

# QUICKSTART CHECKLIST



## 1. DataTap-10 / FlightLine-2012 Software QUICK START

The DataTap-10 is a versatile and small replacement for a number of ASCB-D related systems designed and Built by ICS over a 14 year period. This one adapter can replace the functionality of

- Two PCI-NICs (Honeywell TIU support required)
- A Dual Channel ASCB Data Bus Reader (with FlightLine 2012 Software)
- A Dual Channel Simulator Interface Unit (SIU) (with ICS SIU platform)
- A Telemetry / Acquisition Interface System (TIS) (no additional software required)

The Flightline 2012 software is the easiest way to interface to and program a DataTap-10 ASCB / ARINC Adapter at the time of this manual writing. ICS is working directly with Honeywell International to have this device added to the list of supported devices by the Honeywell written and maintained TIU software. The DataTap-10 has not been added to the supported device list at the time of this writing.

### 1.1. Flightline 2012 Software

1. Get the latest Flightline 2012 Application Software from:

<http://www.icsaero.com/products/d-banalyzers/datatap10ascb-d>

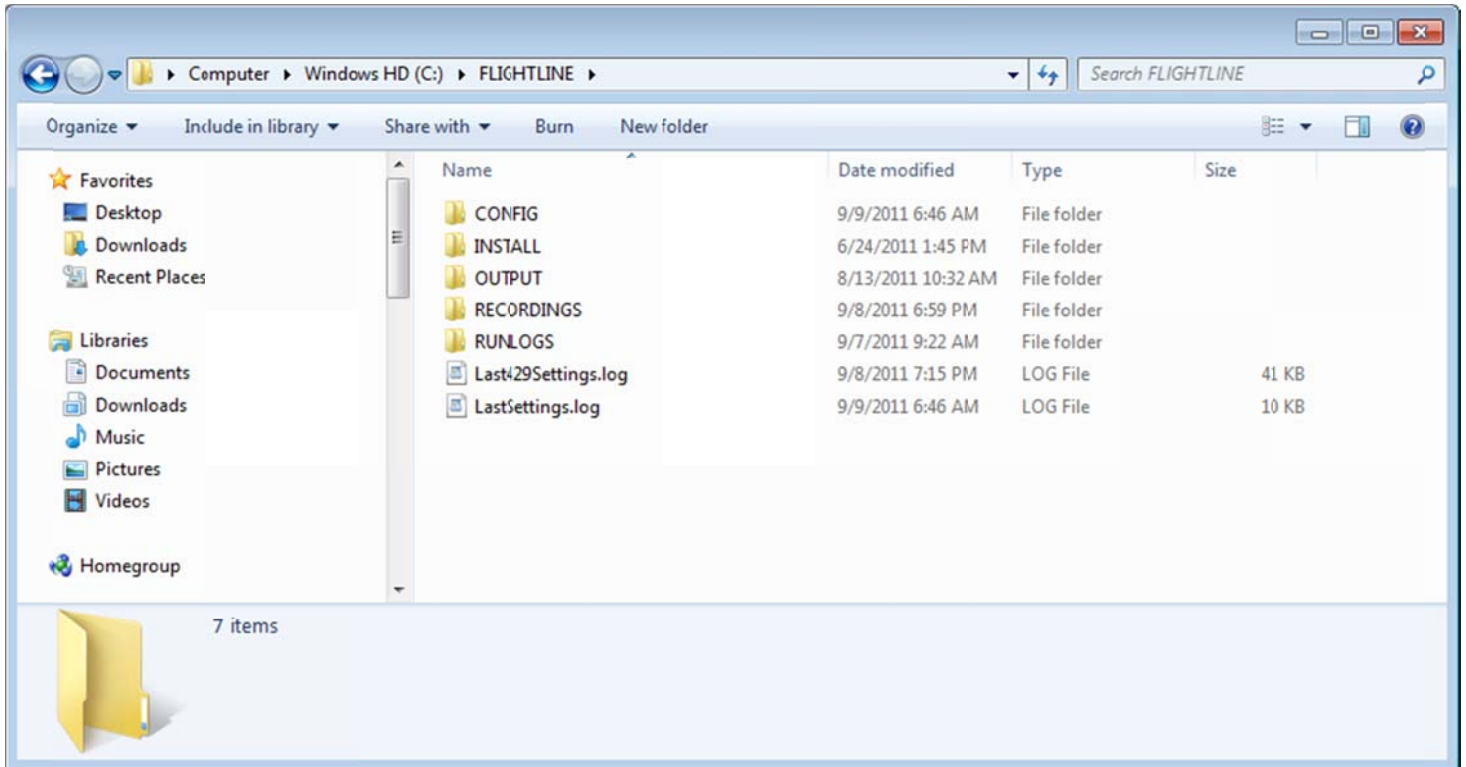
Or from the included CD.

We recommend the first steps you take is to get the latest Flightline 2012 software from the ICS web site download area. The software is free and can be used without a DataTap-10 connected. New functionality is being added and problems fixed so we encourage the use of the latest available version. Many changes to our previous FlightLine software versions have been made to allow the application to operate with the new DataTap 10 hardware.



