

# The DIGITAC Comparator is an analog comparator assuring high quality audio levels to meet both small and large system requirements



### **Features**

- ► Assures consistently high quality audio levels from all receivers to the comparator. Status tone output from the comparator allows a group of satellite receivers to feed into a remote comparator and present these signals into the major voting system as one signal. This provides design flexibility to meet your system coverage requirements, while minimizing expensive leased line paths.
- ▶ Designed to handle either small system voting requirements or to vote multiple channels for very large systems. Every DIGITAC comparator can be expanded by 4 channel increments, up to 40 channels per cabinet.
- ► Field-programmable to prevent the rebroadcast of designated incoming messages, allowing advanced information control.
- ► Self-testing features have been designed into every unit to diagnose trouble both at power-up and during normal operation minimizing system down time and simplifying diagnosis for easy service.
- ▶ Immediate, temporary priority can be given to any channel through manual assertion at the console allowing the operator to respond to an unexpected emergency or urgent communication needs simply by holding down a button.
- ► Main/Standby configuration enhances system reliability, simplifies installation and provides one point of contact to facilitate a change-over to standby operation.

#### Options

- ▶ Emergency Power Backup is provided so critical operations will not be interrupted should a commercial power loss occur.
- ▶ Provides tone remote control signals and voted audio signals to an associated voting repeater allowing the retransmission of the best inbound signal for all users.

# **DIGITAC Comparator**

## **Current Drain Specifications**

Model	Current drain amp @ 13.8 VDC	Estimated Battery life 55AH battery @ 25∞C
Q298/0AA	2.2 AMPS	20.0 HRS
W/C175	3.0 AMPS	14.4 HRS
Q298/1AA	2.5 AMPS	17.5 HRS
W/C175	3.5 AMPS	12.5 HRS
Q298/2AA	4.5 AMPS	9.5 HRS
W/C175	5.5 AMPS	8.0 HRS
Q298/3AA	5.0 AMPS	8.5 HRS
W/C175	6.0 AMPS	7.0 HRS
Model	Factory ID	
Q298/0AA	Q2980A	
Q298/1AA	Q2981A	
Q298/2AA	Q2982A	
Q298/3AA	Q2983A	
Q298/4AA	Q2984A	
Q298/5AA	Q2985A	
Q298/6AA	Q2986A	
Q298/7AA	Q2987A	
Q298/8AA	Q2988A	
Q298/9AA	Q2989A	

# **Electrical Specifications**

Power Supply	120/240 VAC, 60Hz, 13.8 VDC	
Input Line Impedance	600 ohms, balanced	
Input Line Sensitivity	Jumper Selectable	
	-39 dBm to −13 dBm or −28 dBm to −2 dBm for Status Tone,	
	−26 dBm to 0dBm or −15 dBm to +11dBm @ 1kHz	
Output Line Impedance	600 ohms, balanced	
Number of Outputs per Chassis	4 independent line driver outputs (6 if equipped with Tone Keying Priority option)	
Output Audio Level	Adjustable, –25 dBm to +11 dBm @ 1 kHz	
Output Audio Response	±1 dB from 300 to 3000 Hz with voice transmission	
Output Audio Distortion	Less than 3% at 1000 Hz @ 0 dBm	
Unselected Channel Rejection	–50 dBm	
Timing	Access time < 50 ms	
	8 channel unit	
	Voting rate – up to 10 votes per second	
	(programmable)	
Voting Resolution	2 dB	

## **Mechanical Specifications**

Comparator Chassis	10½" x 19" x 9" rack mount (267mm x 475mm x 231mm), 8 channel unit	
Comparator Capacity	4 to 40 channel (4 channel increments) per cabinet	
Enclosures	Optional depending upon individual channel and space requirements: 30", 41" and 60" Indoor Cabinets	
	46" Outdoor Cabinet	
	70" Indoor Cabinet	

Motorola U.S.A. 1301 E. Algonquin Road Schaumburg, Illinois 60196 In the U.S. call: 1-888-567-7347

Motorola Canada Limited 3900 Victoria Park Avenue North York, Ontario M2H 3H7 In Canada call: 1-800-268-5758

Outside the U.S. and Canada call: (847) 538-6602

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