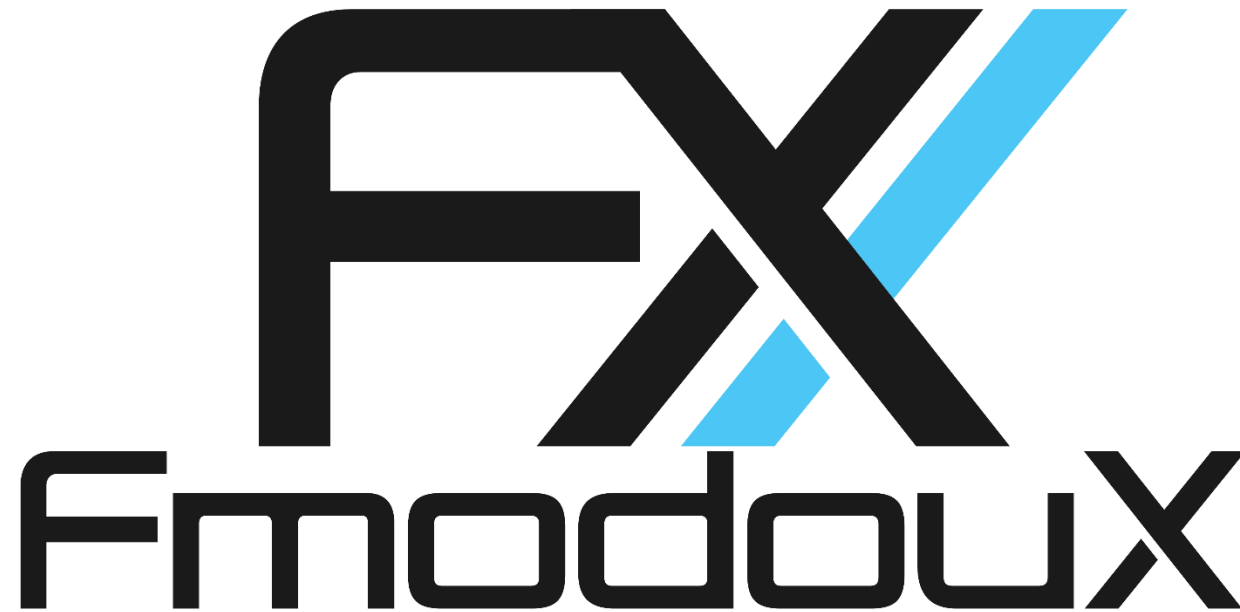


# LIVE TV REAL TIME UDP PROTOCOL



3 characters based with semi-colon and delimiters, ultra-short content, request on demand, udp protocol.

Each packet MUST be folowed by a Carriage Return (hex 13) and Line Feed (hex 10) {"\r\n"}



<u>STREAM DESCRIPTION</u>	<u>STREAM w/o "</u>	<u>REQUIRED ARGUMENT(S)</u>	<u>OPTIONAL ARGUMENT(S)</u>	<u>SPORT</u>	<u>REQUEST</u>
CLOCK	'clk;'	1	1	UWW / WT	"clock"
BREAK	'brk;'	1	0	UWW / WT	"break"
PERIOD	'prd;'	1	0	WT	"period"
POINTS	'pt1;' / 'pt2;'	1	0	WT	
KICKLEVEL	kl1;' / 'kl2;'	1	0	WT	
SCORE	'sc1;'	2	0	UWW / WT	"scores"
WARNINGS / GAM-JEOM	'wg1;'	2	0	UWW / WT	"warnings" / "gam-jeom"
CAUTIONS	'ct1;'	2	0	UWW	"cautions"
MATCH	'mch;'	14	0	UWW / WT	"informations"
ATHLETES	'at1;'	6	0	UWW / WT	"athletes"
AVANTAGE	'avt;'	1	0	UWW	"avantage"
INJURY	'ij1;' / 'ij2;'	1	1	UWW / WT	"ij1" / "ij2"
ACTIVITY	'ac1;' / 'ac2;'	1	1	UWW	"ac1" / "ac2"
WINNER PERIODS	'wpr;'	3	0	WT	"winperiods"
WINNER	'wmh;'	2	0	UWW / WT	"winmatch"
IDENTIFICATION	'mat;'	3	0	UWW	"identification"
CHALLENGE / IVR	'ch1;'	1	1	UWW / WT	
REFEREES	'ref;'	2	x	UWW / WT	"referees"
PRELOAD	'pre;'	0	1	UWW / WT	
READY	'rdy;'	0	1	UWW / WT	
TIMEOUT	'to1;' / 'to2;'	1	1	WT	
HELLO / BYE	'hel;' / 'bye'	0	0	UWW / WT	



