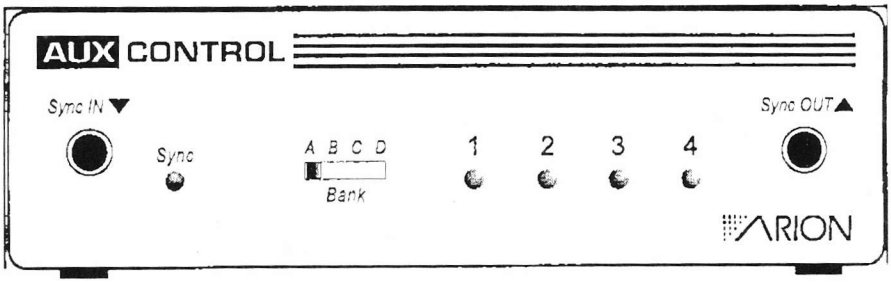
ARION

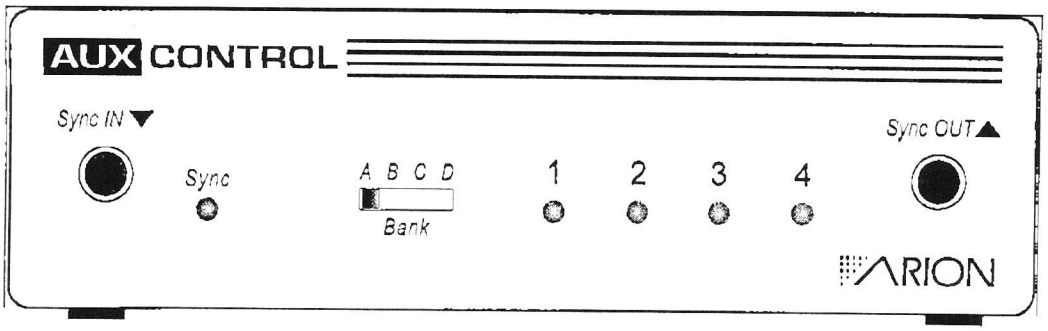
The AUX CONTROL



Auxiliary Relay Control Module

User's Guide

AUX CONTROL
Front Panel



Introduction

The Arion ***AUX CONTROL*** Module is a device used for switching low-voltage devices that can be activated by means of programmable relay closures. This module provides 3 or 4 independent momentary or latching relay channels. These channels activate according to a program that is created with the Arion ***Pro Sixteen Presentation Programmer***, or any compatible device.

The Arion ***AUX CONTROL*** Module responds to the Mate-trac synchronizing signal, which allows it to be used as a stand-alone device, or combined with any Mate-trac compatible dissolvers, lamp dimmers, etc.

Front Panel Description

Sync In

The ***Sync In*** connector is a standard phone (1/4") female jack. This jack is used to receive the Mate-trac signal previously recorded on audio tape. The ***Sync In*** can also be used to connect to the Mate-trac output of any Arion programming system.

Sync

The green ***Sync*** indicator lights whenever the AUX CONTROL receives the Mate-trac synchronizing signal. The ***Sync*** indicator **lights steadily** when a proper sync signal is received. If the ***Sync*** indicator flickers, it is an indication that the sync signal being received is not of good quality.

Bank

This four position switch selects the Bank to be active. Be sure the position it is set to corresponds with the source that is providing the Mate-trac synchronizing signal.

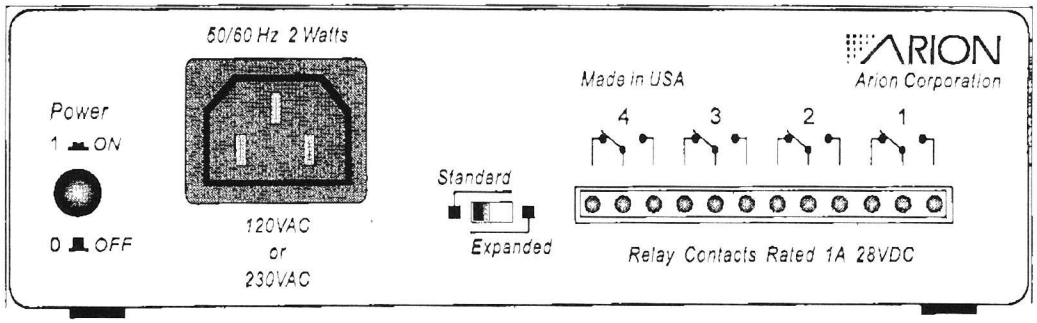
Channel Indicators

These indicators show when relay channels are energized.

