

arc



User Manual ver1 rev1



Important: Check www.tangentwave.co.uk for updates

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1. Important safety instructions / Instructions De Sécurité Importantes



- Read this manual first before using the panel.
- Keep these instructions for future reference.
- Heed all warnings in this manual.
- Follow all instructions in this manual.
- Do not use this apparatus near water.
- Install and use the panel only as instructed.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Unplug the apparatus when it's not going to be used for long periods of time.
- Refer all servicing to qualified personnel. Servicing is required when:
 - The apparatus has been damaged in any way.
 - Liquid has been spilled on the apparatus.
 - Objects have fallen into the apparatus.
 - The apparatus has been exposed to rain or moisture.
 - The apparatus does not operate normally.
 - The apparatus has been dropped.
- Lire les instructions suivantes.
- Conserver ces instructions.
- Tout avertissement doit être pris compte.
- Respecter les instructions à la lettre.
- Ne pas utiliser cet appareil près de sources d'eau.
- Nettoyer uniquement avec un torchon sec.
- Installer selon le mode d'emploi fournit par la chaîne de production.
- Ne pas installer près de sources de chaleur; c'est-à-dire radiateurs ou appareils produisant de la chaleur.
- Débrancher l'appareil si celui-ci ne sera pas utilisé à de longs intervalles.
- Se référer à un personnel qualifié pour toute révision de l'appareil. Une révision de l'appareil est nécessaire:
 - L'appareil a été endommagé.
 - Liquide répandu à l'intérieur de l'appareil.
 - Objets tombés à l'intérieur de l'appareil.
 - Si l'appareil a été mis au contact de la pluie ou exposé à l'humidité.
 - Ou s'il ne fonctionne pas normalement ou a été renversé.

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2. About this manual

This manual applies to the Arc control panel. For the latest updates please check www.tangentwave.co.uk and look under the product page there.

This manual does not tell you how to use the panel with your software. For that information please contact your software vendor. Where we have been provided with information by the software vendors we have included this.

If you find any errors with this manual or you have any suggestions then please contact Tangent Wave. It is only through your feedback and suggestions that we can improve our services and products.

3. What's in the boxes

After unpacking the boxes you should have the following items. Note some of the items are shipped with their matching panel in the internal cardboard accessories box.

- 1 x Arc Grading Panel.
- 1 x Arc Navigation Panel.
- 1 x Arc Function Panel.
- 1 x Power supply.
- 5 x Red balls.
- 5 x Rings.
- 6 x Legs.
- 2 x 1m USB cable.
- 1 x 2m USB cable.
- 2 x Power cable.

4. Requirements

- Any operating system that has a built in USB HID driver. Current versions of Mac OS X, Windows and Linux should have this.
- A computer with a USB 2.0 port that can supply 500mA. Or if using a USB 2.0 hub, then this should be powered, and be able to supply 500mA to the USB port to which the panel is connected.
- The application you intend to use the panel with must support the Arc panel. Please check with your application's manual or our website.
- Some applications require the Tangent Hub, this is available to download for free from our website. Please check with your application's manual or our website.
- Access to the internet. This is required to download the manuals and any support software you may require from our website.
- IEC power lead to connect the power supply to your mains supply.
- Wacom Intuos Pro Medium PTH-660 tablet.

5. About the Arc control panel

The Arc control panel is aimed at the colour correction and video post production industry. It doesn't do any processing of the video data itself; it just provides a physical user interface to software packages, much like your computer keyboard and mouse. It is designed to improve speed, ease of use, and efficiency of your software by putting the controls at your finger tips without having to access them through menu functions and mouse clicks.

5.1 What the panel will control in your software

The panel is designed to be generic. What we mean by generic is that it is not designed specifically to be used with just one type of software. This means the function any of the controls is not determined by Tangent – it is decided by the software that you are using the panel with.

Some applications support the Tangent Mapper which will allow you to customise what the panel does – see our website for which applications support this. If an application does not support our Mapper the mapping will have be fixed it its function by the application manufacturer.

