

- Description of Operation -

A. Speed/CDC Sensor (Speed/CDC Signal Transmitter)

a) Speed Reed Switch

Reed Switch generates a single pulse signal per wheel rotation.

b) CDC Reed Switch

Reed Switch generates a single pulse signal per crank rotation.

c) Pulse Shaper

Pulse Shaper adjusts waveform of the pulse signal from Reed Switch to transmit to CPU Controller.

d) CPU Controller

Fig.1 shows reed switch signals, time intervals of the period calculation, and data signal at the transmitter coil.

A signal from pulse shaper is input into CPU, and the period of the signals in each time interval is calculated.

Data signal including signal period and number of signals are transmitted every time interval from 1.3 to 1.5 sec.

e) Data Signal Amplifier

Data Signal Amplifier amplifies the data signal from CPU Controller and transmits to Data Signal Transmitter Coil.

f) Data Signal Transmitter Coil

As shown in Fig.1, Data Signal Transmitter Coil transmits the amplified signal from Data Signal Amplifier as an electromagnetic wave of $26.4\text{kHz} \pm 10\%$.

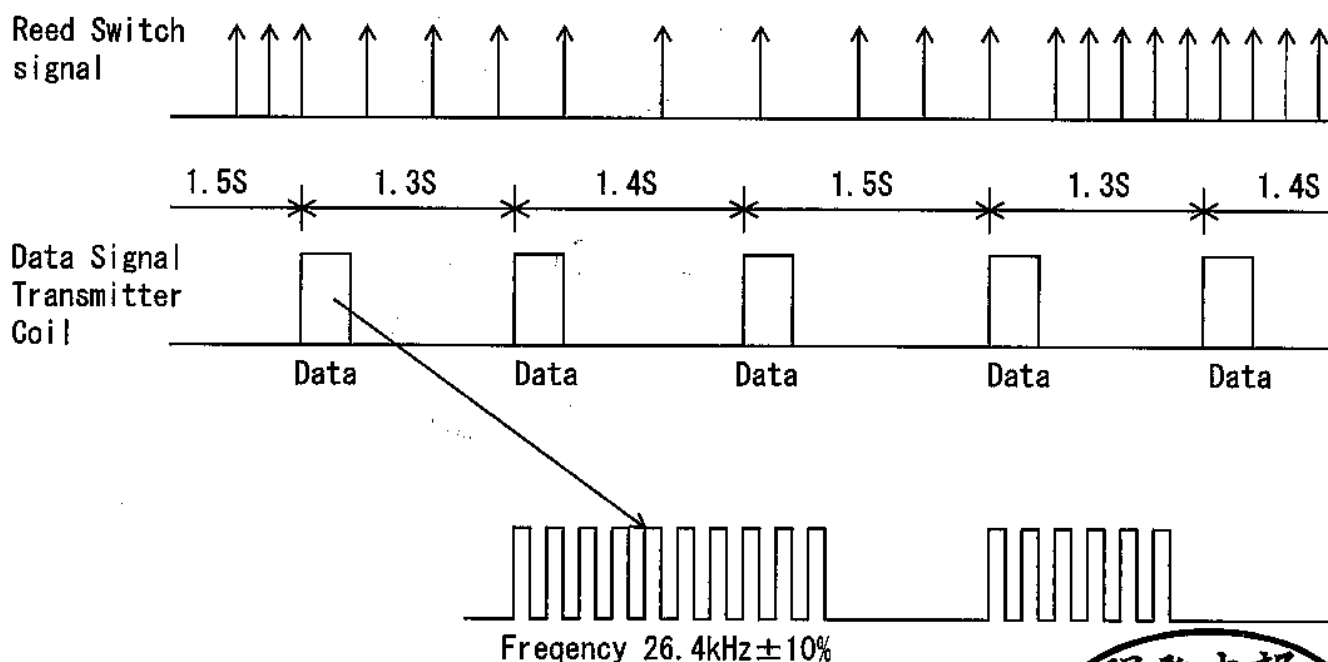
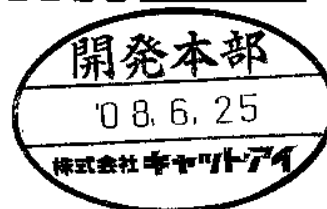


Fig. 1



- Description of Operation -

B. Main Unit (Receiver)

a) Data Signal Receiver Coil

Data Signal Receiver Coil detects an electromagnetic wave of 26.4kHz.

b) Data Signal RF Amplifier

Data Signal RF Amplifier amplifies the data signal from Data Signal Receiver Coil.

c) Data Signal Pulse Shaper

Data Signal Pulse Shaper adjusts waveform of the amplified signal to CPU Controller.

d) CPU Controller

CPU Controller computes information such as speed, CDC and distance by calculating the signal pulse from Data Signal Pulse Shaper.

e) LCD Display

LCD Display represents the information computed by CPU Controller on the screen.

