

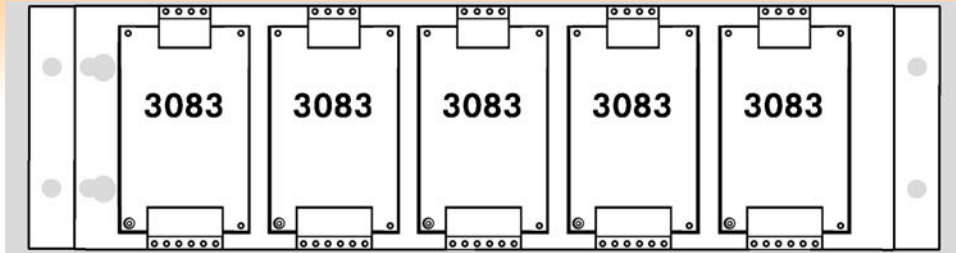
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Datasheet

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TRM-5 Tones Receiver Module-5 Accommodates up to 5 3083's



General

The TRM-5 (Tones Receiver Module - 5) is a unit that accommodates up to five 3083 TRM's. When fully loaded, TRM-5 has ten independent outputs. As the name implies, TRM is the receiving end of a Tones pair which also consists of a TTM (Tones Transmitter Module). The TTM is located at the protected premises whereas the TRM is located at the receiving station. The TRM continuously supervises the TTM. The employment of tones in alarm signal transmission renders a wide choice of media such as fiber optic lines, and 2000 or 3000 series voice grade lines.

The TRM-5 is intended for connection to a polarity reversal input circuit of a receiving unit having compatible ratings.

Installation

Remove the cover from the box. Connection is made through pluggable terminal blocks. Start by connecting together COMMON (pin 6) in a daisy-chain manner. Do the same for DC+ (pin 5). Alternately the 2 pin on board connector may be used to internally daisy chain the power leads. All EARTH pins (pins 3) make contact to the chassis. Connect one of these to earth.

The next step is to connect TIP (pin 1) and RING (pin 2) to the individual incoming telephone lines. Since isolation transformers are used, the polarity of these lines need not be observed. Finally, connect the RP output pins to the RP next. Be sure to use the correct polarity as described in the pin description.

Supervision

The TRM supervises a TTM. A possible compromise attempt will result in a trouble condition, which should be treated as an alarm condition.

Operation

Each 3083 board has two RP (Reverse Polarity) outputs which have been named ALARM1 and ALARM2. The operation of each zone is identical and independent. During a Secure on zone 1, ALARM1+ (pin 7) is positive and ALARM1- (pin 8) is negative. During an alarm, ALARM1+ (pin 7) becomes negative and ALARM1- (pin 8) positive. Also, during TROUBLE, i.e. a condition caused by a loss of communication or power, both output pins become zero volts. The same principle applies to ALARM2.

Keltron develops and manufactures secure, reliable, UL-listed fire and security alarm response management systems and components for the municipal and proprietary life safety markets. Products include radio fire alarm, coded fire alarm and high-line security systems, digital alarm receivers, universally compatible fire alarm control panel networking solutions and a full line of alarm annunciators. For more information, visit www.keltroncorp.com or contact us at 781-894-8710, or info@keltroncorp.com.

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TRM - 5

TRM-5 SPECIFICATIONS

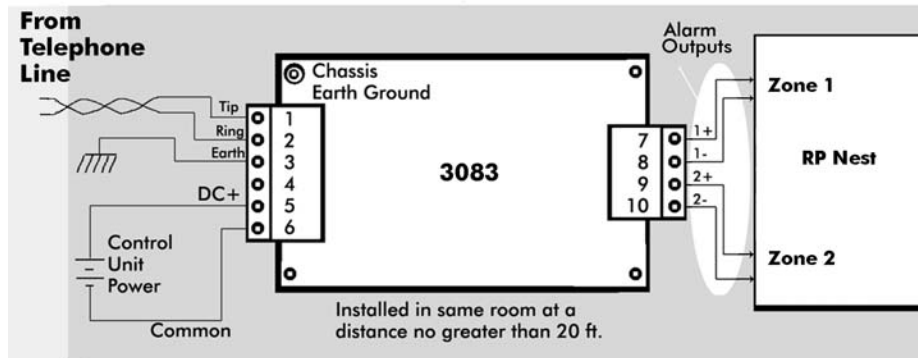
Connection	Terminal lugs	Supervision	Absence of tones results in Trouble
Min Supply voltage	10	Capacity	Two outputs (per board)
Max Supply Voltage	24	Communication medium	Telco direct line (2000 or 3000 series) or twisted pair
Supply Current	50 mA (per board)	Communication method	Freq. modulation
		Frequency range	600Hz .. 1700Hz
		Line Attenuation	10dB (max)
RP (output)		Environmental	
Number of outputs	2 (per board)	Operating temperature	0 to 49°C
Number of wires	4 (per board)	Storage temperature	-25 to 70°C
Level	0 to 5 volts	Relative Humidity	Non-condensing 20 to 85%
	5V@ no load, decreases		
	0.5V per mA		
Response time	50 ms (Alarm & Secure)		
	150 ms (Trouble)		
Tone (input)		Dimensions (L x W x H)	
Impedance	600 ohm	3083 (PC board)	4.0" x 2.5" x 1.0" (per board)
Level	-30 dBm (min)	TBX5 (enclosure)	15.5" x 4.7" x 1.7"
	(0 dBm Δ1mW @ 600Ω)	Weight	
Isolation	Yes	3083 (PC board)	0.12 lb (per board)
Protection	Lightning	TBX5 (enclosure)	1.32 lb
States	Alarm, Secure, Trouble		

NOTES:

1. TRM-5 unit is comprised of a TBX5 Enclosure and up to five 95M3083 Printed Circuit Boards.
2. TRM-5 is compatible with TTM transmitter modules and the 95DM726 400 zone RP Nest.
3. Conduit connection is required. The U.L.listed conduit boxes are:
Hoffman A-SE18x12x4 (screw cover) and A-SE18x12x3 (hinged cover)
Wiegmann SC12184 (screw cover) and A12184 (hinged cover)

3083 Pin description			
Pin #	Name	Type	Description
1	Tip	Input	Connects to one side of the telephone line
2	Ring	Input	Connects to the other side of the telephone line
3	Earth	Input	Earth ground
4			No connection
5	DC+	Input	Positive 10 - 24 volts DC power input
6	Common	Input	Negative DC power input
7	Alarm1+	Output	First zone RP output (positive during Secure)
8	Alarm1-	Output	First zone RP output (negative during Secure)
9	Alarm2+	Output	Second zone RP output (positive during Secure)
10	Alarm2-	Output	Second zone RP output (negative during Secure)

Wiring Diagram
All circuits are power limited



Notes: 1) Use 18 AWG UL-listed wire.

