



**Quick Start Guide and Lamination Instructions
for
Permanent Version**

Quick Start Guide For



This guide covers the following: loading the software; setting up the communications; touch alignment; sensitivity of the touch foil and mouse function.

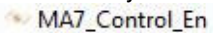
For further details please refer to the full user guide supplied with the ViP Interactive Foil CD.

1. **Please note: The touch screen touch function is disabled on first start up, you must enable (see section 6) only after you have set up the calibration and touch sensitivity.**
2. **You must save the configuration before closing the MA7 after the following setup procedure.**
3. **Ensure you use the right driver number on the CD as stated on the foil's Electronic Control Board (where applicable). If no driver number is stated, use Driver 0.**
4. **Please ensure that you follow the correct instructions at section 3 (Communications) depending on whether your electronic control board has a Serial or USB connector. (For Serial board with Serial-USB Converter please follow Serial Communications)**

1. Loading the Touch Driver Software onto PC

1. Switch on projector/LCD and align image with the active area of the touch foil
2. Insert the ViP Interactive Foil driver disc into the PC. Installation will start automatically
3. Follow instructions on the screen
4. During the installation process ensure that you create a new folder (named in accordance with the driver number) and remember the location of this folder
5. Further documentation can be found in the ViP Documentation folder on the ViP Interactive CD (Right-click and Open CD from My Computer)

2. Starting the Driver Control Program

1. To start the driver, either tick the "Launch ViP X" box during the installation process or go to the new directory and **double click Ma7_Control_En.exe** icon.
 
2. If it is required to start the driver every time Windows is started then a **short cut to Ma7_Driver.exe (not the program)** is automatically saved in the **Start-Up folder**

When the program is started it displays the following window:

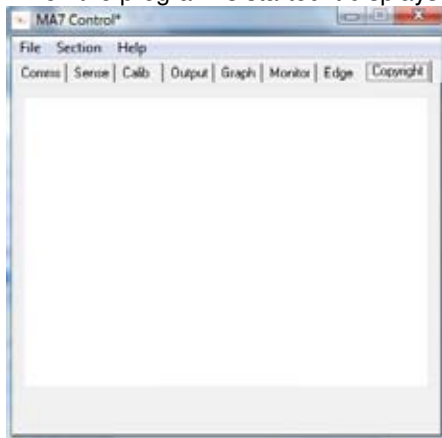


Fig 1

Configuring the Communications Port

Please ensure that you follow the correct instructions, depending on whether your electronic control board has a **Serial** or **USB** connector. (For Serial board with Serial-USB Converter please follow **Serial Communications**)

Serial Communications

When the program has loaded:

Select the **Comms** tab

1. If you are using a Serial to USB convertor with Win 98 or XP, please install the driver software **before** you connect the USB cable. With Windows Vista you connect the cable first to collect the driver from the internet
2. Connect to a free serial port or USB port if you are using a Serial to USB adaptor. Other devices, drivers or programs **must not** address this port.
3. Make sure the driver box called '**Present**' is red and select the appropriate port that the touch foil is connected to. **Do not use the USB port selection**
4. Select 19.200 Baud rate
5. Tick the '**Open**' box in the **Status section**
6. When the driver recognises the touch foil, the **Open**, **Active** and **Valid** boxes will go red
7. The button called **Reset** will reset the touch foil driver when pressed

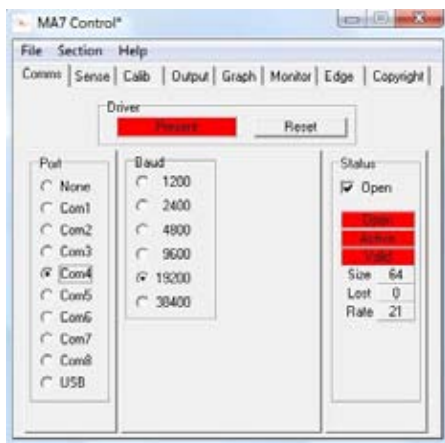


Fig 2

Reasons why the driver does not see the touch foil on the screen are usually:

