AVL Loom Control

with

WeavePoint 8
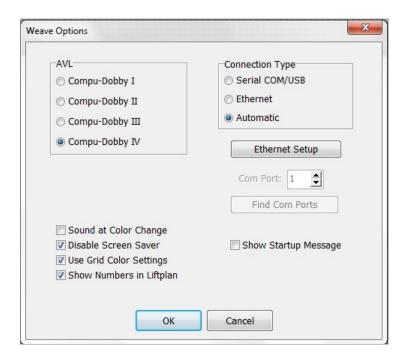
User's Guide

AVL Looms, Inc. | www.avlusa.com

WEAVE MENU

Weave Menu items will allow you to operate your particular AVL Compu-Dobby. Proper connection must be made between the Compu-Dobby and your Computer. (Refer to your Compu-Dobby manual for further information on connection issues.)

WEAVE/Options

Selecting Options on the Weave menu will open the Weave Options dialogue box. This box will allow you to select the correct driver by choosing your type of CompuDobby, connect with your Computer by finding and selecting the correct Com Port, and other options that will provide tools to help you while weaving.

Compu-Dobby I, II, III or IV

Select Compu-Dobby I, Compu-Dobby II, Compu-Dobby III, or CompuDobby IV, depending on which CompuDobby you have. Please note that Compu-Dobby III selection is used for both Compu-Dobby III and Compu-Dobby III+ systems. Compu-Dobby IV is used for Compu-Dobby IV, Compu-Dobby ver. 4.5 and Little Weaver systems. If you are unsure, please refer to your Compu-Dobby manual. Some helpful information about AVL's computerized dobby systems:

SYSTEM	LAUNCH YEAR	STYLE: Positive (P), Negative (N), RL Air (A), Little Weaver (LW), IDL (I & I4)	DISTINGUISHING FEATURES
Compu-Dobby (original or I)	1984	P, I	1 sheet metal box; eye case and handheld controller hardwired together
Compu-Dobby II	1996	P, I	2 sheet metal boxes, I/O box has LCD screen
Compu-Dobby III	2001	N, A	1st Negative Style
Compu-Dobby III+	2007	N	WDL only
Compu-Dobby IV	2009	P, N, A	Built in USB, RS232 and Ethernet (RJ45) jacks
Compu-Dobby 4.5	2016	P, N, A, LW, I4	Built in USB jack and WiFi antenna

Connection Type

The selection of connection options will be grayed-out unless you have selected and are using an AVL type of Compu-Dobby IV. With this last selection, you will be able to choose what type of connection you will use with your computer.

USB
If you select to use a USB connection, the installation of a direct USB driver (D2XX) from FTDI will be required. This driver will be included on your WeavePoint CD-ROM. After installation of your WeavePoint software, locate the USB driver installation file on your CD-ROM and run it. It will not automatically install with the weaving software. You can also download the latest driver from AVL's web site. Please refer to your CompuDobby IV manual for more information, or contact Customer Service at AVL Looms, Inc.

ETHERNET
The selection of Ethernet for your method of communication will require the use of the Ethernet Set-Up button. Enter the IP address:169.254.128.3.

The Ethernet connection must be made with an Ethernet crossover cable. Note that this differs from a standard Ethernet cable, but even the crossover type can be found by most pc/cable suppliers. Ethernet is an easy way to connect your loom. Because the address and port is fixed, there's no need to select a port like with COM/USB. Also, you don't need to install any driver. The Ethernet port on your PC will be occupied with the loom connection, but you can still connect to internet by Wi-Fi, if available.

If, for whatever reason, you find it necessary to go from one connection type to the other, it is best to change the connection type, then reboot the CompuDobby IV and restart WeavePoint.
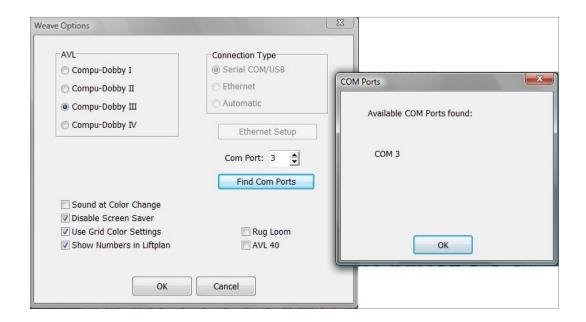
AUTOMATIC
If you have a CompuDobby IV and select Automatic, WeavePoint will try out both Ethernet (with the present IP address) and COM ports (which includes USB with the driver), until it finds the loom or until all available options are tested.

Normally, Automatic will find the correct connection the first time Loom Control is run. This could take up to about 10 seconds. WeavePoint will then store the connection information and use this the next time you start Loom Control.