Sync Out

The ***Sync Out*** connector is a standard phone (1/4") female jack. This jack may be used to pass the Mate-trac sync signal to other devices.

AUX CONTROL
Back Panel



Back Panel Description

Power Switch

The Power Switch provides AC power to the AUX CONTROL.

Power Inlet

The AC Power Cable is attached here. Be sure the power source is properly wired with an earth ground.

Standard/Expanded

This switch configures the AUX CONTROL to respond to standard Auxiliary commands or to slide projector Lamp commands when set to the Expanded position. See the ***Programming*** section for further details of how to use the Expanded setting.

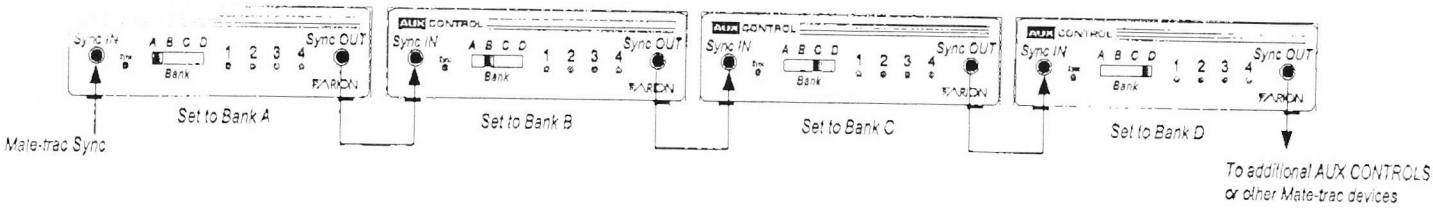
Relay Contacts

The AUX CONTROL provides both normally open and normally closed contacts. Note that the contact rating is 1 Ampere at 28 Volts DC.

Programming

The Arion ***AUX CONTROL*** Module may be programmed to respond to Auxiliary commands or slide projector Lamp commands. The Arion ***Pro Sixteen Presentation Programmer*** allows up to 12 Auxiliary channels as well as 16 slide projector channels.

At times more than 12 Auxiliary channels may be required. Therefore, the AUX CONTROL may be configured to the ***Expanded*** setting which allows the AUX CONTROL to respond to slide projector Lamp commands instead of Auxiliary commands. Using the ***Expanded*** setting effectively allows the Pro Sixteen Programmer to control a total of 28 Auxiliary channels (the 12 Aux channels plus using the 16 slide projector channels as ***Expanded*** Aux channels).



Linking AUX CONTROLS

Up to 8 ***AUX CONTROL*** Modules may be linked together to make up a system of 28 independent Auxiliary channels. Linking AUX CONTROLS together requires a shielded audio cable with standard phone (1/4") plugs on each end.

Once the interconnecting cables are attached, it is necessary to set each AUX CONTROL so that they respond to the proper commands from the Mate-trac sync signal source. Each channel responds to a particular command from the Pro Sixteen programmer. The following table shows the possible settings.