- Touch foil on a different port to the one selected
- The Baud rate is incorrect
- Another device, driver or program is using the port
- Moisture still in the controller after lamination

Reasons why the mouse pointer is erratic on the screen at this point is usually because:

- Microsoft windows has incorrectly installed the ViP Interactive Foil as a serial ball mouse*
- Moisture still in the controller after lamination
- A metallic material is close to where the foil is positioned

* If MS Windows has installed the ViP Interactive Foil as a serial ball mouse you must go into system/device drivers/mouse drivers and pointers and disable the driver not delete. For further details on this issue see the serial ball mouse document on the ViP software CD

USB Communications

When the program has loaded: Select the **Comms** tab

1. Connect to a free USB port.
2. Select **USB** option in the **PORT** section.
3. Make sure the driver box called '**Present**' is red indicating that the driver has loaded.
4. Tick the '**Open**' box in the **Status section**
5. When the driver recognises the touch foil, the **Open**, **Active** and **Valid** boxes will go red
6. The button called **Reset** will reset the touch foil driver when pressed.
7. Select the **SampleTime** you require which changes the scans per second as shown in the box called '**Rate**'. The faster the scan rate the more responsive the touch but the capacitive field generated is less and therefore goes through less material. **Sample Time** against **Rate** is shown in the table below:

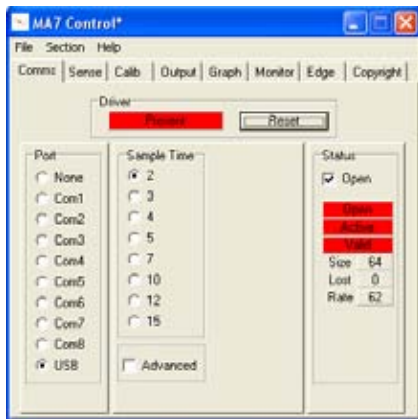


Fig 3

Sample Time	Rate (Scans per second)	Material thickness and response
2	61 - 62	Thin e.g. approx 4mm non-metallic material – sheet of glass for LCD Integration
3	49 - 50	
4	46 - 47	
5	40 - 41	Medium e.g. approx 10- 12mm non-metallic material – standard window for through window touch
7	33 - 34	
10	27 - 28	
12	24 - 25	
15	20 - 21	Thick e.g. approx 20mm non-metallic material – double glazing* – total construction of glass and air gap

* In this mode we recommend only touch not the touch and drag function. Due to the variation in double construction glass Visual Planet recommend testing with a foil during the survey of each individual site since it is impossible to guarantee the foil will function in all cases.

Follow the above scan rates beginning with a lower sample time to determine the best response for your touch system. Different materials have different characteristics which will determine how the foil performs. Therefore we provide a flexible choice of sample times to ensure that your touch system is as responsive as possible.

Adjustment of the **Coarse Sensitivity**, **Press Threshold** and **Finger Pressure** in the '**Sense**' section of the driver may be needed after each Sample time adjustment. Experimentation is required for new users of this system to gain the knowledge required to make future installations very easy.

4. Adjusting the Touch Sensitivity Level

To select the sensitivity setup click on the **Sense** tab:

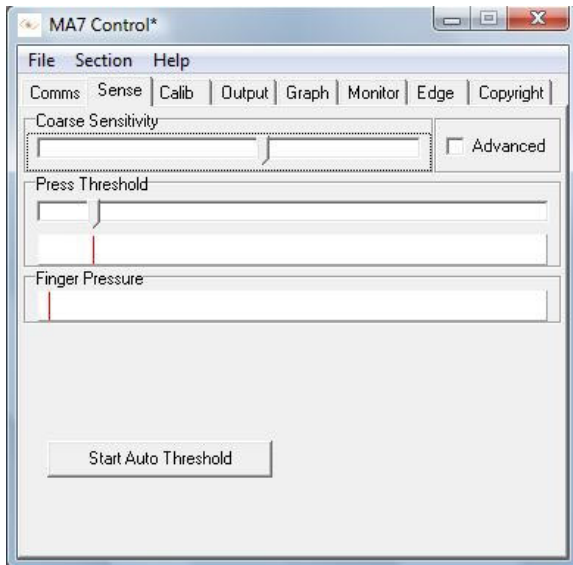


Fig 4

The objective of the following setup is to use the minimum amount of coarse sensitivity required to achieve a satisfactory touch function, the thicker the substrate the more coarse sensitivity will be required.

