Compu-Dobby V User's Manual

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INTRODUCTORY INFORMATION

SAFETY

Before Getting Started:

Please read the entire manual before using the software.

WARNING:

Never pull or cut power to the loom without first shutting down the loom through the software.

INTRODUCTION

About AVL

AVL Looms has been in the business of designing and building some of the world's finest handweaving looms since 1977.

Jim Ahrens had been building and designing looms for a number of years before Jon Violette, the "V" in AVL, approached Ahrens about a partnership in 1977.Violette, an industrial management professional, had discovered Ahrens' work through his sister who ran the Pacific Basin School of Textiles in Berkeley, where Ahrens was a volunteer advisor.

The two men worked together in the Bay Area for three years until Violette moved Ahrens and Violette Looms to Chico, where it officially became known as AVL Looms Inc., and has operated ever since.

In 1982, Violette was instrumental in the development of the first computerized dobby, then called the "Apple Dobby". He retired from active life in the company in 1987.

Once known for our production looms, AVL has broadened its line considerably and we now offer customers a full spectrum of fine weaving equipment, ranging from our small Home Looms, to our Industrial Dobby Looms, Rug Looms, and Jacquards.

The Compu-Dobby V Design Concept

The guiding concept behind the Compu-Dobby V is ease of use with precise, repeatable control. The loom is designed to be easy to thread, easy to setup and easy to weave on.

LOOM FEATURES

Compu-Dobby[®]

A first for handweaving looms, the Compu-Dobby 5 enables computer control of pattern *and* key loom functions, including warp tension and pick spacing.

Pattern control is a state of the art system that eliminates the multi-treadle dance of traditional looms and the tedious pegging of mechanical dobby

looms. Much like the legacy cartridge systems from the Compu-Dobby I and II, the Compu-Dobby 5 stores entire weaving files (WIFs) onboard with three significant advantages over all other systems:

- Ultra-fast pick writing. The system can achieve weaving speeds in excess of 100 picks per minute.
- Hundreds of weaving files may be stored for later use.
- Eliminates latency timing issues inherent in computer communications systems. Latencies can cause slower weaving and even missed picks.

As a web enabled device, this loom connects to your computer or tablet via WiFi or USB and controls the loom from your favorite browser. AVLDrive version 5 is an easy to use, intuitive interface run from within the Compu-Dobby 5. As a direct result, there is no software to install for the loom, nor limitation on the controlling device, except fora minimum screen resolution (1024 x 768 pixels). AVLDrive is compatible with all major browsers, including Safari, Chrome, Edge, Firefox and Opera.

Warp Beams and Automatic Warp Tension System

Another first in our industry, some looms offer digital control of warp tension using a small electrical motor and drive system connected via spring and brake cable to the warp beam. The motor is controlled by the Compu-Dobby & AVLDrive. Easily change the warp tension at any time during weaving by a click of the mouse or a touch of the finger on the touchscreen. This system allows very fine, repeatable control with a range from locked beam to free turning for winding on the warp.

Automatic cloth advance is an AVL-only feature on hand weaving looms. Earlier mechanical versions of these systems are well known for providing fine control over pick advance spacing. This feature utilizes digital controls via an electric motor driven worm and gear attached directly to the cloth beam. Much like the digital warp tension controls, set the picks per inch in AVLDrive and start weaving. Easily change the advance setting or manually advance the cloth at any time during weaving by a click of the mouse or a touch of the finger on the touchscreen. This system allows very fine, repeatable control with a range from hundreds of picks per inch (or centimeter) to gross movements needed when starting a new warp.

CONNECTING TO THE LOOM

ATTENTION:

Please read through this entire section before powering on your loom.

GETTING STARTED

New Features:

The loom uses a lighted interface for communication with the weaver.

Light Name	Description
POWER	Orange light means "power" to the loom in standby mode.
	Red light means "power" to the loom in weaving mode.
NETWORK	Different colors indicate the network status.
	Blinking Red: searching for LAN (Local Area Network).
	Red: connected to LAN
	Green: LoomDirect is available (not searching for LAN).
СОМ	Green light shows the loom is connected to a device. No light
	means there is no connection.
ERROR	Red light will shine when an error has occurred.
SHED	Red light will shine when shed is open.



In order to connect to the loom, your device must either have a USB port or the ability to connect to the internet. There are three ways to connect a device to the loom:

Connection Type	Description
USB	USB cable from your device to the loom. Only
	devices with USB ports can connect this way.
LAN (Local Area	Through a router. Only devices with WiFi can
Network)	connect this way.
LoomDirect	Connection to loom's WiFi network (not through a router). Only devices with WiFi can connect
	this way.

The software interface (AVL Drive) is web browser based so you do not need to download anything. Simply open your standard web browser (Chrome, Safari, Firefox, etc.) and type in the loom's address.

Loom Modes

The loom is designed to be controlled through the AVL Drive software, so there is no "power" button anywhere on the loom.

In areas prone to brown/black out or power grid fluctuations, we recommend a 800W, 1000VA UPS for Compu-Dobby 5 equipped K-Series.In regions subject to lightning strikes and other extreme electrical anomaly incidences, we recommend the addition of a good surge protector between the outlet and UPS on the Compu-Dobby 5.

STANDBY MODE:

When you plug the loom in it enters Standby Mode. It is alright to leave the loom plugged in and in Standby Mode at all times. Minimal power is going to the loom, and some lights will be on, but the full power has not been turned on yet. In Standby Mode you'll be able to connect to the loom via AVL Drive and power on the loom.

WARNING:

Never pull or cut power to the loom in STANDBY MODE.

WEAVING MODE:

Weaving mode is when the loom and all its digital controls have been powered on through AVL Drive. You will hear the warp tension motors set into place and other digital features come to life.

WARNING:

Never pull or cut power to the loom in WEAVING MODE.

SHUTDOWN MODE:

This mode allows you to shut down the loom properly so that power can be removed. It can be initiated from Weaving Mode or Standby Mode through AVL Drive. Shutting down the loom through AVL Drive is the proper way to stop all power to the loom.

Once the loom has been shutdown the power cord can be unplugged.

If the loom has been Shutdown through the software, but is still plugged in, simply unplugging it and plugging it back in will initiate Standby Mode.

We'll go into greater detail on all the modes in the following sections.

Powering on the loom:

When powering on the loom for the first time, you will need to use either a USB connection or connect via LoomDirect. In order to connect via LAN, you will have to setup the Network information on the loom using one of the other connection types first. Once setup you can then connect via LAN each time you come to the loom. However, if Wifi connections are ever lost you can always revert to USB or LoomDirect.

