

Newly developed  
CCD scan converter tube inside!

The Highest Frequency Bandwidth in the world  
*TS-81000/80600*

Iwatsu Test Instruments Corp.





# Features of TS-81000/80600

- Analog Oscilloscope
- Frequency Bandwidth DC - 1GHz (DC-600MHz)
- Ultra-high Brightness
- Storage type
- List Price Yen2,480,000 (Yen1,480,000.-)

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*IWATSU STORAGESCOPE TS-81000/80600*

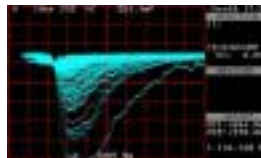


# New points of TS-81000/80600

High resolution color Low-Temperature Polycrystalline Silicon LCD display  
320 x 240 to 800 x 480



Built-in Printer



PC card slot



LAN Interface  
VGA output  
NTSC (S type and composite)



Lighting button for easy operation





## Features of Analog Oscilloscopes 3

	TS-80600	TS-81000	LT584	TDS7404
List Price	1,480,000	2,480,000	2,48,000	6,680,000
Analog / Digital	Analog	Analog	Digital	Digital
Frequency Bandwidth	600MHz	1GHz	1GHz	4GHz
Max. Sampling rate (Equivalent)	300GS/s 3.3ps	300GS/s 3.3ps	4GS/s 250ps	20GS/s 50ps

