Dry Cells and a Miniature bulb

RFAnalog

One Dry Cell

→ 1 (A) → 1 (A)

1.5 (   )

1.5 (V)

The Law of Ohm
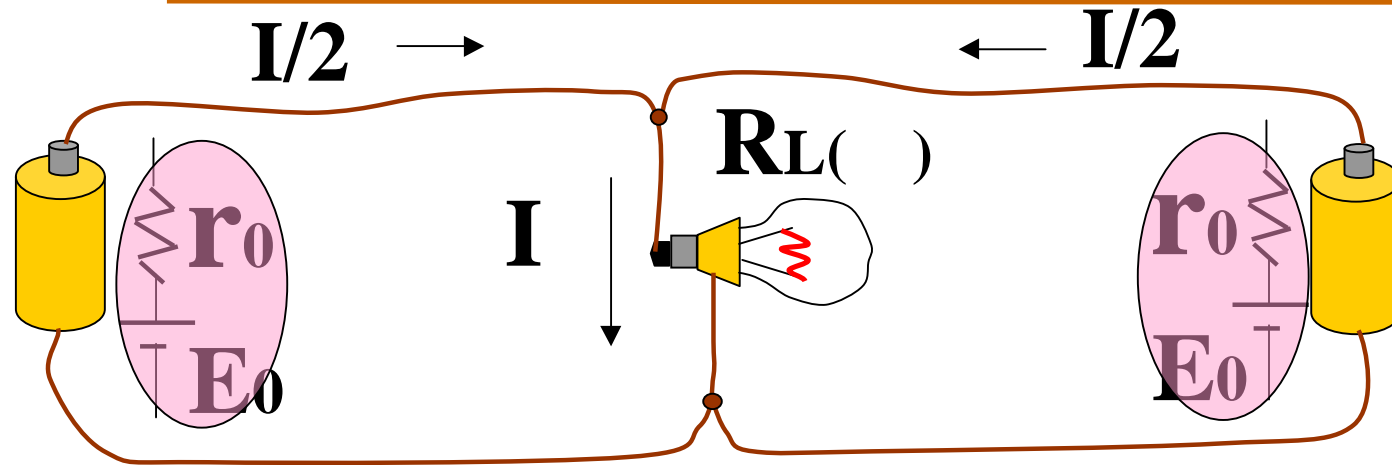
It is a law of
Although
notheing has
changed at
miniature bulb
side., the current
from a battery
will always be
by halves why.

→ 1 (A)

1.5 (   )

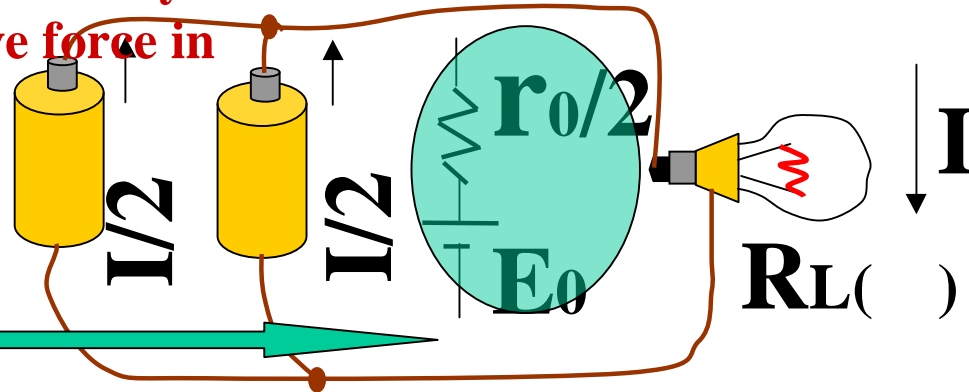1.5 (V) ↑ 0.5 (A) ↑ 0.5 (A) 1.5(V) **The Law of Ohm**

