

# The FM-35 Cinema Cue Detector/Failsafe



The FM-35 Cue Detector provides all of the outputs required by today's theatre automation. It includes three separate proximity sensors for foil tape cue detection and four optical sensors for the monitoring of film presence and motion across the film frame. The outputs are conditioned to provide proper cue pulse lengths and eliminate false dropouts on splices.

Built with a heavy gauge metal frame, stainless steel shafts and sealed ball bearing rollers, the FM-35 sets the standard for physical quality and durability.

The triple-cue FM-35 is intended as a stand-alone replacement for older or less sophisticated units. With accessories, it can upgrade simpler automations to more flexible installations.

## The FM-35:

- ▶ Is a fully self-contained single chassis stand-alone unit
- ▶ Has three reliable proximity sensor cue detectors
- ▶ Detects film presence optically – there are no rollers to ride on (and scratch) the film
- ▶ Optically senses motion
- ▶ Features fully isolated relay contacts
- ▶ Is a modular plug-in design
- ▶ Includes a mounting bracket and output cable (several lengths available)
- ▶ Options include a 35-70mm version (FM-37) and a cue expander (QX-10, see next page)

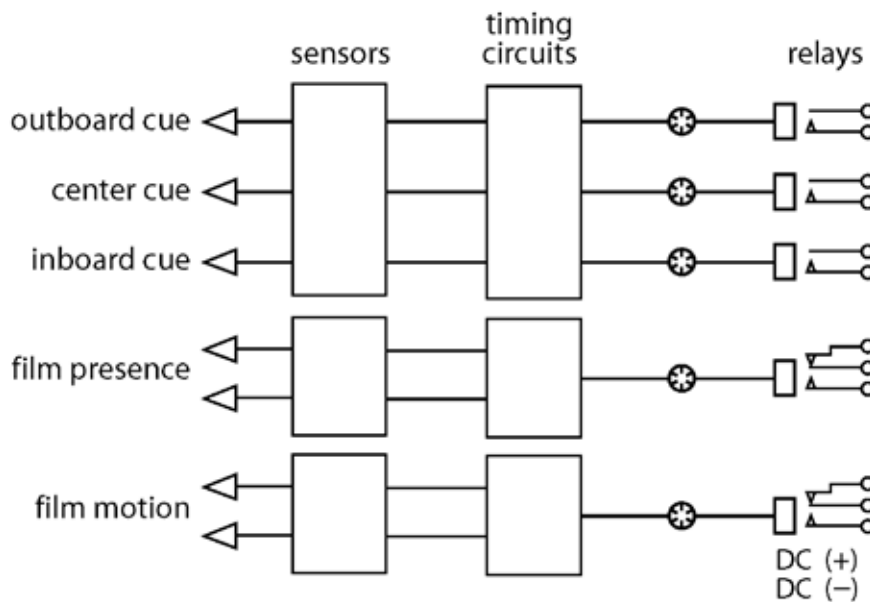
## QX-10 Cue Expander

The QX-10 Cue Expander is designed as a companion unit for use with Component Engineering's FM-35 or FM-37 monitoring system. The QX-10 connects to the three cue outputs of the detectors and treats them as the elements of a three-bit binary code. When cues or cue combinations are received by the QX-10, they are decoded into one of seven possible outputs.



The combination of FM-35 (or FM-37) and the QX-10 is an easy, inexpensive and reliable way to upgrade older automation systems which can't control all the various formats required by today's presentations.

### BLOCK DIAGRAM



### SPECIFICATIONS (FM-35 and QX-10)

#### Power Requirements:

12v to 28v dc (power supply modules available for 12v or 24v ac systems)  
350mA max

#### Relay Contact Rating:

500mA ac or dc  
Voltage over 48 not recommended

#### Wiring (FM-35):

8 foot (2.4 meter) 15 conductor cable and connector supplied (other lengths available)