

# **AN-21 Installation/Operation Manual**

**The AN-21 is not approved for installation in certified aircraft.**

## **Description:**

The AN-21 is a light and warning tone Annunciator Control Unit for use in experimental aircraft. The AN-21 monitors 21 circuits, sixteen channels are activated by ground and five by positive input. Each channel can activate a light and emit a warning tone when triggered.

Any incandescent or LED warning indicator of the appropriate voltage can be driven by the AN-21.

The AN-21 also includes a Windows Programming utility to enable the user to configure it for each specific installation.

Each channel, when activated, has an associated user programmable output which can be programmed to do the following:

- Steady light
- Flashing light
- Alert Tone with steady or flashing light

Other AN-21 features:

- "Master Caution" – User selected channels will trigger a master caution
- Test Function – Causes all lamps to illuminate to check the indicators
- Dim – Causes all Lamps to illuminate a selected lower brightness

## **Installation:**

### **Mechanical**

Mount the AN-21 in any orientation using four 6-32 screws.

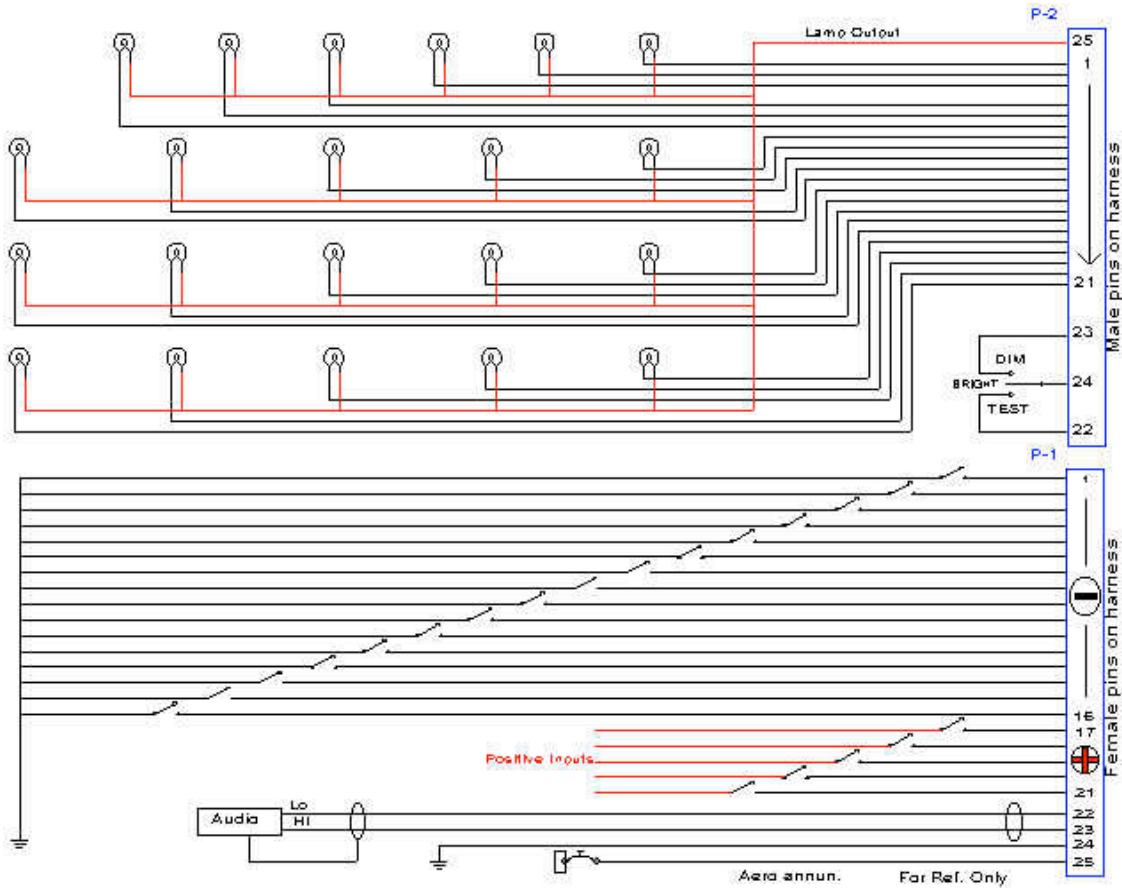
## Electrical

Build your harness using the following diagram as a guide. Each of the input pins, (1-21) when triggered, causes illumination of the associated output pin (1-21).