1. First set the **coarse sensitivity bar** to approximately 50% by dragging the bar with your mouse
2. Set the **Press Threshold bar** so the background movement of the **Finger Pressure** red line indicator movement does not go beyond press threshold red line indicator, by dragging the bar with your mouse (it will not move fully to the left hand side)
3. Touch the screen to see if the **Finger Pressure** red indicator goes above the **Press Threshold bar**. This action creates a touch (note: you will not see a cursor movement on the display until you enable the touch control see section 6)
4. If the **Finger Pressure** red indicator does not go above the **Press Threshold** level when you touch the screen then increase coarse sensitivity in small increments until the **Finger Pressure** red indicator goes above the **Press Threshold** indicator
5. Increasing the coarse sensitivity may increase the background movement of the finger pressure indicator above the press threshold level, if this is the case then increase the **Press Threshold bar** as described in point 2

We recommend manual and not Auto Threshold

5. Calibration

1. Select the **Calib** tab as shown below, click the '**Start Calibration**' box

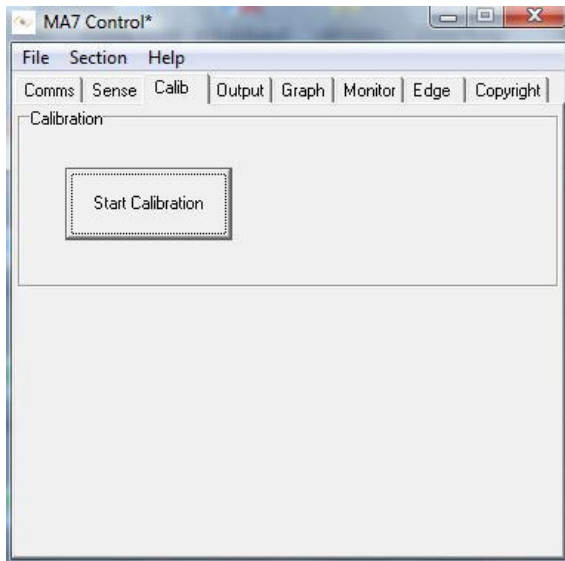


Fig 5

2. You will see the following on the screen; three targets will appear in turn like the one shown below:

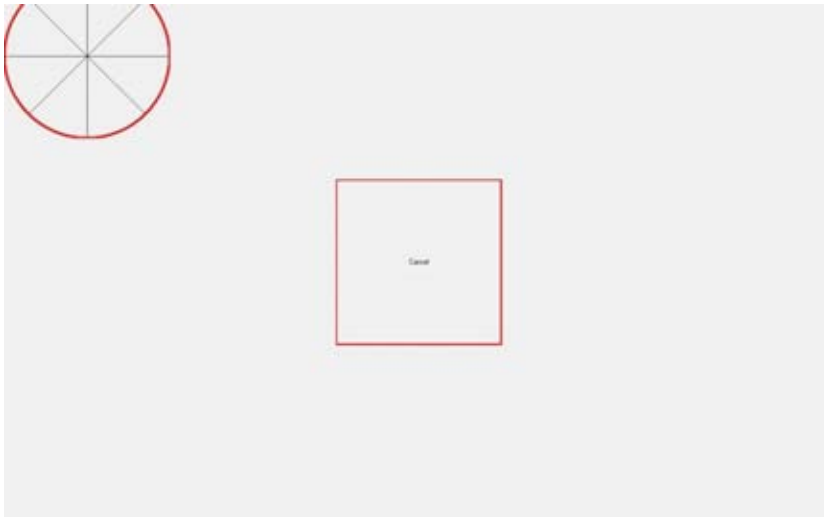


Fig 6

3. When each of these targets is displayed, **touch and hold** your finger on the centre of the target. **You must touch all three targets**
4. The red circle in the target slowly moves towards the centre of the target
5. Remove your finger only when the next target appears and touch that one

If the touch calibration is not correct after this procedure, please run the process again and adjust your finger position on the targets to compensate for any misalignment.

