

**KEENE****ELECTRONICS****SYNCBLASTER****SCART COMMANDER****PRODUCT OVERVIEW**

The Keene Scart Switch Box is a high quality audio/video switcher designed to allow the connection of multiple sources to one display. Particular attention has been given to the signal processing to ensure that all video formats and picture information are preserved. The Keene scart switch box is capable of switching composite video, s-video, RGB (in all its forms including RGBs, RGsB, RGBS or RGBHV) and component video. The inputs can be selected manually or automatically via signal detect. A single switchbox can be used to switch four inputs to one output, or two units may be used together in a Master/Slave arrangement providing switching for seven units to one output. It utilises very high quality high bandwidth IC's throughout to ensure that no discernable signal degradation occurs.



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**Channels**

- 2 audio channels
- 4 video channels
- 2 digital channels
- 2 control channels (pin 8 & 16)

**INSTRUCTIONS FOR USE (single unit)**

Connect the IR receiver to the IR input jack and position it in a convenient place to receive signals from the supplied remote control. Next connect the output and input scart sockets to the desired devices and switch them on. The input scart socket which has the green LED illuminated will be the one that is routed through to the output scart. Finally plug the supplied power adapter into the DC input socket. The routed scart can be selected in a variety of ways;

**Automatic mode** - This mode is engaged by depressing the "AU" button on the remote control and can be identified by the illumination of the red LED by the output scart. The switch box will monitor each socket for the presence of a signal in signal and switch to that socket when a signal becomes present. The switch box monitors pin 8 (control) pin 16 (RGB) and all video pins to detect this presence. In automatic mode, pressing the "+" button on the remote will cycle through each active input (see note on master/slave arrangement). Pressing "-" on the remote in this mode will stop at the last active input.

**Manual mode** - depressing "AU" then "OFF" on the remote control will put the commander into manual mode (the red LED by the output scart will extinguish). In this mode the signal monitoring is switched off and the scarts are selected either by the switch in the casing or by the supplied IR remote control.

### **Remote control functions**

“AU” followed immediately by “OFF” turns off the automatic signal detection function (red output LED will extinguish)

“RCL” recalls the last selected input (ignoring selections made by using the “+” or “-” buttons if these were last used).

“PRG” stores the current active input into non-volatile memory. The unit will automatically return to the stored input when next switched on.

“OFF” deselects all inputs (ie standby function)

Pressing either “RCL” or “+” or “-” will turn the unit back on (ie take it out of standby)

### **INSTRUCTIONS FOR USE (master/slave arrangement)**

The Keene Scart Switchbox allows for two units to be connected together in a master/slave arrangement giving seven to one switching capability. To use in this mode simply connect the output scart of the unit to be the slave into input 4 of the unit to be the master unit. (nb this connection must be made with a fully wired scart to scart plug and the slave unit will still require its own mains supply). Also note that the IR port for the slave unit is disabled so IR control will only work with the master unit sensor. The red LED on the output scart will always be illuminated for the unit that is used as a slave and the red LED on the master output will indicate whether they are operating in auto mode. It is recommended to occupy the scart sockets in number order, ie for five devices use sockets 1,2,3,4 & 5 leaving say 6 & 7 blank

### **GENERAL NOTES**

#### **IR receiver**

Important! Please disconnect Power before inserting or removing the IR receiver jack plug!

#### **Aux out socket**

The 15 pin HD connector provides a secondary buffered output of the video signal present at the scart output socket. It could be used for example to connect to the input of a Plasma display whilst the scart output is also connected to a conventional TV. Please note though that no signal conversion takes place within the Commander so the input signals would need to be compatible with the 15pin HD input on the display, (usually RGB or Component). 15 pin end 1,2,3,13,14 <-> Scart pins 15,11,7,12,10 (RGB) plus 10&12 (H&V sync)

#### **Data out socket**

This socket provides a buffered IR output and is reserved for future product development.

