PM2230

PROGRAMMING CARD
BASICA or GWBASIC
INSTRUMENT DRIVERS FOR DIGITAL MULTIMETERS

IEEE 488

IEC 625

4822 872 80021   871001

SUPPORTED DIGITAL MULTIMETERS:

PM2525
PM2534
PM2535

STATEMENT SYNTAX

CALL DRIVER (variable ,........., variable)

TERM

$<$ *instr.id* $>$ = The logical instrument name referring to a specific instrument.

MEASURE *(instr.id, meas.value)*

Performs a measurement and reads the result.

$<$ *meas.value* $>$ = The measured value is assigned to this variable.

READ.DATA *(instr.id, meas.value)*

Used to read a measurement result.

$<$ *meas.value* $>$ = The driver assigns the measured value to this variable.

SET.FILTER *(instr.id, filter)*

Turns measurement filtering ON or OFF.

<*filter*>	Description
YES	Enables the filter.
NO	Disables the filter.

SET.FUNCTION *(instr.id, meas.function)*

Selects the type of measurement to be made.

<*meas.function*>	Description
VOLT.DC	Measure DC volts.
VOLT.AC	Measure AC volts RMS, AC only.
VOLT.RMS	Measure true RMS, AC + DC.
VOLT.PEAK.PEAK	Measure AC volt Peak to Peak.
VOLT.PEAK.NEG	Measure minimum voltage.
VOLT.PEAK.POS	Measure maximum voltage.
CURRENT.DC	Measure DC current.
CURRENT.AC	Measure AC current.
CURRENT.RMS	Measure true RMS current, AC + DC.
RESISTANCE.2W	Measure resistance using 2 wires.
RESISTANCE.4W	Measure resistance using 4 wires.
TEMPERATURE	Measure temperature.
CAPACITANCE	Measure capacitance.
DIODE	Diode test function.
FREQUENCY	Measure frequency.
PERIOD.POS	Measure the period of the input signal, starting on the positive edge.
PERIOD.NEG	Measure the period of the input signal, starting on the negative edge.
PULSEWIDTH.POS	Measure the pulse width of the input signal, starting on the positive edge.
PULSEWIDTH.NEG	Measure the pulse width of the input signal, starting on the negative edge.

SET.RANGE *(instr.id , meas.range)*

Programs the measurement range.

<meas.range>	Specifies the instrument's measurement range.
AUTOMATIC	The instrument selects the best range for the measurement.
<user defined>	The user defined variable specifies a fixed range that the instrument must use to make its measurements.

SET.RESOLUTION *(instr.id , nr.of.digits)*

Programs the instrument's resolution.

<nr.of.digits>	= Specifies the number of digits to be used for the measurement.

SET.SETTLING.TIME *(instr.id , settling.time)*

Enables/disables the instrument's internal settling time.

<settling.time>	Description
YES	Forces the instrument to produce an internal waiting time after receiving a start.
NO	Disables the internal settling time.

SET.SPEED *(instr.id , meas.speed)*

Sets the speed at which the instrument makes measurements.

<meas.speed>	Description
LOW	Lowest speed, highest resolution; typically less than 1 measurement per second.
NORMAL	Standard resolution, with a typical measuring speed of 1 to 10 measurements per second.
MEDIUM	Moderate resolution, with a typical measuring speed of 10 to 50 measurements per second.
HIGH	Highest speed, lowest resolution; typically over 50 measurements per second.

SET.TIMEOUT *(instr.id , timeout)*

Programs the timeout period.

> *<timeout>* = Specifies the timeout period in seconds.

SET.TRIG.DELAY *(instr.id , trig.delay)*

Programs the instrument's trigger delay time.

> *<trig.delay>* = Specifies in seconds the trigger delay.

>> *NOTE:* *<trig.delay>* = 0: Disables the delay function.

SET.TRIG.SOURCE *(instr.id , trig.source)*

Specifies where the instrument will receive a trigger from.

<trig.source>	Description
INTERNAL	The instrument generates its own trigger.
EXTERNAL	The trigger is supplied by some external source, other than the GPIB.
BUS	The trigger is supplied via the GPIB interface: START or ALLSTART.
MANUAL	The trigger is supplied manually from the operating panel of the instrument.

START *(instr.id)*

Starts a new measurement.

TABLE 1: Defaults for the PM2525

Drivers for PM2525	Defaults		
MEASURE			
READ.DATA			
SET.FUNCTION	$<meas.function>$	=	VOLT.DC
SET.RANGE	$<meas.range>$	=	AUTOMATIC
SET.RESOLUTION	$<nr.of.digits>$	=	6
SET.SPEED	$<meas.speed>$	=	NORMAL
SET.TIMEOUT	$<timeout>$	=	3 (seconds)
SET.TRIG.SOURCE	$<trig.source>$	=	BUS

NOTE: The defaults are valid after **INIT** or **ALLINIT** *(DEFAULT.SET)*

TABLE 2: Defaults for the PM2534 and PM2535

Drivers for PM2534/PM2535	Defaults		
MEASURE			
READ.DATA			
SET.FILTER	$<filter>$	=	NO
SET.FUNCTION	$<meas.function>$	=	VOLT.DC
SET.RANGE	$<meas.range>$	=	AUTOMATIC
SET.RESOLUTION	$<nr.of.digits>$	=	6
SET.SETTLING.TIME	$<settling.time>$	=	YES
SET.SPEED	$<meas.speed>$	=	NORMAL
SET.TIMEOUT	$<timeout>$	=	3 (seconds)
SET.TRIG.DELAY	$<trig.delay>$	=	0
SET.TRIG.SOURCE	$<trig.source>$	=	BUS

NOTE: The defaults are valid after **INIT** or **ALLINIT** *(DEFAULT.SET)*