## CLOCK

*UWW / WT*

Stream broadcasted when clock change, operator start, correct or stop the clock, or when period is finished

<b>MAIN STREAM</b>	clk;	
<b>REQUIRED ARGUMENT</b>	1:23	<i>Scoreboard clock</i>
<b>OPTIONAL ARGUMENT</b>	;start	<i>Operator action : starting the clock</i>
	;stop	<i>Operator action : stopping the clock</i>
	;corr	<i>Operator action : correcting the clock</i>
	;stopEnd	<i>Automatic action : end of period / match</i>

*'clk;1:59;start' / 'clk;1:58' / 'clk;1:57;stop' / 'clk;0:00;stopEnd'*



## BREAK

*UWW / WT*

Stream broadcasted during the breaking time (inter-periods)

### MAIN STREAM

brk;

### REQUIRED ARGUMENT

59      *Scoreboard break {ss}*

0:59      *Scoreboard break {m:ss}*

*'brk;0:59' / 'brk;58' / 'brk;0:00;stopEnd' / 'brk;0;stopEnd'*



## PERIOD

*WT*

Stream broadcasted when period (round) changes

### MAIN STREAM

prd;

### REQUIRED ARGUMENT

1      *Period number 1*

2      *Period number 2*

3      *Period number 3*

4      *Period number 4*

### EXAMPLES w/o "

*'prd;1' / 'prd;2' / 'prd;3' / 'prd;4'*



## POINTS

*WT*

Stream broadcasted when points are added

### MAIN STREAM

pt1; Main stream for athlete 1

pt2; Main stream for athlete 2

### REQUIRED ARGUMENT

1 *Punch point*

2 *Body point*

3 *Head point*

'pt1;1' / 'pt1;2' / 'pt1;3' / 'pt2;1' / 'pt2;2' / 'pt2;3'



## KICKLEVEL

WT

Stream broadcasted when kick happens

<b>MAIN STREAM</b>	kl1;	Main stream for athlete 1
	kl2;	Main stream for athlete 2
<b>REQUIRED ARGUMENT</b>	50	<i>Kick Level value (from 1 to 100)</i>

'kl1;50' / 'kl1;1' / 'kl1;100' / 'kl2;50' / 'kl2;1' / 'kl2;100'



## SCORE

*UWW / WT*

Stream broadcasted when score changes

### MAIN STREAM

sc1;

### REQUIRED ARGUMENTS

1      *score of athlete 1*

;sc2;      *delimiter for athlete 2*

2      *score of athlete 2*

### EXAMPLES w/o "

*'sc1;1;sc2;2' / 'sc1;18;sc2;24'*





WARNINGS / GAM-JEOM*UWW / WT*Stream broadcasted when warnings / gam-jeom changes**MAIN STREAM**

wg1;

**REQUIRED ARGUMENTS**1      *warning / gam-jeom of athlete 1*;wg2;      *delimiter for athlete 2*2      *warning / gam-jeom of athlete 2*

'wg1;1;wg2;2' / 'wg1;4;wg2;3'



CAUTIONS

UWW

Stream broadcasted when cautions changes

## MAIN STREAM

ct1;

## REQUIRED ARGUMENTS

1 *Cautions of athlete 1*;ct2; *delimiter for athlete 2*2 *Cautions of athlete 2*

'ct1;1;ct2;2' / 'ct1;4;ct2;3'



MATCH

UWW / WT

Stream broadcasted when match is loaded

## MAIN STREAM

mch;