If connection is not obtained with Automatic, you can manually select Ethernet or Serial COM/USB. For serial connection, use the **Find Com Ports** button to help narrow your search - the list of available Com Ports will include Serial and Serial/USB Ports 1 thru 9. If the Com Port is not within range 1-9, you may wish to look at the settings in the Device Manager on your computer (Start Menu/Control Panel/Device Manager/Com Ports) and set the Port number manually.

In Weave Options, you can check "Show Startup Message" to display the Start Up Message sent from the loom and thus confirm that communication is established.

Sound at Color Change

Choose this setting for the computer to notify the weaver to change the weft color while weaving. The sound used is the standard Windows exclamation sound. Note that this sound can be changed in the Control Panel Sounds to any sound you like.

Check the settings in Sounds in the Control Panel. Is any sound assigned to Exclamation? If not, select a sound. Then test the sound with Preview. (If there are no loudspeakers, there may still be a simple beep.)

Then make sure that the volume on your computer is turned up.

Disable Screen Saver

It is not desirable to have your weaving interrupted by the screen saver. You may weave for a long time without touching the mouse or the keyboard and then the screen saver will start if it is not disabled. Making this selection will automatically keep the screen saver disabled when in loom control mode. Each time you exit from weaving, the screen saver will be re-enabled. And don't worry about your screen. It can take long hours of weaving without any sign of damage.

Use Grid Color Settings

Select this box if you want the Grid Color Settings in your Draft Window to be reflected in the Loom Control window, too.

Show Numbers in Liftplan

Select this box to replace the black squares in the liftplan with numbers.

Rug Loom

If you are operating an AVL Rug loom, you must make this selection. It affects the timing of the solenoids with the movement of the Slide Bar in the Dobby Box.
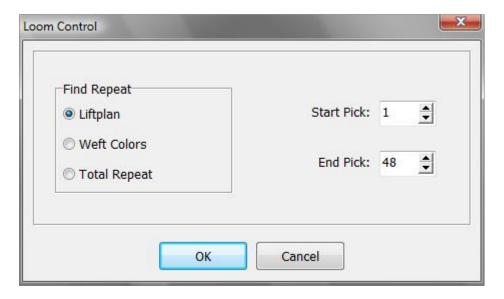
AVL 40

This box should be selected only if your AVL loom has 40 harnesses.

Weave/Loom Control

The **Loom Control** dialog box lets you select the **Start Pick** (default is pick 1) and the **End Pick**. The End Pick, shown automatically in liftplan or treadling, is suggested according to your selection of the repeat in either the **liftplan**, **weft colors**, or the **total repeat** mode.

It is important to select **Total Repeat** if you work with complex color sequences and especially if their repeat is not matching with the **liftplan repeat**. Since your computer will give you a sound signal when to change the weft color, it is important to have an accurate repeat according to both color and structure. **Total Repeat** is the minimal repeat one has to select to get the design repeated completely, including color and pattern.

For example, if the liftplan repeat is eight picks and the weft color repeat is twelve, the total picks in one repeat will be 24. T**otal Repeat** should be selected so the full range will repeat automatically when weaving.
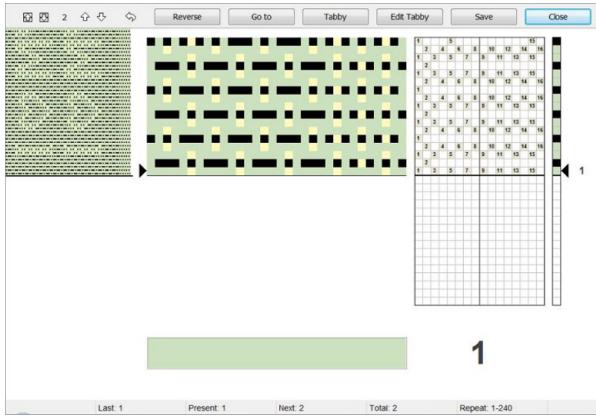
You can override **start Pick** and **End Pick,** if you wish.

For weaving a pattern with weft borders, you can select Start Pick to be the first pick above the border.

When these selections have been completed, click **OK**, and the **Loom Control Window** will open in complete screen mode.

Loom Control Window

When weaving, your pattern will be displayed in a special weaving mode in an **enlarged scrolling grid**. This makes it easy to follow the pattern on the screen, even from a distance.

Loom Control Window

The **arrow** at the right side of the scrolling grid/Liftplan and Drawdown indicates the fell line and current pick. The **active pick number** is displayed to the right of the arrow.