Use a Circuit Breaker value 2 Amps greater than the current draw of the indicators you plan to install. Example: 21 LED's draw .5A + 2A = 3A breaker.

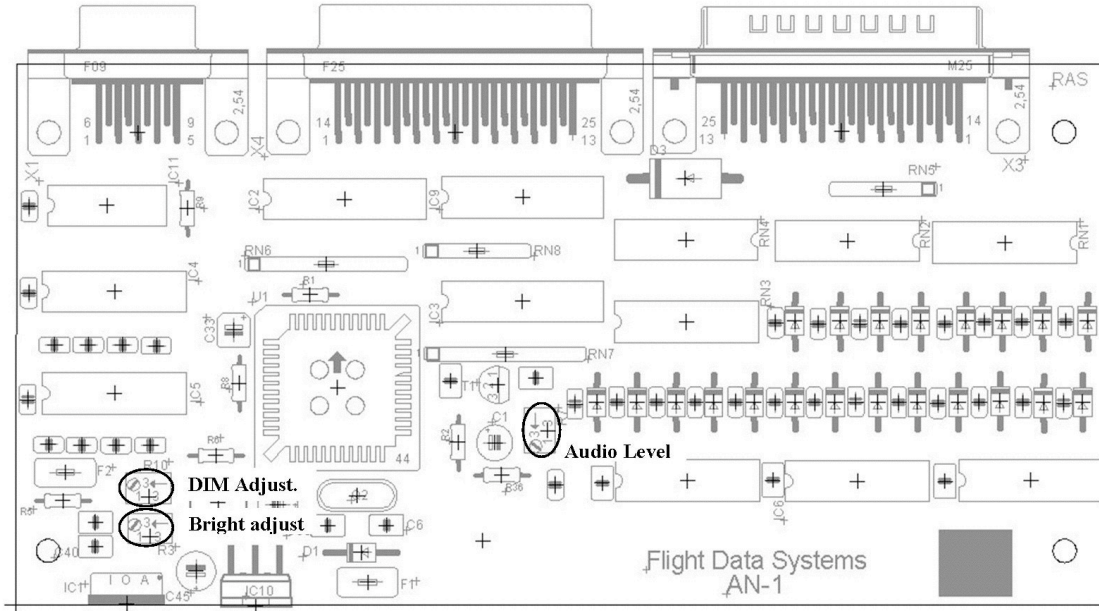
The AN-21 operates by closing the ground to activate each channel, thus, pin 25 on P-2 should be positive to carry power to all the indicators.

If you plan to use the "Master Caution" function, install its light to output channel 1 and the "Master Caution" cancel button to input channel 1. Channel 1 is not available to monitor other systems when the "Master Caution" function is installed.



## Setup

Once the unit is installed and wired use the three control pots to adjust lamp brightness and to set the audio level. See Diagram below:



## Programming

Download and install the Annunciator programming utility from our website at:

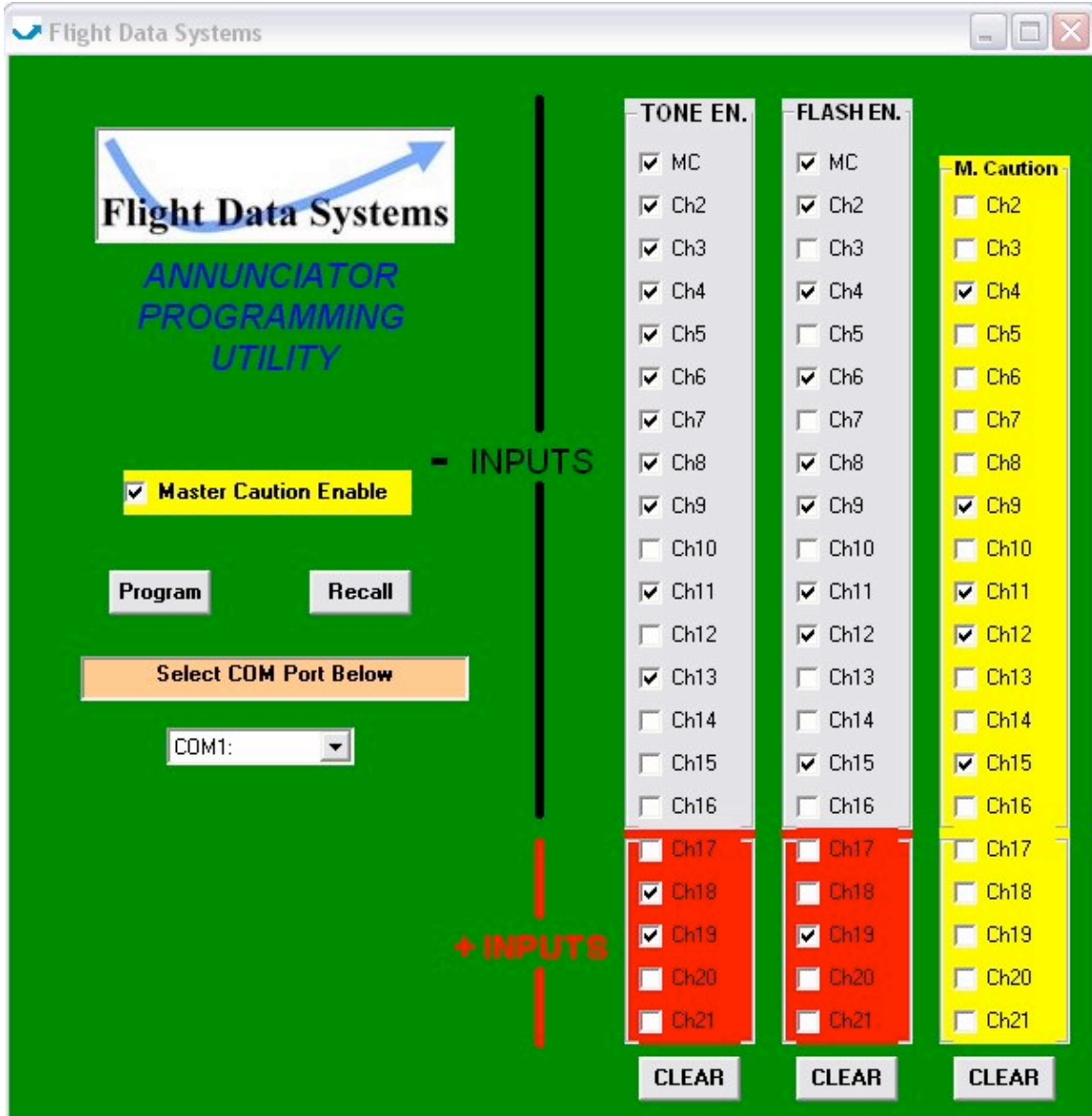
<http://www.fdatasystems.com/support.htm>

Connect the AN-21 to your computer with the via the DB-9 connector. If your computer does not have a DB-9 serial port, use a USB serial adapter (Available anywhere computers are sold).

NOTE: The AN-21 Must be powered in order to run the Programming Utility.

- 1) Open the Utility and select the proper "COM" port from the drop down menu.
- 2) Click "Recall" to see how your AN-21 is currently configured.
- 3) Check or uncheck boxes appropriate to your installation and then click "Program"

The Illustration below is an example configuration:



**Specifications**

Input Voltage: 12-28 Volts DC  
 Output Voltage = Input Voltage  
 Dimensions: 7.1" X 3.2" X 1.0"  
 Weight 9.0 oz.

**Need Help?** [support@fdatasystems.com](mailto:support@fdatasystems.com) or call

**(831) 325-3131**