A pair of a Dry Cell

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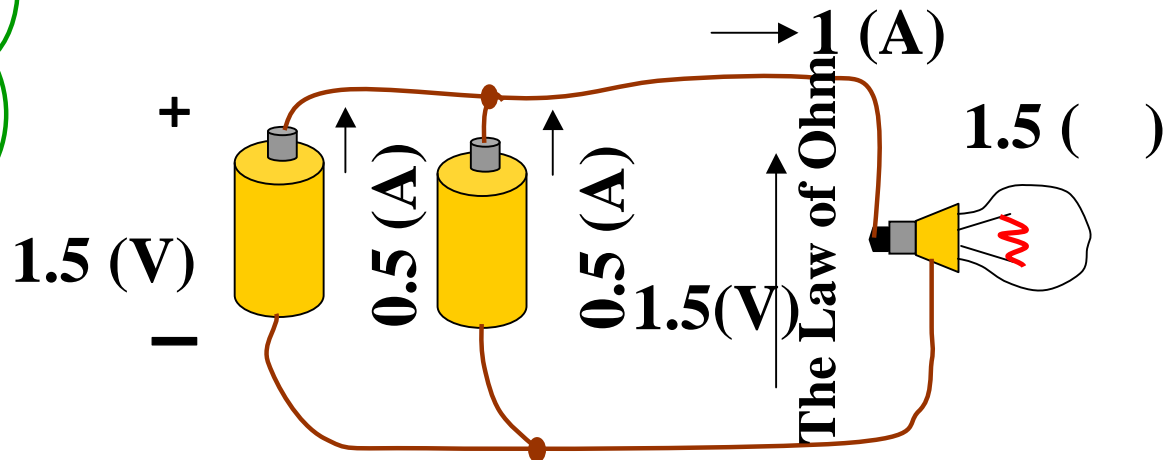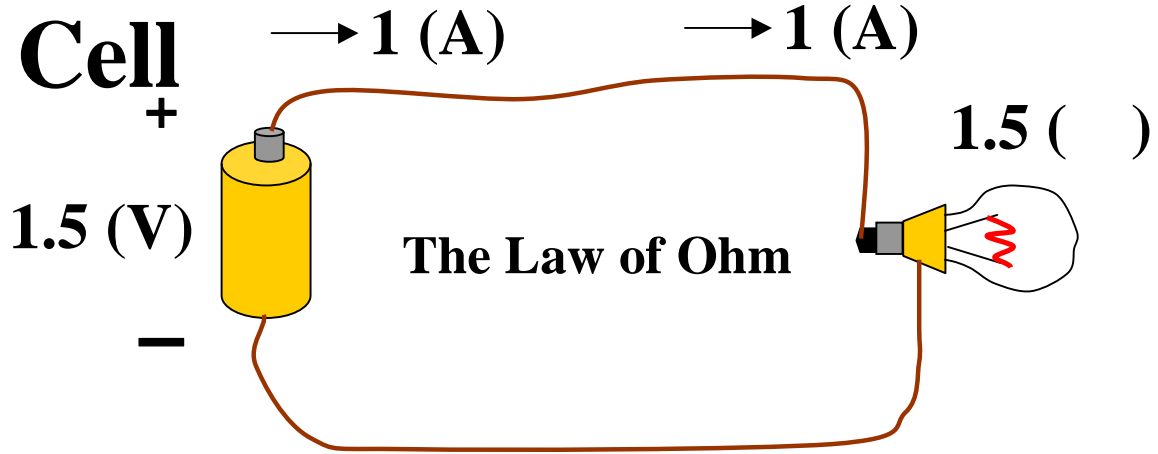
Use Thevenin's theorem

$I/2 \rightarrow$ $\leftarrow I/2$

$R_L(\ \ )$

I

r_0

E_0

r_0

E_0

**I represent a cullent flow in the dry cell.
r0 represent internal resistance in a dry
cell. E0 represent Electro-motive force in
a dry cell.**