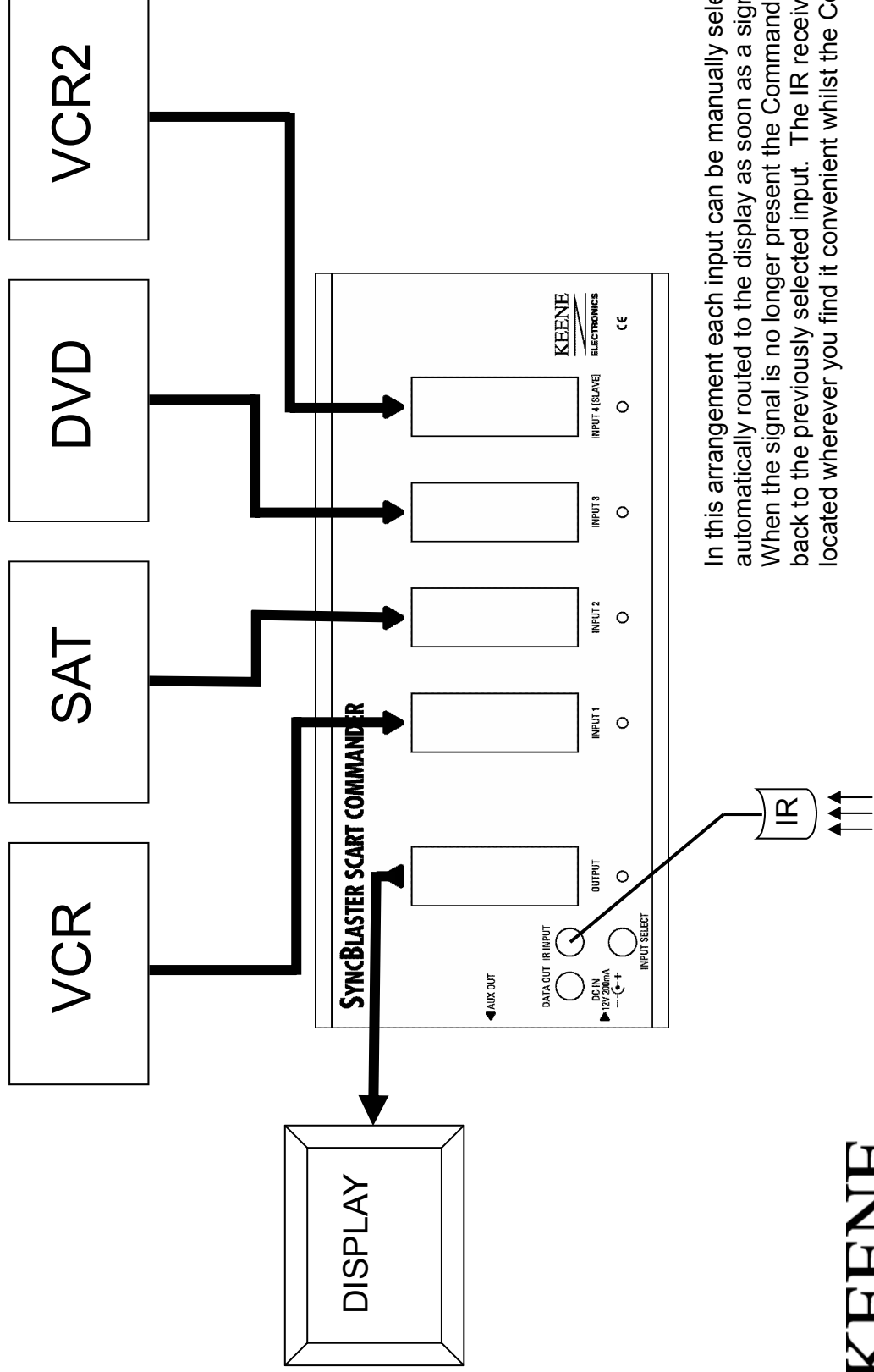
#### **Cables**

For best results use good quality, correctly graded and correctly wired audio and video cables for every connection.