1) Connect the loom to power via the provided power cable. All lights but the "Error" light will light up as shown in the images below.



2) Wait for the loom to bootup. This can take up to several minutes. Once ready the loom will show just the "Power" and "Network" lights. The network light may be Green or Red.



SETTING UP COMMUNICATION

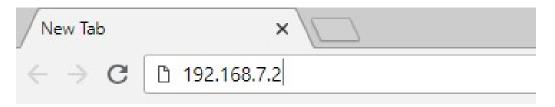
Connecting via USB

1) Plug the normal USB plug into your computer and plug the other end into the Compu-Dobby.

- 2) Open an Internet browser program on your computer (Chrome, Internet Explorer, Microsoft Edge, Firefox, Opera, etc.).
- 3) In the Address Bar, type in 192.168.7.2 or the Loom Name URL and press Enter to open AVL Drive. This is the IP address for the loom when connecting via USB.

Note:

Any time you're connected via USB you can use the IP address or the loom name to open AVL Drive.



4) When the connection is established, the COM Light will turn on and be green.



Connecting via LoomDirect

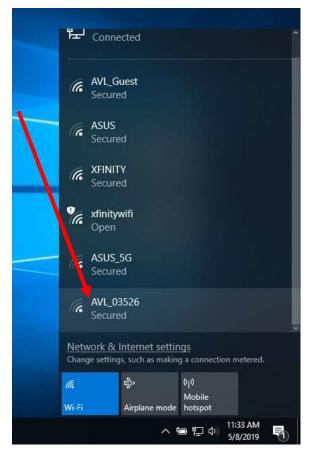
LoomDirect means the loom is generating its own WiFi network and will show up as an available network on your device. The great part about this feature is that you don't need to be actively connected to the internet to wirelessly connect to the loom. However, your computer must still have the capability to connect to the internet.

The loom's protocol is to first search for a LAN connection. If it does not find one, it will automatically switch to LoomDirect and create its own network.

Note:

If no LAN connection is established your loom will automatically switch to LoomDirect.

- 1) It can take up to several minutes for the loom to switch to LoomDirect.
- 2) When the Network light shines green, the loom is now putting off its own network that can be found from your device.
- 3) The network will be AVL_[loom_serial_number] where loom_serial_number is the serial number for your loom.
- 4) Connect your device (laptop, tablet, phone) to this WiFi network.



- 5) The password for the network will be CompuDobby5.
- 6) The COM light will turn off while the loom is connecting. When the COM light turns green, you'll know connection has been reestablished.
- 7) Open your browser and type in 192.168.7.2, or the name of the loom if you've named it.

8) Once you establish the LoomDirect connection you won't have to go through this process again. You can shut down your loom and you'll be able to turn the loom on and connect to AVL Drive automatically.

Note:

If you switch to a new device, you will need to connect to LoomDirect on the new device and enter the Network ID and password.

Setting up Network settings to connect via LAN (Local Area Network)

For this connection, you will connect using your router at your location. The router allows you to access the internet wirelessly on your device. Both your computer and the loom will be connected to the same network. In order to use this connection type, you must have access to the internet.

If you don't have internet, you can still connect via WiFi with LoomDirect connection covered in its own section.

- 1) Connect your device to the loom via USB or LoomDirect.
- 2) Go to Network tab in AVL Drive.

AVLDrive Version 5.0.23.14	Please select file Connected To: myloom
Cloth Advance	Weaving Files Options Tabby Network Utilities Diagnostics
Picks 0 Reset Repeats 0 Reset Prev 0	Name AVL_Guest, 35 Scan
Current 0 Next 1 Set Pick	Get Address Automatically (DHCP)
Start 1 End 93 Set Range	Network Address 192.168.1.74
Warp Tension	Restart Network

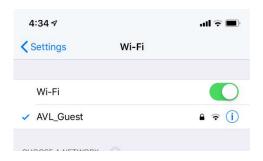
3) Select your network from the dropdown list and enter the password for your router.

Note:

The network light should remain RED during these steps. If your network light turns GREEN, you've entered the incorrect password for your router. Check the password for your router and reenter the correct password.

4) Click the Restart Network button.

- 5) Unplug the USB or disconnect from LoomDirect.
- 6) Wait for the WiFi connection to the loom. It can take up to several minutes for the loom to connect to the router.
- 7) The COM light will turn off during this period. When the COM light turns green, you'll know connection has been reestablished.
- 8) Connect your device (laptop, tablet, phone) to the same WiFi network you connected the loom to.



- 9) You can refresh your browser.
- 10) Once you establish the LAN WiFI connection you won't have to go through this process again. You can shutdown your loom and you'll be able to turn the loom on and connect to AVL Drive without these steps.

Note:

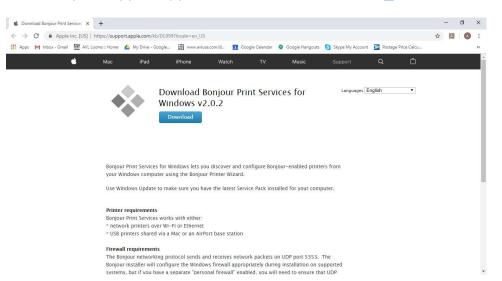
If your router name or password changes, you will have to setup the network using the USB or LoomDirect.

NAMING YOUR LOOM

Install Bonjour Print Services for Windows

Bonjour Print Services for Windows lets you access AVL Drive via your web browser using your "loom name" as the URL. Example: http://[loom name].local. This service needs to be downloaded and installed on your computer.

1) Go to <u>https://support.apple.com/kb/DL999?locale=en_US</u>.



 Click the Download button. The file will be downloaded to a location on your computer. For Windows computers, this will most often be the Download folder.

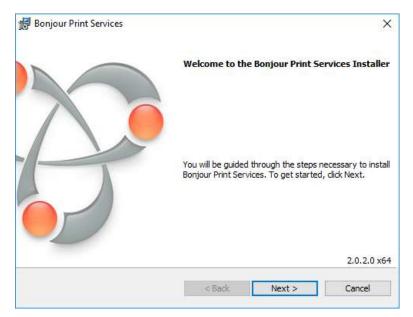
Note:

Depending on your browser, you will see a notice that the file is being downloaded at either the top or bottom of the screen. Once the download is complete, you may be able to click on the notification to open and install the software.

3) Navigate to the correct folder.