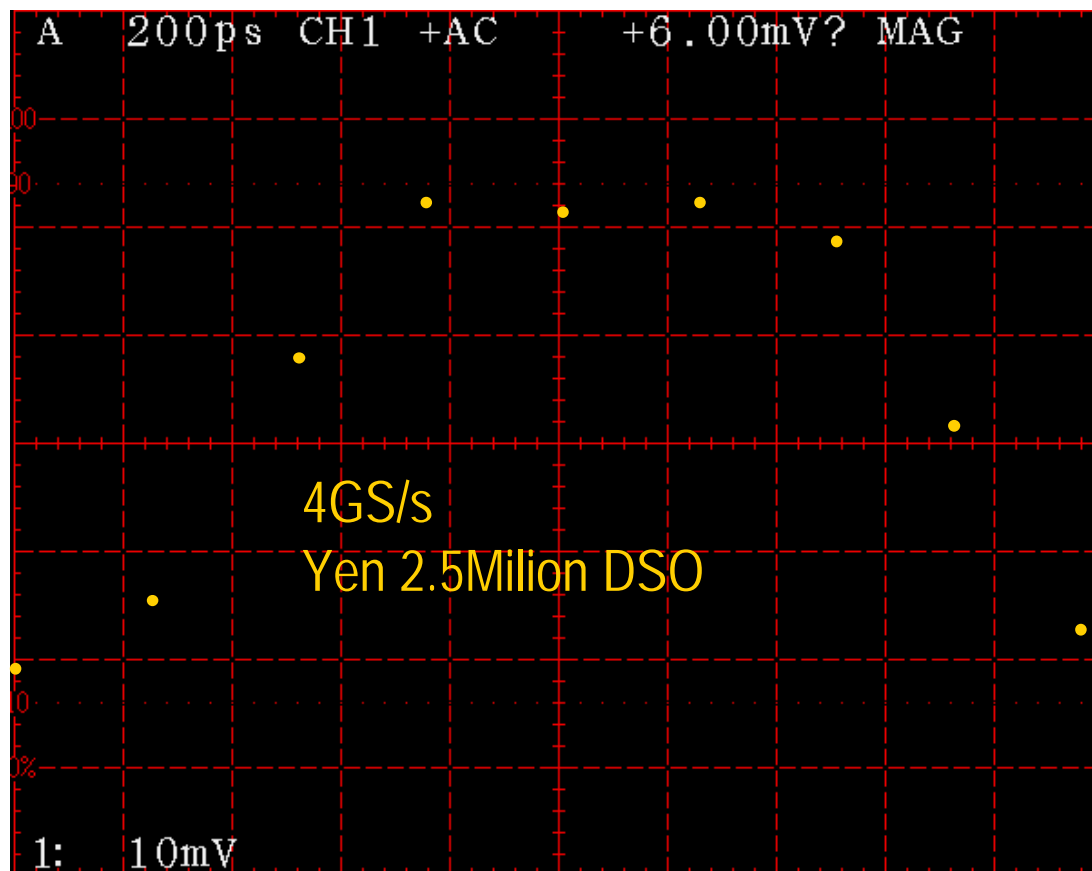


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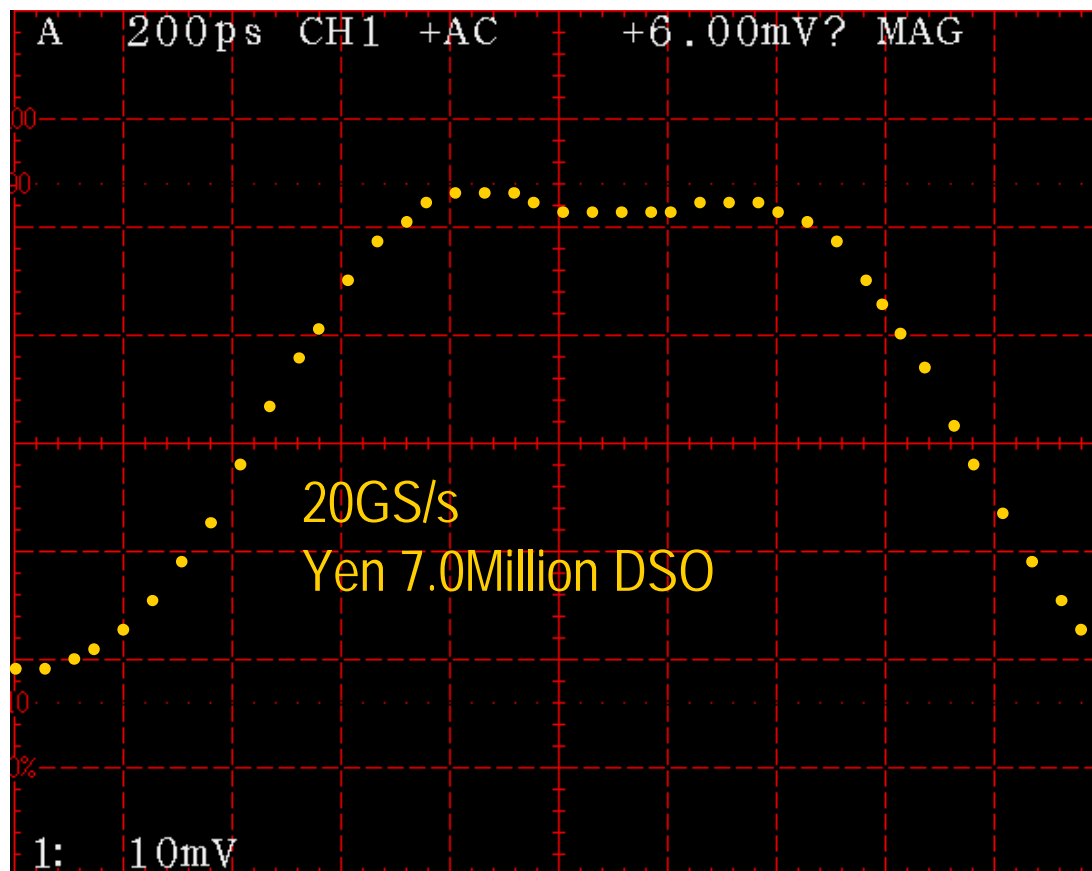