6. Setting the Touch Output to Suit the Application Program

Select the **output** tab:



Fig 7

1. **To enable the touch function on the screen check the enable select control check box**
2. Select the required mouse control required for your application
3. If you are not achieving satisfactory touch and drag function please go back to section 4 adjusting the touch sensitivity function.
4. Select/Move/Release/RC allows Right-Click menus to be selected by touching and holding the screen for several seconds

For full details on the different mouse functions please go to the full user guide found in the ViP Documentation folder on the ViP Interactive Foil Installation CD.

7. You Must Now Save the Configuration

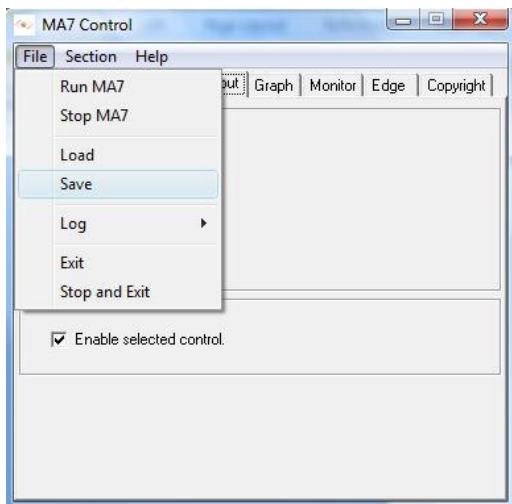


Fig 8

1. Click on file
2. Click on save to save the current settings
3. For details on the other file items please refer to the full user guide
4. **When the touch foil driver has been setup and there is no requirement to change it**

Details on the other file menus please go to the full user guide found in the ViP Documentation folder on the ViP Interactive Foil Installation CD.



Installation Procedure - Permanent Version

Components enclosed

ViP Interactive foil Permanent adhesive version.
VP soap solution

Overview

Touch foil comes with the permanent adhesive applied to one surface; the adhesive is exposed when the release layer is removed from the touch foil. The adhesive side is identified with a small red sticker

The touch foil is applied to the substrate using a soap/water mix (50ml (VP solution) soap to 500ml of water) and a squeegee.

It can take at least 24hrs for the water used in the installation process to evaporate sufficiently for the adhesive to bond. It is advisable to have two people available for the installation for sizes over 40"

The electronic control board is either delivered fixed to the foil or is removable. The removable controller comprises of an orange ribbon cable laminated to the foil, with the electronic control board enclosed. See instructions below for installing both versions of the controller.

Important

1. The touch foil must be handled carefully to avoid creasing or tearing,
2. Always lay the interactive foil on a soft scratch free surface where possible.
3. A soft cloth should be used if the foil requires cleaning, clean from the centre of the foil out to the edges of the interactive foil.
4. **If during the installation water enters the electronics of the Interactive touch foil please allow sufficient time to dry before using. If the controller is not dry when you connect the foil will not function correctly.**
5. **If you are integrating within LCD Screen please ensure the earthing wire on cable is connected to the chassis of the LCD system**

Installation

1. Decide on the correct position of the touch screen **before** starting the lamination process.
2. Thoroughly clean the substrate making sure it is, dust-free and free of any oils or grease. **Dirt and other contaminants allow pockets of air that undermine the seal necessary for a good installation.**
3. Use the water/soap mix and squeegee to clean the substrate just before lamination.
4. Apply a good covering of water/soap mix (50ml (VP solution) soap to 500ml of water) to the substrate using a water sprayer/atomiser.
5. Apply the **non** adhesive side of the touch foil to an adjacent window or other suitable surface you are performing the final lamination if possible by first spraying the window/wall with water so the foil is held against the surface: Fig 1