File Home Share	Application Tools View Manage	Downloads					×
Din to Quick Conv Paste	Cut Copy path Paste shortcut		New folder New	Proper	Edit ities	Select all Select none Invert selection Select	
← → ~ ↑ 🕹 > This	s PC → OS (C:) → Users → AV	L1 > Downloads	£	~ Ö	Search Down!	oads 🖌	ρ
Ouick access	Name		Date modifie	d	Туре	Size	
-	😺 BonjourPSSetup.exe		4/25/2019 9:4	6 AM	Application	5,310 KB	ſ
Desktop	Lightworks_v11_User_Guid	de_2018-07-25	4/18/2019 11:	12 AM	Adobe Acrobat	D 5,089 KB	
ConeDrive	PDFsam_Basic3_3_Installer	r.exe	4/3/2019 8:49	AM	Application	11,093 KB	
AVL1	linkscape-0.92.4-x86.exe		3/28/2019 9:5	6 AM	Application	65,183 KB	
This PC	AVL LOOMS_20190327_084	4700.pdf	3/27/2019 8:5	2 AM	Adobe Acrobat	D 185 KB	
Eibraries	attachments.zip		3/22/2019 10:	43 AM	Compressed (zij	op 2,084 KB	
A Network	AVLDrive v5 Overview.mp	4	3/20/2019 11:	53 AM	MP4 File	203,824 KB	
Control Panel	Warp Routing.PDF		3/13/2019 9:1	2 AM	Adobe Acrobat	D 251 KB	
Control Parlet	harnerscahleretainers zin		2/7/2010 10-5	A A A.	Compressed (7)	5 006 KR	

4) Open the downloaded file to initiate the install wizard.



Add Loom Name

Naming your loom is an important step that will make it easy to access your loom via WiFi from any device.

This creates a URL that you type in to the address bar on a web browser. It will be easy to remember, unlike the IP address. Your loom name can be changed at any time.

```
The LOOM URL will be http:// + [loom name] + .local
```

Example:

Loom name = myloom

Loom URL = http://myloom.local

Note:

The name must be a solid piece of text with no spaces. If a space is added to the name, the URL will only be the letters before the space even though the "Loom Name" shows the complete name with the space.

GOOD EXAMPLES: myloom, my_loom, my-loom

BAD EXAMPLES: my loom (loom would only show up as "my")

Note:

If you ever forget the name of your loom you can always connect with the IP address.

1) Once you have AVL Drive open, select the "Options" tab.

AVLDrive Version 5.0.23.14	Please select file Connected To: myloom
Cloth Advance	Weaving Files Options Tabby Network Utilities Diagnostics
Picks0ResetRepeats0Reset	Loom Name
Prev 0 Current 0 Next 0	 ✓ Show repeat counter ✓ Show color bar ✓ Observations in start

- 2) In the box for Loom Name, enter the name you'd like to use for your loom. If the box is not blank, delete the existing name and enter the new text of your choice.
- 3) Click the enter button on your keyboard, or simply clicking anywhere on the page.
- 4) Refresh or exit your browser. The COM light will turn off and then back on pretty quickly. In the Options Tab you'll see the loom name has been changed. You will also see the Connected To: field under Please select file has changed.

- 5) Type the new URL into your browser with your new Loom Name as shown in the beginning of this section: http:// + [loom name] + .local
- 6) Click Enter on the keyboard.
- 7) AVL Drive will refresh and the COM Light will light up once communication is established with the loom. You can now use this URL to access AVL Drive via USB, LAN, and LoomDirect.

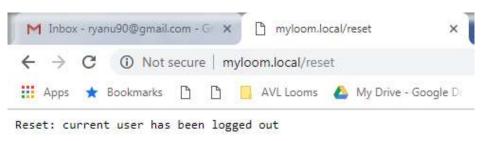
USING THE RESET FUNCTION

If at any time you see the below alert, you'll need to reset the web URL to reestablish connection to the loom. This could occur if you accidentally unplug your USB cable, or if you're trying to connect a new device to the loom when another device is already connected.

1) When connecting to the loom, you receive the message below.



- 2) Enter "/reset" after the URL or IP address in your web browser.
- 3) Refresh your page.



4) Once you receive the notification that the "current user has been logged out", simply reenter your normal URL or IP address.

SHUTDOWN THE LOOM

If you will be removing the loom from a power source, you will need to shutdown the loom using the commands in the software first. This is similar to shutting down a computer so that it restarts correctly.

- 1) In the software, go to the Utilities tab.
- 2) Click Shutdown.
- 3) Once the loom has completed the shutdown sequence, you can remove power from the loom.

USING WEAVEPOINT

Weavepoint 8.0.2.0 and above offers direct access to AVL Drive for your loom with Compu-Dobby V. The loom control function in Weavepoint will open the software, and upload the pattern you have open in Weavepoint.

Set Weave Options in WeavePoint

1) Select Options on the Weave menu to open the Weave Options dialogue box.

AVL	Connection Type
O Compu-Dobby I	○ USB
🔾 Compu-Dobby II	Serial (COM/USB)
🔾 Compu-Dobby III	○ TCP/IP Ethernet
O Compu-Dobby IV, 4.5	OAutomatic
	Com Port: 1

2) Select Compu-Dobby V.

Note:

Compu-Dobby V will launch the AVL software that controls the loom with the pattern you have open. If this is selected, there will be no other options you can choose in Weave Options window.

Connect to Loom

- 1) Have the pattern you want to weave with open. You can use WeavePoint files or WIF files.
- 2) Select Loom Control on the Weave menu.

Upload new pattern to the loom	×
Connection USB WiFi	
Loom Address:	
Pattern Name:	
Replace any existing pattern with same na Start loom control with this pattern	ame
OK Cancel	

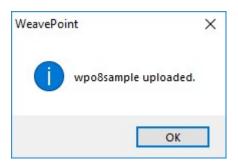
- 3) Select USB if your loom is connected with a USB cable. If you are connecting to your loom wirelessly, choose WiFi.
- 4) If WiFi is chosen, you must enter the Loom Address so that the connection will be made correctly.

Note:

You may use either the IP Address or the Loom Name for the Compu-Dobby V.

5) If you have a pattern open in WeavePoint, the pattern name will display here.

- 6) Select Replace any existing pattern with same name if you want to overwrite a pattern already on the loom with the same name.
- 7) If Start loom control with this pattern is checked, the pattern will open in the loom control so that it is ready for you to weave with.
- 8) Click OK. A message that the pattern was uploaded will appear.



9) Click OK. The pattern will open in AVL Drive in the Weaving tab.

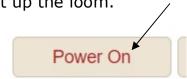
WEAVING WITH THE COMPU-DOBBY V

No matter how you are connecting to the loom, the loom software will appear in your browser. Depending on the browser you are using, the software may appear subtly different from the pictures in this manual, however all functionality will be the same.