## REQUIRED ARGUMENTS

1234 *Match number*;1/8 final *Round / Phase*;Men -59Kg *Sport / Discipline*;1 *Mat / Court*;#000000 *Color Athlete 1*;#FFFFFF *Text Color Athlete 1*;#000000 *Color Athlete 2*;#FFFFFF *Text Color Athlete 2*;a14ddd5c *GUID*;Senior *Age category / Division*;2 *Number of periods*;120 *Period duration*;cntDown *Count up or count down clock*;3 *Hit level*

'mch;1234;1/8 final;Men -59Kg;1;#000000;#FFFFFF;#000000;#FFFFFF;a14ddd5c;Senior;2;120;cntDown;3'



ATHLETES

UWW / WT

Stream broadcasted when match is loaded or when names or country changes

## MAIN STREAM

at1;

## REQUIRED ARGUMENTS

F.MODOUX

*Short name athlete 1*

;Frederic MODOUX

*Long name athlete 1*

;SUI

*Team athlete 1*

;at2;

*Delimiter for athlete 2*

F.MODOUX

*Short name athlete 2*

;Frederic MODOUX

*Long name athlete 2*

;SUI

*Team athlete 2*

'at1;F.Modoux;Frederic MODOUX;SUI;at2;F.MODOUX;Frederic MODOUX;SUI'



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(submit any request on [github.com/Fmodoux/FX\\_graphic](https://github.com/Fmodoux/FX_graphic))

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## AVANTAGE

UWW

Stream broadcasted when score is equal and advantage changes

### MAIN STREAM

avt;

### REQUIRED ARGUMENT

1     *Athlete number having advantage (0 if none)*

'avt;1' / 'avt;2' / 'avt;0'



INJURY

UWW / WT

Stream broadcasted when injury time is running

MAIN STREAM	ij1;	Main stream for athlete 1
	ij2;	Main stream for athlete 2
	ij0;	Main stream for unidentified athlete
REQUIRED ARGUMENT	1:23	<i>Clock of the injury time</i>
OPTIONAL ARGUMENT	;show	<i>When showing the injury time</i>
	;hide	<i>When hiding the injury time</i>
	;reset	<i>When resetting the injury time</i>

'ij1;1:23;show' / 'ij1;1:22' / 'ij1;1:21;hide' / 'ij2;0:45;show' / 'ij2;0:44' / 'ij2;0:44;hide' / 'ij0;1:42'



ACTIVITY

UWW

Stream broadcasted when activity time is running**MAIN STREAM**

ac1;

ac2;

**REQUIRED ARGUMENT**1:23      *Clock of the activity time***OPTIONAL ARGUMENT**;show      *When showing the activity time*;hide      *When hiding the activity time*;reset      *When resetting the activity time*

'ac1;28;show' / 'ac1;27' / 'ac1;26;hide' / 'ac2;9;show' / 'ac2;8' / 'ac2;7;hide'



WINNER PERIODS

WT

STREAM BROADCASTED WHEN A PERIOD ENDS... ALL 3 PERIODS ARE ALWAYS SENT AND ID IS '0' PLAYING / IF NOT PLAYED YET

## MAIN STREAM

wpr;

## REQUIRED ARGUMENTS

pr1	1st period
;1	Athlete number winning 1st period (0 if none)
;pr2	2nd period
;2	Athlete number winning 2nd period (0 if none)
;pr3	3rd period
;0	Athlete number winning 3rd period (0 if none)

'wpr;pr1;0;pr2;0;pr3;0' / 'wpr;pr1;2;pr2;1;pr3;0'





WINNER*UWW / WT*

Stream broadcasted when winner is selected and can be update when classification points are selected

**MAIN STREAM**

wmh;

**REQUIRED ARGUMENTS**

F.MODOUX

*Winner name*

;3-0VF

*Classification points*

'wmh;F.MODOUX' / 'wmh;F.MODOUX;3-0VF'



# IDENTIFICATION

UWW

Stream broadcasted when requested only**MAIN STREAM**

mat;