# The same price range DSO





The shape of waves can be imagined with 20GS/s

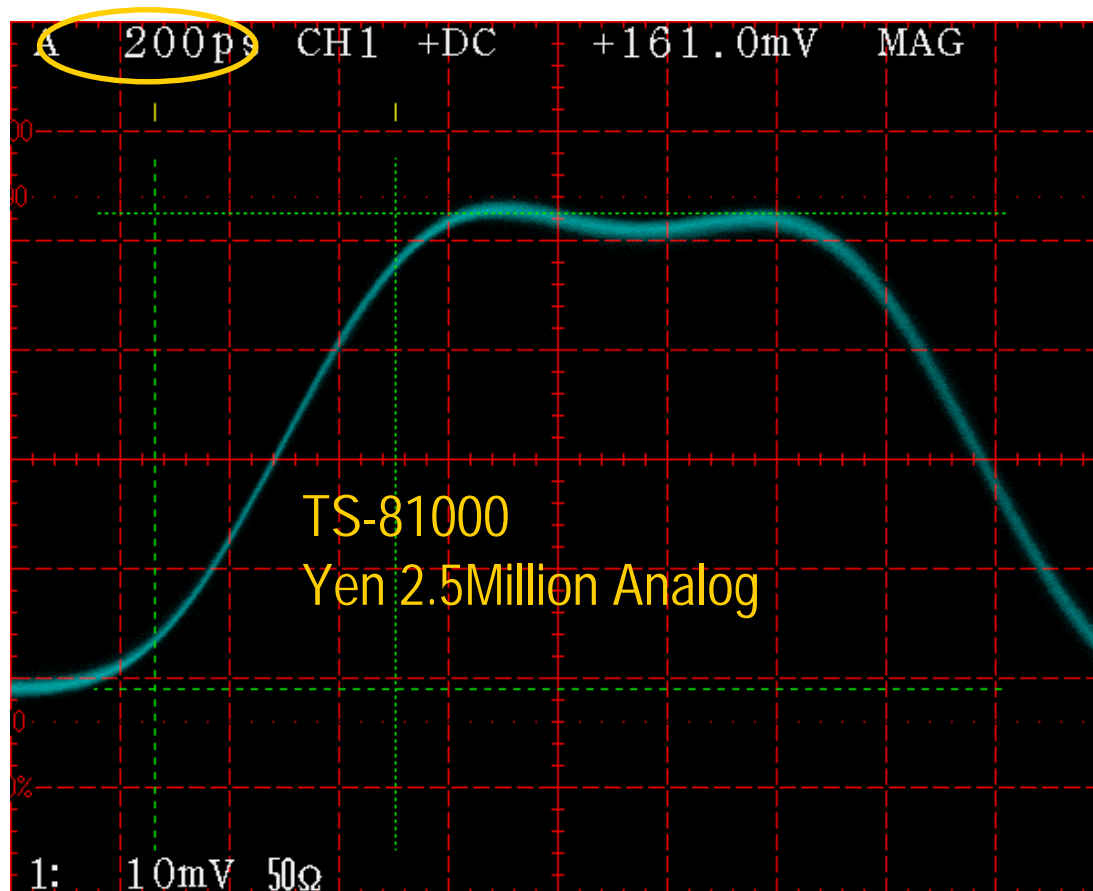


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Equivalent to 300GS/s with reasonable 2.5M Yen





# Users of High frequency Analog Scopes

- R&D and Manufacturing of Broadcasting equipment
  - Cameras, Monitors, Transmitter and receiver
- R&D and Manufacturing of Storage Media
  - HDD, Optical Disk
- EMC sight
  - Calibration
- Accelerator, Elementary particle, Synchrotron radiation, Laser, Cosmic rays





