

Basketball Stats

Data Broadcast Protocol

1.UDP network interface

We use UDP communication broadcast mode, the port number is **6678**.

General data package format:

Head	ID	Data Length	Tail
0xCC 0xCC		Exclude Head and Tail 4 Bytes		0xCD

3.Team Info

Name	Length	Remark
Head	2 Byte	0xCC 0xCC
ID	1 Byte	0x06 = home team 0x07 = guest team
Data Length	2 Byte (little-endian)	
Team Name	20 Byte	Team name use utf-8 character, more than 20 byte will cut off, less than fill 0x00.
Player1Number	3 Byte	the player number will be 0x00 0x00 0x00 when there is not enough player
Player1Name	20 Byte	Player name use utf-8 character, more than 20 byte will cut off, less than fill 0x00.
Player2Number	3 Byte	the player number will be 0x00 0x00 0x00 when there is not enough player
Player2Name	20 Byte	
....		
Player16Number	3 Byte	the player number will be 0x00 0x00 0x00 when there is not enough player
Player16Name	20 Byte	
Tail	1 Byte	0xCD

4.Match info

Name	Length	Remark
Head	2 Byte	0xCC 0xCC
ID	1 Byte	0x08
Data Length	2 Byte (little-endian)	
Match period	3 Byte	Q1: 0x51 0x31 0x00 OT1: 0x4F 0x54 0x31
Match Time	4 Byte (little-endian)	Match timer time based on 1 / 10 second. Fill with 0xFF when the time is not available.
Shock clock	4 Byte (little-endian)	Shot clock time based on 1 / 10 second. Fill with 0xFF when the time is not available.
Home Score	1 Byte	
Home Foul	1 Byte	
Home Timeout	1 Byte	
Guest Score	1 Byte	
Guest Foul	1 Byte	
Guest Timeout	1 Byte	
Tail	1 Byte	0xCD

Sample: CC CC 08 0B 00 01 02 03 05 02 08 01 02 06 04 05 CD

1. 0xCC 0xCC head
2. 0x08 ID represent send all match info
3. 0x0B 0x00 Data length represent 11 Bytes
4. 0x8B 0xFF 0x00 0x00 Match time represent 10:25.9
5. 0x52 0x00 0x00 0x00 Shock clock 5.2s
6. 0x08 home score 8 points
7. 0x01 home foul 1 times
8. 0x02 home timeout 2 times
9. 0x06 guest score 6 points
10. 0x04 guest foul 4 times
11. 0x05 guest timeout 5 times
12. 0xCD tail

5. Player Individual Info

Name	Length	Remark
Head	2 Byte	0xCC 0xCC
ID	1 Byte	0x09 = home player stats info

			0x0A = guest player stats info
Data length		2 Byte (little-endian)	
Player1		22 Byte	
	Player number	3 Byte	the player number will be 0x00 0x00 0x00 when there is not enough player
	One Point made	1 Byte	For 3V3 game only.
	One Point miss	1 Byte	For 3V3 game only.
	One Point Rate	1 Byte	For 3V3 game only.
	Two Point made	1 Byte	
	Two Point miss	1 Byte	
	Two Point rate	1 Byte	
	Three Point made	1 Byte	For 5V5 game only.
	Three Point miss	1 Byte	For 5V5 game only.
	Three Point rate	1 Byte	For 5V5 game only.
	Free throw made	1 Byte	
	Free throw miss	1 Byte	
	Free throw rate	1 Byte	
	Rebounds	1 Byte	
	Assistant	1 Byte	
	Foul	1 Byte	
	Is On Court	1 Byte	0x01 = player on court 0x00 = player not on court
	reserved	1 Byte	
	reserved	1 Byte	
	reserved	1 Byte	
Player2		22Byte	
...			
Player16		22Byte	
Tail		1 Byte	0xCD

5. Player Substitution Info

Name		Length	Remark
Head		2 Byte	0xCC 0xCC
ID		1 Byte	0x0B = home player substitution info 0x0C = guest player substitution info
Data length		2 Byte (little-endian)	
Out player	Player Number	3 Byte	the player number will be 0x00 0x00 0x00 when there is

			not enough player
In player	Player Number	3 Byte	the player number will be 0x00 0x00 0x00 when there is not enough player
Tail		1 Byte	0xCD

Sample: CC CC 0B 06 00 1F 20 00 20 00 00 CD

1. 0xCC 0xCC head
2. 0x0B ID represent send home player substitution info
3. 0x06 0x00 Data length represent 6 Bytes
4. 0x31 0x32 0x00 Substitution out player number 12
- 5 0x32 0x00 0x00 Substitution in player number 2
- 6 0xCD tail