### **TECHNICAL SPECIFICATIONS**

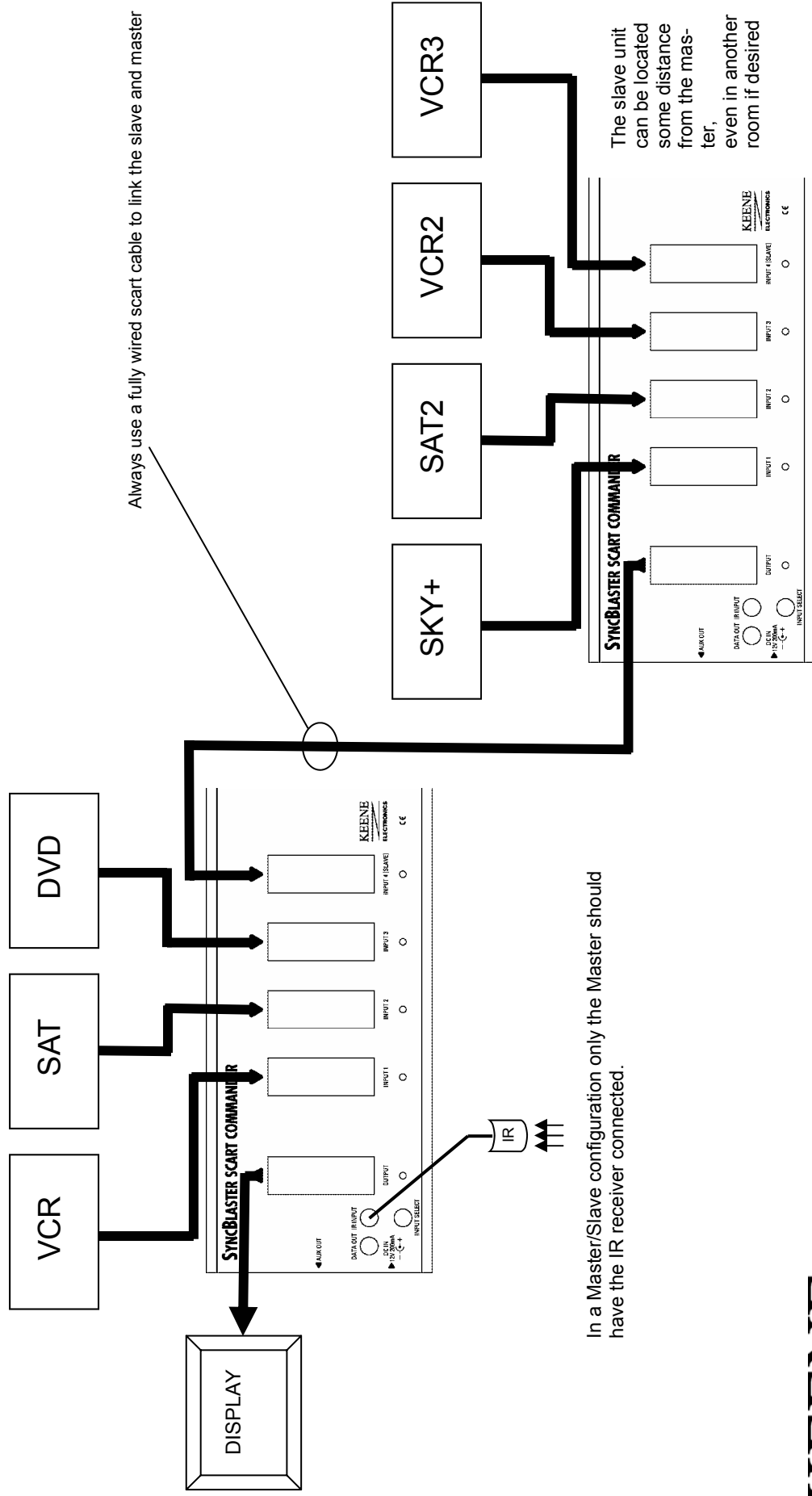
Power requirements	By external supply to DC input socket, (2.1mm centre positive) 12-18v DC @ 200mA or greater. Consumption 60mA standby 100mA video signal present
Video	Video bandwidth 50MHz at 3db Level - Composite / Luminance 1v pp, Chrominance 0.3v peak to peak.
Distortion components	< -50db up to 10Mhz Open circuit voltage gain is X2 (unity gain when correctly terminated) Back terminated series 75R outputs for reflection free performance Slew rate up to 500v/uS
Audio	buffered audio outputs Distortion <0.1% Bandwidth 20Hz – 30KHz Output impedance, <1K ohms each output Input impedance >10K ohms Unity gain

