

## **TLC-6S Tally Controller**

# Preliminary



#### Setting the Tally / Contact Closure Jumpers

Each output has two jumpers that set whether the contact closure or Intercom pass-through is active for that output

The jumpers are clearly labeled, just be sure to move both jumpers if you need to make any changes. Improper jumper settings may damage the TLC-6, tally lights or connected intercom equipment.

See **Appendix A** for general jumper instructions.

All six outputs set to Intercom Pass Through (This is how the TLC-6 ships)

All six outputs set to Contact Closure

Outputs 1, 2,3 and 6 set to Contact Closure Outputs 4 and 5 set to Intercom Pass Through

Outputs 4 and 5 set incorrectly, equipment damage may occur.





#### Using Contact Closure with a CCU (Camera Control Unit)

Each of the six output jacks on the TLC-6 have connections for up to four LEDs plus two contact closure connections. The contact closures can be connected to most CCUs and other devices (monitors etc.) that have tally input connections. Because of the vast array of connectors used on CCUs we don't provide cables for this so you will need to have these made locally.

#### Interfacing with CCU tally connections

Most CCUs expect contact closure for their tally inputs. Simply build a cable that connects pin 8 and pin 1 of the desired TLC-6 output to the program (Red) tally inputs and Pin 8 and Pin 2 to the preview (green) tally inputs. Polarity generally doesn't matter but if a terminal is indicated as common or ground - connect it to pin 8 of the RJ-45 on the TLC-6. Different CCU models will use different connectors for the tally inputs as there are no industry standards.

Some example cases:

Sony CCU-TX50 - 25 pin D-Sub Pin 11 and 12 red Tally, Pins 24 and 25 green tally

Sony CCUM5A - Screw terminals labeled R, G and X

Sony CCU-D50 - 15 pin D-Sub pin 2 tally common, pin 3 red tally, pin 10 green tally

JVC RM-HP250 - Wireclips labeled PGM, PVW, C

Panasonic AK-HCU931P - Hirose JR25K-24P connector (good luck) Pin 11 tally common, Pin 10 red tally, pin 12 green tally

Check your CCUs manual it should have the tally connection information and see the Custom Wiring Section on how the RJ-45s are wired. Pins 1, 2 and 8 on each RJ-45 have the tally contact closure lines.

#### Using the Aux Output

The first six outputs on the TLC-6 are hardwired to the first six channels on the TriCaster/VTs switcher while the Aux output provides a seventh tally output that can be assigned to any switcher channel.

Rather than the normal contact closure the Aux port has GPI (General Purpose Interface) outputs. These do a 150 mS contact closure pulse whenever the corresponding switcher channel is selected.

The two GPIs are configured independently in the software and can be set to any channel or to fire with *any* change to the bus. GPIa (pin 1) is fired with the program bus and GPIb (pin 2) is fired with the effects bus. Note that GPIa, GPIb and Aux can all be set to different channels in the Tally.ini file.

If you need normal contact closure on the Aux port contact us about a simple modification.

#### Using the Intercom Pass Through Connection

If you are **not** using the contact closure on a particular output you can configure jumpers on the main circuit board to use those connections on the RJ-45 output jack to either pass through standard "two wire" intercom signals or feed audio out to your camera position over the same twisted pair cable that carries the tally signals

Connect an intercom belt pack or master station to the xlr on the TLC-6 then use an 1/8" to xIr adapter to connect belt packs to each TL-2 light for camera operators.



Signals from the three pins on the xlr are sent in parallel to any of the RJ45 outputs that are jumpered to the Intercom position on the main circuit board of the TLC-6.

The TLC-6 intercom lines break out on the TL-2 tally lights light's Multi-Purpose jack like this:





Due to an error in the TLC-6 (pins 2 and 3 are reversed) this is nonstandard so a custom cable will be neccesary. The TLC-8 controller is different.

Feeding audio to the camera positions using the "Intercom" connection

Use a standard XLR to Stereo Phone plug adapter to feed stereo audio to the camera positions via the "Ethernet" cable. This can be used as a poor mans, one way intercom system etc. The adapter should be wired like this:



Then simply plug in headphones to the Multi-Purpose jack on the TL-1/TL-XD lights

Sleeve and pin 1 are ground, ring and pin 3 are right channel while tip and pin 2 are left channel.

Note Due to an error in the TLC-6 the saturdard cable shown here will actually have the left and right channels reversed.

If you are driving multiple headphones you may need a dedicated headphone amp to provide enough signal without distortion.

### **TLC-6 Wiring Diagrams**

If you need to make cables to do custom connections the RJ-45 connectors on the TLC-6 are wired like this:



Note: Pins 1 and 2 are reversed compared to the TLC-8 controller



#### Controller Set for Contact Closure



