## Bebop Drone Receive Stream

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Here are the classes, structs, unions and interfaces with brief descriptions:	
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Here is a list	of all docum	nented tiles wil	h brief descrip	tions:

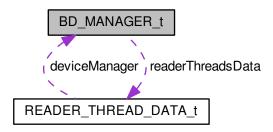
BebopDroneReceiveStream.c	
This file contains sources about basic arsdk example receiving video stream from a BebopDrone	
BebopDroneReceiveStream.h	?

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## **Class Documentation**

### 3.1 BD\_MANAGER\_t Struct Reference

Collaboration diagram for BD\_MANAGER\_t:



### **Public Attributes**

- ARNETWORKAL\_Manager\_t \* alManager
- ARNETWORK\_Manager\_t \* netManager
- ARSTREAM\_Reader\_t \* streamReader
- ARSAL\_Thread\_t rxThread
- · ARSAL Thread txThread
- ARSAL\_Thread\_t videoTxThread
- ARSAL\_Thread\_t videoRxThread
- int d2cPort
- int c2dPort
- int arstreamFragSize
- int arstreamFragNb
- · int arstreamAckDelay
- uint8\_t \* videoFrame
- uint32\_t videoFrameSize
- FILE \* video\_out
- ARSAL\_Thread\_t \* readerThreads
- $\bullet \ \ READER\_THREAD\_DATA\_t*readerThreadsData$

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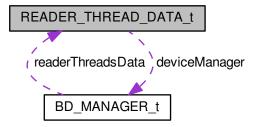
• int run

The documentation for this struct was generated from the following file:

• BebopDroneReceiveStream.h

### 3.2 READER\_THREAD\_DATA\_t Struct Reference

Collaboration diagram for READER\_THREAD\_DATA\_t:



### **Public Attributes**

- BD\_MANAGER\_t \* deviceManager
- int readerBufferId

The documentation for this struct was generated from the following file:

• BebopDroneReceiveStream.h

## **File Documentation**

### 4.1 BebopDroneReceiveStream.c File Reference

This file contains sources about basic arsdk example receiving video stream from a BebopDrone.

```
#include <stdlib.h>
#include <stdio.h>
#include <string.h>
#include <unistd.h>
#include <signal.h>
#include <errno.h>
#include <libARSAL/ARSAL.h>
#include <libARSAL/ARSAL_Print.h>
#include <libARNetwork/ARNetwork.h>
#include <libARNetworkAL/ARNetworkAL.h>
#include <libARCommands/ARCommands.h>
#include <libARDiscovery/ARDiscovery.h>
#include <libARStream/ARStream.h>
#include "BebopDroneReceiveStream.h"
Include dependency graph for BebopDroneReceiveStream.c:
```



#### **Macros**

- #define TAG "BebopDroneReceiveStream"
- #define BD IP ADDRESS "192.168.42.1"
- #define BD DISCOVERY PORT 44444
- #define BD\_C2D\_PORT 54321
- #define BD\_D2C\_PORT 43210
- #define BD\_NET\_CD\_NONACK\_ID 10
- #define BD\_NET\_CD\_ACK\_ID 11
- #define BD\_NET\_CD\_EMERGENCY\_ID 12
- #define BD\_NET\_CD\_VIDEO\_ACK\_ID 13
- #define BD\_NET\_DC\_NAVDATA\_ID 127
- #define BD NET DC EVENT ID 126
- #define BD NET DC VIDEO DATA ID 125
- #define BD\_NET\_DC\_VIDEO\_FRAG\_SIZE 65000

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- #define BD\_NET\_DC\_VIDEO\_MAX\_NUMBER\_OF\_FRAG 4
- #define FIFO\_DIR\_PATTERN "/tmp/arsdk\_XXXXXX"
- · #define FIFO\_NAME "arsdk\_fifo"

#### **Functions**

- int main (int argc, char \*argv[])
- int ardiscoveryConnect (BD\_MANAGER\_t \*deviceManager)
- int startNetwork (BD\_MANAGER\_t \*deviceManager)
- void stopNetwork (BD\_MANAGER\_t \*deviceManager)
- void onDisconnectNetwork (ARNETWORK\_Manager\_t \*manager, ARNETWORKAL\_Manager\_t \*al←
   Manager, void \*customData)
- int startVideo (BD MANAGER t \*deviceManager)
- void **stopVideo** (BD\_MANAGER\_t \*deviceManager)
- uint8\_t \* frameCompleteCallback (eARSTREAM\_READER\_CAUSE cause, uint8\_t \*frame, uint32\_←
   t frameSize, int numberOfSkippedFrames, int isFlushFrame, uint32\_t \*newBufferCapacity, void \*custom)
- int sendBeginStream (BD MANAGER t \*deviceManager)
- eARNETWORK\_MANAGER\_CALLBACK\_RETURN arnetworkCmdCallback (int buffer\_id, uint8\_t \*data, void \*custom, eARNETWORK MANAGER CALLBACK STATUS cause)
- eARDISCOVERY\_ERROR ARDISCOVERY\_Connection\_SendJsonCallback (uint8\_t \*dataTx, uint32\_← t \*dataTxSize, void \*customData)
- eARDISCOVERY\_ERROR ARDISCOVERY\_Connection\_ReceiveJsonCallback (uint8\_t \*dataRx, uint32\_t dataRxSize, char \*ip, void \*customData)

#### 4.1.1 Detailed Description

This file contains sources about basic arsdk example receiving video stream from a BebopDrone.

Date

08/01/2015

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