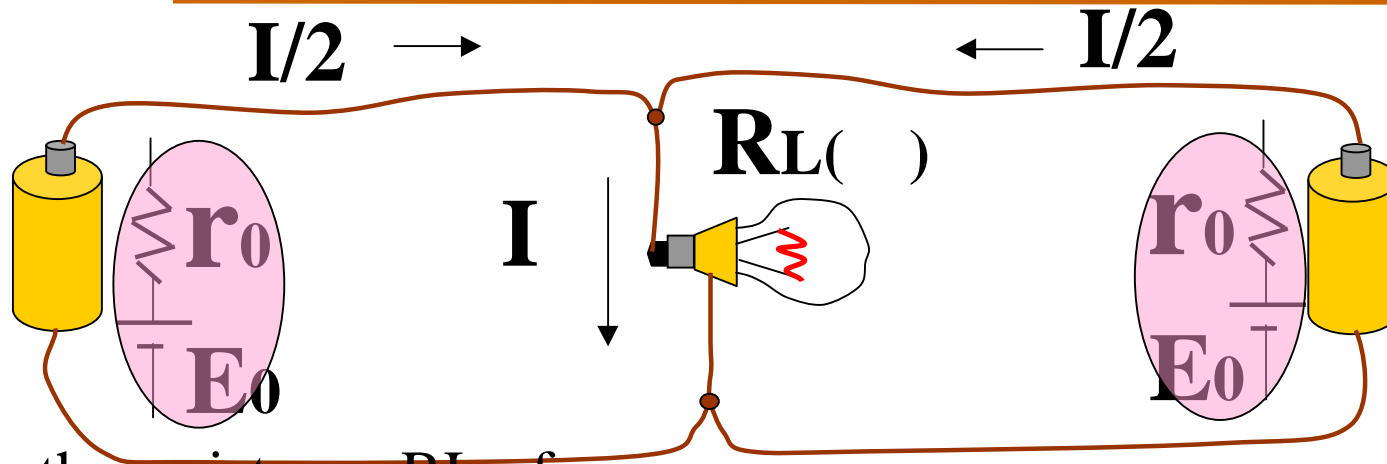$I = E_0/(r_0/2 + R_L)$

Parallel dry cell side ,
using Thevenin's theorem,
     it be changes.

$I/2$ $I/2$ $r_0/2$

E_0

$R_L(\ \ )$ I

On any conditions, the current of a dry cell becomes half.

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Optimal resistance combination of a dry cell and a miniature bulb

$I/2 \rightarrow$ $\leftarrow I/2$

$R_L(\quad)$

r_0

I

E_0

r_0

E_0

Whenever the resistance RL of a miniature bulb of the conditions from which the current which flows from each dry cell serves as half of the current which flows into a miniature bulb, is a half of the internal resistance r0 of a dry cell?

$I/2$ $I/2$

$r_0/2$

E_0

$\rightarrow I = E_0/r_0$

$R_L = r_0/2$
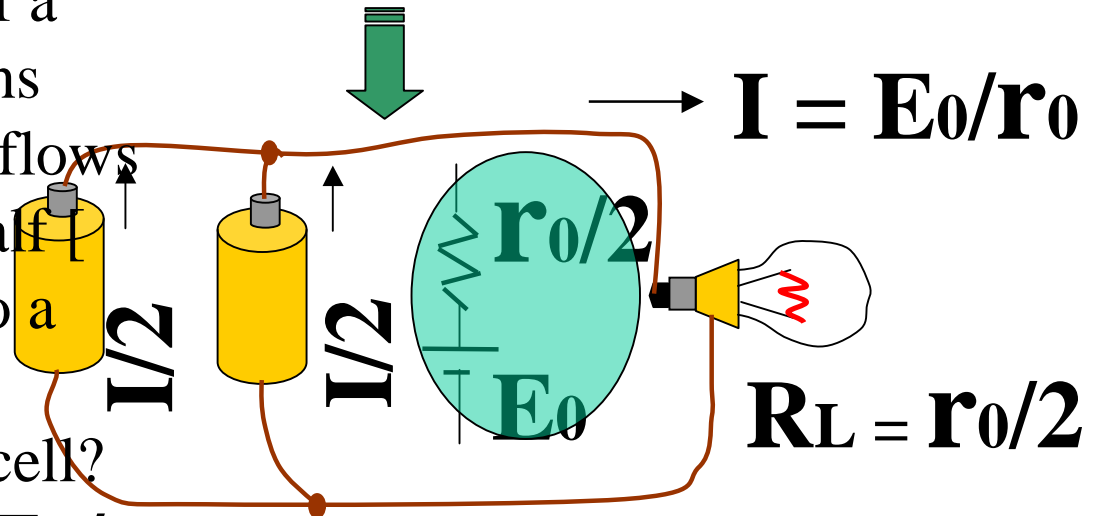
$$I = E_0/(r_0/2 + R_L) = E_0/r_0$$