The **Color Indicator** is the large, rectangular field located in the lower portion of the window. It shows the yarn color to weave in the active pick.

The **active pick number** is repeated again, by the large number to the right of the **Color Indicator**.

On the upper left side of the window you can see the **pattern repeat** as fabric. If your repeat is short, 16 for example, it will be a narrow horizontal selection of your pattern. The longer your repeat, the more will be shown, but the view will be limited to the range allowed in the upper left corner. It will scroll as you progress through your extended pattern.

Status bar

The **status bar** is located at the bottom of the window. Here you can see the total number of picks in the repeat to weave, the total number of picks you have woven since you started the present weaving session and the next, present, and last picks, and the position of the cursor if it is over a shaft in the Liftplan.

If you are not able to see the Status Bar, it is probably behind your computer's Task Bar. To hide the Task Bar, right-click at an empty place on the Bar and select Properties. Then check "Auto-hide the Task Bar".

Tool Bar

There are a series of **Arrow Buttons** and **Command Buttons** at the top of the window, in the Tool Bar.

The **two arrows inside the squares** will Advance the **Scrolling Grid**, as currently displayed in the window, to the complete next page of the pattern.

The two **Up and Down Arrows** will cause the next pick to move up or down as you select, and the **number of the next selection** is always reflected in the between the two sets of arrows.   You can also press the page up and page down keys on your keyboard. Please note, though, that the screen won't update until the next time you treadle.

The **little curved arrow** will send you **back by one pick**. The keyboard shortcut is "B".

The **six Command Buttons** are as follows: (To issue most of the following commands, you can either click the screen button, or the button on the loom control box with Compu-Dobby I and II)

Reverse

Change Reverse/Forward weaving direction. When **Reverse** is in effect, a large, red arrow will appear to the right of the Active Pick number in the lower right corner. The keyboard shortcut is "R".

To avoid skipping any picks**, it is important that Reverse is only selected while the shed is closed**.

Go To

Click this button to open a window, in which you can specify the next pick by its number.

The pattern and weaving direction will go forward from that pick and tabby weaving is turned off. The keyboard shortcut is "G".

Tabby (Plain Weave)

Change to tabby (plain weave) weaving. Click the tabby button again to leave tabby weaving and return to your pattern.

When weaving tabby, the two tabby lags are called A and B in the status bar for Next, Present, and Last. These tabby picks will be counted separately from your other pattern, as long as you are in Tabby mode.

When Tabby is in use the arrow buttons are not be available. The keyboard shortcut is "T".

Edit Tabby

This will open a box which will enable you to adjust the tabby for your pattern/threading, to

diminish overshots in the tabby. Use your cursor and right click to make any changes.
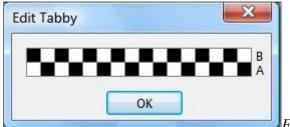

Fig. 10.5

Save

Save your present pattern and weaving position. When save, you can later choose **Resume** to continue weaving the same pattern. The present position, repeat range, and weaving direction will be stored.

Note that the present pattern will be saved to disk like an ordinary WeavePoint pattern. You can open and edit this pattern also when not weaving. Any changes you make to the pattern will be used when you resume.

Skip

Skip one pick. This command is only available at the loom control box for Compu-Dobbys I and II.

Close

Click Close to quit the loom control window.

Weave/Resume

When weaving, before closing the Loom Control window you can click **Save** to store the present pattern and weaving position. Later, you can then just click **Resume on the Weave Menu** to open the same pattern and resume weaving where you left off last time.

Weave/Cartridge

You must be in Liftplan Mode for Cartridge Programming.

You can store patterns in the cartridge inserted in the Compu-Dobby box. Then you can weave without having the PC connected to the loom.

The Cartridge dialogue will show the present patterns stored in the cartridge by index number, name, and number of picks. You can put your present liftplan in the cartridge or load a liftplan from the cartridge.

With Compu-Dobby II, you can store ten patterns. With Compu-Dobby I, you can store five patterns.

If the cartridge memory for some reason is corrupted, you will get a message and the option to erase the cartridge contents. It is then recommended to click **Yes** to erase the cartridge and reset the cartridge memory. If it is important to access any pattern stored in the cartridge, you can click **No** and then try to load the pattern from the cartridge.

Put Liftplan

Select the pattern index where you want the liftplan to be stored. If choosing an index where a liftplan is already stored, the new liftplan will replace the old one.

Select the number of picks you wish to store, starting from pick one. Patterns number 1 and 6 can accommodate up to 900 picks. Patterns 2-5 and 7-10 can accommodate up to 445 picks.

If you try to save a design in a tie-up mode, you will get a warning message to transform it to a liftplan mode.