5.2 Software

Some applications will work with the panel without any additional software being installed. Some applications will require the Tangent Hub which is available to download for free from our website, or may be distributed as part of your application. You should check with the user manual for your application, or refer to our website, to determine if your application requires the Tangent Hub.

5.3 Power

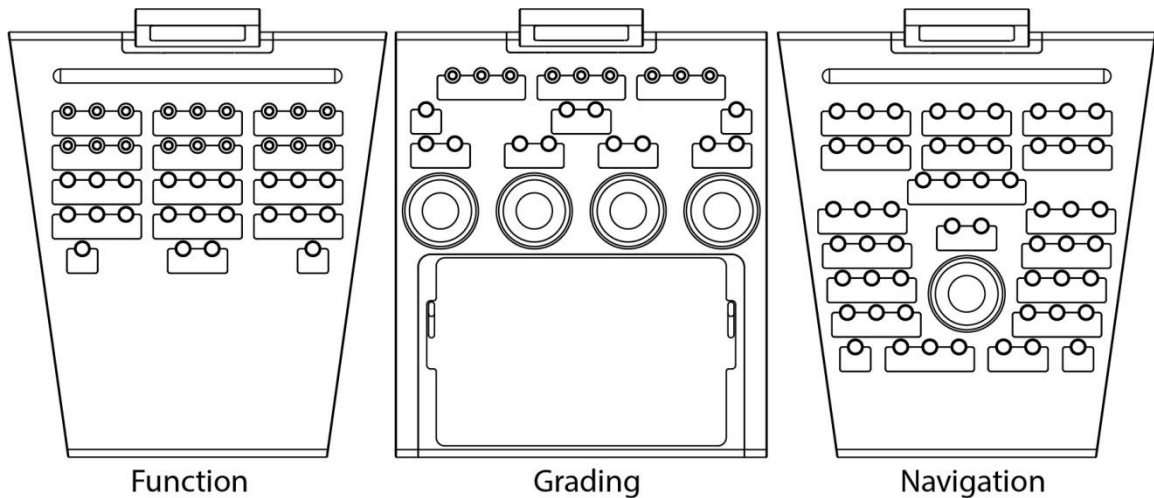
The panel receives its power from an external power supply which is provided with the panel. You must use only the power supply provided. The power supply plugs into the Grading panel, and the Function and Navigation panels then plug into the Grading panel with their own power cables.

5.4 Communication

The panel communicates with your computer using USB. Only USB 2.0 is required. Your computer plugs into the Grading panel. The Grading panel has in built-in USB hub which the Function and Navigation panels plug in to.

6. Panel names

We use the following naming conventions for the panels:



7. Power supply

Only use the power supply that was supplied with the panels. Using any other power supply may be dangerous and will void your warranty.

Manufacturer: Mean Well
 Model: GSM40A07
 Input: 100 – 240VAC, 50/60Hz, 1.0-0.5A
 Output: 7.5VDC, 5.34A, 40W


8. What Wacom tablet do I need?

Tangent do not supply the Wacom tablet – you must supply this. The Grading panel is designed to fit only the following Wacom:

- Wacom Intuos Pro Medium PTH-660 tablet.

9. Positioning and use of the panel

The Grading panel is designed to be in the middle of the three panels. You can position the Function and Navigation panels on either side – the choice is yours.

	<p>Health Warning</p> <p>Some experts believe that use of any human input device may cause serious injury to hands, wrists, arms, neck or back. If you feel pain, numbness, weakness in these areas see a qualified health professional. To reduce the risks of such injuries follow these precautions:</p> <ul style="list-style-type: none"> • Take frequent short breaks. Get up and walk around at least a couple of times every hour. • Vary your tasks throughout the day. • Keep your shoulders relaxed with your elbows at your side. Position your control panel so you don't have to reach. • Adjust your chair and control panel so your wrists are straight. • Avoid resting your wrists on sharp edges.
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10. Getting started – steps to set the panel up