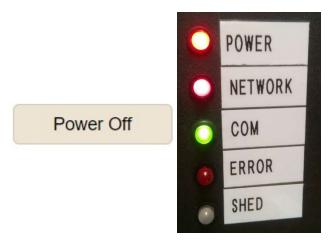
WARPING THE LOOM

Looms with automatic warp tension motors are designed to allow you to wind on the warp without removing the tension cable. A button on the Weaving tab allows you to set the tension to the lowest setting.

- 1) Connect to the loom as described previously. The software defaults to the File tab.
- 2) Open the Weaving tab. You do not need to have a weaving file open.
- 3) Click Power On to boot up the loom.



4) The button will switch to Power Off once the loom is ready and the Power light on the interface will turn red.



5) Click the free warp tension button.



6) The button will turn red to indicate it is activated. Click the button again to turn it off.



- 7) Wind the warp onto the warp beam. For more information, see the weaving section in your loom manual.
- 8) You can click Power Off to return the loom to standby when threading the heddles and reed. If you are going to turn off power to the loom, shutdown the loom through the software.

/
Power Off

STARTING TO WEAVE

1) Connect to the loom as described previously. The software defaults to the File tab. For complete information on the Files tab, including how to import files, see page 42.

• • • • AVLDrive v5.0.21.3		
	🔏 test1.local	… ♥☆ II\ © ≫ ≡
AVLDrive Version 5.0.21.3	Please select file Connected To: test1	0
Cloth Advance	Weaving Files Options Tabby Network Utilities	Diagnostics
Picks 0 Reset Repeats 0 Reset	4365-liftplan.wif 4467-liftplan.wif 6978-liftplan.wif	Transfer to Loom and Open Open for Weaving
Prev 0 Current 0	BigDiamond.wif	Rename
Next 0		Delete
Set Pick	•	Upload to Loom
Start 1 End 0		Download from Loom
Set Range		Backup to Local Machine
Warp Tension 25:		

- 2) Click a file from the list to select it.
- 3) Click Open for Weaving. The Weaving tab will open with your selected file as shown in the next screenshot.

AVLDrive v1.0.0 ×								L	
Apps M Inbox - Gmail M AVL		ive - Google 📆 www.a	avlusa.com/d	Google Calen	dar 😋 Google	Hangouts 🔋 Skype My	/ Account 📄 Postage Price	Calcu	A
AVLDrive Version 1.0.0	Ryan's X as Connected To: tes	Taquete Rug N	NEW (1).	wif				1	
Cloth Advance	Weaving	Files Options	Tabby	Network	Utilities	Diagnostics			
Picks 0 Reset Repeats 0 Reset									
Prev 0 Current 1 Next 2									
Current 1									

Power On

When the loom is powered on, the Power light goes to dark red. All the motors engage and go to whichever setting the loom was shutdown in.

The Power button is used to turn weaving mode on/off. It is not used to completely Shutdown the loom. Shutting down the loom is done through the utilities tab and is only needed when preparing the loom to be unplugged form power.

1) Click Power On to boot up the loom.



2) The button will switch to Power Off once the loom is ready and the Power light on the interface will turn red.



3) Once the loom is ready, begin to weave.

Note:

If you are resuming a weaving session, the loom will remember the cloth advance and tension settings. With most versions of the software, you will be asked if you want to resume weaving where you left off in the pattern.

CONTROLLING THE CLOTH ADVANCE

The cloth advance controls allow you to advance the warp without weaving, or reverse the warp. You can also set the picks per inch (PPI). The default PPI is 15.

Advance the Warp

Typically, you manually advance forward to bring the fell line to the correct weaving position after you have warped the loom. The correct position is when the beater arms hit the bumpers and the fell line is at the reed.



1) In the software go to the Cloth Advance area.



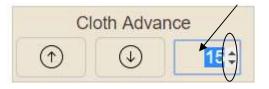
2) Use the up arrow to advance the warp. Click the arrow until the warp has advanced as far as you want it.

Set the PPI

The default for the cloth advance is picks per inch, but you can change inches to centimeters in the options tab.

It's important to note that PPI can be affected by types of yarn and the sett, so please use the PPI as indicated in the Cloth Advance Box as a starting point, and understand that numbers may need to be adjusted to get the correct PPI on the cloth. However, once you have the PPI set, it will not change on the cloth until adjusted in the software.

1) In the software go to the Cloth Advance area and click in the PPI field.



2) Use the small arrow keys to change the value, or click in the field and type in the value you want.

Note:

If you want to advance the warp quickly, for example when warping the loom, set the PPI to one.

SET WARP TENSION

You can set the tension by entering a number in the field or by using the up and down arrows on the field. The default tension is set at 55.

When the loom is powered on for weaving, the warp tension motor will search for its reference home, then return to the tension setting left by the weaver in the previous weaving session.

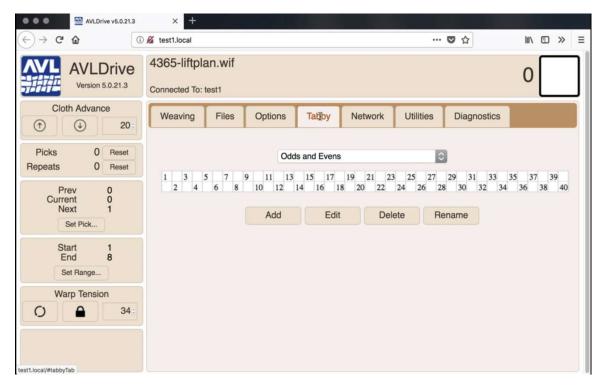
1) In the software go to the Warp Tension field. Use the arrow keys to change the value, or click in the field and type in the value you want.



TABBY

You may want to weave a tabby header before beginning your main pattern. The tabby tab allows you to choose the pattern that will create plain weave with the threading you are using. Once you have chosen the correct tabby on the Tabby tab, you will be able to switch to it at any point by clicking the Tabby button on the Weaving tab. For information on how to setup new tabbies, please see page 51.

1) Open the Tabby Tab by clicking on the name. The tabby will only show the number of shafts available on your loom. The following example was taken on a 40 shaft loom.



2) From the drop-down menu, choose the tabby to use with your threading. Several defaults are available.

ions Tabby	Network Ut	ilities Dia	agnostics	
	Odds and Evens		•	
1 3 2	Atwater-Bronson Lac Evens and Odds	ce	21	1 23 22 24
-	Odds and Evens			
Ac	Summer and Winter		18	ame
	Three-tie Unit Weave	es		
	Two-tie Unit Weaves			

3) Return to the weaving tab.

