

# BA12 INSTRUCTIONS

Use enclosed mounting kit with installation instructions to install wall display. There are 2 options for cabling inlet, a pair of 13/16" holes in the middle of the chassis and a pair to the left (preferred) of the pc board. These holes will accept standard 1/2" conduit fittings, if you desire. One hole for 120VAC, the other for the serial control cable.

## CABLE

Use standard control cable to interface closures to the BA12 controller. All inputs are opto-isolated, so shielding is not necessary. It is suggested that you interface the TRIGGER and RESET connectors on the controller to an external punch block or barrier strip. The BA12 display requires 120vac at 85 watts (worst case, all 12 lamps on) current consumption. The BA12 displays have both a serial input and output connector and displays can be daisy chained or wired in a star configuration with all inputs running to the controller. Both the wall and rack displays can operate in tandem. The serial protocol is noise-free opto isolated RS-485 at 1200 baud. CAT-5 cable is recommended although any twisted pair will suffice.

## MODE

Each channel of the BA12 alert monitor can be set up in one of two modes, AUTO or MANUAL reset. Close the jumper for the appropriate channel for AUTO reset or leave it open for MANUAL reset. "Time on" can be adjusted from 1 second (maximum CCW) to approximately 30 minutes (maximum CW) in AUTO reset mode by adjusting the appropriate trimmer. MANUAL reset is provided for at the manual reset connector.

## LATCHING CLOSURES

Use the AUTO reset mode and set trimmer to maximum CCW. When the latch lets up or is reset, the alert will turn off immediately.

## TELEPHONE CALLS

Monitor incoming telephone calls with the included FN2 ring detect module. Each FN2 will monitor 2 phone lines and provide a closure for the BA12 TRIGGER input. (90vac, 20hz ringing voltage required). When using the FN2, set the trimmer maximum CCW for the appropriate channel. Additional FN2 modules are available, if you need to monitor more than 2 lines.

## TRIGGER

To trigger the BA12 connect closure between COMMON and the appropriate input (1 through 12). Use contact closure (relay, switch, etc.) or npn open collector output of transistor or optoisolator.

## MANUAL RESET

To reset the BA12 manually, connect closure between COMMON and the appropriate input (1 through 12). Use contact closure (relay, switch, etc.) or npn open collector output of transistor or optoisolator.

## CHANNEL 1 ALERT

The first channel of the BA12 (OFF AIR or ?), will supply a +5v output and an open collector for an additional audible alert, (piezoalarm, etc.) Use the 3 pin connector above the fuses on the PC board. Connect between the +5V pin and the "CH1" (open collector) pin. Do not draw more than 15ma. Avoid long cable run.

## ANY ALERT

If ANY alert is triggered on the BA12, you can also pick up an output between the +5V pin and the "ANY" (open collector) pin on the same connector. Do not draw more than 15ma. Avoid long cable run.

## CHANNEL DEFEAT

Short the appropriate channel (1-12) with pcb jumper on any display to defeat that channel.

# BA12 INSTALLATION OPTIONS:

**1:** Each display will mimic the other...

**BA12CTL**

**DISPLAY**

**DISPLAY**



**2:** Any channel on each display can be defeated...

**BA12CTL**

**WAAA STUDIO**

**WZZZ STUDIO**



EAS  
OFF AIR (a station is off)  
NEWS  
WEATHER  
ENTRY (1 studio gets door)  
WAAA HOTLINE  
WZZZ HOTLINE  
FIRE  
AUDIO (a studio lost audio)  
SYSTEM (user interface?)  
CHECK AM  
TRANSMITTER

EAS  
OFF AIR  
NEWS  
WEATHER  
**DEFEATED**  
HOTLINE  
**DEFEATED**  
FIRE  
AUDIO  
SYSTEM  
**DEFEATED**  
TRANSMITTER

EAS  
OFF AIR  
NEWS  
WEATHER  
ENTRY  
**DEFEATED**  
HOTLINE  
FIRE  
AUDIO  
SYSTEM  
CHECK AM  
TRANSMITTER