
DIGITAL STORAGE SCOPE

DS - 8623

INTRODUCTION MANUAL

Version 2

IWATSU

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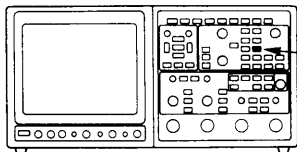
General Rules

The instruction manual for DS-8623 consists of "OPERATION" and "INTRODUCTION".

"INTRODUCTION" helps to roughly understand how to operate DS-8623, and enables those who will use a digital storage scope for the first time to try operating this DS-8623.

To know in detail the convenient way of measuring and the function of each part, refer to the above "OPERATION" as text.

◆ Nations and Conventions



◆ Panel illustration

The panel illustration at the top and right of the each page shows the locations of the keys used for operations as painted keys.

◆ Key notations

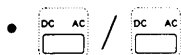


is used to indicate the actual key or switch.

dotted line surrounding the key is a tentative line used to clarify the key.



is used to indicate the actual control.

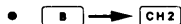


is used to indicate a toggle key. Pressing the key toggles between states.



is used to indicate all the necessary keys for the operation.

You can push the keys in any order, and you may need to push one key several times.



is used to indicate the key operation sequence.

◆ Notations in the operation procedure



is used to indicate the operation procedure.



is used to indicate the function to be selected.

◆ Others



Calls an operator's attention to matters dangerous for himself, to the trouble in devices and to the damage to them.



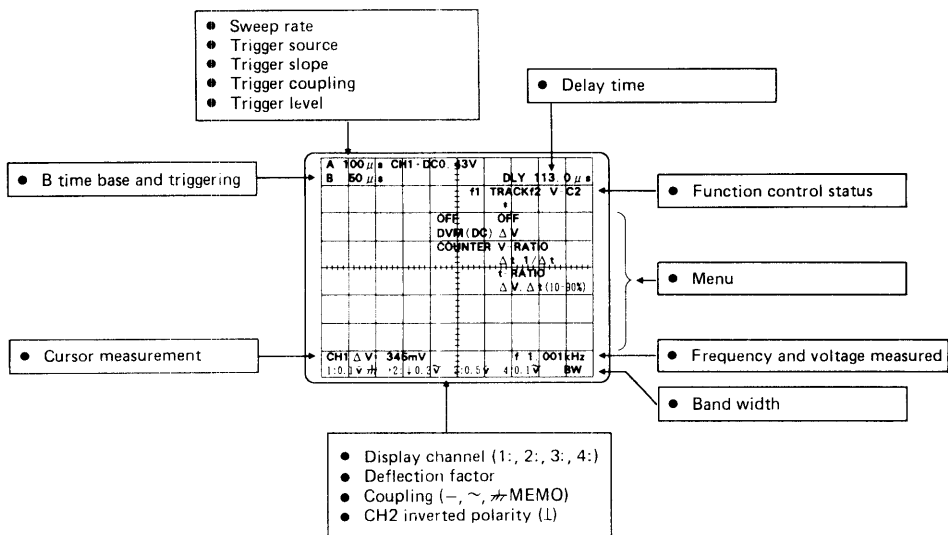
Introduces the matters to know for convenience, the other ways of operating and relevant keys, to give advice to operators.

One-point advice • Introduces the matters to know for convenience, the other ways of operating and relevant keys, to give advice to operators.