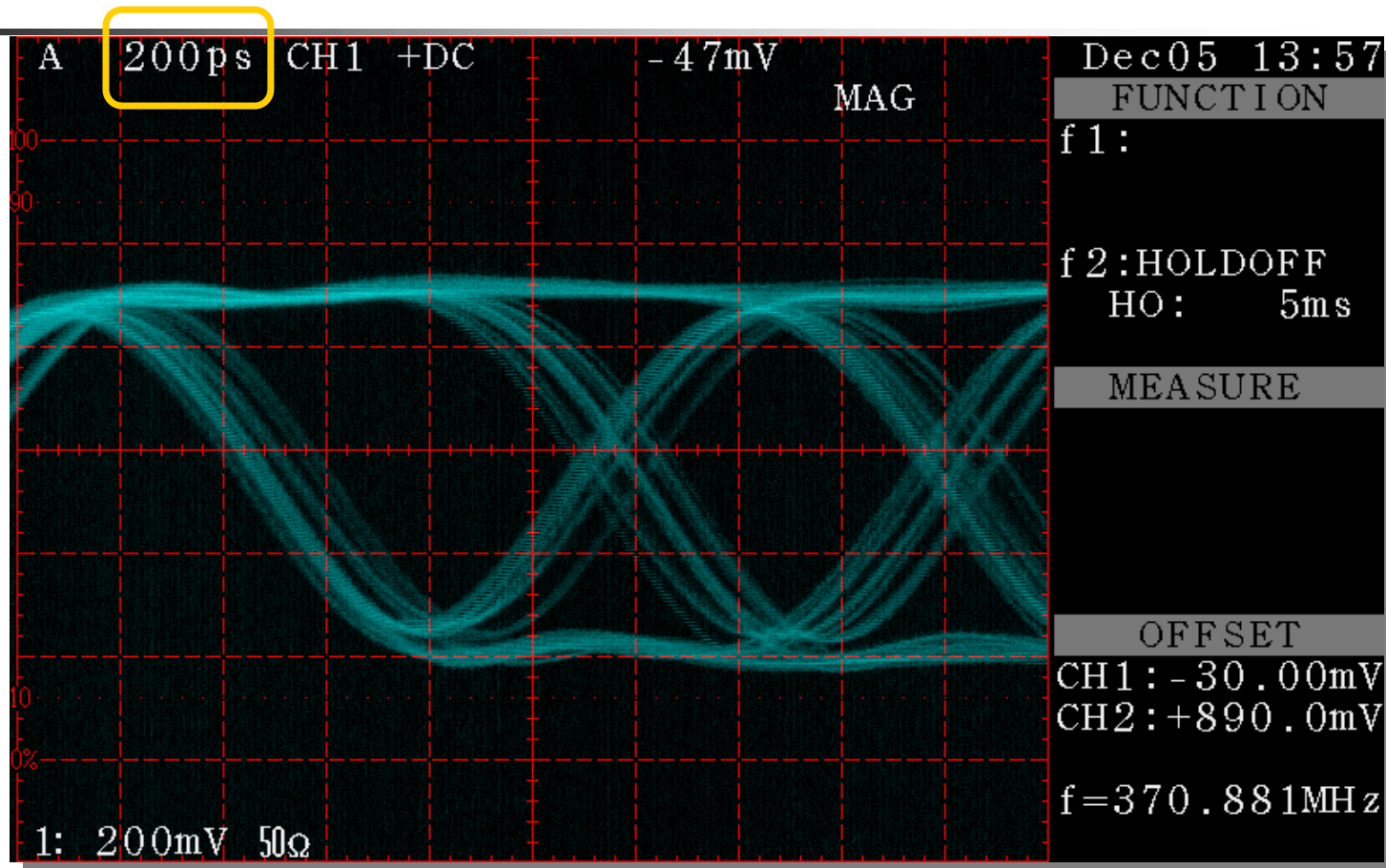
## For sales promotion to Broadcasting industry

- For observing HD-SDI (Newly available)
  - 1GHz
- For HIGH VISION EQUIPMENT
  - 1GHz
- For observing VIDEO SIGNAL
  - Rapidly improved delay jitter
  - Sharp traces and High resolution color display
  - Dual delay function
- For Production line of Broadcasting equipment
  - High accuracy 6-digit frequency counter
  - Low price