# Typical arrangement (single unit)

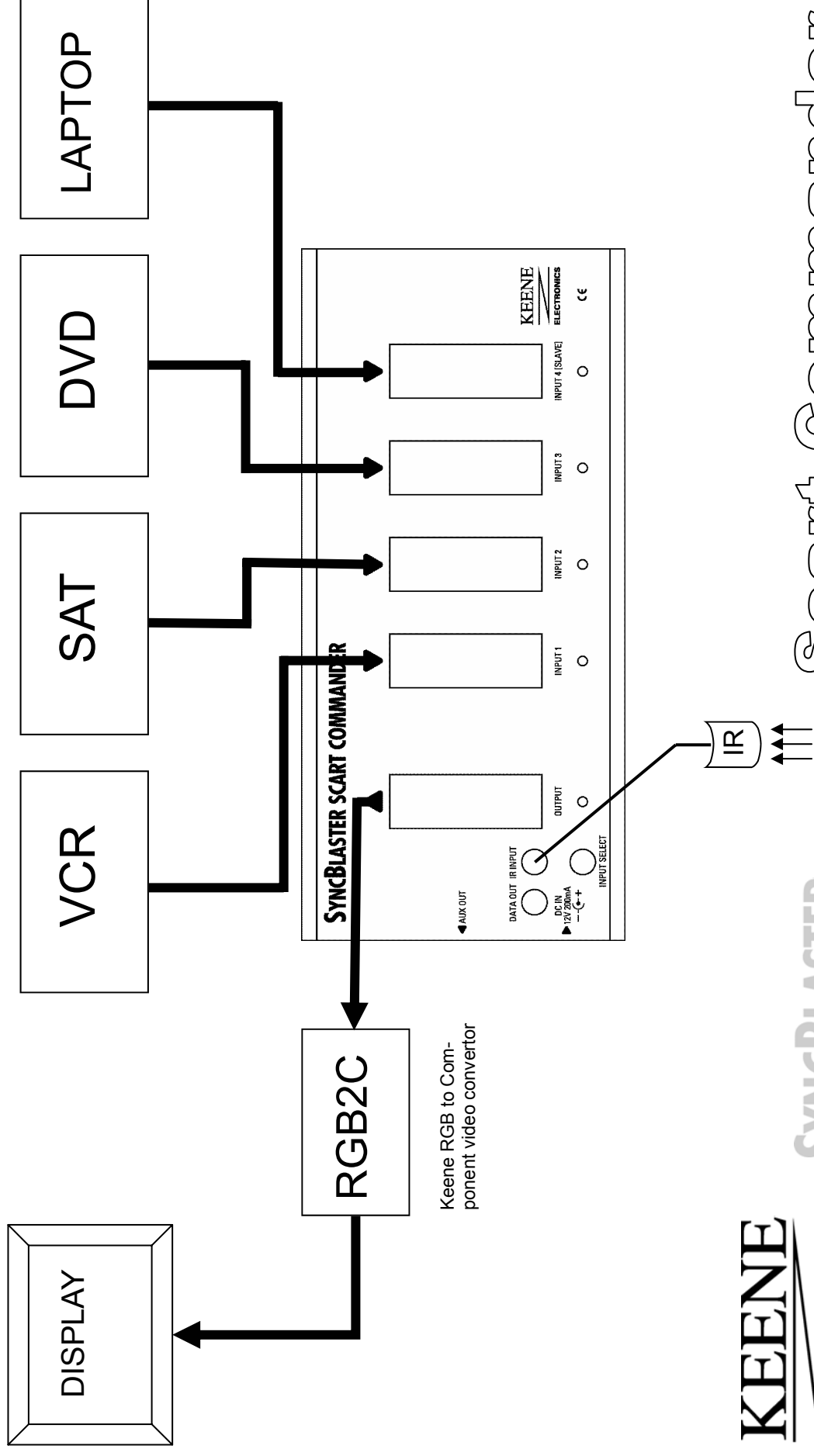


In this arrangement each input can be manually selected or automatically routed to the display as soon as a signal is detected. When the signal is no longer present the Commander will revert back to the previously selected input. The IR receiver can be located wherever you find it convenient whilst the Commander itself