Pro Sixteen Command	AUX CONTROL Setting		Standard / Expanded
Aux A1	Bank A	Channel 1	Standard
Aux A2	Bank A	Channel 2	Standard
Aux A3	Bank A	Channel 3	Standard
Aux B1	Bank B	Channel 1	Standard
Aux B2	Bank B	Channel 2	Standard
Aux B3	Bank B	Channel 3	Standard
Aux C1	Bank C	Channel 1	Standard
Aux C2	Bank C	Channel 2	Standard
Aux C3	Bank C	Channel 3	Standard
Aux D1	Bank D	Channel 1	Standard
Aux D2	Bank D	Channel 2	Standard
Aux D3	Bank D	Channel 3	Standard

Pro Sixteen Command	AUX CONTROL Setting		Standard / Expanded
Lamp A1	Bank A	Channel 1	Expanded
Lamp A2	Bank A	Channel 2	Expanded
Lamp A3	Bank A	Channel 3	Expanded
Lamp A4	Bank A	Channel 4	Expanded
Lamp B1	Bank B	Channel 1	Expanded
Lamp B2	Bank B	Channel 2	Expanded
Lamp B3	Bank B	Channel 3	Expanded
Lamp B4	Bank B	Channel 4	Expanded
Lamp C1	Bank C	Channel 1	Expanded
Lamp C2	Bank C	Channel 2	Expanded
Lamp C3	Bank C	Channel 3	Expanded
Lamp C4	Bank C	Channel 4	Expanded
Lamp D1	Bank D	Channel 1	Expanded
Lamp D2	Bank D	Channel 2	Expanded
Lamp D3	Bank D	Channel 3	Expanded

Special Consideration for Channel 4

With all Arion programming systems, Channel 4 relay of any device including the ***AUX CONTROL*** Module, has been reserved for the special function of providing a Tape Stop command to a tape recorder.

With all other relay channels, when a command is given to turn on, that relay will remain energized until it is given a command to turn off. However, Channel 4 relay of the AUX CONTROL operates differently.

Here is the reason why:

To stop most any tape recorder, a momentary closure is required. To do this, the command sequence programmed into the Pro Sixteen is AUX A3 relay **on** for 0.5 seconds, then AUX A3 relay **off**.

When this command sequence is played back from tape, the AUX CONTROL reads the AUX A3 relay **ON** command and turns on the Channel 4 relay, and the tape stops. However, the tape has stopped *before* the AUX A3 **OFF** command can be read by the AUX CONTROL. The relay channel remains energized, preventing the tape recorder from being re-started.

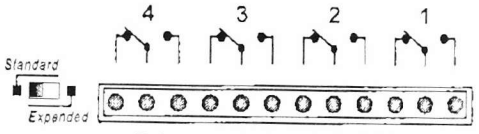
To solve this problem, the Channel 4 relay has been specially designed to **automatically turn off when the AUX CONTROL stops receiving the Mate-trac Sync Signal**. By having the Channel 4 relay automatically turn off, the tape recorder may now be re-started.

Therefore, Channel 4 (in any Bank Switch setting) should be used for stopping a tape recorder, or for controlling a device that will not be affected by the relay turning off when the Mate-trac signal stops.

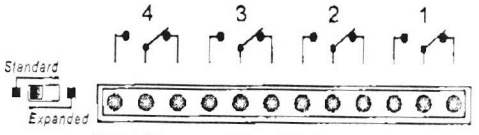
However, what if you require 3 Relay Channels to remain energized when Mate-trac stops?

As you will notice, in the Standard setting, both **Channels 3 and 4 of the AUX CONTROL turn on together**. If you require all three relay channels to remain energized, **use relay contacts for Channel 4** on the back panel of the AUX CONTROL. The relay of **Channel 4 does not automatically turn off** when the Mate-trac signal stops as with Channel 4.

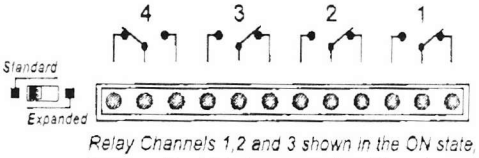
NOTE: This only occurs when the AUX CONTROL is in the **STANDARD SETTING.**



Relay contacts shown in the OFF state.



Relay Channels 1,2 and 3 shown in the ON state and the Mate-trac sync signal is being received. Note that Channel 4 turns ON with Channel 3.



Relay Channels 1,2 and 3 shown in the ON state, however the Mate-trac sync signal has stopped being received.

Note that Channel 4 relay automatically turns OFF, and Channels 1, 2, and 3 remain ON.