Setting up Digital Performer 6.02 – 7.11 for the AC-7 Pro iPad Control Surface application

by James Steele, Site Admin at MOTUNATION.COM – 4/13/2010 • Updated: 4/21/2010

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Introduction:

Well everyone... it's finally here! Wireless control for Digital Performer for the iPad (and also iPhone). First of all, thanks go out to Colin Morrison at Saitara Software for his continued hard work on his line of iPad/iPhone apps. Special thanks also to Kelly Jacklin, who programmed the DP-AC7-DSMidiWifi Bridge application that makes it possible for users of DP 6.02 and later to enjoy this technology! And of course the good people at MOTU!

System Requirements:

You should have a PPC or Intel Macintosh running Mac OS 10.4 or later with AirPort/AirPort Extreme card installed (recommended) or direct Ethernet connection to wireless router. This tutorial applies to Digital Performer 6.02 through 7.1—and as of yesterday—7.11! (This required dividing Section 2 into 2A and 2B.) Also note that versions of Digital Performer earlier than 6.02 cannot be supported for technical reasons.

Get the App(s):

If you own an iPad, purchase the AC-7 Pro app for \$9.99 here:

http://itunes.apple.com/us/app/ac-7-pro-control-surface/id363743042?mt=8

If you own an iPhone, purchase the AC-7 app for \$5.99 here:

http://itunes.apple.com/us/app/ac-7-daw-control-surface/id352266082?mt=8

Get the DSMidiWifi Server Software:

Download and install version 1.01 of the free **DSMI Server for OSX**. (Version 1.01 is recommended *instead* of the newer 1.02 version.) You can download it here:

http://saitarasoftware.com/dsmidiwifi-v1.01.dmg.zip or http://motunation.com/dsmidiwifi-v1.01.dmg.zip

Get the DP-AC7-DSMidiWifi-Bridge Application:

Thanks to Kelly Jacklin's bridge app, <u>all</u> versions of Digital Performer from 6.02 to 7.11 can interface with DSMidiWifi. In addition, use of the MidiPipe application to enable track names to be displayed on the AC-7 Pro is no longer necessary as this app not only contains this functionality, but improves up on it. It also includes some nice extras you'll learn about later. Download DP-AC7-DSMidiWifi-Bridge from the Jacklin Studios site at the link below. The download link is in the Version History section, but please quickly review the information at this page before downloading.

http://jacklinstudios.com/downloads/DP-AC7-DSMidiWifi-Bridge.html

Install the Apps:

1) The **DSMidiWifi** archive contains a disc image. Mount the disc image and drag the DSMidiWifi app into your Applications folder. DO NOT drag onto the Dock afterward. You will not need to launch it directly.

2) The **DP-AC7-DSMidiWifi-Bridge** archive contains the application. Drag the DP-AC7-DSMidiWifi-Brige app into your Applications folder and DO drag onto the Dock for quick launching later.

3) Make sure you have installed either AC-7 Pro on your iPad, or AC-7 on your iPhone. Note that throughout this tutorial I'll be referring to AC-7 Pro and iPad, but these instructions work just the same with AC-7 and iPhone.

Let's get started...

Section 1 - Setting DP-AC7-DSMidiWifi-Bridge preferences

1. Launch DP-AC7-DSMidiWifi-Bridge. This first time it runs, a file dialog will appear prompting you to locate the DSMidiWifi app. Navigate to DSMidiWifi, select it in the file dialog, and click "Choose." You should see two dialogs as shown below: DP-AC7-DSMidiWifi-Bridge is on the left, and DSMidiWifi is on the right. From now on, launching DP-AC7-DSMidiWifi-Bridge will launch DSMidiWifi automatically.

	P-AC7-DSMidiWifi-Bridge	O O 💎 DSWifiMIDI
	DSMidiWifi Connection:	DSMIDI Wifi

2. Choose "Preferences" from the DP-AC7-DSMidiWifi-Bridge menu. You will see the dialog below. Note that "Launch DSMidiWifi Automatically" is checked since we located the app in the previous step.

