

ALABAMA EDUCATIONAL TELEVISION COMMISSION

ASI TRANSPORT STREAM SWITCH

- 1.0** Alabama Educational Television Commission is requesting bids for nine (9) ASI automatic changeover switches. The units will have ASI inputs and both ASI and SMPTE 310M outputs. These switches will be used at AETC transmitter locations to automatically switch between the satellite and microwave receivers. The units will have a primary input which will automatically switch to the secondary input once errors are detected on the primary input stream. These units will be used to maintain a signal to the television transmitter whenever there is an outage to the incoming primary signal due to weather or equipment failure. This will ensure uninterrupted service to the viewers.
- 2.0 EQUIPMENT SPECIFICATIONS**
- 2.1** The unit must have simultaneous inputs which accept ASI or SMPTE 310M inputs.
 - 2.2** Units must have simultaneous ASI and SMPTE 310M outputs of the switched input.
 - 2.3** The unit must use standard 75 ohm BNC connectors for both input and output.
 - 2.4** The ASI data rate must be at least 50 Mbps with a tolerance of +/- 10ppm in and +/- 3ppm out.
 - 2.5** The ASI logic level must be 800mV with a tolerance of +/- 10%.
 - 2.6** The ASI data rate accuracy must be no greater than 3ppm.
 - 2.7** The SMPTE 310M data rate must be 19.392658 Mbps with Bi-phase mark coding format.
 - 2.8** The maximum jitter shall be 1 ppm.
 - 2.9** Units will be equipped with a web-based GUI interface. Monitoring and management using the web-based interface must be real time.
 - 2.10** Units will utilize a 10/100 BaseT Ethernet port using a standard RJ-45 connector.
 - 2.11** Units will utilize 120 volt supply voltage input.
 - 2.12** Units will be supplied with two power supplies.
 - 2.13** Units shall not require spacing below or above for cooling.
 - 2.14** Units shall be one (1) rack unit high and fit in a standard nineteen (19) inch rack.
 - 2.15** Unit must operate with an ambient temperature of plus 32-104 degrees Fahrenheit.
 - 2.16** The input switching shall use a minimum of 12 user defined parameters to determine when to switch. These must include HEX 47 sync byte, PAT and PSIP.
 - 2.17** Unit must have user definable parameters to determine when unit will switch back to primary.
 - 2.18** Units must have access control to restrict unauthorized operation.
 - 2.19** The front panel of the unit must contain status indicator LED lights.
 - 2.20** Signal continuity must be maintained seamlessly during any transition.
 - 2.21** Unit must have PCR re-stamping.
 - 2.22** Units must have a relay bypass on the primary input.

3.0 SERVICE AND WARRANTY REQUIREMENTS

- 3.1** Each bidder will guarantee all equipment as represented in their bid against defects in materials and workmanship for a period of one (1) year minimum. The successful bidder further guarantees to replace or repair, without cost to the Owner, any items that become defective within the warranty period when the defect is clearly a fault of the manufacturer and not of misuse. This will include shipping to and from manufacturer for repairs or return of defective equipment.
- 3.2** Bidder's other standard terms, conditions and warranties will be accepted.

4.0 QUANTITY TO BE PURCHASED

- 5.1** Nine (9) units will be purchased.
- 5.2** Units will be shipped to APT's main office location at Alabama Public Television, 2112 11th Avenue South, Suite 400, Birmingham, AL 35205.
- 5.3** Shipping cost to the above location must be included in the base bid.