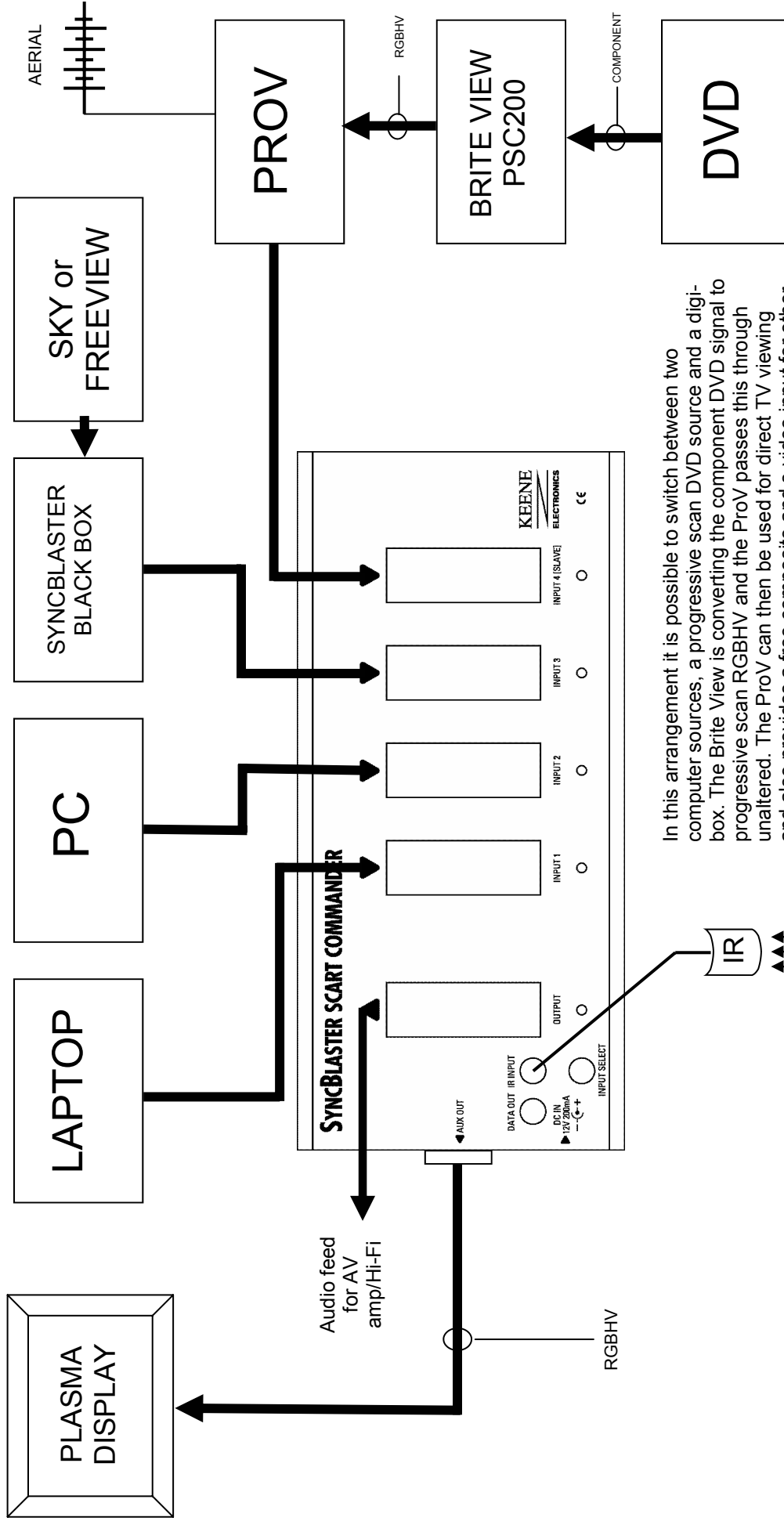
# Typical arrangement (master/slave)



# Typical arrangement All sources RGB with component input projector



# Scart Commander



In this arrangement it is possible to switch between two computer sources, a progressive scan DVD source and a digital box. The Brite View is converting the component DVD signal to progressive scan RGBHV and the ProV passes this through unaltered. The ProV can then be used for direct TV viewing and also provides a free composite and s-video input for other uses. Inputs 1, 2 & 4 are progressive (31KHz or higher) signals whilst input 3 is interlaced (15KHz) with TTL level sync. The Plasma is connected via the 15pin HD aux output leaving the scart output free for connection to another display or for use as an audio feed to AV amplifier of Hi-Fi

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