000	Preferences	
	idiWifi Automatically al Performer Automatically	Browse Browse
	: (if it is running) haracters in Track Names w	ith Spaces

Let's continue with the other preferences:

"**Replace** 'I' **Characters in Track Names with Spaces.**" This option is checked by default. It prevents unwanted "pipe" or "bar" characters from appearing in AC-7 Pro's track names display. Future AC-7 Pro updates may make this preference unnecessary, but for now you should leave it on.

"Use MidiPipe (if it is running)." Leave this option un-checked. Most users will never need this as MidiPipe functionality is now built into the DP-AC7-DSMidiWifi-Bridge application itself.

"Launch Digital Performer Automatically." Click the "Browse..." button and navigate to your Digital Performer app, select it in the file dialog, and click "Choose." Digital Performer will not actually launch this first time, but you can see this option is now checked. The advantage to this is that whenever you do a session with the AC-7 Pro, all you do is launch DP-AC7-DSMidiWifi-Bridge and it takes care of the rest, launching DSMidiWifi <u>and</u> Digital Performer for you. (Of course you may always change this later by opening the Preferences dialog and un-checking this option).

Now, close the Preferences dialog, but <u>**DO NOT QUIT</u> DP-AC7-DSMidiWifi-Bridge!** Before quitting you must manually launch Digital Performer and setup your Control Surface. DP-AC7-DSMidiWifi-Bridge and DSMidiWifi <u>**must be running**</u> to do this. Proceed to Section 2.</u>

Section 2A – Control Surface Setup in Digital Performer 6.02 – 7.1

(For Digital Perfomer 7.11, please skip ahead to Section 2B)

1. <u>*While DP-AC7-DSMidiWifi-Bridge and DSMidiWifi are still running*</u>, manually launch Digital Performer and load a project. A project must be loaded to access Digital Performer's Control Surface Setup dialog.

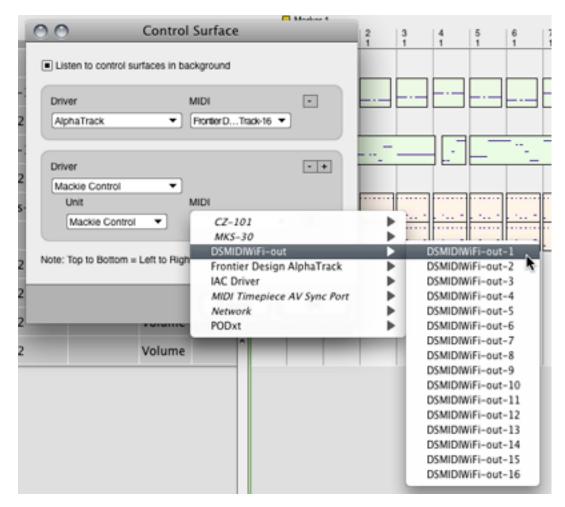
2. From the "Setup" menu choose "Control Surface Setup..." A dialog will appear like the one below. Note that in the dialog shown there is already an AlphaTrack controller. If you have no controller attached, the dialog will look different, but you will still see a square "+" button.

Control Surface
trol surfaces in background
MIDI • •
Frontier DTrack-16
tom = Left to Right
Cancel OK

3. Click the "+" button to add a new Control Surface. A new shaded area for the new Control Surface will appear with two pop-up menus: "Driver" and "MIDI." Click in the "Driver" pop-up menu and choose "Mackie Control". A new row will appear and the dialog will now look like the one below:

Driver	MIDI -
AlphaTrack	Frontier D Track-16
Driver	-
Mackie Control	•
Unit	MIDI
Mackie Control	• • •

4. Click in the "MIDI" pop-up window and go to "DSMIDIWiFi-out" and choose "DSMIDIWiFi-out-1" from the submenu as show below.



5. Your Control Surface dialog should now look like the one below. Close the dialog. These settings will now be retained in the future. **Quit Digital Performer and DP-AC7-DSMidiWifi-Bridge**. Skip ahead to Section 3.

Listen to control surface	MIDI -
AlphaTrack	Frontier DTradk-16
Driver	-+
Mackie Control Unit Mackie Control	MIDI DSMIDIWIFi-out-1
ote: Top to Bottom = Left	to Right

Section 2B – Control Surface Setup in Digital Performer 7.11

1. <u>While DP-AC7-DSMidiWifi-Bridge and DSMidiWifi are still running</u>, manually launch Digital Performer and load a project. A project must be loaded to access Digital Performer's Control Surface Setup dialog.

