Updating the BDS2 Firmware with Direct Connection to PC (6-Feb-2020)

Configuring Your PC Network Settings:

Click on the Start Menu (Windows Logo in lower left corner of screen) and type "control". Click on the "Control Panel" app once it shows up in the search bar:

	All	Apps	Documents	Email	Web	More 🔻
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0	<u>•</u>	Control App	Panel			
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Click on the "Network and Sharing Center" icon:

🖾 All Control Panel Items - 🗆 🗙					
← → × ↑ 🖾 > Control Panel > All	V 🖸 Search Co 🔎				
Adjust your computer's settings	View by: Large icons 🔻				
File Explorer Options	File History	Flash Player (32-bit)			
Fonts	lndexing Options	Infrared			
Internet Options	Java (32-bit)	Keyboard			
Mail (Microsoft Outlook 2016) (32-bit)	🥏 Mouse	Network and Sharing Center			
Phone and Modem	Power Options	Programs and Features			
Recovery	Region	RemoteApp and Desktop Connections			
Security and Maintenance	Sound	Speech Recognition			

Click on the "Ethernet X" connection of your direct connection to the BDS2. Note: (X is a port number specific to your system)

Network and Sharing Center -					
← · · ↑ 📱 · Control Panel · Network and Internet · Network and Sharing Center · ਹ					
Control Panel Home	View your basic network information and set up connections				
View your active networks Change adapter settings					
Change advanced sharing settings	Unidentified network Public network	Access type: No network access Connections: Ethernet 3			
Media streaming options					
	Change your networking settings				
Set up a new connection or network Set up a broadband, dial-up, or VPN connection; or set up a router or access point.					
	Troubleshoot problems Diagnose and repair network problems, or get	troubleshooting information.			
See also					
Infrared					
Internet Options					
Windows Defender Firewall					

Click on "Properties":

Ethernet 3 Status	×
General	
Connection IPv4 Connectivity: No network access IPv6 Connectivity: No network access Media State: Enabled Duration: 06:20:07 Speed: 1.0 Gbps Details	_
Activity	_
Sent — 🗾 — Received	
Bytes: 354,132 688,982	
Properties Disable Diagnose	
Close	2

Double click on "Internet Protocol Version 4 (TCP/IPv4)"

Ethernet 3 Properties	\times
Networking Sharing	
Connect using:	
Intel(R) Ethemet Connection (4) I219-LM	
<u>C</u> onfigure	
This connection uses the following items:	
 Client for Microsoft Networks File and Printer Sharing for Microsoft Networks Npcap Packet Driver (NPCAP) QoS Packet Scheduler Internet Protocol Version 4 (TCP/IPv4) Microsoft Network Adapter Multiplexor Protocol Microsoft LLDP Protocol Driver 	
Install Uninstall Properties	
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	
OK Cancel	

Select the radio button "Use the following IP address" and then change the following two parameters and click "OK":

Г

IP address: 192.168.0.100

Subnet mask: 255.255.255.0

Internet Protocol Version 4 (TCP/IPv4) Properties X	Internet Protocol Version 4 (TCP/IPv4) Properties
General Alternate Configuration	General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically	Obtain an IP address automatically
O Use the following IP address:	• Use the following IP address:
IP address:	IP address: 192 . 168 . 0 . 100
Subnet mask:	Subnet mask: 255 . 255 . 0
Default gateway:	Default gateway:
Obtain DNS server address automatically	Obtain DNS server address automatically
• Use the following DNS server addresses:	Use the following DNS server addresses:
Preferred DNS server:	Preferred DNS server:
Alternate DNS server:	Alternate DNS server:
Validate settings upon exit Advanced	Validate settings upon exit Advanced
OK Cancel	OK Cancel

Applying the BDS2 Update through the Web Interface:

Navigate to the BDS2 web page at 192.168.0.151 in the browser and click "Home" on the left menu bar. Note: Your BDS2 unit may have a different IP address. 192.168.0.151 is the default IP address of the unit.



Model Information

<u>Login</u>

Name	Model	S/N	Mfg Date	Cal Date
Probe	7001A550-1-1414	183100697	08/20/2018	08/20/2018
Cable	7001B040-5M	183501356	09/07/2018	09/07/2018
Receiver	7001A900-2	194400028	01/16/2020	01/16/2020

Software Version Information

Name	Version	Date	
BDS2 Build Info	BDS2_Receiver-33	06/21/2019	
BDSHost	2.1	06/21/2019	
FPGA IP	0.87	06/16/2019	
FPGA Firmware	0.87	06/16/2019	
CmpData	2.1	06/21/2019	

Enter "admin" for both the username and password. Then click "Login":

Bird Techno	logies®	bds Configuration
Home Login Bird Diagnostic System	Username: admin Password: ••••• Login	

Click on "Updates" in the left menu bar:

Bird Technologies	Boos Configuration
HomeSetupSecurityMeasurementUpdatesLicenseLogout	

Click on "Choose File" (or "Browse") and navigate to the location of the update on your hard drive using the pop-up window:

