

OSZI24B 24 Bit Oszilloskop 500kSPS 100kHz

SCPI Commands on USBTMC

----- Channel -----

C1:BWL Bandwidth limit
 Read "AUTO" "OFF"
 Write "AUTO" "1" "OFF" "0"

C1:COUP Coupling
 Read - Write "AC" "DC"

C1:STAT
 Read "ON"

C1:VDIV vertical sensitivity in Volts/div
 Read - Write 5.0 2.0 1.0 0.5 0.2 0.1 0.05 0.02

C1:WIDEB Wideband Filter
 Read "ON" "OFF"
 Write "ON" "1" "OFF" "0"

----- Time -----

TDIV Timebase setting in seconds
 Read - Write 100us - 10s/div
 Read RESULT="5E-4"

TRGHY Trigger hysteresis
 Read - Write 0..4096 Default 128

TRGO Trigger time offset
 Read - Write -10.0 ... 0.0 ... 1.0 Default 0.5

TRGS Trigger source
 Read "NONE" "C1""C1S""SINGLE""FREERUN""EXT"
 Write "0"|"NONE"|"OFF" "C1""C1S""SINGLE""FREERUN""EXT"

TRGV Trigger level in Volts
 Read - Write

TRIG Trigger slope/polarity
 Read - Write "POS" "NEG"

RUNS RUNSingle (new Trigger)

MSIZ Memory length
 Read - Write 2500 5000 12500 25000 35000 70000*

----- DMM -----

DMM?

Read in Volts
RESULT="-0.000006"

DMM+?

Read "Volt, Temperature °C, V/Div"
RESULT="-0.000006V,25.6°C,0.500V/Div"

USBV?

Read "USB Volt"
RESULT="4.98"

C1:INDC? Input DC-Volts (CPU 14Bit ADC)

Read -+33V
RESULT="0.059"

----- Read Data -----

BUFST?

0=no data 1=new data
RESULT="1"

DATA?

RESULT="ALDccpWAVE,#6007599"

> -----

Digital waveforms

```
0000-0000 41 4C 44 63 63 70 57 41 56 45 2C 23 36 30 30 37 ALDccpWAVE,#6007
| Identifier |chr num| data
0000-0010 35 39 39 00 5E 00 3C 00 00 00 C5 09 00 00 00 02 599.^.<...Å.....
size |0 |h len| T0sziDataHead --->
0000-0020 18 01 0A 0A 00 00 4C 45 30 30 35 30 20 31 30 6B .....LE0050 10k
0000-0030 00 00 00 00 00 00 00 00 00 00 4C 0C A6 34 BD 37 .....L.|4½7
0000-0040 06 36 0A D7 23 BB 00 00 00 3F 6F 12 03 3A EF 01 .6.×#»...?o...i.
0000-0050 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
0000-0060 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
0000-0070 00 00 00 00 20 8E D8 4F 8E D8 55 8E D8 43 8E D8 .... .00.0U.0C.0
<-- T0sziDataHead | data n * 3 Byte
0000-0080 4E 8E D8 45 8E D8 42 8E D8 52 8E D8 85 8E D8 85 N.0E.0B.0R.0..0.
```

use T0sziFileHead and T0sziDataHead oszi.h

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----- Calibration -----

CAL:GV5000m (inp 10kOhm)

CAL:GV2000m (inp 10kOhm)

CAL:GV1000m

CAL:GV500m

CAL:GV200m

CAL:GV100m

CAL:GV50m

CAL:GV20m (inp 50 Ohm)

Read - Write
Gain Calibration 0.1x ... 10.0x
Default 1.0 (GV20m Default 1.6)

CAL:OV5000m (inp 10kOhm)
CAL:OV2000m (inp 10kOhm)
CAL:OV1000m
CAL:OV500m
CAL:OV200m
CAL:OV100m
CAL:OV50m
CAL:OV20m (inp 50 Ohm)

Read - Write
Offset Calibration OV500m ~ -0.005 ... 0.005 V
Offset Calibration OV200m ~ -0.002 ... 0.002 V

.....
Default 0.000

CAL:TVK2 (200mV/Div)
CAL:TVK3 (100mV/Div)
CAL:TVK4 (50mV/Div)

Read - Write
Relais On/Off Calibration TVK2 ~ -0.002 ... 0.002 V

Default 0.0

CAL:TEMPK
Read - Write
Offset Calibration -0.001 ... 0.001 V/°C
Default 0.000

CAL:TEMPO
Read - Write
Temperature Sensor Offset Calibration -30.0 ... 30.0 °C
Default 0.000

CAL:TEMP?
Read Temperature Sensor °C

CAL:INDC:DIGV Input DC-Volts ~0.0042V/Digit (CPU 14Bit ADC)
min: 0.0001V/Digit max: 0.0655V/Digit
Read - Write

CAL:INDC:OFF Input DC-Volts Offset (CPU 14Bit ADC)
Read - Write

CAL:SAVE
Write calibration data to Flash