Fig 1

6. Release the release liner using sticky tape at the corner of the film: See Fig 2



Fig 2

7. Remove the release liner at the same time spray the touch foil adhesive surface with the water/soap mix. It is important to pull back the release layer close to the touch foil and make sure the foil does not lift off the substrate, (it is useful for the second person to hold the foil to the substrate). Fig 3/4



Fig 3



Fig 4

8. Wet your fingers before removing and turning around the touch foil for application to the substrate.
Note:
If you had to place the foil in the area of the final lamination to remove the release layer clean this area before you perform the final lamination of the foil.
9. Align the touch foil at the top of the substrate, and then slowly lower the foil on to the substrate.
Fig 5



Fig 5

10. Spray the top surface with the soap mix to avoid the squeegee sticking during lamination
11. The second person should hold the foil lightly but sufficiently to stop the foil moving during the lamination process.
12. Remove excess water using a squeegee working from the centre to the edges of the touch foil apply an even pressure. Fig 6/7



Fig 6



Fig 7

13. The electronics should be securely fixed to the window once the installation has dried.
14. If applying to a piece of glass or acrylic substrate allow at least 24 hours before moving, to allow sufficient evaporation of the remaining water to enable a good bond to the substrate.

Removable Electronics

15. When using the **Removable electronics**, once the touch foil lamination process has finished and the touch foil is sufficiently dry the electronics can now be added. Please note, if the board is attached too soon after the lamination process the extra weight of the board may cause the touch foil to move position.
16. You must ensure the foil is unplugged from the computer before removing/disconnecting the controller board from the orange ribbon cable

17. **Carefully** lift the clamping clip as shown below taking care not to over extend the clamping clip.

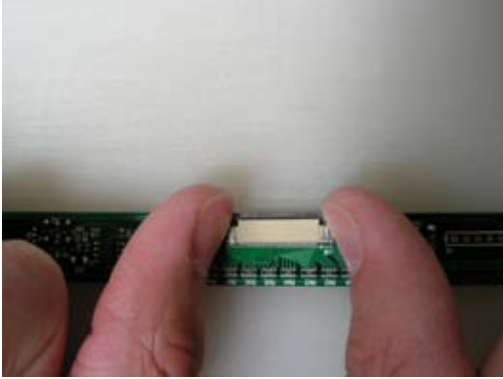


Fig 8

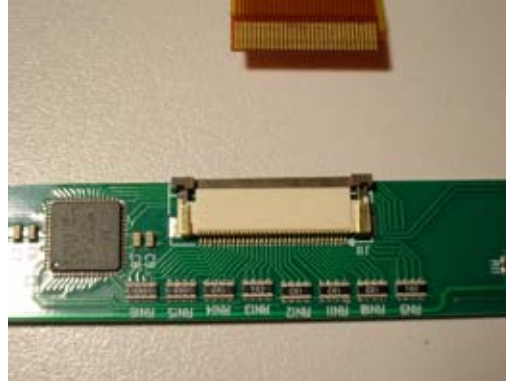


Fig 9

18. Prepare the position of the electronics in relation to lining with the position of the orange ribbon cables. The board's components and the gold bar of the orange ribbon cable should be facing up

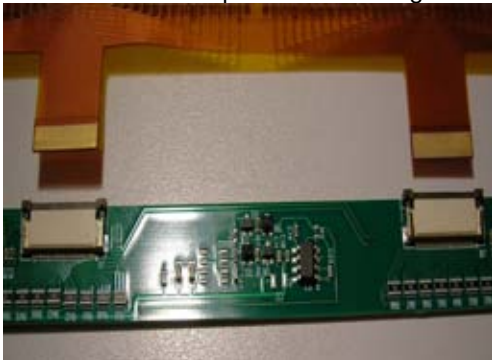


Fig 10

19. Gently insert the connectors into position. The ribbon cable must be fully inserted until no gold bar can be seen. Once in, push the two brown bars in until it becomes locked.



