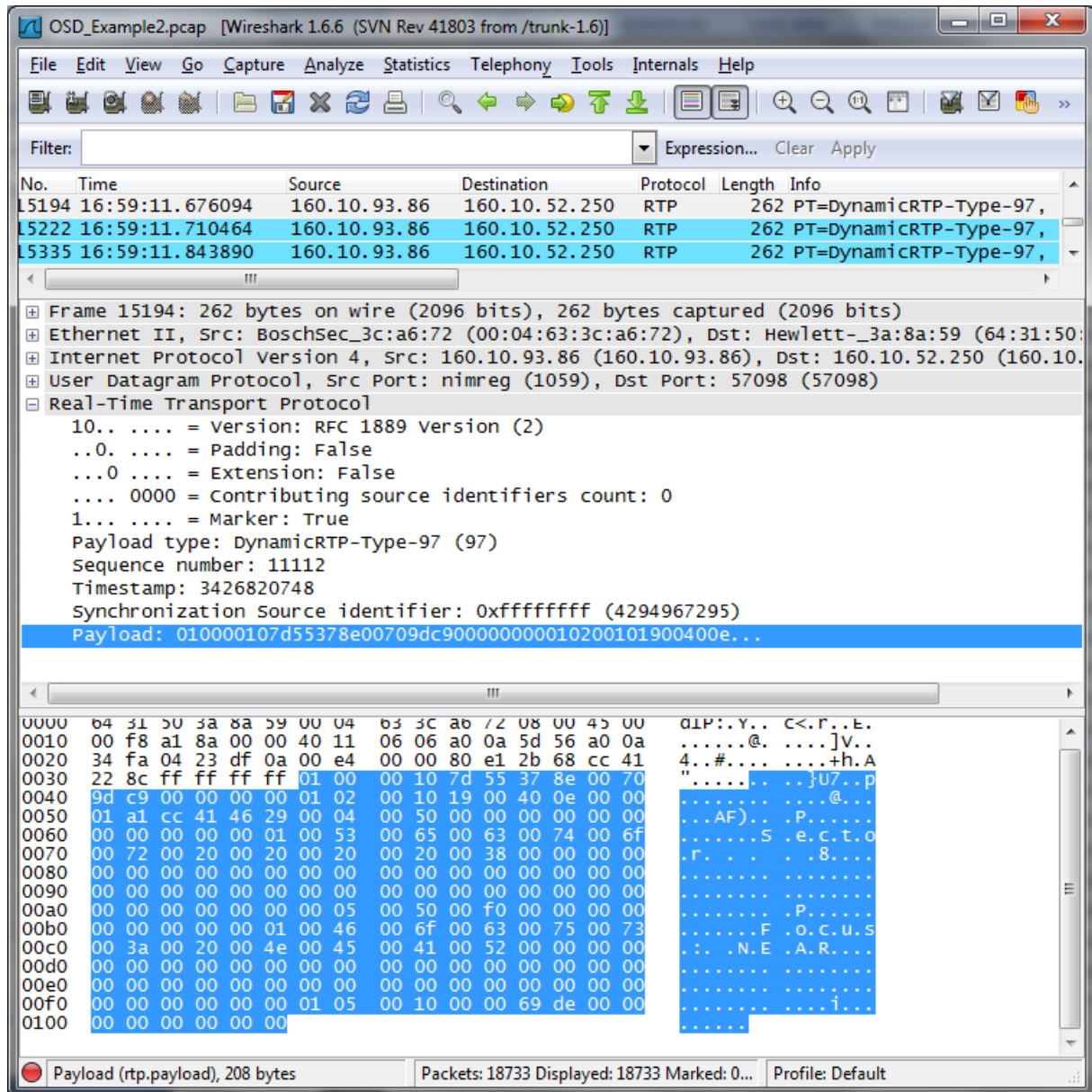
Signature ID

Values	
RSA with SHA-1	0x0001

Flags

For future extensions

## Example RTP Packet



The payload from the packet shown above can be decoded as following:

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0100 0010 7d55378e00709dc900000000    → Bosch Internal Tag
0102 0010 1900400e 000001a1 cc414629    → Time Stamp at 16.04.2013 16:59:58.417
0004 0050 00 00 00000000 00000001
→ Tile OSD at x=0/y=0 with default layout and Unicode
0053 0065 0063 0074 006f 0072 0020 0020 0020 0020 0038 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
    → OSD Tile Text: "Sector 8"
0005 0050 00 f0 0000 00000000 00000001
→ Camera OSD at x=0/y=240 with default layout and Unicode
0046 006f 0063 0075 0073 003a 0020 004e 0045 0041 0052 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
    → OSD Camera Text: "Focus: NEAR"
0105 0010 000069de0000000000000000    → Bosch Internal Tag
    
```