

FifeX Colour Mixer™

Use of Kit

This kit is to help users explore the effects of colour mixing with light, and to aid the explanation of how colour is perceived.

Kit Contents

Documentation
1 x White screen
1 x FifeX Colour Mixer™ Stand containing 6 LEDs
1 x Opaque screen – black acrylic with ‘cut out’ aperture
1 x Clear screen – clear acrylic with black circle in centre
1 x FifeX Colour Mixer™ Control Box
1 x 5V 1A DC power supply

Please note that each of the six LEDs should come with an inset removable lens. If for any reason one of these lenses dislodged during transit, simply click back into place. If a lens is missing, contact your supplier for a replacement.

Operating Instructions

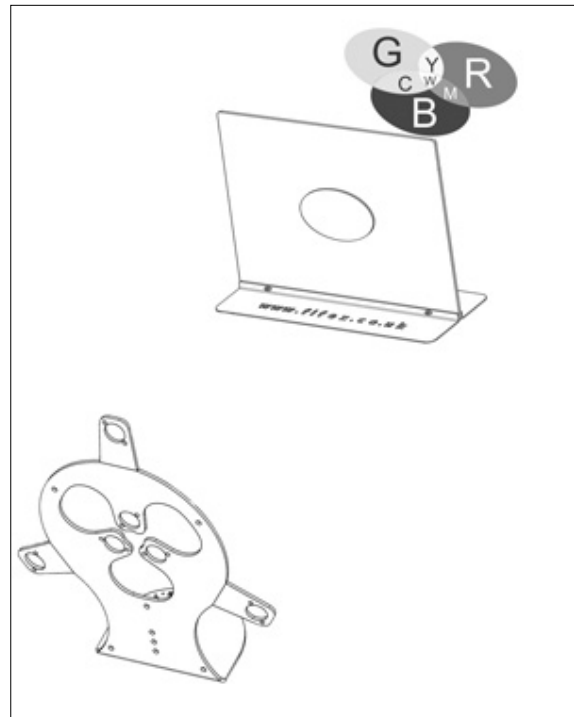
1. Unpack box and remove all protective films
2. Take FifeX Colour Mixer™ Control Box and plug in DC power supply. (DO NOT SWITCH ON)
3. Take FifeX Colour Mixer™ Stand, and attach 9-way connector to FifeX Colour Mixer Control Box.
4. Ensure all three control knobs on FifeX Colour Mixer™ Control Box are turned fully anticlockwise.
5. Ensure that LEDs are pointing away from the audience.
6. Switch on the DC supply

Set-up 1 – Colour Mixing

1. After completing previous steps, align FifeX Colour Mixer™ Stand with the opaque screen as shown in Fig.1
2. Slide switch to ‘outer’ position
3. Adjust colour control knobs on FifeX Colour Mixer™ Control Box to desired position
4. Rotate between screens to see additive colour mixing (opaque screen) or a simulated subtractive colour mixing (clear screen)
5. See ‘Some Things to Think About’ for ideas of how to maximise the use of your product

N.B. this set-up is designed to work in normal levels of ambient light. For enhanced results, dim the lights.

Fig 1: right, setup for the colour mixing experiment



Set-up 2 – Surface Colouration

1. An alternative set-up can be seen in Fig.2. Notice that the opaque screen is now directly in front of the FifeX Colour Mixer™ Stand.
2. Place a piece of tracing paper on the screen to completely cover the aperture.
3. Slide switch to inner position
4. Adjust the control knobs to the desired position
5. See 'Some Things to Think About' for ideas of how to maximise the use of your product

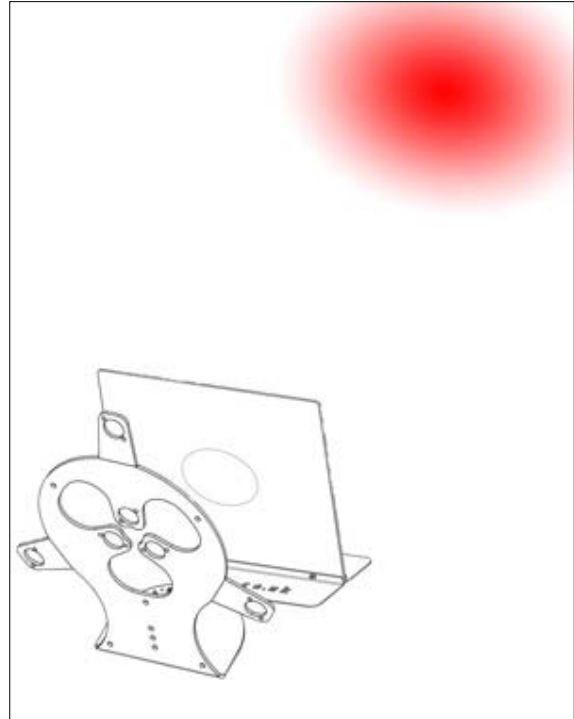


Fig 2: right, setup for surface colouration experiment

Online Support

Further information including examples of experiments for colour mixing can be found at <http://www.fifex.co.uk/fcmonline.htm>

Safety

1. **Please note that this product is for demonstration purposes ONLY.**
2. **The FifeX Colour Mixer™ must only be used with the supplied voltage regulator. If this is lost or suspected damaged in any way, contact your supplier immediately.**
3. **When working in ambient light levels that are below the norm, extra caution must be taken. FifeX accepts no responsibility for damage or personal injury caused by using this product in an environment that is unsafe.**
4. **The FifeX Colour Mixer™ should always be turned off when not in use.**
5. **No persons should stare directly into ANY of the LEDs. The FifeX Colour Mixer™ is a Class 2 LED product.**
6. **We recommend that the audience be no closer than 1m to the equipment.**
7. **The minimum desk area that we recommend to use for the FifeX Colour Mixer™ is 1200mm x 600mm.**
8. **FifeX Ltd accept no responsibility for injury or damage caused by the misuse of the FifeX Colour Mixer™**

Troubleshooting

If one or more LED's fail:

1. Switch off DC supply immediately
2. Check both the DC supply and the 9-way connector are connected correctly.
3. Ensure all three control knobs on FifeX Colour Mixer™ Control Box are turned fully anticlockwise.
4. Switch on the DC supply
5. If this has not solved the problem, turn DC supply off again and contact your supplier.

If the LCD screen on the Control Box fails:

1. Switch off DC supply immediately
2. Check both the DC supply and the 9-way connector are connected correctly.
3. Ensure all three control knobs on FifeX Colour Mixer™ Control Box are turned fully anticlockwise.
4. Switch on the DC supply
5. If this has not solved the problem, turn DC supply off again and contact your supplier.

If all LED's are off:

1. Check that the slide is fully pushed to either the inside or outside setting
2. Check that the control knobs are not at the zero position
3. If 1 or 2 fails to resolve the problem, turn off DC supply immediately
4. Check both the DC supply and the 9-way connector are connected correctly.
5. Ensure all three control knobs on FifeX Colour Mixer™ Control Box are turned fully anticlockwise.
6. Switch on the DC supply
7. If this has not solved the problem, turn DC supply off again and contact your supplier.

Acknowledgements:

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