**REQUIRED ARGUMENTS**

1

*Mat or court number*

;xxx.xxx.xxx.xxx

*IP of the scoreboard PC*

;V1.2

Software version

'mat;1;192.168.0.1;V1.2'



CHALLENGE / IVR

UWW / WT

Stream broadcasted when challenge / IVR is requested or updated**MAIN STREAM**

ch1; Main stream for athlete 1

ch2; Main stream for athlete 2

**REQUIRED ARGUMENT**1 *Boolean if challenge is accepted or denied. -1 for canceled challenge***OPTIONAL ARGUMENT**;1 *Boolean if the accepted challenge is won or lost*

'ch1;' / 'ch1;0' / 'ch1;1' / 'ch1;1;0' / 'ch1;1;1' / 'ch2;' / 'ch2;0' / 'ch2;1' / 'ch2;1;0' / 'ch2;1;1' / 'ch1;-1' / 'ch2;-1'



REFEREES

UWW / WT

Stream broadcasted before match start or when referees name/team changes**MAIN STREAM**

ref;

**REQUIRED ARGUMENT**

Referee NAME

*Name of the referee*

;SUI

*Team of the referee***OPTIONAL ARGUMENTS**

;ju1

*Delimiter for 1st judge*

;Judge NAME

*1st judge name*

;SUI

*1st judge team*

;ju2

*Delimiter for 2nd judge*

;Judge NAME

*2nd judge name*

;SUI

*2nd judge team*

;ju3

*Delimiter for 3rd judge*

;Judge NAME

*3rd judge name*

;SUI

*3rd judge team***EXAMPLE w/o "***'ref;Frederic MODOUX;SUI;ju1;Frederic MODOUX;SUI;ju2;Frederic MODOUX;SUI;ju3;Frederic MODOUX;SUI'*

## PRELOAD

*UWW / WT*

Stream broadcasted when match is pre loaded

**MAIN STREAM**

pre;

**OPTIONAL ARGUMENT**

FightLoaded

*Any optional comment*

*'pre;' / 'pre;FightLoaded'*



READY

*UWW / WT*

Stream broadcasted when match is ready to start

**MAIN STREAM**

rdy;

**OPTIONAL ARGUMENT**

FightReady

*Any optional comment*

'rdy;' / 'rdy;FightReady'



TIMEOUT

WT

Stream broadcasted when Timeout time is running

MAIN STREAM	to1;	Main stream for athlete 1
	to2;	Main stream for athlete 2
	to0;	Main stream for unidentified athlete
REQUIRED ARGUMENT	0:30	<i>Clock of the timeout time</i>
OPTIONAL ARGUMENT	;start	<i>Operator action : starting the timeout</i>
	;stop	<i>Operator action : stopping the timeout</i>
	;corr	<i>Operator action : correcting the timeout</i>
	;stopEnd	<i>Automatic action : end of timeout</i>

**EXAMPLES w/o "**

'to1;0:23;show' / 'to1;0:22' / 'to1;0:21;hide' / 'to2;0:45;show' / 'to2;0:44' / 'to2;0:44;hide' / 'to0;0:42'



HELLO

*UWW / WT*

Stream broadcasted just after opening the connection/software

**MAIN STREAM**

hel;

**EXAMPLE w/o "**

**'hel;'**





BYBYE

*UWWW / WT*

Stream broadcasted just before closing the connection/software

**MAIN STREAM**

bye;

'bye;'



Packets must be broadcasted on the whole subnet ! Ex: class A 10.**255.255.255**, class B 172.17.**255.255**, class C 192.168.1.**255**

Data can be broadcasted on different ports for each mat / court but can share the same LAN

Each packet must be separated by a Carriage Return `\r` and Line Feed `\n` so if packet paste each other on network, they still can be read

When changes happens, data are broadcasted when those changes happens.

When request is done from a client, the answer must go only to this client endpoint and not broadcasted on the whole subnet

Requests can be done on the same port used to broadcasted the data, or on another dedicated request port

Packet strings must be trimmed before sending

This protocol is copyright free to use...



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*(submit any request on [github.com/FmodouX/FX\\_graphic](https://github.com/FmodouX/FX_graphic))*

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