Enter a pattern name of up to twelve characters, if you did not name it before. If you did, do not change the name here. Use the same name. Click **OK** to store the liftplan in the cartridge.

Get Liftplan

First, select a pattern to load by clicking its index.

Error Recovery

For CompuDobby II - when communicating with the loom controller box, errors may occur. If you ever get an error message, you can just try to proceed if possible.

One reason for errors when starting weaving or cartridge communication would be if you pressed any of the switches on the loom control box after turning on the Compu-Dobby power. This must not be done before you start to weave. Your Compu-Dobby II display should be in a "waiting for computers or switches" mode.

If errors occur, check that the cable is properly connected at both ends. And check that you have selected the correct Com Port - being the port where the loom cable is connected to your PC.

Sometimes it can help to restart the PC and the Compu-Dobby box.

When getting the message saying that the cartridge is corrupted or missing, it indicates that something is wrong in the cartridge memory. The cartridge battery (on Compu-Dobby I only) may need recharging. Check that the cartridge is actually installed. CompuDobby II batteries can be replaced.

For further information, refer to your CompuDobby manual.

Step by Step Process of Weaving On-Line and with a Use of Cartridge

First five steps are the same for both Weaving On-Line or with the cartridge. After step 5, go to the appropriate part.

1.)   From the pull down **Weave** menu, select **Options**. From the **Weave Options Window**, choose the appropriate option, e.g. Compu-Dobby I or Compu-Dobby II.

2.)   From the same **Weave** menu, select **Com Port**. Choose the appropriate **Port**.

3.)   Make sure that the cable connecting your computer with the Compu-Dobby is connected to the same selected port on the back of your computer.

4.)   Click on the **Sound at the Color Change** if you will use more than one color in the weft and want computer to give you the sound signal at each color change

5.)   Click on **Disable the Screen Saver** if you screen has one and you intend to weave on-line. You want to be able to look at your weaving on the screen while weaving.

Weaving "On Line" (without the use of cartridge)

1.)   Open your design on the screen. It can be in either **Liftplan** or a **Tie-Up Mode**.

2.)   Switch your CD box on and make sure it says "Waiting for a computer or switches".

3.)   From the **Weave** menu, select **Loom Control**. The Loom Control dialog box lets you select the **Starting Pick** and the **End Pick** of your weave (repeat). For the End Pick, the weft repeat will be suggested according to your selection of the repeat in either the liftplan, weft colors, or the **Total Repeat** mode. It is important to select Total Repeat if you work with complex color sequences and especially if their repeat does not match the liftplan repeat. The Total Repeat is the minimal repeat one has to select to get the design repeated completely. For example, if the liftplan repeat is eight and the weft color repeat is twelve, the total repeat will be 24. Click OK.

4.)   A large window will appear on your computer screen showing an enlarged scrolling grid. A horizontal line indicates the present pick. To the left you can see pattern repeated as fabric. You are ready to start weaving. The display on the CD box is showing the active and the next pick.

5.)   When you want to **Stop**, go back to your computer and click on the **Close** button in the top right corner of the displayed window.

Weaving with a Cartridge

1.)   Open your design on the screen. Make sure the draft is in the **Liftplan** mode. If it is not, go to **Options** menu, **Options** submenu, **Loom** window. Change your **Loom Systems** to **Liftplan**. If you try to access the cartridge while in **Tie-Up** mode, you will see the warning "Turn to **Liftplan** mode for cartridge programming".

2.)   Switch your CD box on and make sure it says "Waiting for a computer or switches" and that your cartridge is connected properly.

3.)   From the **Weave** Menu, select **Cartridge**. An AVL Cartridge window appears on the screen. You have ten possible positions. Each liftplan will be displayed with its index number, name, and the number of picks in that liftplan. This is an information window. From this point you can:

   a.)   **Put Liftplan** to transfer your liftplan to the cartridge.

   b.)   **Get Liftplan** to transfer liftplan from the cartridge back to the computer.

   c.)   **Close** if you just wanted to see positions, index numbers, names or number of pick in each design, but did not want to make any changes.

4.)   In your **Put Liftplan** window, you need to enter three parameters:

   a.)   **Put as Liftplan** #_____. Here you decide in which position on your cartridge you want to put this liftplan.

   b.)   Determine the size of your design by entering your end pick. Start pick is always 1.

   c.)   Enter the name of your design. If your design does not have a name, you can name it here; if it does, it has to be exactly the same. If you change the name of your design, it might not save it correctly. Click OK.

5.)   Click on the **Select** button on your CD box to select among ten saved designs. When the name of the liftplan you want to weave is displayed, you will also see the first pick from that liftplan and you can start weaving.