In case of R matching, maximum electric power is sent

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☺ **RFAnalog theory   Allways consider Refrection**

The law of Ohm's Law for a dry cell, a miniature bulb

RFAnalog

Time:T → 1 (A)   Incident   1 (A) ←

\+   0.5 (A)   1
                   (A)   0.5 (A)
1.5 (V)   Refrection   1.5 (V)
\-
        1.5(V)   (A)   1.5 ( )   1.5(V)

Ohm's Low   Ohm's Low

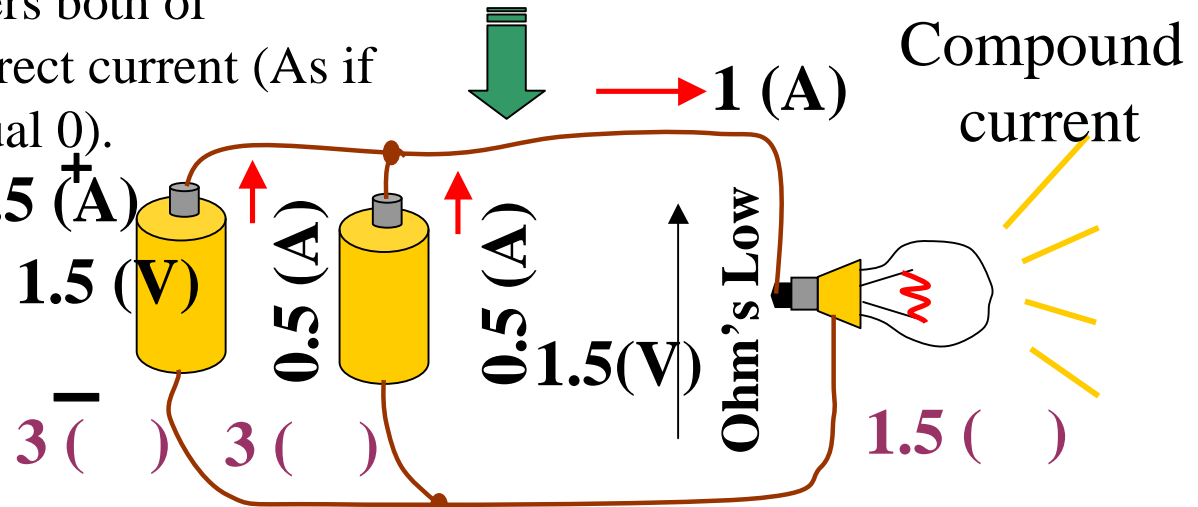3 ( )   3 ( )
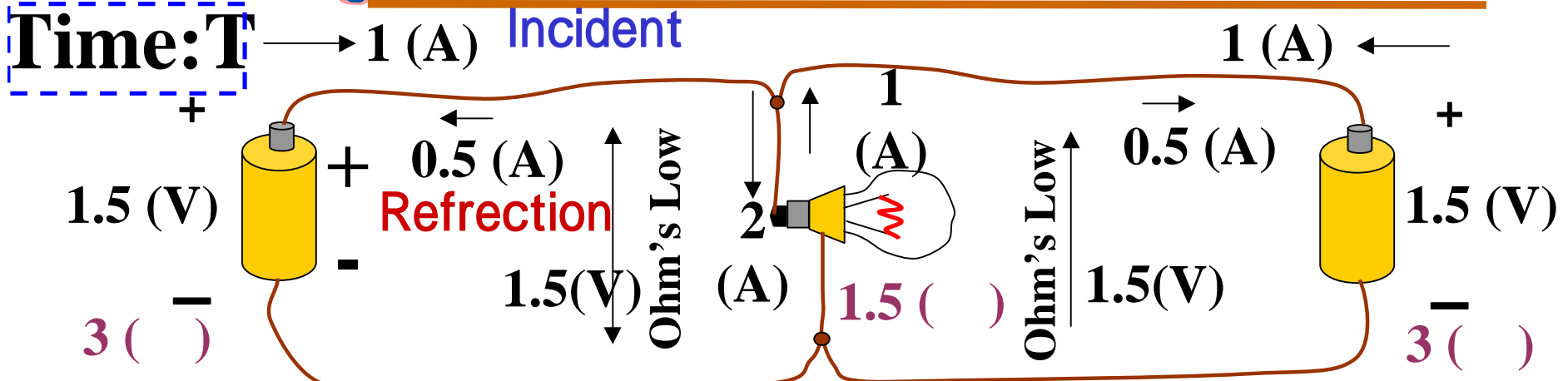
Mr. RFAnalog's theory considers both of incidence and reflection of a direct current (As if frequency infinitely nearly equal 0).