Innovative Control Systems, Inc.  
10801 N. 24th Ave. Suite 103  
Phoenix, AZ 85029 U.S.A.  
[www.icsaero.ccm](http://www.icsaero.ccm) +01-602-861-6984 Voice +01-602-588-9440 Fax

The software does not need to be installed. Unlike many Windows programs, the download is an executable that can simply be placed on the desktop of a Windows XP, Vista, or Windows 7 platform. Double click the resulting ICON, and the program will run. On the first run of the program, it will attempt to locate a C:\FLIGHTLINE directory on your machine. If this directory does not exist, the program will create the directory with five sub directories.



2. If you are going to connect to a DataTap-10, then you will need an Ethernet network port configured for communications on the DataTap-10 network. All control of the DataTap-10 is via Ethernet traffic and the Default IP address for a DataTap-10 is **192.168.1.1** with a subnet mask of **255.255.255.0**. This means that your computers network interface must be configured to be on this same subnet and it must have an IP address OTHER than 192.168.1.1. **We recommend using 192.168.1.200 for the host platform network interface. These numbers can be changed if this range does not work for your setup. See Users Manual section Error! Reference source not found. Error! Reference source not found. to change the host and DataTap-10 IP addresses from the defaults shown above.**

3. Connect the DataTap-10 to your Laptop or other PC with both a USB and RJ-45 Ethernet connection.

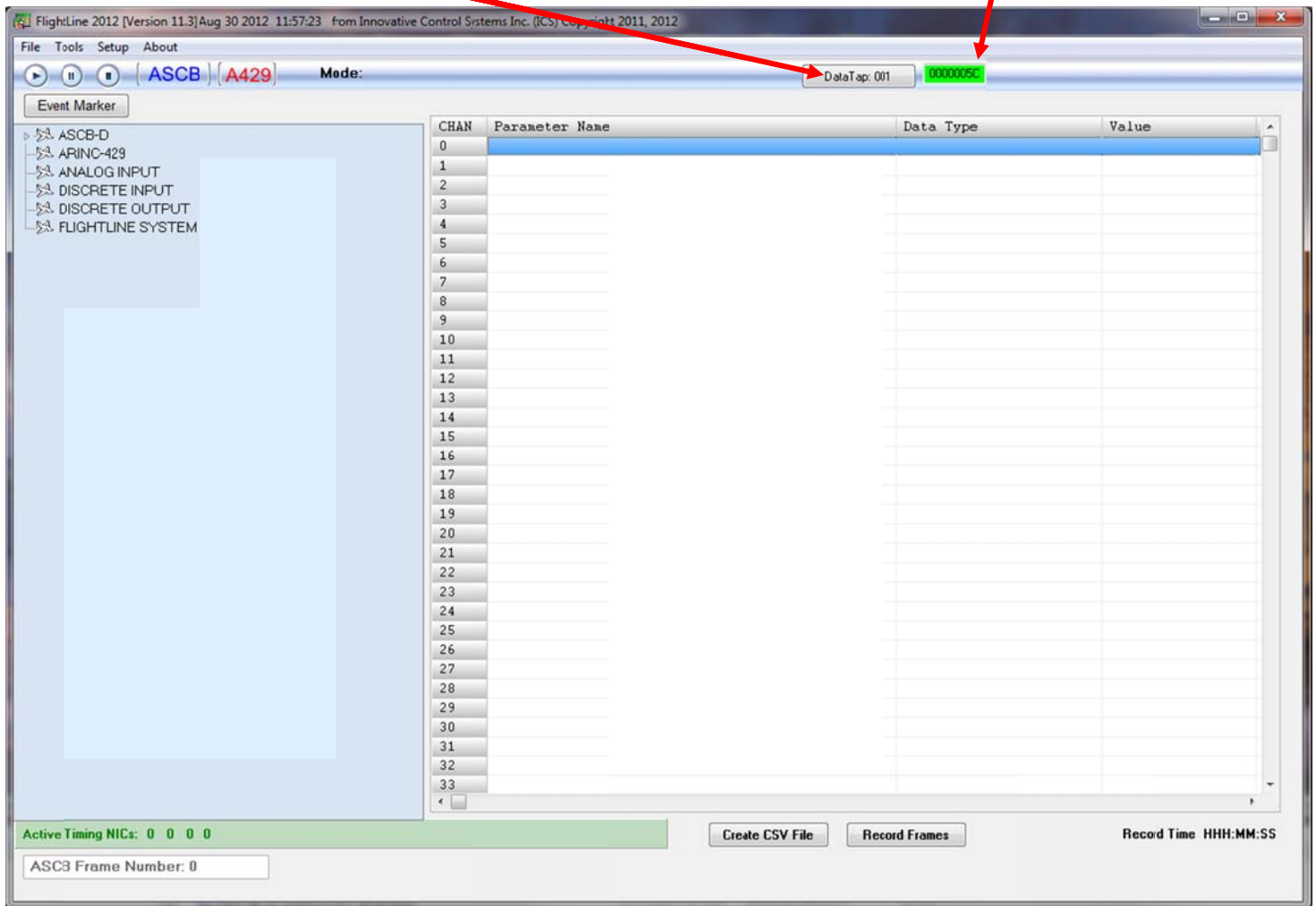
The DataTap-10 requires Ethernet for communication and USB for power. The Adapter is powered from the USB port and generally, only one port is required. If the DataTap-10 is being used for ASCB-D transmission and /or ARINC-429 transmission, the available power from just one USB port. The supplied USB cable has two connectors to supply additional power when needed. It is best to use both USB connectors if the ports are available. If only one is available, you can use either connector to power the DataTap-10. See the typical connections below. ICS recommends using a dedicated Ethernet connection or a dedicated Ethernet network (when using multiple DataTap-10 adapters).