2. From the "Setup" menu choose "Control Surface Setup..." A dialog will appear like the one below. Note that in the dialog shown there is already an AlphaTrack controller. If you have no controller attached, the dialog will look different, but you will still see a square "+" button.

00	Control Surface
Listen to cont	I surfaces in background
Driver AlphaTrack	Input Port Output Port -+ Fiortier DTrack-16 Fiortier DlphaTrack
Note: Top to Bott	m = Left to Right
	Cancel OK

3. Click the "+" button to add a new Control Surface. A new shaded area for the new Control Surface will appear with three pop-up menus: "Driver," "Input Port," and "Output Port." Click in the "Driver" pop-up menu and choose "Mackie Control". A new row will appear and the dialog will now look like the one below:

Driver	Input Port	Output Port	
AlphaTrack	Frontier DTrack-16	Frontier DIphaTrack 💌	
Driver		•	+
Mackie Control	•	0.000	
Unit	Input Port	Output Port	
Mackie Control	•	▼ None ▼ *	

4. Click in the "Input Port" pop-up window and go to "DSMIDIWiFi-out" and choose "DSMIDIWiFi-out-1" from the submenu as show below. Do not set the "Output Port."

00	Control Sur	rface			2	3
Listen to control sur	faces in background					
Driver (AlphaTrack	Input Port Frontier DTrack-1	Output Port 6 • [Fronter Dlpha				
Driver Mackie Control	•		I	••		
Unit	Input Port	Output Port				
Mackie Control Note: Top to Bottom = L HD192 Main 1-2	Left to Righ IAC Driver MIDI Keys PODxt CZ-101 MKS-30 Xk	MIDI Keys PODxt CZ-101 MKS-30 Xk MIDI Timepiece AV Sync Port		DSMID DSMID DSMID DSMID DSMID DSMID DSMID DSMID DSMID	IDIWIFI-out-1 IDIWIFI-out-2 IDIWIFI-out-3 IDIWIFI-out-4 IDIWIFI-out-5 IDIWIFI-out-6 IDIWIFI-out-7 IDIWIFI-out-7 IDIWIFI-out-8 IDIWIFI-out-9 IDIWIFI-out-10 IDIWIFI-out-11	
				DSMID DSMID DSMID DSMID	IWiFi-out IWiFi-out IWiFi-out IWiFi-out IWiFi-out	-12 -13 -14 -15

5. Your Control Surface dialog should now look like the one below. (Don't worry that the Output Port setting is that same as the Input Port. DP-AC7-DSMidiWifi-Bridge compensates for this in order to be backward compatible with earlier versions of Digital Performer.) These settings will now be retained in the future. **Quit Digital Performer and DP-AC7-DSMidiWifi-Bridge**. Proceed to Section 3

Driver	Input Port	Output Port	-
AlphaTrack	 Frontier DTrack-16 	 Frontier DlphaTrack 	•
Driver			- +
Mackie Control	•		
Unit	Input Port	Output Port	
Mackie Control 🔻	DSMIDIWIFI-out-1	DSMIDIWIFI-out	- +

Section 3 – Making the Wireless Connection

In the beginning of this tutorial, I listed a Mac with AirPort/Airport Extreme wireless card as a **requirement**. This card is needed to establish a <u>direct wireless link</u> between your iPad and your Mac via Internet Sharing (the ideal method) or by creating a Computer-to-Computer network. This will allow optimum wireless communication between your iPad and your Mac. I will describe how to set up those two connections in a moment.

If you <u>do not</u> have an AirPort/Airport Extreme card in your Mac, some users have reported good results if the Mac is connected <u>directly</u> to a wireless router via Ethernet cable. That way, at least the <u>Mac</u> has a reliable hard-wired connection to the router. In this case, simply joining your iPad to your local wireless network may be adequate and you can skip ahead to Section 4 now.