Bird Technologies®			bds Configuration
<u>Home</u> Setup	BDS Firmware	Update	Help
<u>Security</u>	Filename: Choose	e File No file chosen	Upload File
<u>Updates</u> License			
<u>Logout</u>	Update History	Filenama	Description

Date Applied	Filename	Description
February 03, 2020	bds2-image.2.2.mender.bdsu	BDS2_Receiver_33

💿 Open						l	x
O -	Firmware			- 49	Search Firmware		Q
Organize	 New folder 				:== :==		0
*	Name	^	Date modified	Туре	Size		
	7001A991-11.3.2.r	mender.bdsu	2/7/2020 9:23 AM	BDSU File	54,436 KB		
	File <u>n</u> ame:	7001A991-11.3.2.mender	.bdsu	•	All Files (*.*)	Cancel	▼
							E E

Click on "Upload File":



Date Applied	Filename	Description
February 03, 2020	bds2-image.2.2.mender.bdsu	BDS2_Receiver_33

Wait approximately 1 minute as the file is uploaded to the receiver. Upon completion of the file upload, you will see a "File uploaded successfully" confirmation. Then click the "Apply Update" button:

Bir	d Technologies®	bds Configuration
<u>Home</u>	File uploaded successfully. Please click on 'Apply Update' to perform the update.	May take a few minutes.
<u>Setup</u>		
<u>Security</u>	Apply Update	
<u>Updates</u>	Potura to Provious Page	
<u>License</u>	Retuin to Flevious Fage	
<u>Logout</u>		

Wait approximately 3-6 minutes as the BDS2 applies the update. Note: The screen will not be changing during this time so please be patient and wait for the next screen to load. Upon completion of the applied update you will see confirmation on the webpage showing "Update was applied successful. Please reboot the BDS for the update to take effect". You may then click on the "Reboot" button:

Bir	d Technologies®	bds Configuration
<u>Home</u> <u>Setup</u>	Update was applied successfully. Please reboot the BDS	S for the update to take effect.
<u>Security</u>	Reboot	
<u>Updates</u>	Beturn to Provious Page	
<u>License</u>	Retuin to Frevious Fage	
<u>Logout</u>		

You must now refer to the LEDS on the front panel off the BDS2. Once the unit has finished rebooting and the three status LEDs are glowing green, wait another 20 seconds and then click the "Confirm Update" button on the webpage:

Bi	rd Technologies®	bds Configuration	
<u>Home</u>	Confirm Update		
<u>Setup</u>	Reboot		
<u>Security</u>	Rebooting Please wait for the BDS to reboot(may take a few minute	es). Then click on the 'Confirm Undate' button to complete the i	indate
<u>Updates</u>			poure.
<u>License</u>			
<u>Logout</u>			

The receiver will now show that the update has been confirmed successfully. Now reboot the BDS2 once more by clicking the "Reboot" button on the webpage:

Bir	d Technologies®	bds Configuration
<u>Home</u>	Update confirmed successfully. Please reboot the	BDS for the update to take effect.
<u>Setup</u>		
<u>Security</u>	Reboot	
<u>Updates</u>	Deture to Desuisue Dese	
<u>License</u>	Return to Previous Page	
Logout		

You will now the page show "rebooting". Once the three LEDs on the front of the BDS2 return to green, click on the "Logout" tab on the left menu bar:

Bin	rd Technologies®	bds Configuration
<u>Home</u>	Rebooting Please wait for the BDS to reboot(may take a few r	ninutes). Then re-login.
<u>Setup</u>		
<u>Security</u>		
<u>Updates</u>		
<u>License</u>		
<u>Logout</u>		

Click on the "Home" tab on the left menu bar:



You will now see the newly applied BDS2 Software version below the "Software Version Information" Text:





<u>Home</u>
<u>Setup</u>
<u>Security</u>
<u>Measurement</u>
<u>Updates</u>
<u>License</u>
Logout

BDS Web UI v3.1, 01/15/2020

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Cable	7001B040-5M	183501356	09/07/2018	09/07/2018
Receiver	7001A900-2	194400028	01/16/2020	01/16/2020

Software Version Information

Name	Version	Date	
BDS2 Build Info	BDS2_Receiver-50	02/06/2020	
BDS2 Host	3.2	02/06/2020	
FPGA	0.112	01/04/2020	
CmpData DLL	3.2	02/06/2020	

The receiver has now been updated with the latest firmware. Note: You may want to change your computer's network settings back to the original state. To do so follow the instruction at the beginning of the procedure to get to the IPv4 settings and select the "Obtain an IP address automatically" to return to DHCP.

Internet P	Protocol Version 4 (TCP/IPv4) Propertie	5		\times
General	Alternate Configuration				
You can this cap for the	get IP settings assigned auto ability. Otherwise, you need t appropriate IP settings.	matically if o ask your r	your ne network	twork sup administra	ports ator
() Ob	otain an IP address automatica	lly			
	e the following IP address: —				
IP ac	ldress:			1.0	
Subn	et mask:	1.1			
Defa	ult gateway:				
Oot	tain DNS server address auto	matically			
O Us	e the following DNS server add	dresses:			
Prefe	erred DNS server:				
Alter	nate DNS server:				
V	alidate settings upon exit			Advanc	ed
			ОК	(Cancel