DataTap-10 adapters can produce a fair quantity of UDP broadcast activity that needs to be shipped and responded to in real time at 80Hz. A slow or heavily loaded 10 Mb/s or 100MB/s network may induce data problems. **We recommend a dedicated link at 1000 Mb/s**



4. Start the Flightline 2012 software on your laptop or other PC.

On the main screen of the Flightline 2012 software you should see an incrementing counter in Green. Click on the Datatap button next to it to see the status of your connected DataTap-10.



CHAN	Parameter Name	Data Type	Value
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

If your DataTap-10 is powered up and connected correctly to a properly configured Ethernet port on your host platform, then you should see status information similar to the following DataTap-10 status screen.

PILOT (P1)	CO-PILOT (P2)
<b>PACKETS</b>	<b>PACKETS</b>
00000000	00000000
<b>CRC ERRORS</b>	<b>CRC ERRORS</b>
00000000	00000000
<b>RUNT ERRORS</b>	<b>RUNT ERRORS</b>
00000000	00000000
<b>RX SWITCH</b>	<b>RX SWITCH</b>
PRIMARY	PRIMARY

**Active DataTaps**

DataTapID: 001

STATUS COUNTER	FRAME COUNT	% LOAD
00000608	00000000	12

**FPGA CONFIG VER**

10301201

**CPU 0 SW VERSION**

Oct 30 2012 14:23:34

**CPU 1 SW VERSION**

Oct 30 2012 14:23:55

**CPU 2 SW VERSION**

Oct 30 2012 14:23:59

**ESCAPE REGISTRY FILE INFO**

Planeview GVI: GVI Planeview TIU PRODUCE ALL: 34331069-39-218-0013E6C4

**NIC REGISTRY FILE INFO**

Planeview GVI: GVI Planeview TIU PRODUCE ALL: 34331069-NIC Reg-0013E6C4

**Ethernet Status**


1000 Mb/s

**Temp**

24C 75.2F

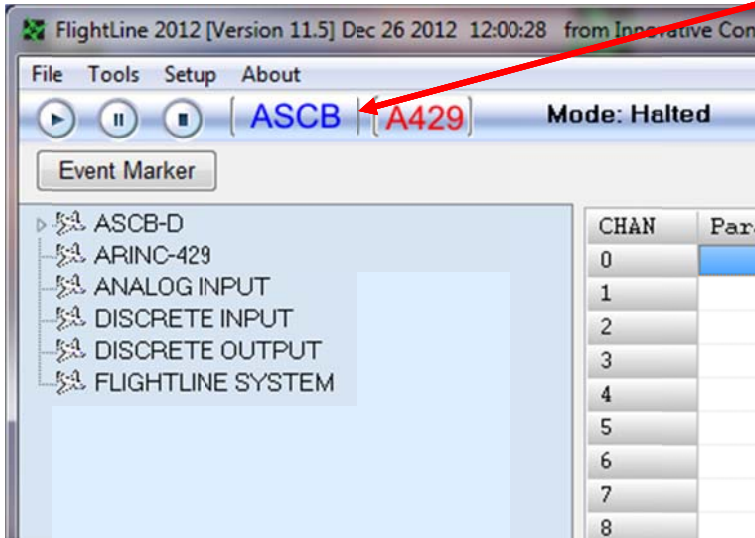
**IRIG Time**

Day 001 00:04:49.203808



Model TP2800-901

5. In order to use the Flightline 2012 software as an ASCB-D buse reader, you are going to have an Escape.le\_reg, NIC.le\_reg, and ESCAPE configuration database from Honeywell for your application loaded onto your host platform. These three files can be located anywhere on your computer, but we suggest they be copied into the C:\FLIGHTLINE\CONFIG directory of your host platform. Once you have these files on your computer, you need to select the files from the ASCB-D Setup menu by selecting the SETUP->ASCB-D Flyout Menu Item or selecting the ASCB button.



6. At this point you are ready to select and configure the ASCB-D files needed. There are several options here and you should please see section 7.3 FlightLine 2012 Bus Reader Analyzer Initialization” to continue.

