



FDS-PRO-Ethernet-CDU

ProSim A320 Integration



New for **2021**, the FDS-Pro-Ethernet-CDU comes with HDMI compatibility. With most of the latest Graphics cards (GFX) providing DVI-D and HDMI and DisplayPort.

The newest version lets you use the latest GFX cards with HDMI and/or Display Port.

*Minimum requirement for GFX cards and Avionics Suites is a 2 GIG card.

*Requires ProSimA320 1.46b1 or higher.

* Tested with 1.55b16

- S O L U T I O N S ——



ProSim A320 shown on the screen

SOLUTIONS



- Rubberized Keys
- Dome type switches providing millions of cycles
- Brightness switch is functional (screen dimming) from the ProSim software to dim the ProSim CDU screen brightness.
 Note: Not the hardware screen brightness, software brightness

SOLUTIONS-



Looking from the rear and left to right:

- L Position IBL constantly ON (set to maximum)
- C Position External IBL from PWM dimmer.
- R Position External IBL from DC voltage regulated dimmer.
- The "C" position is most commonly used when connected to the FDS IBL Dist Boards.
- Left/Center/Right

- S O L U T I O N S ------



- HDMI port
- Screen switches w/indicator LED
- Ethernet jack
- Reset switch
- Power jack
- Back lighting switch/remote IBL jack

— SOLUTIONS ——



Rear View

- S O L U T I O N S ------



Cables connected to the CDU



Pin1 – DC voltage from "0 to 5V" from voltage regulated dimmer **OR** "PWM" from PWM dimmer. Pin2 – GND

*Connects to the FDS IBL Dimmer in the Pedestal with the supplied cable. See **page 11** in the **FDS-PRO-Ethernet-CDUManual** for further details on connecting this harness if required.

— SOLUTIONS — —

Configuration

Main Da	talink Drivers Combined config S	witch types Hardware options
	CPFlight hardware support	[Not installed]
	CPFlight V2	Enabled Advanced
	Directinput support for joysticks	Enabled
	EHID Server	Advanced
	FDS hardware support	C Enabled Advanced
	FDS Ethernet	
+	Flight Illusion support	[Not installed]
	FSC Hardware support	Enabled Advanced
	FSCockpit hardware support	Enabled Advanced
	FSUIPC support	Enabled
	Generic COM port/TCP driver	Enabled Advanced
+	IOCP Server	
	Phidgets support	Enabled Advanced
	PoKeys USB and Ethernet support	Enabled Advanced
	Poldragonet ethernet hardware	
	Pololu support	Enabled
	SimASPAirSpace	Enabled
+	Skalarki hardware support	Advanced S
		OK Cancel

Open the ProSim System A320 Config screen and open the Drivers Tab.

Enable "FDS Ethernet"

Click "OK"

ProSim will reload.

- 🗆 X

File Config Help Main Electric Engine Pneumatic Hydraulic Fuel Display Lighting Heating Misc Navigation Warning Fire Audio MIP Throttle/MCI Connected hardware Software + Database Options -Simulator connection FDS-CDU-E Primary (SimConnect): Connected to Lockheed Martin® Prepar3D® v4 4.5.12.30293 Secondary (FSUIPC): Connected to FSUIPC 5.157/Prepar3d (V4.5) Core Version 1.46b5, built 06 Apr 2021 +-FDS support FDS Ethernet

FLIGHTDECK

- SOLUTIONS ------

In the IO Modules list you will see **"FDS-CDU-E"** and **FDS Ethernet** in the Software List.

*It is recommended you use the Test Module to locate the IP Addresses of each MCDU. ProSim does not have a way to tell you which MCDU is which. Configuring 1 at a time is recommended.

*ProSim uses the "Hostname" now to locate the network devices. You need to change each MCDU Hostname to Identify each MCDU. (CA_MCDU and FO_MCDU)

These are the only names you can use.

— SOLUTIONS — —

File	e Config	, Help			
Main	Electric	Engine	Pneumatic	Hydraulic	Fuel
	IO Module	5			
	Options	•			
	FDS-CDU FDS-CDU	E T			
	Currently	running la	test ProSim	737 versior	n.

IO Modules list you will see **"FDS-CDU-E"** and **FDS Ethernet** in the Software List. You will see two **"FDS-CDU-E"** if you have 2 MCDU's installed and configured. See above. • Open the Test Module or the ProSim System Screen you can locate the MCDU IP Address. Type the IP Address into a browser:



- Note the Hostname in the Top Left Corner.
- Select "Settings"
- Enter the new Hostname of the MCDU you are assigning:

CA_MCDU

FO_MCDU

Note: there can be no blank spaces in the Hostname.