What you really <u>must</u> avoid however, is having the Mac and iPad <u>both connecting wirelessly</u> to your router instead of directly to each other. Your wireless router is then an unnecessary go-between, and this will likely result in dropped packets and data loss, and significantly degrade performance of AC-7 Pro. It may take a bit more time to configure Internet Sharing before each session, but you'll enjoy optimum performance from AC-7 Pro by doing so.

So... now let's look at how to set up a direct connection. We'll cover two different methods: Internet Sharing or Computer-to-Computer network. From my testing, Internet Sharing was far and away the most reliable and I recommend you go with that method. After covering Internet Sharing, I'll describe the "Computer-to-Computer" method as an alternative. But trust me... go with Internet Sharing if you can.

Connecting via Internet Sharing (Best)

1. Launch "System Preferences" on your Mac and open the "Sharing" preferences.

2. In the Sharing preferences, click <u>on the words</u> "Internet Sharing" (do not click the box) to modify the Internet Sharing settings. The dialog should look like the one below. Because I normally use AirPort to connect to my local wireless network, it appears in the "Share your connection from:" menu. I need to change this to enable my iPad to establish a direct wireless connection to my Mac. I'll click it and change the setting to "Built-in Ethernet."

00	Sharing
♦ ► Show All	٩
	James Steele's Power Mac GS Computers on your local network can access your computer at: james- steeles-power-mac-gS.local Internet Sharing: Off You cannot start Internet Sharing because you have not selected a port over
Screen Sharing File Sharing Printer Sharing Web Sharing Remote Login Remote Manage Remote Apple E Xgrid Sharing Internet Sharing	which to share your connection. Share your connection from: AirPort To computers using: On Ports Ethernet FireWire

3. The AirPort option now appears in the "To computers using:" list box. Now, in the list box on the left side of the dialog, I click the box to the left of "Internet Sharing" as shown below and a dialog appears asking if I'm sure I want to turn on Internet Sharing. I then click the "Start" button.

000	Sharing		
◄ ► Show All	۹		
Computer N On Service DVD or Cl Screen Sh File Sharing Printer Sharing Printer Sharing Remote Login Remote Management Remote Apple Events Xgrid Sharing Internet Sharing Internet Sharing Internet Sharing	Are you sure you want to turn on Internet sharing? If your computer is connected to a network, turning on Internet sharing may affect the network settings of other computers and disrupt the network. Contact your system administrator before turning on Internet sharing. Start Cancel mection to the Share your connection from: Built-in Ethernet To computers using: On Ports Ethernet FireWire AirPort		

4. Internet Sharing is now enabled over the Mac's AirPort card and my iPad can now make a **direct wireless connection to the Mac without going through the router**. This direct connection will improve the performance of AC-7 Pro significantly. Your dialog should look similar to the one below. Now close the Sharing Preferences.

000	Sharing	
▲ ► Show All		٩
	James Steele's Power Mac G5 Computers on your local network can access you steeles-power-mac-g5.local	r computer at: james- Edit
On Service DVD or CD Shari Screen Sharing File Sharing Printer Sharing Web Sharing Remote Login Remote Manage Remote Apple Ev Xgrid Sharing	ng Internet Sharing allows other comp Internet. Share your connection from: To computers using: ment	ng your Built-in Ethernet connectior uters to share your connection to the Built-in Ethernet On Ports Ethernet FireWire AirPort

When Internet Sharing is enabled, a new icon will appear in the menu bar as shown below:



5. Now get your iPad, launch your Settings, and choose "Wi-Fi." Make sure Wi-Fi is set to "ON," then connect your iPad to this network by tapping its name. You should now see something like this:

iPad	11:56 AM	88 % 🔳)
Settings	Wi-Fi Networks	
🛜 Wi-Fi James Steele's Power		
Notifications On	Wi-Fi	ON
🙀 Brightness & Wallpaper	Choose a Network	
Picture Frame	✓ James Steele's Power Mac G5	÷ 📀
General	paleblack	۲ 🕑
Mail, Contacts, Calendars	Other	>

6. Close the iPad Settings. DO NOT launch AC-7 Pro yet! Proceed to Section 4.

Alternate Connection Method: Creating a Computer-to-Computer Network (2nd Best)

Again, this is an another method of making a direct wireless connection between your iPad and your Mac, and ask such is vastly better than connecting your iPad and Mac via a wireless router. In my testing however, I have encountered odd issues using this method so I recommend using "Internet Sharing" method described previously if possible.