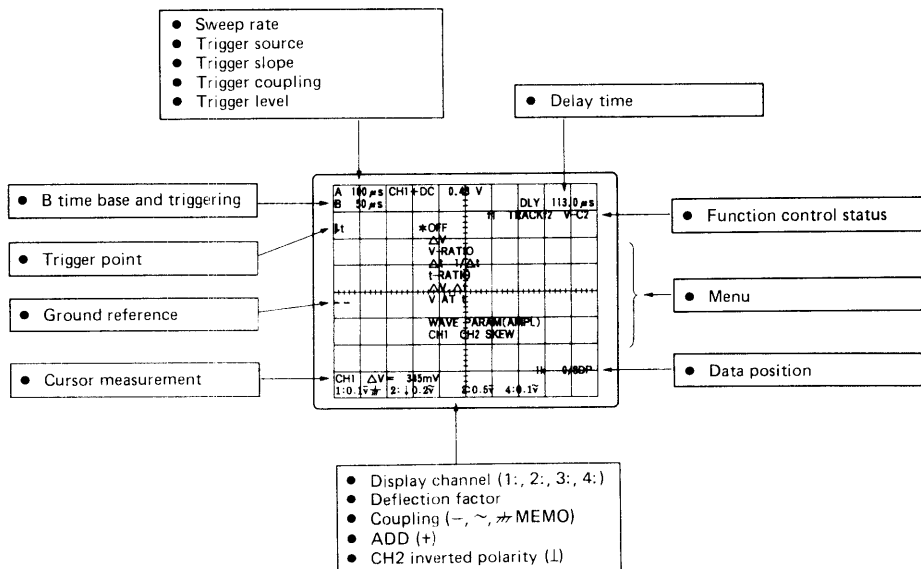


Viewing Area and On-Screen Message

Real Mode



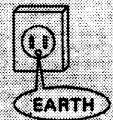
Storage Mode



Turning Power On and Off and Finishing Measurement

WARNING

- ◆ Follow the next rules for the safety operation when connecting the power cord. **Three-core type source**
 Check the line voltage and use the proper power cord suiting to the line voltage.
 Never use the wrong power cord.



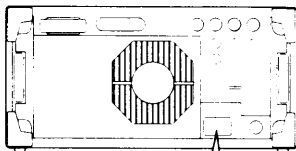
◆ Turning the power on.

POWER







■ ON
 ■ OFF

(Rear panel drawing)



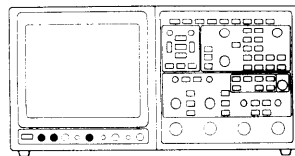
Inlet

- ① Push out the power switch and turn the power off position .
 - ② Insert the power cord plug into the inlet located on the rear panel of the digital storage scope.
 - ③ Insert the power cord plug into the outlet in the wall.
 - ④ Push the power switch and turn the power on position .
- In a short time, the trace and/or character READ-OUT are displayed. If not, turn the  knob clockwise. (This  knob is set fully counter-clockwise at the factory prior to shipment.
- ⑤ Start the measurement at the following pages.

◆ Setting Power to OFF

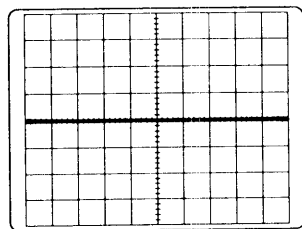
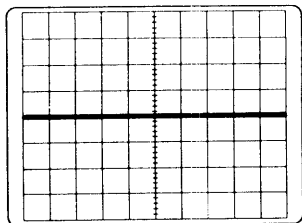
It does not matter if you set it to OFF in any order.

Adjusting Intensity and Focus



To obtain the best measurement circumstances, adjust the brightness and the clearness of trace and character as a basis of operation.

◆ INTEN (Intensity of trace)

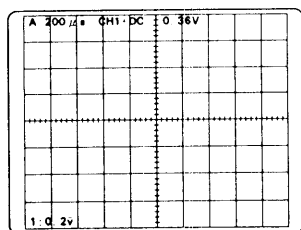
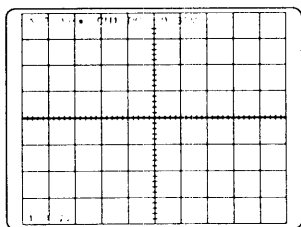


WAVE:

Do not increase the CRT intensity too highly. High intensity may result in eye irritation. When the instrument is left on under high intensity for a long time, this may burn the phosphor on the CRT face plate. Turn this control for appropriate intensity.



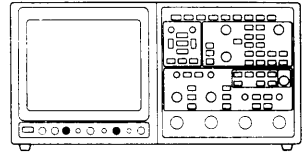
◆ FOCUS (Clearness)



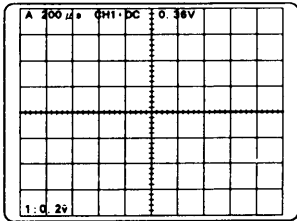
FOCUS:

Turn this control for clear trace and character.



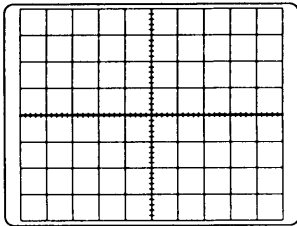


◆ READOUT (Character)

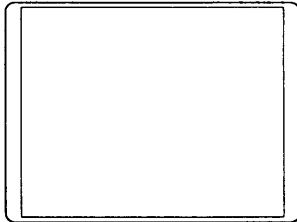


READOUT:

READOUT adjustment controls the intensity of character. Fully rotating this control counterclockwise stops displaying characters.