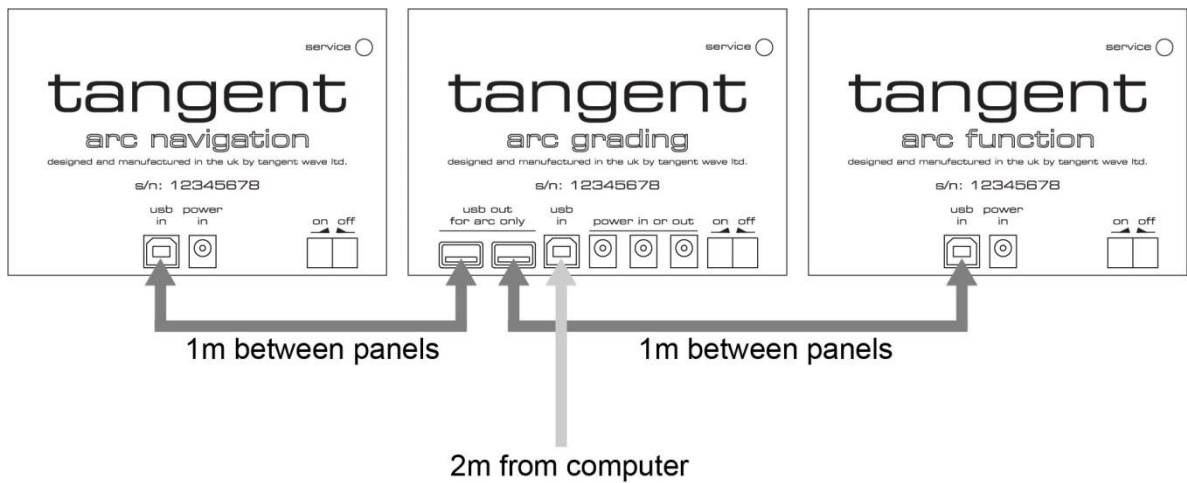
Set up the panel in the order of the following steps.

10.1 Screw in the legs

Each panel has two legs which must be screwed in before doing anything else. Be careful not to overtighten the legs, they just need to be finger tight, but not wobble. The easiest way to do this is put the panel face down on a desk.

10.2 Connect the USB cables

Refer to the diagram below which shows the rear of the panels.

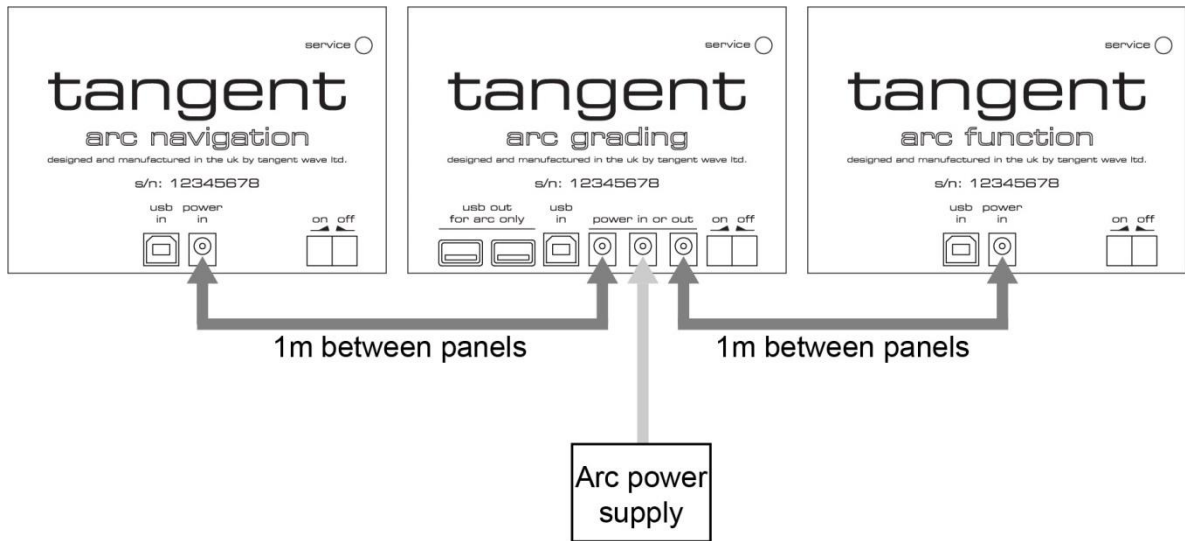


Important Notes:

- Only Arc panels should be plugged into the “for arc only” USB ports on the Grading panel.
- It doesn't matter which “for arc only” USB port on the Grading panel the Navigation and Function panels are connected to.
- The Grading panel is designed to be in the middle of the three panels. You can position the Function and Navigation panels on either side – the choice is yours.

10.3 Connect the power cables

Refer to the diagram below which shows the rear of the panels.



Important Notes:

- Use only the power supply that was supplied with the panels.
- It doesn't matter which "power in or out" port on the Grading panel the power supply, Navigation, and Function panels are connected to.
- Tangent do not supply the IEC mains lead to connect the power supply to your mains supply.
- The Grading panel is designed to be in the middle of the three panels. You can position the Function and Navigation panels on either side – the choice is yours.

10.4 Prepare and fit the balls

Before placing a ball in its cup, rub the ball between your hands – this deposits natural oils from your skin on to the surface of the ball which will help it to run smoothly.

10.5 Fit the trackerball rings

The rings fit in place over the balls and are held in place magnetically. It can be a little tricky to get it ring first time, by it is made easier by aligning the pumps in the top of the trackerball with the grooves on the underside of the ring.

10.6 Fit the Wacom tablet

Fit the panel into the recess on the front of the Grading panel. The holes in either side of the recess allow the USB cable from the tablet to be fed through and out the back of the panel. Connect the Wacom to your computer as per the Wacom instructions.

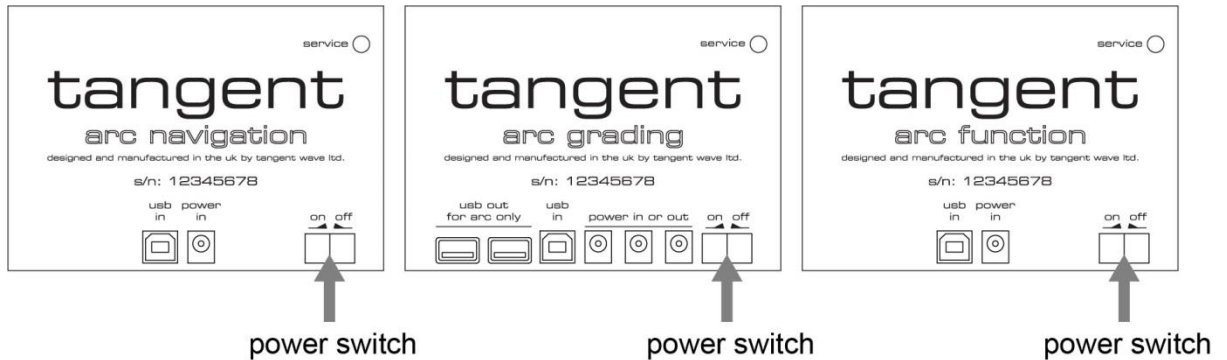
Important Notes:

- Tangent do not supply the Wacom tablet.
- The recess in the Grading panel is designed to take only the Wacom Intuos Pro Medium PTH-660.

- Do not use the USB ports on the back on the Grading panel to connect the Wacom tablet.

10.7 Switch on the panels

Use the power switch on the back of each panel to turn the panel on.



10.8 Install the Tangent Hub if your application requires it

Some applications require the Tangent Hub to be installed. Check our website, or your application's website, to see if the Tangent Hub is needed. If it is you can download it for free from the Support page of our website.

In the case of Linux based systems your applications manufacturer will supply the approved Tangent Hub.

10.9 Select the Arc as the panel type in your application

Some applications require you to select Arc as the panel type being used with it. Check your application's manual to see if this step is needed. Note where possible, we post this information on the support page of our website.