Power Off	Tabby	Reverse	

4) Click Tabby to switch to the pre-defined tabby. The pattern showing on the weaving tab will change to plain weave and the button will change from Tabby to Pattern with red text.

Note:

If the pattern that is showing is not plain weave, you may have chosen the wrong tabby. Return to the tabby tab and change the tabby.

AVLDrive v1.0.0 ×	+							-	٥	
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	Puopie V or	Taquete Rug	NEW/ (1) W	if						-
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5) To return to the pattern, click the Pattern button.

REVERSE

The Reverse feature flips the pattern upside down and keeps you weaving forward. This is NOT used to unweave or to go backwards in your pattern.

This could be used to provide symmetry in a pattern, for example, keeping the ends of a scarf the same when it is worn.

1) Click Reverse to reverse the weaving pattern. This allows you to automatically reverse the weaving order of the WIF.

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Cloth Advance	Weaving	Files Options	Tabby	Network Util	ities Diagn	ostics			
Picks 0 Reset Repeats 0 Reset									
Prev 0 Current 1 Next 2 Set Pick									3
Start 1 End 32 Set Range									
Warp Tension 56									
	Power Off	Tabby	Reverse	Unweave	an and			+ Zoom	

2) The button will change to Forward with red text. Click Forward to return to the original pattern.

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SET THE **R**ANGE

If you do not want to weave the whole pattern, enter the range of picks you want to use. Once you reach the end of the range, the range will repeat.

Use this feature to experiment with different looks from the same WIF file. You could also choose a small section from a longer pattern to help create a set of differing sized items, for example, a table runner and napkins.

1) In the Set Range Area, click Set Range.

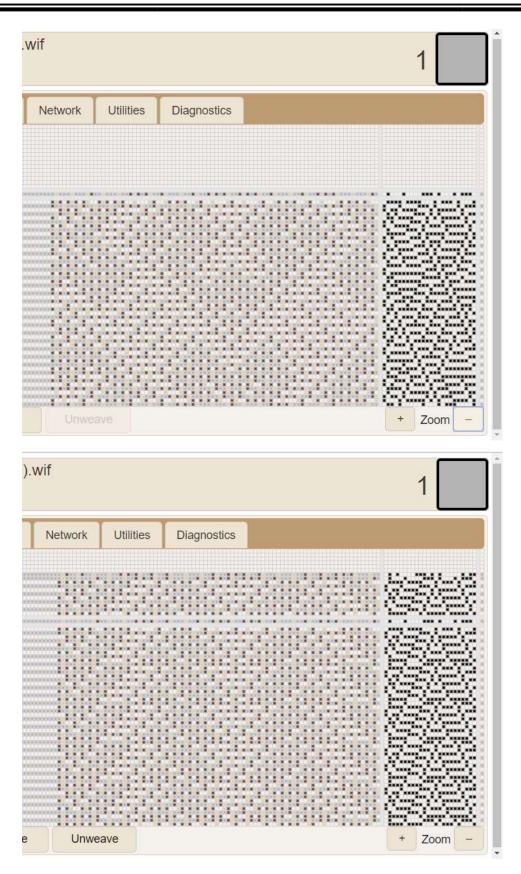


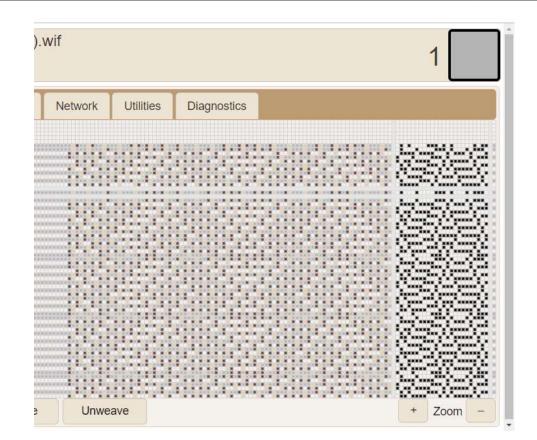
2) The Set Range window appears.

			1
2			
	2	2	2

3) Enter the Start and End Picks. Click Apply.

The following examples show the full pattern, then 1-10 and then 1-15 were set as the range for the same WIF file. Each pattern appears slightly different.





UNWEAVE

WARNING:

Anytime you move the weaving backwards, you must remove the pin in the cloth storage beam. This will release the tension on your finished cloth so that the loom will not be damaged.

The Unweave button is used when you need to remove some of your weft threads. When you press down the treadle, the shed will open the picks in the reverse order that you wove. The warp beam will move backwards when Unweave is selected. Once you have removed the weft back to the desired point, you can use the manual advance buttons in the cloth advance section of the Weaving tab to adjust your fell line back to the proper point if necessary.

1) Take the pin out of the cloth advance beam so that the cloth will unwind easily.



2) Click Unweave.



3) The button will change to Weave with red text. Click Weave to return to normal functionality.

Reverse the Warp

- 1) Make sure the pin is out of the cloth advance beam so that the cloth will unwind easily
- 2) In the software go to the Cloth Advance area.



- 3) Use the down arrow to reverse the warp. Click the arrow until the warp has reversed as far as you want it. Use the beater to adjust the fell line.
- 4) Reset the tension. Depending on how far you have unwoven, you may need to rewind the warp onto the warp beam.

5) Return the pin to the cloth advance beam.

Note:

If you cannot find the hole for the pin easily, move the cloth advance beam by using the beater until you see the hole. The cloth advance beam will not wind on cloth unless the pin is in the hole.

6) If there is any slack in the cloth you can tighten up by using the beater.

Set the Pick

Most versions of the Compu-Dobby V software will ask you if you want to resume where you left off at your last weaving session. If you have an older version, it may not save your last pick. In this case, enter the pick you want to start this weaving session with.

You can also use this feature to start at a different pick then the one you left off at for design purposes.

Note:

Check the current pick to see what will be opened when you treadle. If the current pick is zero, treadle once to advance to the correct pick.

1) In the Pick area, click Set Pick.



2) The Set Pick window appears.

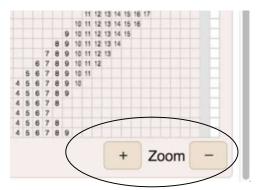
Apply	
	Apply

3) Enter the pick you want to start with and click Apply.

Zoom in on the WIF

You can zoom in on the WIF in order to see it in more detail. You can zoom out on the WIF in order to see more of it.