Fig 11

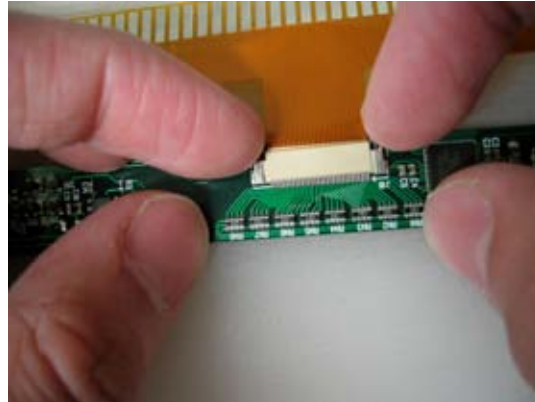


Fig 12

20. Once connected to the foil fold the flat side of the board back up on itself towards the tail. Take the black board cover, open the gap gently to allow smooth sliding and slide the ribbon and board inside. Do this slowly and carefully without damaging the ribbon cable or the parts of the electronic control board.



Fig 13



Fig 14

21. With the board and ribbon cable safely covered all electronic components will be suitably protected



Fig 15



Fig 16

Detachable Earth Wire

For our USB and Removable USB Controller Boards you will find attached a female bullet connector along with a male bullet connector enclosed with delivery of your foil. This is for use with LCD Integration and installations where grounding to nearby metalwork would be recommended.



Fig 17

22. Align the male and female bullet connectors



Fig 18

23. Firmly connect the male bullet connector with the female bullet connector (attached to the control board) ensuring they are fully pushed together to achieve connection



Fig 19

24. Connect the fork end of the Earth wire to the metal Chassis of the LCD or nearby metal framework. The whole system should be earthed to the same potential



Fig 20

Important

25. If water bubbles remain under the foil do not be tempted to pierce to the foil to remove, these should evaporate over time, in some situations it can take more than a week depending on environmental conditions.
26. Unless you are operating in clean room conditions it is possible that some small imperfections may occur during the lamination process, do not lift the foil to try and remove these, as the bonding process will have started.

For additional information see video of the foil application supplied in the ViP Documentation folder on the VIP software CD or visit www.vipsupport.blogspot.com

Disclaimer: It is the duty of the User to determine the suitability of the ViP Interactive Foil based on the Users' intended purpose. It is in this "Quick Start Guide and Lamination Instruction Manual" that we only provide convenient recommendations and descriptions based on technical information and installation statements and therefore the accuracy of this information is not warranted. The ViP Interactive Foil is not intended to be used for medical devices. The ViP Interactive Foil is warranted to meet its published specifications set from date of shipment and it is at Visual Planet's discretion whether to repair, replace or refund in the event of these specifications not being adhered to. The specifications of the ViP Interactive Foil are subject to change without prior warning. Visual Planet will not be responsible for any product related action resulting in loss or damages caused by misuse or modifications and subsequent manufacturing operations carried out by anyone other than a Visual Planet employee. This "Quick Start Guide and Lamination Instruction Manual" is subject to change without prior warning. Visual Planet shall not in any event be liable for economic loss of profits, indirect, special, bodily injuries or consequential damages.

Visual Planet Touch Foil Warranty Policy

Visual Planet Touch foils are warranted to be free from defects and other faults for a period of 1 year from the date of shipment.

Visual Planet will at their discretion either repair or replace a faulty touch foil if a fault is found during the warranty period.

Faults or damage caused by the user due to negligence, lack of training or caused maliciously in any installation environment is specifically excluded from the warranty.

Repair charges outside warranty

1. Controller	£50	
2. RS232 Cable	Up to 6 m	£15
	15 metre	£25
3. Foil repair	where a foil is damaged, or controller is detached due to user error £50 for replacement controller £50 labour charge	
4. Complete Foil	replacement foils outside warranty are priced at Visual Planet published list prices operating at the time	

Returns procedure

Where a foil is returned for evaluation and repair Visual Planet will prepare a report on the faults found with the foil and clarify if it is deemed to be repairable or not.

Any shipping charges during the warranty are the responsibility of the reseller.