11. Note on using USB hubs and extenders / repeaters

Note: Tangent do not guarantee the Arc panels to work with a USB or extender / repeater.

You can use a USB hub to connect the Arc to your computer. The important thing to note is that the hub must be powered and must be able to provide 500mA to the USB port the panel is connected to. This will most probably mean the USB hub will be powered with an external power supply. The power supply must therefore be rated to supply 500mA or more. If you're connecting anything else to the USB hub then it will need to be correspondingly rated higher.

If you use an extender / repeater it must be able to supply 500mA, and the above rules for USB hubs still apply regarding external power supplies.

12. Service button

On the back of the display at the rear of the panel there is push button labelled "service". Currently this only has one function which is to put the panel in to firmware update mode. To enter firmware update mode, switch the panel off, then hold the

service button in whilst you turn the panel back on. The display will now say that it's update mode and waiting for the host computer.

13. Trouble-shooting

13.1 Are you using a USB hub or extender / repeater?

If you're using a USB hub or extender / repeater then remove this and plug the panel directly into your computer. If the panel starts to work then it's your USB hub or extender that is at fault. See the section **Note on using USB hubs and extenders / repeaters.**

If the panel still doesn't work after removing the USB hub or extender then proceed with the trouble shooting steps below. If these don't solve your problem then contact Tangent support.

13.2 A button doesn't work

First check that the application you are using makes use of that control.

Unplug and plug the panel back in again, making sure you do not press any buttons on the panel as you do so.

If the button still does not work then please contact Tangent support.

13.3 A trackerball ring doesn't work

First check that the application you are using makes use of that control.

Unplug and plug the panel back in again, making sure you do not press any buttons on the panel as you do so.

If the control still does not work then please contact Tangent support.

13.4 A trackerball doesn't work

First check that the application you are using makes use of that control.

Unplug and plug the panel back in again, making sure you do not press any buttons on the panel as you do so.

If the ball still does not work then please contact Tangent support.

Note: from time to time you will need to clean the trackerballs. See Care of your panel - Cleaning the balls. If there is a build up of dust inside the panel it may affect the optical sensor used to track the movement of the balls.

Note: if the ball is moved too quickly then the optical sensor will not be able to track it. This will produce erratic behaviour in the output from the ball. Try to keep movements of the ball smooth and avoid rapid changes of direction or spinning the ball.

13.5 My software isn't communicating with the panel

Generally problems with communication are related to setting up your software to talk to the panel. See the sections **Install the Tangent Hub if your application requires it** and **Select the Arc as the panel type in your application**.

Make sure the USB cable is connected properly. Also make sure the USB port on your computer can supply the 500mA the panel requires. Some laptops do not allow this. See the section "USB hubs and extenders (or repeaters)"

If the panel still doesn't work after checking the above then contact Tangent support.

14. Care of your panel

Your panel should not be cleaned with harsh abrasives or chemical cleaning products. If they become dirty wipe them with a soft damp cloth.

Sharp objects, such as watch straps and jewellery, will scratch the plastic so be careful not to bring such items in to contact with the panel.

14.1 Cleaning the balls

From time to time you may need to clean the balls and the trackerball unit that holds them.

To do this first unplug the panel and remove the ball. To remove the ball you'll need to lift off the ring over the ball which is held in place magnetically.

Clean the ball with a soft damp cloth. Then rub the ball between your hands – this deposits natural oils from your skin on to the surface of the ball which will help it to run smoothly.

To clean inside the trackerball unit use a damp cotton bud, paying close attention to the three white balls the red ball sits on, and the lens which houses the optical sensor. Do not try and remove the lens and do not press too hard on it. Be gentle and do not have too much water on the cotton bud – it just needs to be slightly damp.

15. Firmware updates

The firmware in your Arc panel was the most up to date version when your panel was manufactured. It is possible however that a newer version may be available from our website www.tangentwave.co.uk.

Check your panel firmware version with what is on the website. Your version number is displayed when your panel is first connected. It will say something like "Run Code: v02.01"

Make sure you follow the firmware update instructions that come with the update.