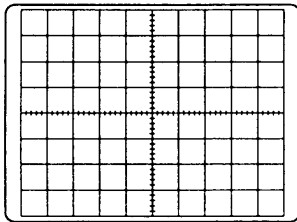


◆ SCALE (Scale illumination)

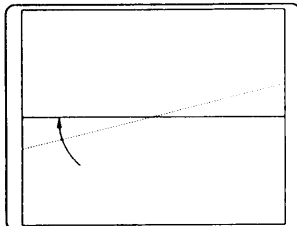


SCALE:

Turn this control to adjust the scale illumination.



◆ TRACE ROTATION



TRACE ROTATION:

Turn this control to make the trace parallel to the scale if it is tilted.

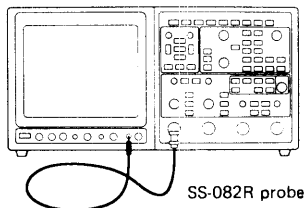


Displaying the CAL Waveform

(CAL signal is used for the probe phase compensation.)

Displaying the signal on the screen is the first step for the digital storage scope users. For a first-time user of DS-8623, the following steps describe how to display a signal on the screen allowing the provided CAL signal to be fed to the CH1 for display.

◆ Preliminary setup

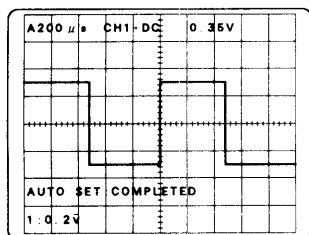


Using the accessory probe (SS-082R), apply the CAL signal (calibration signal) to the CH1 input.

◆ Key operation



◆ Operation procedure



① Press the **AUTO SET** key.

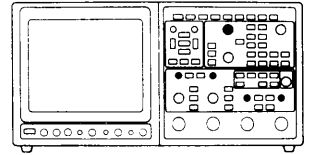
- "AUTO SET COMPLETED" appears on the screen and the CAL waveform is displayed after completion of AUTO SET.

One-point advice · When the AUTO SET function is selected, the digital storage scope is automatically set to an appropriate setup after the input signal amplitude and frequency are checked.



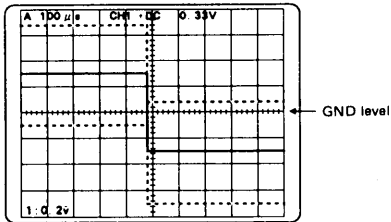
Positioning Signals


POSITION



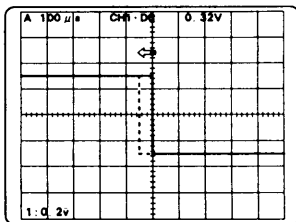
Enables to move signals so that they can be easily monitored.


Positioning Signals Vertically



- ① Using the  knob, position the signal.

Positioning Signals Horizontally

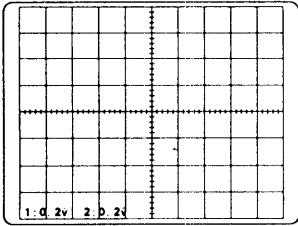
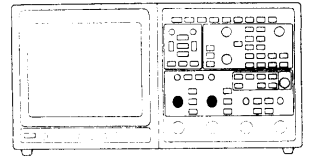


- ① Turn the  control to shift waveform for the best viewing.


Changing Signal Amplitude

VOLTS/DIV VARIABLE


Changes the signal amplitude to obtain the appropriate size.



Selecting signal amplitude secondarily

- ① Turn the  (outer) knob, select deflection factor.

Continuously changing signal amplitude

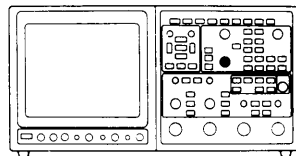
- ① Turn the  (inner) knob, change amplitude continuously.

One-point advice · Signal amplitude can be monitored on the screen.

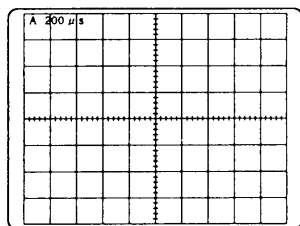


Magnifying and Reducing Signals Horizontally

A SEC/DIV



Magnifies or reduces display signals horizontally to select a sweep rate appropriate for monitoring them.



