



**MULTI-FUNCTION  
INTELLIGENT  
DATA LOGGER**

*QUICK REFERENCE CARD  
FOR STANDARD INSTRUMENT*



Components Ltd.  
Stock No. 611-975

## DATA LOGGING PROGRAMS

### STARTING DATA LOGGING

- Manual: Press "START".
- Automatic External: Place pulse switch to left side position. Apply a voltage greater than 1 Volt to input.
- Automatic Internal: Place pulse switch to right side position. When voltage on channel 1 exceeds a threshold, data logging starts.

### STOPPING DATA LOGGING

Programs 02 and 03 can be stopped during execution by pressing "STOP".

### PROG NO DESCRIPTION AND USE

- 00 Four channel Digital Voltmeter**—Useful for checking connections and sensors; to change channel press "CH2" or "CH3" or "CH4".
- 01 Fast Single Channel Transient Recorder**  
4K samples are stored.  
Parameter between 0 and 999 determines intersample time. '0' selects fastest at 26 microseconds. A parameter of '1' gives 50 microseconds, '2' 100 microseconds, '3' 150 microseconds, etc.  
1K samples displayed on scope/micro/chart recorder at any one time; to look at second K press "RESELECT DISPLAY" followed by "CH2" etc. i.e. "CH2" selects second block.
- 02 Medium Speed 4 Channel Transient Recorder**  
1K samples are stored per channel.  
Parameter between 1 and 999 determines intersample time in milliseconds e.g. parameter of 20 selects 20 milliseconds between samples. Each 'sample' stores the value from all four channels.
- 03 Slow Speed Data Recorder**  
1K samples are stored per channel.  
Parameter between 1 and 999 determining intersample time in seconds, e.g. a parameter of 5 selects 5 seconds between samples.  
Each 'sample' stores the value from all four channels.
- 08 Re-entry to Output Routines when Battery Back-up of Memory is used**  
Apply power to logger.  
Type '08' followed by the program number previously used.

## TIMING AND FREQUENCY PROGRAMS

### PROG NO DESCRIPTION AND USE

- 04 Frequency Meter (<20KHZ)**  
No parameter needed.  
Use pulse/trigger input and pulse switch to left side position.  
If signal is of amplitude <1V then apply it to channel 1 input; select range of  $\pm 250$  mV and pulse switch to right side position.
- 05 Single Channel Timer**  
Records interval between 'start' and 'stop' signals —i.e. voltage changes on the pulse input, or between manual pressing of "START" and "STOP".  
Parameter determines start/stop sequence.
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- 06 Multi-channel Timer**  
Records state of 8 input data lines and times with millisecond resolution any state changes occurring on these lines.  
No parameter.  
After pressing "ENTER" display shows state of sensors for checking their operation.  
Press "START" to start timing.  
After pressing "STOP" display shows sensor pattern. Timing can be read by repeatedly pressing ">"

## CONTROL/WAVEFORM PROGRAMS

### PROG NO DESCRIPTION AND USE

- 10 Waveform Generation**  
Parameter of 1 to 999 defines time in milliseconds between each code output. A parameter of 0 gives a time of approximately 80 microseconds between codes. Maximum of 255 codes accepted.  
Decimal codes from 0 to 255 are entered into successive memory locations using "ENTER".  
">" and "<" move through memory for code entry/modification.  
After entering required codes "START" initiates output.  
Pressing "RESELECT DISPLAY" halts output and enables a new parameter to be entered.
- 11 Control Sequence Generator**  
Operates similar to program 10.  
Parameter of 1 to 999 defines the time in seconds between each code output.