1) Click the + or – zoom buttons until you have adjusted the view of the WIF file to what you want.



The following examples show a weaving tab that is zoomed out, and then one that shows it zoomed in.

Ryan's X as Taquete Rug NEW (1).wif								
	(
Weaving	Files	Options	Tabby	Network	Utilities	Diagnostics		
Power On	T	abby	Reverse	Unwe	ave			+ Zoom –

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Lock the warp beam

There is a button that allows you to lock the warp beam in place. When the warp beam is locked, the cloth advance is automatically disabled.

This feature could be used by weavers who want to be able to experiment with placing wefts while manually advancing the cloth and letting off warp.

If you need to treadle through your pattern for some reason, you can use this feature to avoid having the warp advance.

You can also turn off the cloth advance without locking the warp beam. See page 45.

- 1) Open the software.
- 2) Click the Lock wrap beam button.



3) Click the button again to turn it off.



Power Off

1) When you are done weaving, click Power Off to return the loom to its normal standby state. If you are going to turn off power to the loom, shutdown the loom through the software.



OTHER TABS

FILE TAB

Files are stored on the loom. The files must be in the WIF format. The file tab allows you to open your weaving files or to transfer weaving files to the loom. It is the default tab that appears when you open the software.

If you are using Weavepoint, you can use the loom control feature to open Weavepoint files directly in AVL Drive. With any other software, you must export your weaving files to the WIF format. With the Compu-Dobby 5, files are stored directly on the loom. From the files tab, you can open WIF files that have been stored on the loom. You can also upload files from your computer to the loom for use.

Note:

If no file is selected, only Transfer to Loom and Open, Upload to Loom, and Backup to Local Machine will be available.

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AVLDrive Version 5.0.21.3	Please select file Connected To: test1	0
Cloth Advance	Weaving Files Options Tabby Network Utilities	Diagnostics
Picks 0 Reset Repeats 0 Reset Prev 0 Current 0 Next 0 Set Pick Start 1 End 0 Set Range Warp Tension Q 25:	4365-liftplan.wif 4467-liftplan.wif 6978-liftplan.wif BigDiamond.wif	Transfer to Loom and Open Open for Weaving Rename Delete Upload to Loom Download from Loom Backup to Local Machine

Button	What it does
Transfer to Loom and Open	Transfer a file from local storage to the loom
	and open it. Complete instructions follow.
Open for Weaving	Opens the selected file for weaving. You can
	also double-click a file to open it for weaving.
Rename	Rename a file. For example if you have

	several files with similar names, you might rename the file you are actively using so that it is easy to find.
Delete	Delete a file from the loom. While there are no limits on how many files can be stored, deleting files that are not being used can make it easier to find the files you want in the list.
Upload to Loom	Transfer a file to the loom without opening it. Complete instructions follow.
Download from Loom	For future use.
Backup to Local Machine	For future use.

Transfer to Loom and Open

This option allows you to find WIF files on your computer and transfer them to the loom storage system for use. The file will be transferred to and also opened in the Weaving tab for use.

1) Click **Transfer to Loom and Open**. The standard open file window for your device will appear.

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Loom Assembly	Echo 4 design 3 on 36 with DW edge.wif	9/11/2018 12:35 PM	WIF file
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2) Navigate to the folder where you have stored the WIF file you want to use.

- 3) Choose the desired WIF file from the folder by clicking on it.
- 4) Click Open.
- 5) The WIF file will open in the Weaving Tab in AVL Drive.

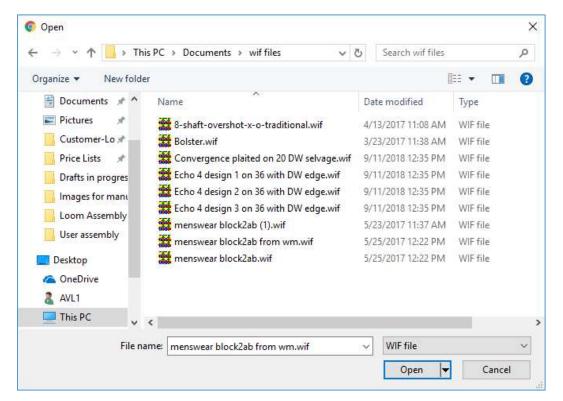
Note:

This process will upload the file to the loom, so the next time you want to use this WIF, you can choose it from the File tab.

Upload to Loom

This option will transfer the WIF file to the loom for use in the future, but it will not be opened in the Weaving tab.

1) Click **Upload to Loom**. The standard open file window for your device will appear.



- 2) Navigate to the folder where you have stored the WIF file you want to use.
- 3) Choose the desired WIF file from the folder by clicking on it.
- 4) Click Open.
- 5) The WIF file will appear in the list of files in the Files tab.

OPTIONS TAB

This tab allows you to set several options for your loom.

- 1) To activate an option, check the box.
- 2) To turn off an option, uncheck the box.

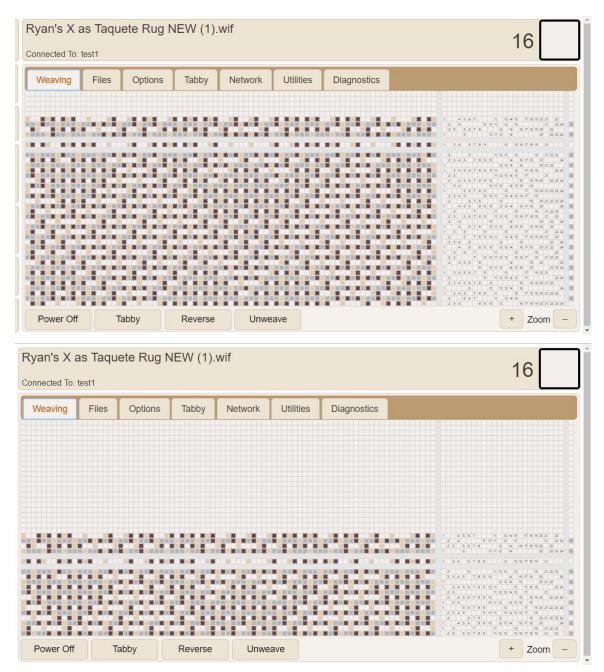
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Cloth Advance	Weaving File	options	Tabby	Network	Utilities	Diagnostics		
Picks0ResetRepeats0Reset	Loom Name History Percer	test1						
Prev 0 Current 0 Next 1 Set Pick	Show repo	eat counter						
Start 1 End 8 Set Range	Show num Fabric scr	c (cm) for advance						
Warp Tension 34:	Enable Cl	oth Beam Advand	ce					

Loom Name

The name of your loom. Changing the name will change the address you need to type to access your loom. See page 13 for complete instructions.