Selecting a sweep rate secondarily (A sweep to be made normally)


① Turn the



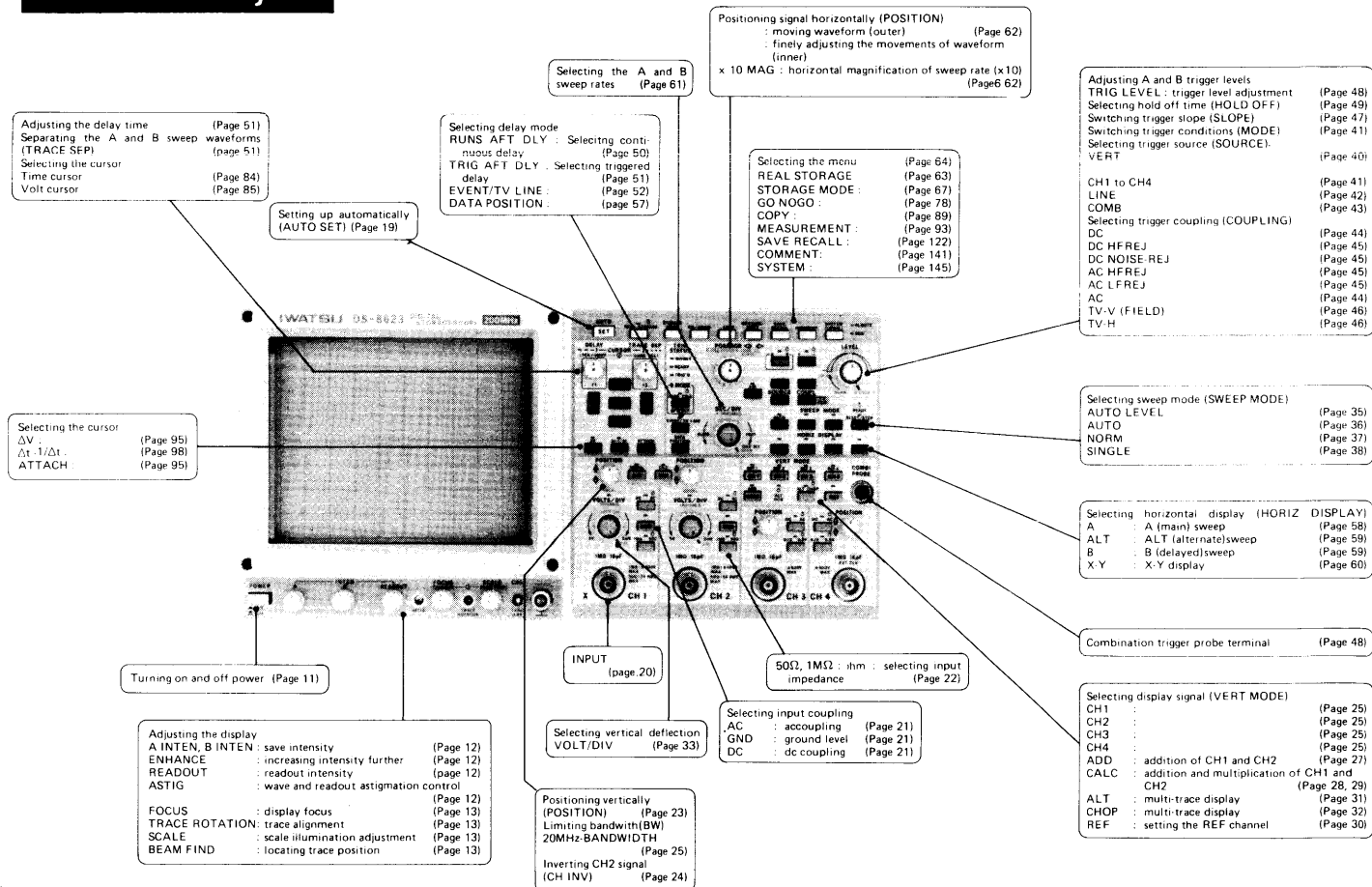
control and select a sweep rate.

One-point advice • A sweep rate can be checked on the screen.



- Press the  key to magnify a waveform by ten times horizontally in reference to the center of the screen. To return the waveform as it was, press the key again.

Front Panel Layout



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