# Transmission waveform of HD-SDI





## For STORAGE industry

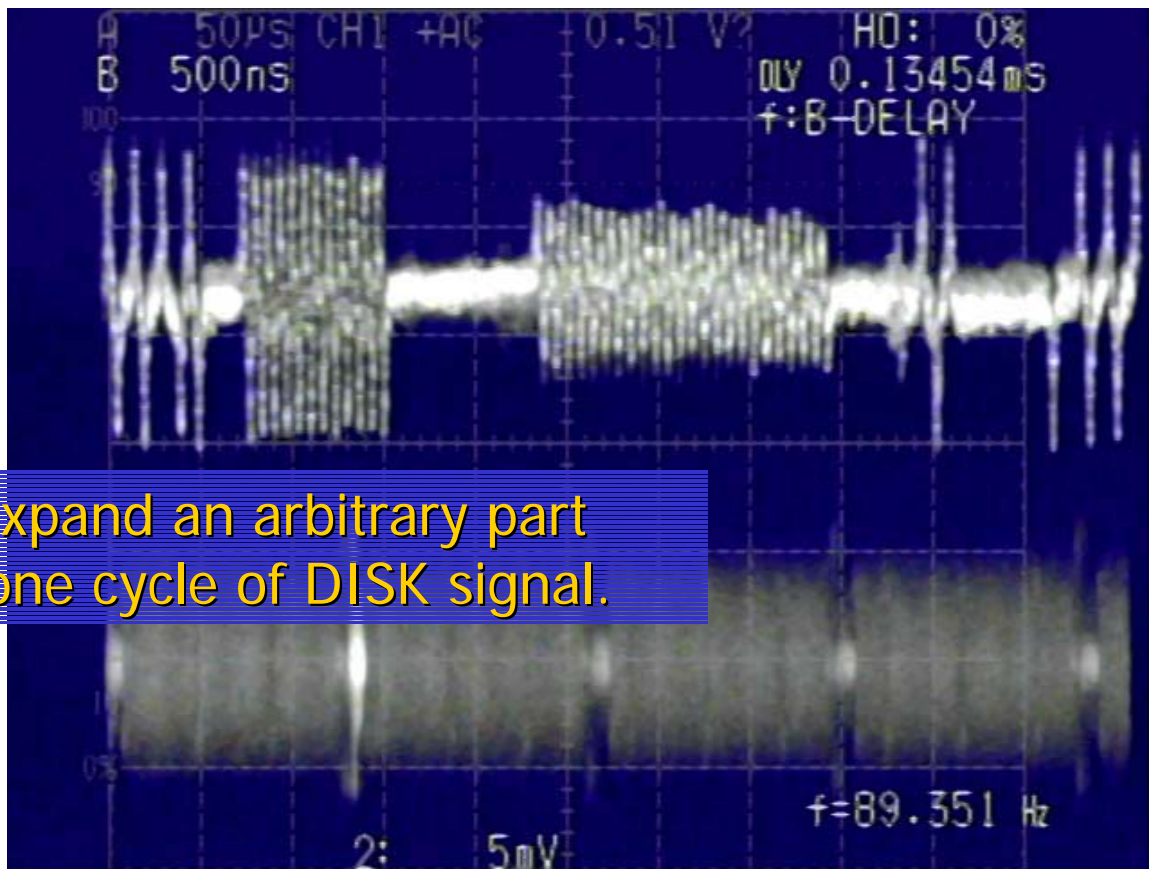
- For HIGH DENSITY Storage
  - 1GHz/600MHz Analog
- For LARGE CAPACITY Storage
  - Rapidly improved delay jitter
  - Dual delay function
- Development of short wavelength laser
  - 1GHz/600MHz Analog
- For PRODUCTION LINE
  - Low price

HDD

DVD, CD, MO



## HDD pick up waveform



It is possible to expand an arbitrary part  
while looking at one cycle of DISK signal.

Waveform of TS-8500



# For PHYSICS

- A natural phenomenon is CONTINUOUS
  - Analog Oscilloscope
    - Ultra high speed waveform re-flesh rate
- Very low-repetition late events
  - Ultra-high brightness storage
- Waveform can not be imagined (Unknown waveform)
  - Wideband
- LAN
- Built-in printer, PC card slot
- NTSC output
  - In-house CATV etc.