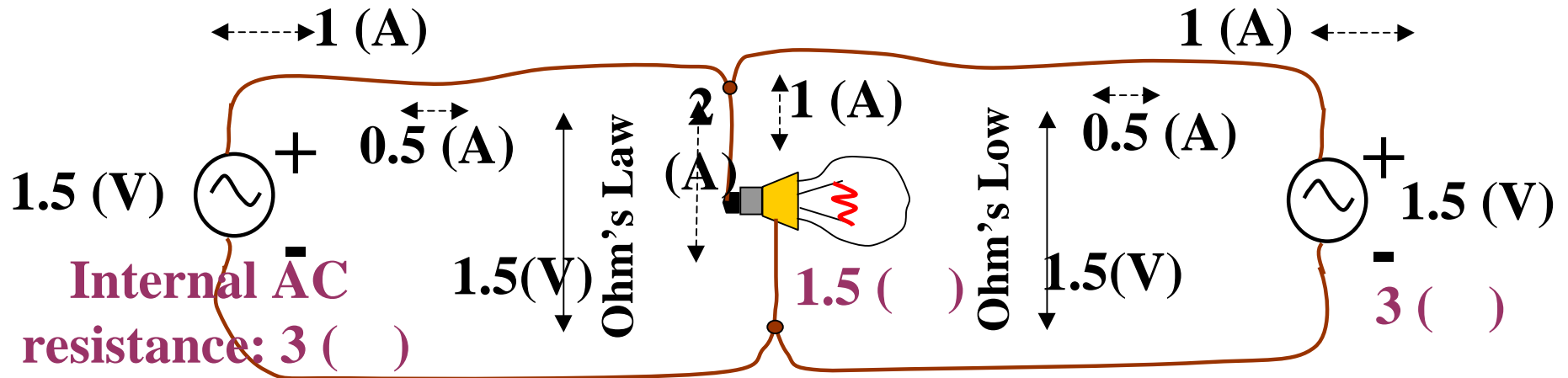**Dry Cell side 1 - 0.5 = 0.5 (A)**

Bulb side 2 - 1 = 1 (A)

Compound current at the arbitrary time T

Electric meter is measured.

Compound current

→ 1 (A)

1.5 (V)   0.5 (A)   0.5 (A)   1.5(V)

Ohm's Low

3 ( ) 3 ( )   1.5 ( )

