



## Improvements made - Theatre Commander to CommBox Classic

During 2005, the PCB for these models was revised. Features were added and improvements made, other features (for which there is now little demand) were removed. Coincident with these hardware changes is a firmware change (2.91) which also includes a 32k byte EEPROM in place of the original 2k byte part. You will need TCWin 3.16 or 3.63 to program this model.

*Here is a synopsis of the changes.*

### **1. Deletion of the Video Commander interface**

This rarely used feature attached to input 1 limited that input to mono sound. Input 1 is now a stereo input like the others. There is now no optical isolation on input 1. However, the feature that mutes the Input 1 audio whenever a code is sent from serial port 1 (part of the Video Commander interface implemented in firmware) remains.

### **2. Serial port changes**

The DB9 programming port is now a conventional RS232 port with bipolar driver swings.

The feedback data is now added to the return data on this port so that the monitoring functions in TCWin are supported, as they are on the Micro and Smart Room Controller products.

### **3. Video outputs**

There are now 2 instead of 4, for space reasons.

### **4. Mic audio changes**

Phantom power for both mic inputs can now be disabled with an internal jumper.

There are now two line level uncontrolled outputs instead of the previous one. These have been re-configured so that they can also function as independent line-level inputs to the two mic channels, which now means you can connect two fixed microphones and two radio microphone receivers.

If instead you want a summed microphone output for recording, just connect the two sockets together with a Y-cable.

### **5. Improved audio power-up muting (de-thump) system**

The improved audio muting system now has a longer time-constant and applies to the output of the mixer instead of the input of the amplifiers, so it also works on the Lite version.



## 6. IRBus changes

The IRBus now uses a 3 way phoenix connector, in line with other products in the range.

The power arrangements for the IRBus also differ from previous models.

### ***Classic (with power amps).***

IRBus is 14.5v regulated, supplied from a switching regulator. It can supply about 1 amp and will go into current limiting and eventually shut down if an attempt is made to draw more current. When the load is removed, the supply will reset itself.

### ***Lite (with no power amps).***

The IRBus is nominally 14.5 volts unregulated, supplied from a full-wave rectifier and mains transformer. Unlike with previous models, it is possible to safely pull 2 amps or more from this supply, but watch for voltage drop. If your control panel is powered at under 12 volts, control will be unreliable. Being a simple rectifier-filter supply, 100Hz ripple will increase with load.