Laser

Accelerator

Elementary particle physics

Radiation

Synchrotron radiation

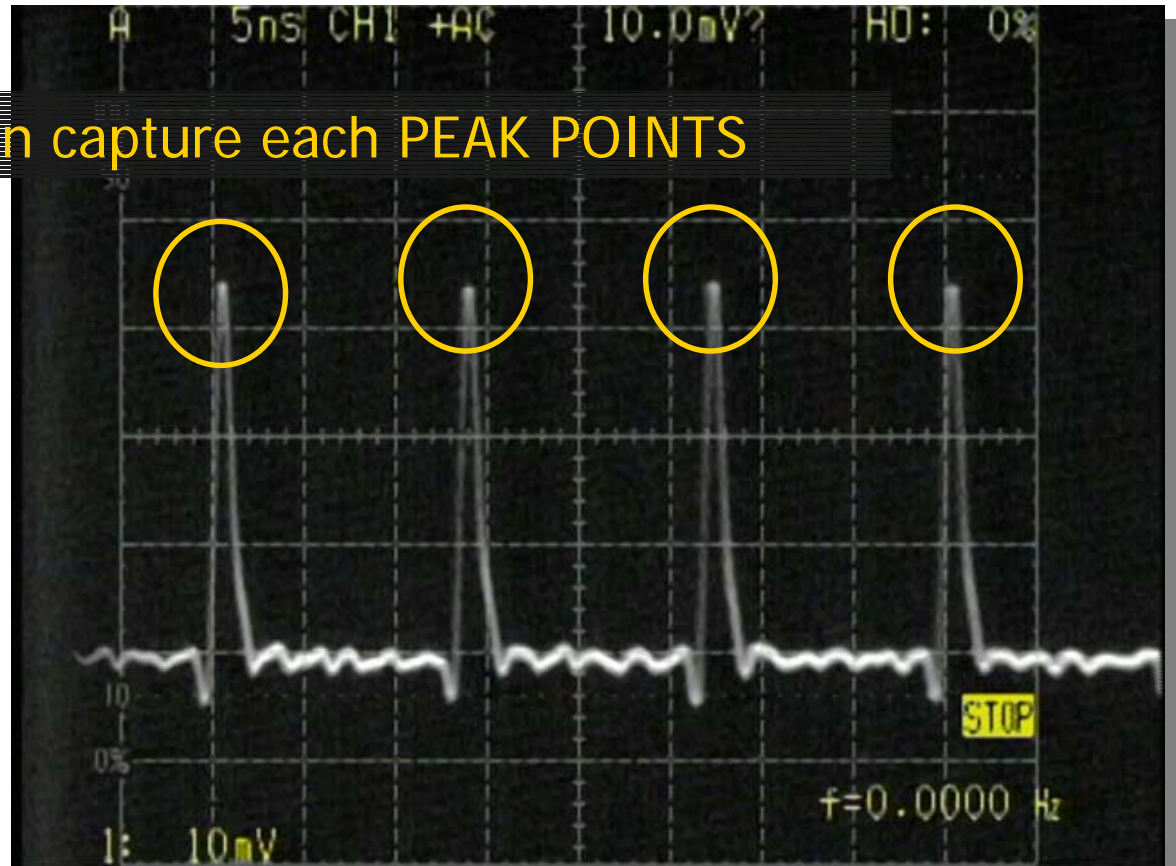
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*IWATSU STORAGE SCOPE TS-81000/80600*