• Default Hostname shown below. It is the actual serial number of the board.

Hostname: IIT682719E18BC	A		FDS-CDU-E
HOME DE	VICE INFO SUB BOARDS	SETTINGS	ADMIN
CAUTION: Inc	prrect settings may cause the devic	e to lose network connectiv	ity.
	Network	Miscellaneous	
Host Name:	IIT682719E18BCA	Board Location: 1	~
MAC Address:	68:27:19:E1:8B:CA	Board Usage: 1	~
Enable DHC	P		
IP Address:	10.0.10.113		
Gateway:	10.0.10.1		
Subnet Mask:	255.255.255.0		
Primary DNS:	192.168.1.1		
Secondary DNS:	0.0.0.0		
	Save Configuration)	

Hostname: IIT682719E18BCA	ι.	FDS-CDU-	·Е
HOME DEV	ICE INFO SUB BOARDS	SETTINGS ADMIN	
CAUTION: Incor	rrect settings may cause the device	to lose network connectivity.	
	Network	Miscellaneous	
Host Name:	CA_MCDU	Board Location: 1 V	
MAC Address:	68:27:19:E1:8B:CA	Board Usage: 1 V	
Enable DHCP			
IP Address:	10.0.10.113		
Gateway:	10.0.10.1		
Subnet Mask:	255.255.255.0		
Primary DNS:	192.168.1.1		
Secondary DNS:	0.0.0.0		
	Save Configuration		

• Click on "Save Configuration"

Save Configuration

• The Board will Reboot, the new Hostname will be shown.



Do the same thing for the FO MCDU by changing the Hostname to "FO_MCDU.

Close the Browser and start the ProSim Software.

This is how ProSim identifies each MCDU and assigns the position.

Open the ProSimCDU Software.

 Setup the MCDU software by selecting the CDU Position (Captain or First Officer)



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FM 1 IND FM 2 A320-200 ENG .5. -RA ASE Config Line Setup mode ASE -1 3 A Quit About CHG IDLE/PERF +0.0/+0.0 NAV ACCUR UPGRAD DATA DIR PROG PERF INIT BRT RAD FUEL ATC MCDU DIM F-PLN AIR E D SUDD 0 N SmZD S T CLR

- Open the Config and Select the MCDU Role (Captain or First Officer)
- We usually set the Font's to 14.95 for both
- Drag the CDU to the CDU screen.
- Follow the ProSim Instructions to use the CDU in Full screen.

ELIGHTDECK SOLUTIONS FM 1 IND FM 2 A320-200 56-5-B4 ASE Config Line Setup mode ASE 13 Quit About CHG Config × Options Drivers Screen layout ProSimA320-System Server 127.0.0.1 Fonts Small font fmgcsmall, 14.7499943pt Large font fmgclarge, 14.7499943pt Reset to default Options Start minimized Show frame Start fullscreen Show border Preferred host for WebCDU Do not move window when border is off Use color Stay on top Doubleclick to resize Hide mouse cursor Use keyboard leds Allow remote computer shutdown CDU Role Captain CDU \sim

- Open the Config and Select the MCDU Role (Captain or First Officer)
- We usually set the Font's to 14.95 for both
- Drag the MCDU to the MCDU screen.
- Follow the ProSim Instructions to use the MCDU in Full screen.
- Start Fullscreen checked
- Show Frame and Show Border Unchecked.
- Click OK



SOLUTIONS-



Follow the Line Setup as per the ProSim Instructions.

Instructions show up in Config

- S O L U T I O N S ——

🚼 Config	×
Options Drivers Screen layout	
To configure individual screen layout, right click in the main window and select "Line Setup mode". Next, use LSKL1 to LSKL6 to select a line, or LSKR1 to select Menu line or LSKR6 to select scratchpad. Use the following keys to modify: - U/D: Up/Down - L/R: Left/Right - W/S: Widen/Shorten To reset all layout to default, press the button below.	
Reset all screenlayout	
	Ok Cancel

Follow the Line Setup as per the ProSim Instructions.

Instructions show up in Config Tab under Screen Layout



Power Supply with adapters, Ethernet Cable supplied along with an IBL Cable for MCDU Key Backlighting.

<u>Terminology</u>

Computer Display Unit
Multi-Function Control and Display Unit
Line Select Key
Flightdeck Solutions Ltd
Video Graphics Card
Integrated Back Lighting for FDS Panels
Main Instrument Panel
O ver h ead
Pedestal
Throttle Quadrant/Thrust Levers
Technology that connects wired local area networks (LANs) and enables the device to communicate with each other through a protocol which is the common network language. Devices are connected to a Network Switch and each device will have its own IP Address.