

## IDD AMPLIFIER

The Forney IDD flame detector amplifier is an industry proven flame safety device for utility and industrial boilers. It has a wide range of tuning capabilities and output contacts that make it especially popular in the multi burner application. The IDD amplifier is available as a rack mount (RM-IDD) or panel mount (PM-IDD IIIA) and compatible with a variety of Forney flame detectors, making it suitable for coal, oil or natural gas applications.

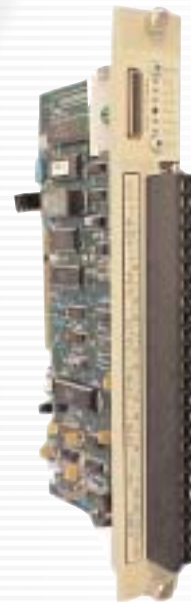
The primary objective of any flame detector system is to detect the presence or absence of a target flame inside an enclosed furnace or combustion chamber. The challenge for most detectors is the ability to discriminate one burner flame from another. The Forney IDD flame detector amplifier has a superior capability to do just that.

The output of the Forney IDD detector, when viewing a flame, is an analogue signal with a multitude of frequencies. The IDD amplifier receives this signal and has the capability of selecting one of many discrete frequencies which best represents the "flame on" condition. This unique tuning feature allows the IDD to provide repeatable "flame on" and "flame off" status, independent of the burner firing rate, boiler load or number of burners in service. To further refine the tuning a "sensitivity" or gain adjustment is available as well as multiple filter "Q" factor settings. Finally, as with all Forney flame detector amplifiers, two separate sensitivity settings (A or B) allow for switching from one to another, if boiler operating conditions require it.

- **FLAME DISCRIMINATION**– is achieved by selecting the peak flame frequency. Many discrete choices are available along with multiple filter "Q" factor settings.
- **UPGRADE CAPABILITY**– Amplifier is compatible with all versions of IDD-II and IDD-UV detectors.
- **SIMPLIFIED TROUBLE SHOOTING** – LED status displays indicate amplifier operating functions.
- **PANEL OR RACK MOUNT** – The self contained panel mount is suitable for smaller quantities of detectors while the rack mount is best for large quantities.
- **ANALOG INTENSITY** – flame intensity output of 0-10 vdc, 4-20 mA for each detector input.
- **BUILT IN SAFETY** – Electronic checking periodically checks the flame sensor to ensure that detector circuits respond to an actual loss-of-flame condition.



FLAME DETECTORS



RM-IDD Amplifier



PM-IDD IIIA Amplifier



Re-powering your world





## IDD AMPLIFIER

### PRODUCTS AND ACCESSORIES

PM-IDD IIIA Amplifier		Part #36237901
RM-IDD Amplifier		Part #35831701
Amp Rack (8 slot)		Part #40432502
Smart Display	(for RM-IDD)	Part #36483901
Tuning Software		Part #39847400
Runs with PCMCIA Card AD converter		Part #9196200
Cable 10'	(for IDD-II)	Part #39985401

### SPECIFICATIONS

Temperature:		0° to 55°C (32° to 131°F)
Humidity:		5% to 95% noncondensing
Power Requirements:		110/220 VAC, 50/60 Hz @ 12 va
Dimensions:	Panel Mount	26.7 cm x 19.1 cm x 10.2 cm (10.5in x 7.5in x 4.0in)
	Rack Mount	30.48cm x 16cm x 4.48cm (12in x 6.25in x 1.75in)
Weight:	Panel Mount	2.5 kg (5lbs. 8oz.)
	Rack Mount	0.47 kg (1lb. 3.2oz.)
Indicator lamps:		Power On Flame checking Channel sensitivity select Channel frequency select
Tuning Frequency:	Panel Mount	30
	Rack Mount	32
Q:	Panel Mount	15
	Rack Mount	8
Input contacts:		Sensitivity A or B select Blind
Output contacts:		Main flame 1 and 2 Main flame light Check alarm
Output Relay Rating:		5A at 125vac or 250vac 5A at 30vdc
Flame Intensity:		0-10vdc, 4-20 mA
Minimum Pickup Time:		1.0 sec
Nonvolatile RAM:		10-year battery
Compatible Flame Detectors:		IDD-II, Filtered Infrared Detector IDD-IIU, Unfiltered, Infrared Detector IDD-UV, Ultraviolet Detector IDD-IIL, Infrared Detector for Lignite

Operational parameters for the RM IDD are set with the Smart Display (HT/2000 portable terminal) while the PM IDD-III A are set with dip switches. Adjustable parameters are: Frequency, Filter "Q", Drop out time, Gain, Check Cycle, Check mode test and Fail test.