1. First I'm assuming your Mac is set to show AirPort Status in the menu bar. If not, open the Network Preferences and enable "Show AirPort status in menu bar." Close Network Preferences.

2. Click on the AirPort status icon in the menu bar and choose "Create Network..." as shown below:



3. A new dialog appears (see below) prompting you for the name of the Computer-to-Computer network you wish to create. Your computer name is supplied by default. Click "OK." (NOTE: You may create a password if you choose. If you do, you will need to use it when joining this network from your iPad later.)

Create a Computer-to-Computer network.			
Enter the name of the Computer-to-Computer network you want to create.			
	Name: James Steele's Power Mac G5		
	Channel: Automatic (11)	\$	
	Require Password		
0	Cancel	ок ,	

When the network is created, a new icon will appear in the menu bar as shown below:



4. Now get your iPad, launch your Settings, and choose "Wi-Fi." Make sure Wi-Fi is set to "ON," then connect your iPad to this network by tapping its name. You should now see something like this:

iPad	11:56 AM	88% 🔳
Settings	Wi-Fi Networks	_
Son Wi-Fi James Steele's Power		
Notifications On	Wi-Fi	ON
🙀 Brightness & Wallpaper	Choose a Network	
Picture Frame	✓ James Steele's Power Mac G5	÷ 📀
General	paleblack	₹ 🕗
🖂 Mail, Contacts, Calendars	Other	>

5. Close the iPad Settings. DO NOT launch AC-7 Pro yet! Proceed to Section 4.

Section 4 – Fun Time!

In a moment you will launch the DP-AC7-DSMidiWifi-Bridge app. The app will in turn automatically launch the DSMidiWifi server, and then-depending on your DSMidiWifi Bridge preferences-automatically launch Digital Performer as well.

BEFORE CONTINUING IT IS <u>VITAL</u> YOU UNDERSTAND THE FOLLOWING:

AC-7 Pro must be launched <u>after</u> DSMidiWifi loads, but <u>before</u> Digital Performer finishes loading its plug-ins!! AC-7 Pro will <u>NOT</u> work correctly—if at all—if you do not do so!

Now let's start using AC-7 Pro with Digital Performer:

1. Have your iPad in hand and powered on. DO NOT launch AC-7 Pro yet!

2. Be sure your iPad Wi-Fi is enabled and the iPad is connected to your Computer-to-Computer network.

3. Launch the DP-AC7-DSMidiWifi-Bridge application.

4. Wait for the status message in DSMidiWifi-Bridge's dialog to change from "<not connected>" to the activity indicator. Digital Performer's startup screen should appear and show that plug-ins have begun loading.

5. Now, quickly launch AC-7 Pro on your iPad. You must do so <u>before</u> Digital Performer finishes loading plug-ins. You will see AC-7 Pro's screen initialize, its meters flash and faders go to full scale.

NEAT TIP: If you using Intenet Sharing, multiple iPads/iPhones can establish a wireless connection to your Mac. While DP's plugs are loading, you could launch AC-7 Pro on your iPad and AC-7 on your iPhone and BOTH DEVICES will control DP at the SAME TIME! I know... I've done it!!!

6. When Digital Performer has finished loading, the faders on the AC-7 Pro will drop to –infinity and the track name labels will go blank.

7. Now load a project and you will see the faders jump to proper position and your project's track names appear on the AC-7 Pro's track display!

Keep in mind that the ability to connect the AC-7 Pro with Digital Performer has only existed for a short time as of this writing, and there are still going to be some issues. Colin, the AC-Pro developer, recently took delivery of an iPad for testing and will be working diligently in the coming days to track down and fix any issues, so please be patient! You can contact him via his website: <u>www.saitarasoftware.com</u>.

Finally, if you don't yet own an iPad, download the AC-7 iPhone app and give it a whirl... it's a lot of fun and you can get a feel for the technology. It will also probably whet your appetite for an iPad however! Have fun!



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