# Laser

Analog Scope can capture each PEAK POINTS



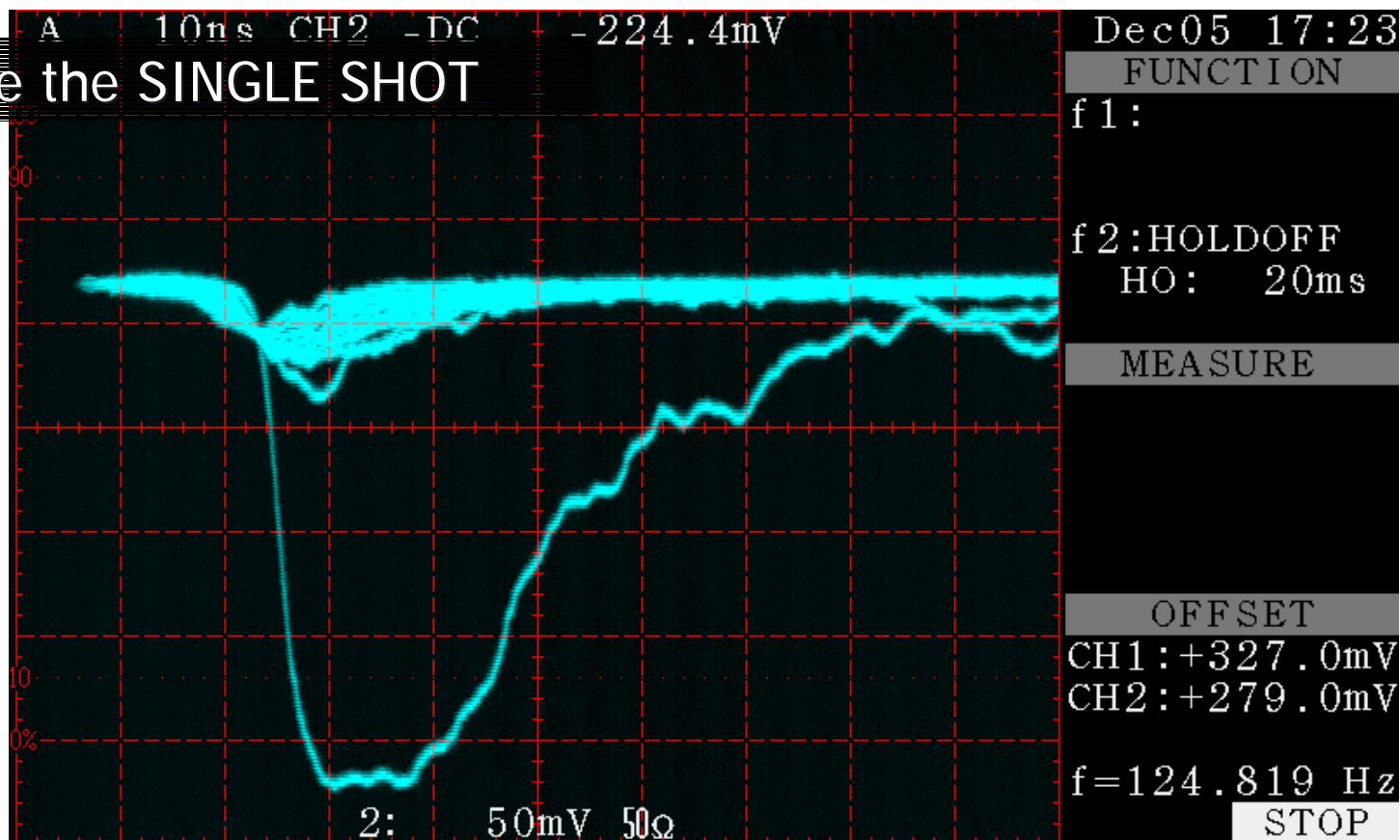
Waveform of TS-8500





# Photo multiplier tube (Observing of Cosmic rays)

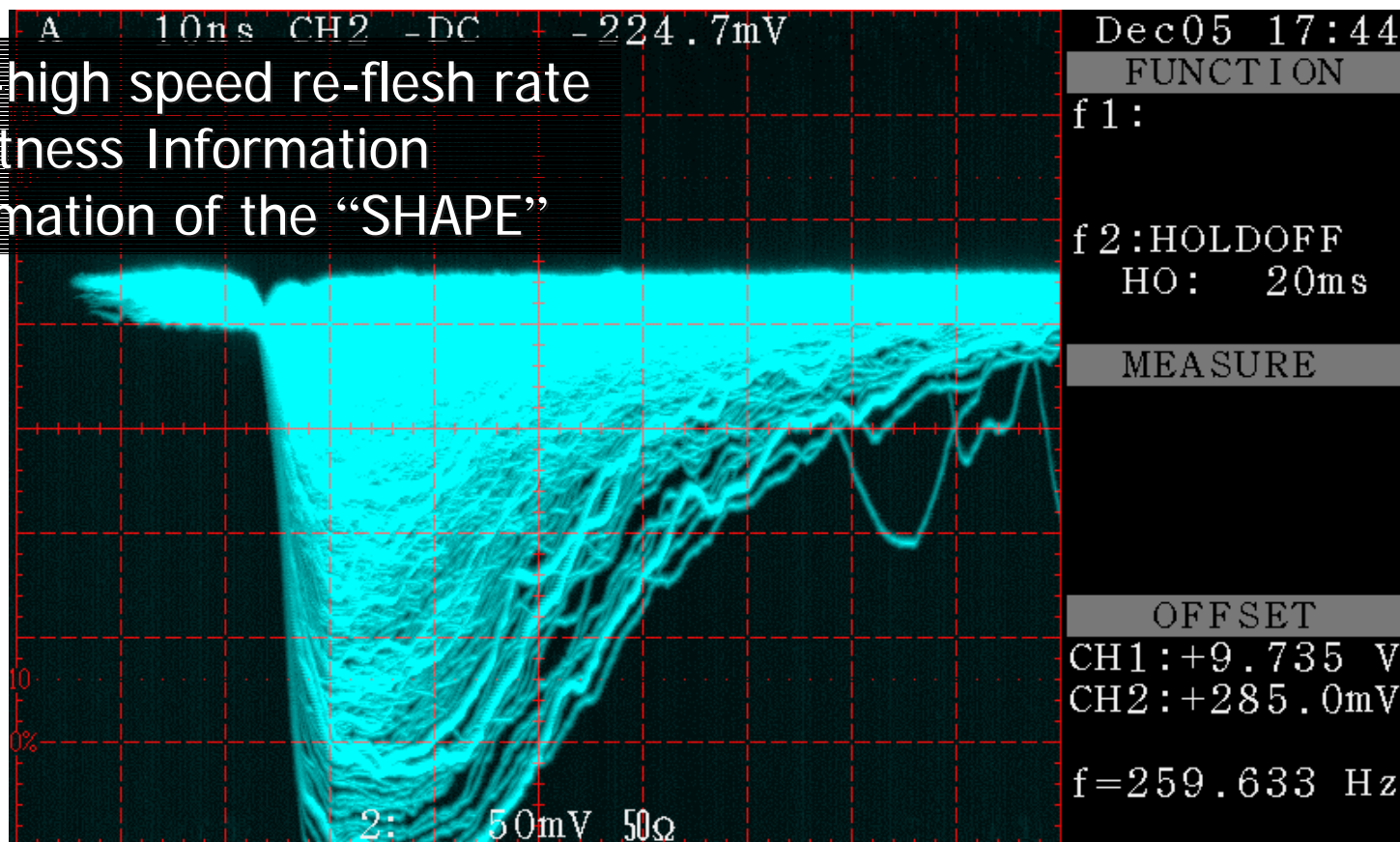
Capture the SINGLE SHOT





## Photo multiplier tube (Observing of Cosmic rays)

- Ultra-high speed re-flesh rate
- Brightness Information
- Information of the "SHAPE"







# The world captured only by ANALOG

- The human being observes
  - REAL TIME
    - Ultra high speed waveform re-flesh rate
  - THE SHAPE OF SIGNALS ARE CAPTURED WITH THE LINE (Different form Sampling points).
    - Equivalent to Ultra-high sampling rate
  - BRIGHTNESS INFORMATION
    - Digital Storage Scopes can not display brightness difference of writing speed

# IWATSU STORAGESCOPE TS-81000/80600