Even if it uses parallel regardless of the length of the electromotive force of a battery, current, internal resistance, or an electric wire, neither the internal resistance of two parallel batteries nor electromotive force changes.
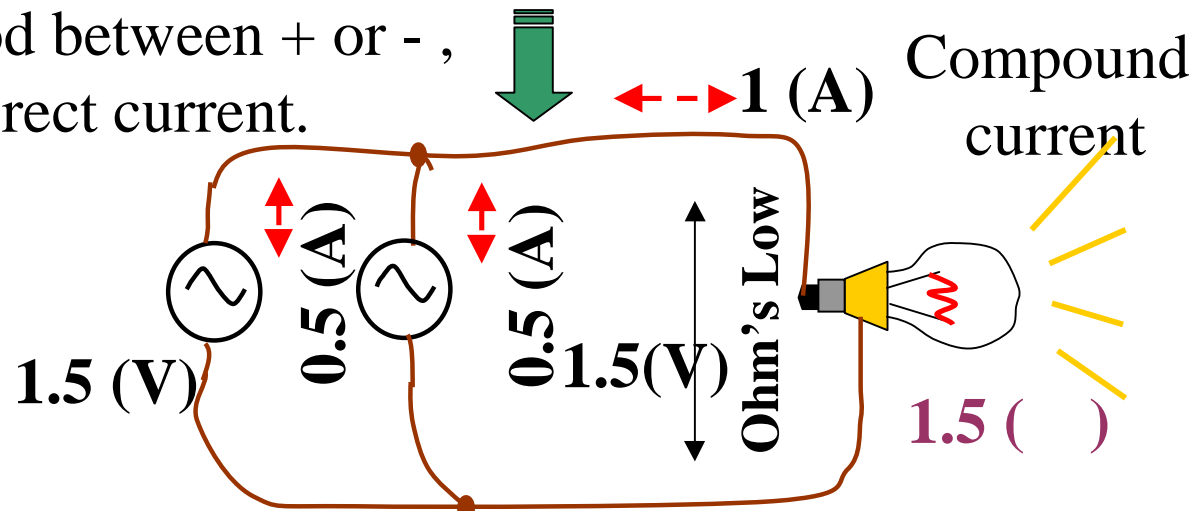
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The law of Ohm ,AC, and a miniature bulb

1 (A)   **1 (A)**

0.5 (A)   **2**   **1 (A)**   **0.5 (A)**

1.5 (V)   **+**   **(A)**   **+** **1.5 (V)**

Ohm's Law   Ohm's Low

Internal AC   **1.5(V)**   **1.5 ( )**   **1.5(V)**   **-**

resistance: 3 ( )   **3 ( )**

If dividing the time period between + or - ,
it is the same case as a direct current.

Compound current

1 (A)

(+/-)1 - (+/-) 0.5

= (+/-) 0.5 (A)

0.5 (A)   **0.5 (A)**   Ohm's Low

(-/+)1 - (-/+) 0.5   **1.5 (V)**   **1.5(V)**

**= (-/+) 0.5 (A)**   **1.5 ( )**

In practice, since the voltage and current from a power supply are never constant and it
changes, such a view will become important if the length of a line becomes long by
high frequency.

The difference between an analog, digital ones, and RF

Physicochemically measurable things, such as sound, electricity and electromagnetic waves (an electric wave, light, and radiation), frequency, heat, time, space, and gravity, or the thing decided by human feeling, such as a hobby and an idea, liking, a tendency,love
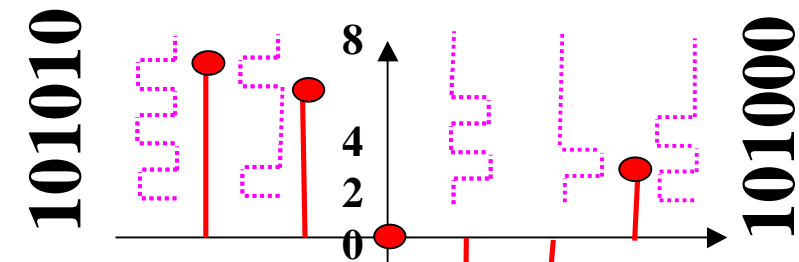
Analog

Change of a limited and complicated

continuous quantity is expressed.
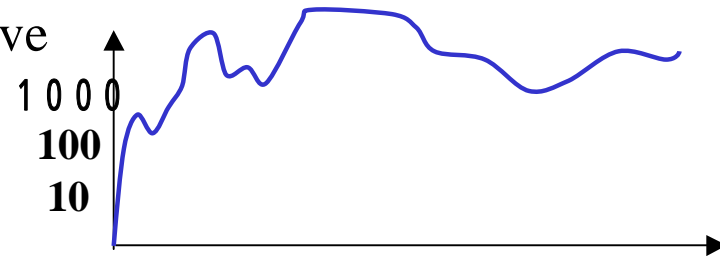
Digital

Change of a limited and infinite

discontinuous quantity is expressed.

RF(Radio Frequency)

Continuation in limited and infinite time and frequency space and change of a discontinuous quantity are denoted by a comparatively simple waveform.

100
10

Time,Frequency,Space

101010

8
4
2
0

101000

0

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