

Comby Serial Interface Installation

The interface is installed inside the Comby's original interface box. Start by disconnecting the power cable to the Comby and then take the cover off of the box by removing the four screws that hold it on.



Photo 1

With the cover off you will see a flat cable connected to the Comby's circuit board

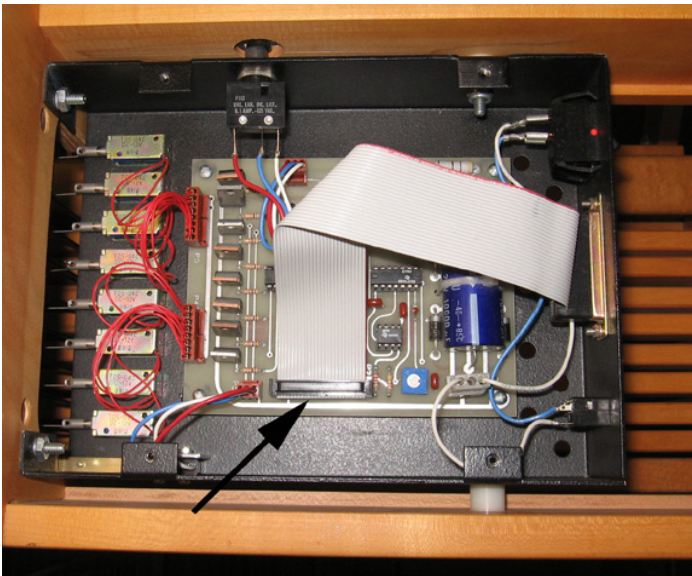


Photo 2

Carefully remove the flat cable from the Combyby circuit board by holding it on the ends and pulling upward. Sometimes a *very slight* rocking motion helps it to disengage. (Rocking it too much will bend the pins on the circuit board!) Do not pull on the flat cable, only by holding onto the connector.

Now, holding the interface in one hand and grasping the flat cable connector in the other, plug the flat cable onto the interface. Make sure that the cable engages all the pins, not offset to one side or the other, and that both rows of pins are engaged .

Next plug the interface onto the Combyby circuit board where the flat cable was originally. It should look like this:

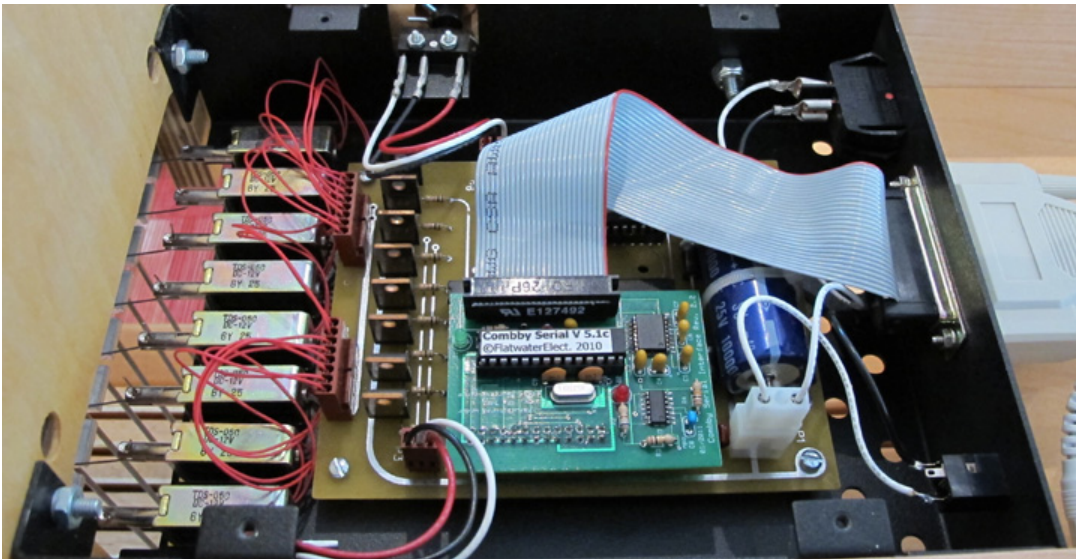


Photo 3

IMPORTANT!

It is important to carefully align the connector where the interface plugs into the Combyby circuit board so that all the pins align. Both rows of pins must engage the interface connector as well as making sure the connector is not off to one side or the other.

Don't put the cover back on the box yet.

Checking Operation

Plug in the loom's power connector and turn on the power switch. At this point the loom should have all the shafts down and the right treadle not depressed. The first thing you should see is that the yellow LED on the interface board is on.

(The yellow LED is located here)



The yellow LED indicates that the interface is correctly aligned with the Comby board.

The green LED should also be on and the red LED should be off.

Troubleshooting

If the yellow LED is on but the green LED is not on make sure that the left treadle is all the way down. The green LED is controlled by the treadle switch and will be on if the right treadle is all the way up and goes off when the right treadle is depressed.

If the yellow LED is off and the green LED is on then the interface is not aligned correctly with the pins on the Comby board. To verify this condition you can push the button on the front of the Comby and the green LED will then go off. What has happened is the connector is off one pin (to the right in the picture above). Turn off the power and reconnect the interface. See the note with Photo 3.

If no LED's come on the connector may be off the other way. Turn off the power and recheck that all the pins line up. If checking all of the above does not give correct operation, contact Flatwater Electronics for further help.

Now you are ready to test the operation. The yellow LED and the green LED will both be on, and the red LED will be off.

Now depress the right treadle. When you depress the treadle the green LED should go off and the red LED should come on. The green LED going off indicates that the treadle switch is working correctly. The red LED coming on indicates that the software is working correctly.

If the green LED does not go off when depressing the treadle either the treadle switch or the Comby board electronics are not working properly. Contact Flatwater Electronics for further help.

Now you are ready to hook up to the computer and verify that the computer and the loom are working together correctly.

Carefully re-fold the flat cable so you can put the cover back on.
Fasten the cover to the Comby's box with it's screws.

You can run the loom with either the included WifWeave program or with weaving software that can be set to for Macomber. Follow the instructions for your weaving software setup for loom type and port selection.

Using loom software set to Macomber:

Set up your weaving software for Macomber loom, 12 shafts. (There is no setting for 8 shafts; the interface will adjust for it.) Make sure your weaving software is set to the correct serial port so it can communicate. Plug in the cable between the computer and the loom. Start with the Comby power off. Put your weaving software into weaving mode, then turn on the loom. Assuming your weaving software supports the communications check on power up, you will get a message that the Comby is OK. You can also do this check while weaving by using the Response test.

Using WifWeave:

Connect the cable to the computer and turn on the loom. Set WifWeave to Comby 8 Shaft. Treadle the loom to make sure that the pick advances. If you get a message that the loom is not responding then check your cable connection and port selection.

If the green/red LED sequence worked but the communications test does not it is most likely that there is either an incorrect cable used to connect to the PC or a port problem on the PC. Be sure your cable is a straight through cable and not a "Null Modem" cable which has the transmit/receive lines reversed.

John Acord
Flatwater Electronics
www.flatwaterfarm.com
jacord@gmail.com
(360) 240-1235