History Percent

Move the percentage bar to indicate how much of the screen should be devoted to history. The following examples show a screen with less history and more history.



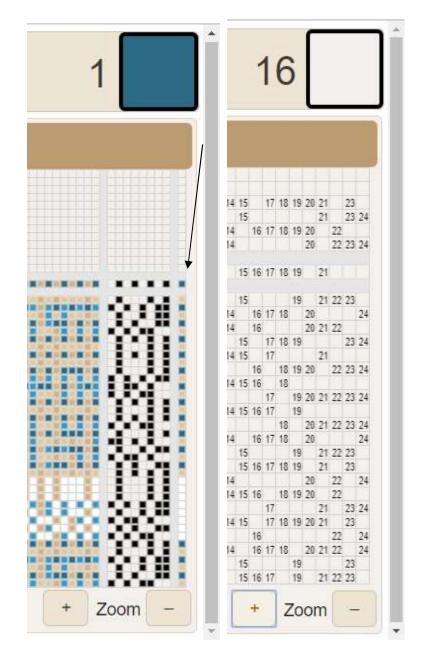
Show repeat counter

Shows the repeat number in the software. The following examples show the screen with the repeat counter on and with it off.

AVLDrive Version 1.0.0	AVLDrive Version 1.0.0
Cloth Advance	Cloth Advance
Picks 4 Reset Repeats 4 Reset Prev 15 Current 16 Next 17	Picks 4 Reset Prev 15 Current 16 Next 17 Set Pick
Set Pick Start 1 End 92 Set Range	Start 1 End 92 Set Range
Warp Tension	Warp Tension 56

Show color bar

The color bar to the right of the draft will appear. The following examples show the color bar on and the color bar off.



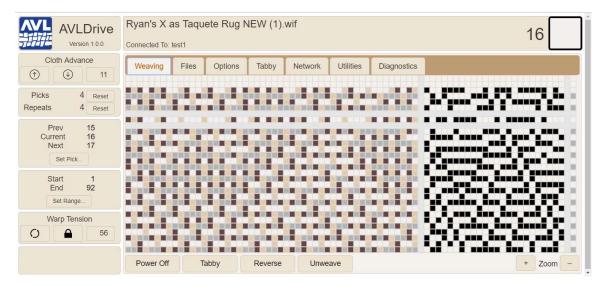
Show drawdown in color

Allows you to view the WIF in color. The following examples show the WIF in color and the WIF with the color option turned off.



Show numbers in liftplan

When you are zoomed in far enough on the WIF, you will be able to see the harness numbers. The following example shows the WIF as it will appear if you zoomed out too far, or if you turn this option off. The examples for the color drawdown on the previous page show harness numbers.



Fabric scrolls down

If selected the fabric will scroll down on the screen as you weave, if not, the fabric will scroll up. The following example shows this option turned on. The other screenshots in this manual show the fabric scrolling up.

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Prev 15 Current 16 Next 17 Set Pick								
Start 1 End 92 Set Range								$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
Warp Tension					1, i ji ji		969999	
	Power Off][T	abby	Reverse	Unwe	ave		+ Zoom -

Use metric (cm) for advance

This option allows you to use the metric system for the cloth advance. The default is imperial (inches).

Enable Cloth Beam Advance

This option allows you to turn on or off the cloth beam advance.

TABBY TAB

This tab allows you to set up or use a tabby. Several defaults are included. If your threading requires a tabby pattern that is not included, you can add a new tabby. You can also edit, delete, or rename existing tabbies.

1) With the AVLDrive software open, click Tabby.

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AVLDrive Version 5.0.21.3	4365-liftplan.wif Connected To: test1		0
Cloth Advance	Weaving Files Options Tatgby Ne	etwork Utilities Diagnostics	
Picks0ResetRepeats0Reset	Odds and Evens	0	
Prev 0 Current 0 Next 1 Set Pick	1 3 5 7 9 11 13 15 17 19 2 4 6 8 10 12 14 16 18 2 Add Edit	01 22 23 25 27 29 31 33 3 0 22 24 26 28 30 32 34 Delete Rename	5 37 39 36 38 40
Start 1 End 8 Set Range			
Warp Tension 34:			

2) To select a tabby, choose it from the drop-down menu. The tabby that appears in the tab is the one that will be selected when the Tabby button is clicked on the Weaving tab.

Add a Tabby

1) Click Add.



- 2) Enter the name of the Tabby.
- 3) Click OK.

Edit a Tabby

- 1) Choose the Tabby from the drop-down list.
- 2) Click Edit. The background color of the tabby will change.

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AVLDrive Version 5.0.21.3	4365-liftplar							0
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Cloth Advance () ↓ 20:	Weaving	Files	Options	Tabby	Network	Utilities	Diagnostics	
Picks 0 Reset Repeats 0 Reset	1 5		my t	abby		0		
Prev 0 Current 0 Next 1 Set Pick			Add	Edit	Dele	ete Re	ename	
Start 1 End 8 Set Range								
Warp Tension 34:								

- 3) Click the harnesses that should rise on each lift. The top line is pick A and the bottom line is pick B.
- 4) When you are done, click Edit again.

Delete a Tabby

Note:

The Odds and Evens tabby cannot be deleted.

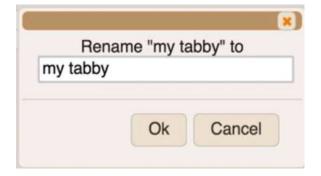
- 1) Choose the Tabby from the drop-down list.
- 2) Click Delete.



3) Click OK at the confirmation window.

Rename a Tabby

- 1) Choose a Tabby from the drop-down list.
- 2) Click Rename.



3) Enter the new name in the window and click OK.

Use a Tabby

When you change the tabby in the drop-down menu, you change the tabby that will be used by the loom when you click Tabby on the Weaving tab.

1) Open the Tabby Tab by clicking on the name. The tabby will only show the number of shafts available on your loom.

AVLDrive Version 5.0.21.3 Cloth Advance Ticks 0 Reset Repeats 0 Reset Cloth Advance Cloth	
Version 5.0.21.3 Connected To: test1 Cloth Advance Image: Connected To: test1 Image: Cloth Advance Image: Cloth Advance Image: Cloth Advanc	≡
Version 5.0.21.3 Connected To: test1 Cloth Advance Image: Connected To: test1 Image: Cloth Advance Image: Cloth Advance Image: Cloth Advanc	I
Image: Weaving Files Options Tabley Network Utilities Diagnostics Picks 0 Reset Odds and Evens Image: Construction of the section	
Repeats 0 Reset	
Prev 0 Next 1 Set Pick	
Start 1 End 8 Set Range	
Warp Tension 34:	

2) From the drop-down menu, choose the tabby to use with your threading. Several defaults are available.

Options	Tabby	Network			
		Odds and Ever	IS		•
	1 3 2	Atwater-Bronso Evens and Odo	21 23 22 24		
		Odds and Ever			
	Ad	Summer and W Three-tie Unit V Two-tie Unit W	Veaves		name

UTILITIES

This tab allows you to perform several operations for your loom.

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AVLDrive Version 5.0.21.3	4365-liftplan.wif						0
Cloth Advance	Weaving Files	Options	Tabby	Network	Utilițties	Diagnostics	
Picks 0 Reset Repeats 0 Reset	Check for upda	ite	Fetch cont	figuration			
Prev 0 Current 0 Next 1 Set Pick	Show Log		Shutd	lown			
Start 1 End 8 Set Range							
Warp Tension							

Button	What it does
Check for update	Checks to see if there are updates for the loom software. The loom must be connected to the internet.
Fetch configuration	Gets configuration information for your software. The loom must be connected to the internet.
Show Log	Displays a log of software events. This can be sent to AVL for diagnostics if something is wrong with your loom.
Shutdown	Shuts down the loom safely so that it can be removed from power.

DIAGNOSTICS

This tab allows you to view information about your solenoids.

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Current 0 Next 1			11.844					
Set Pick			11.895					
Start 1	5 4	4.558	11.832					
Start 1 End 8	6 4	4.633	11.844					
Set Range	7 4	4.55	11.895					
Warn Tanaian	8 4	4.558	11.832					
Warp Tension	9 4	4.55	11.895					
O	10 4	4.558	11.832					
	11 4	4.633	11.844					
	12 4	4.55	11.895					
	10	4 550	11 000					

THE FINE PRINT

AVL CUSTOMER SERVICE

AVL offers free technical support to the original owner of all our looms. This means if you ever have a problem, you can call, fax, or e-mail us and we'll help you find a solution. Please take advantage of this service; your satisfaction is extremely important to us.

Customer Service Phone: (530) 893-4915 Fax:(530) 893-1372 E-Mail:sales@avlusa.com

AVL WARRANTIES

<u>Limited Warranty</u>: The benefits of this warranty accrue solely to the original purchaser of AVL Looms, Inc. products, as defined below.

Your warranty covers:

<u>New Looms:</u> AVL Looms, Inc., a California corporation ("AVL") warrants to the original purchaser of any AVL loom (each, a "Product") that the Product will be free from defects in materials and workmanship during the limited warranty period described herein. The limited warranty coverage begins (a) the day the Product is installed if installed by a professional from AVL, or (b) on the date of shipment from AVL to the original purchaser if the Product is not installed by AVL (the "Effective Date"). Except as set forth under the section entitled "What is Excluded?" below, AVL will, for a period of two (2) years from the Effective Date (the "Original Warranty Period"), repair or replace the defective part(s) of the Product with a repaired, renewed, or comparable part (whichever is deemed necessary or proper by AVL) if it becomes defective or inoperative or fails to perform according to AVL's specifications. Any repair during the Original Warranty Period will be carried out without charge to you for parts (except applicable taxes, if any). You will be responsible for all labor in connection with installation of the parts and service upon the Product, as well as the cost of shipping involved.

<u>New Accessories, Loom Upgrade Parts, and Replacement Parts:</u>Subject to the limitation contained in subsection (i) under the section entitled "What is Excluded?" below, AVL warrants to the original purchaser of any accessory, loom upgrade parts, or loom replacement parts (the "Additional Part") that are sold by AVL that such Additional Part will be free from defects in materials and workmanship for ninety (90) days from the date of purchase. In the event that any Additional Part is physically damaged or physically defective and if such defective Additional Part is returned to AVL within ninety (90) days of the date of purchase, AVL will provide a replacement Additional Part at no charge. The sole remedy for this warranty shall be limited to the replacement of the defective Additional Part. You are responsible for all shipping charges (including applicable taxes) incurred with returning the defective Additional Part.

All New Products and their components (including replacement Product and its components) are covered only for the Original Warranty Period. When the warranty on the original Product expires, the warranty on any replacement Product, or components also expires. After two (2) years from the Effective Date, you pay for any replacement or repair, including all parts, all labor and shipping charges (including applicable taxes).

Your warranty does not cover:

1.Labor charges for installation or set-up of the Product, as well as any labor charges required to install, disassemble, troubleshoot, or reassemble the Product.

2.Any taxes imposed on AVL for Product replacement or repair under this warranty.

3.Installation, performance of, or repair of: cabling, electrical, or accessory attachments used with the Product.

4.Product replacement or repair because of misuse, accident, repair by any party other than AVL, or other cause not within the control of AVL. Please note that removing any parts from the Product for any reason voids the warranty.

5. Incidental or consequential damages resulting from the Product.

6.A Product that has been modified or adapted to enable it to operate in any country other than the United States or any repair of Products damaged by these modifications.

7.Electrical and pneumatic components, each of which carries a one (1) year warranty from the Effective Date.

8.Jacquard components function beyond 98%. A Jacquard module is considered to be operating within specification if 98% of all hooks are operating as commanded.

9.Computing equipment, such as a Personal Digital Assistant or a Personal Computer, which are manufactured by a third party(ies) and which may be under warranty through the original manufacturer. AVL is not responsible for any warranty coverage that may be offered concerning these products and you must contact those manufacturers directly regarding any available warranty coverage.

The performance or functionality of any software that is sold either together or separate from the Product. The AVL warranty covers only defects in the Software Media, namely the CD-ROM media such as a broken CD-ROM or a defect in the CD-ROM that would prevent the CD-ROM from being read by your personal computer's CD-ROM drive.

AVL Returns Policy

Any order that has left AVL in transit to the customer is considered fulfilled. Parts and accessories not covered under warranty must be returned to AVL within 60 days from the date of shipment from AVL. The purchase price of the item(s) is refundable less a 15% re-stocking fee based on the total purchase price. No refunds will be given on shipping or handling. The buyer is responsible to return the merchandise in "as new" condition at their expense. Any item received showing wear or damage is not eligible for return and will be promptly returned to the customer COD unless some other arrangement is made. Looms and custom-made items, special order items, parts made for pre-1998 looms, used and reconditioned items are not eligible for return.