Vol .1

MODEL : DN-AM110

DYNAMIC STRAIN AMPLIFIER

USER'S MANUAL

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1. Outline

This Amplifier is Dynamic Strain Measure meter of DC Voltage type.

• Feature

- Multistage Filter construction, Filter-enable·disable function
- Zero adjustment by Volume
- Filtering, Bridge Voltage, Amplitude Adjustable by Dip-S/W

2. Specification

① Measurement marks
: 1CH / EA

② Measurement established form
: Deflection method

③ Workun Gauge
: 350Ω(Bridge voltage 10V), 120Ω(Bridge voltage 5V)

④ Gauge rate
: 2.00

⑤ Bridge voltage
: 정전압 DC 5V, 10V(Dip switch 선택)

⑥ Measurement range :
2.5V -> 0 ~ 1000 μstrain
5V -> 0 ~ 2000 μstrain
10V -> 0 ~ 4000 μstrain

⑦ Zero adjustment range
: ±10 % F.S

⑧ Gain adjustment range
: ±10 %

⑨ Sensitivity
: 10 μstrain

⑩ Output
: DC 0 ~ ±10V or 4~20mA

⑪ Non-linearity
: 0.02% F.S

⑫ S/N rate (Signal/Noise rate)
: 51dB
⑬ Response frequency characteristic
: DC~10kHz(-3dB)
⑭ Low Pass Filter
: 10Hz, 100Hz, 1kHz, PASS
⑮ Working temperature range
: -10 ~ +60℃
⑯ Temperature Drift
: Zero movement -> ±1 μstrain/℃ 이내
Sensitivity change -> ±0.05% F.S/℃ 이내
⑰ Power
: AC 85 ~ 265V 50/60Hz

3. Calibration

① Gauge 350Ω internal CAL Resister 87kΩ(1%) -> 2000μstrain(1mV/V)
② Gauge 120Ω internal CAL Resister 30kΩ(1%) -> 2000μstrain(1mV/V)

Vout = $Sensitivity(mV/V) \times B.V(V) \times Gain$
Ex1) CAL = ON, Gain = 1000, B.V = 10V -> OUTPUT = 10V 교정
Ex2) CAL = ON, Gain = 500, B.V = 10V -> OUTPUT = 5V 교정

4. Option

DC 4 ~ 20mA Current OUT

5. How to use

Filter adjustment (ON = 1, OFF = 0)

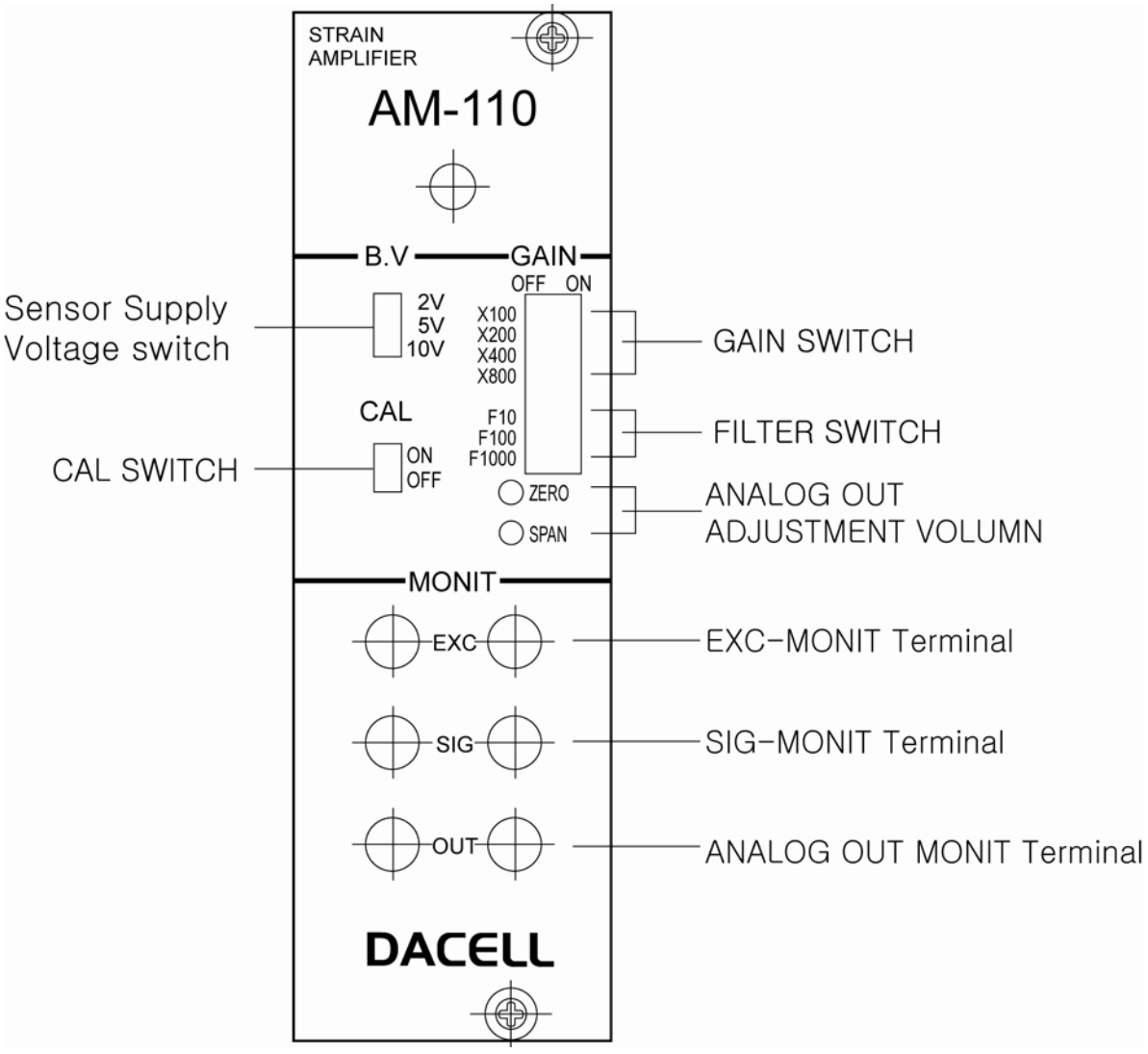
DIP SWITCH	10Hz	100Hz	1kHz	PASS
SW3	1	0	0	0
SW2	0	1	0	0
SW1	0	0	1	0

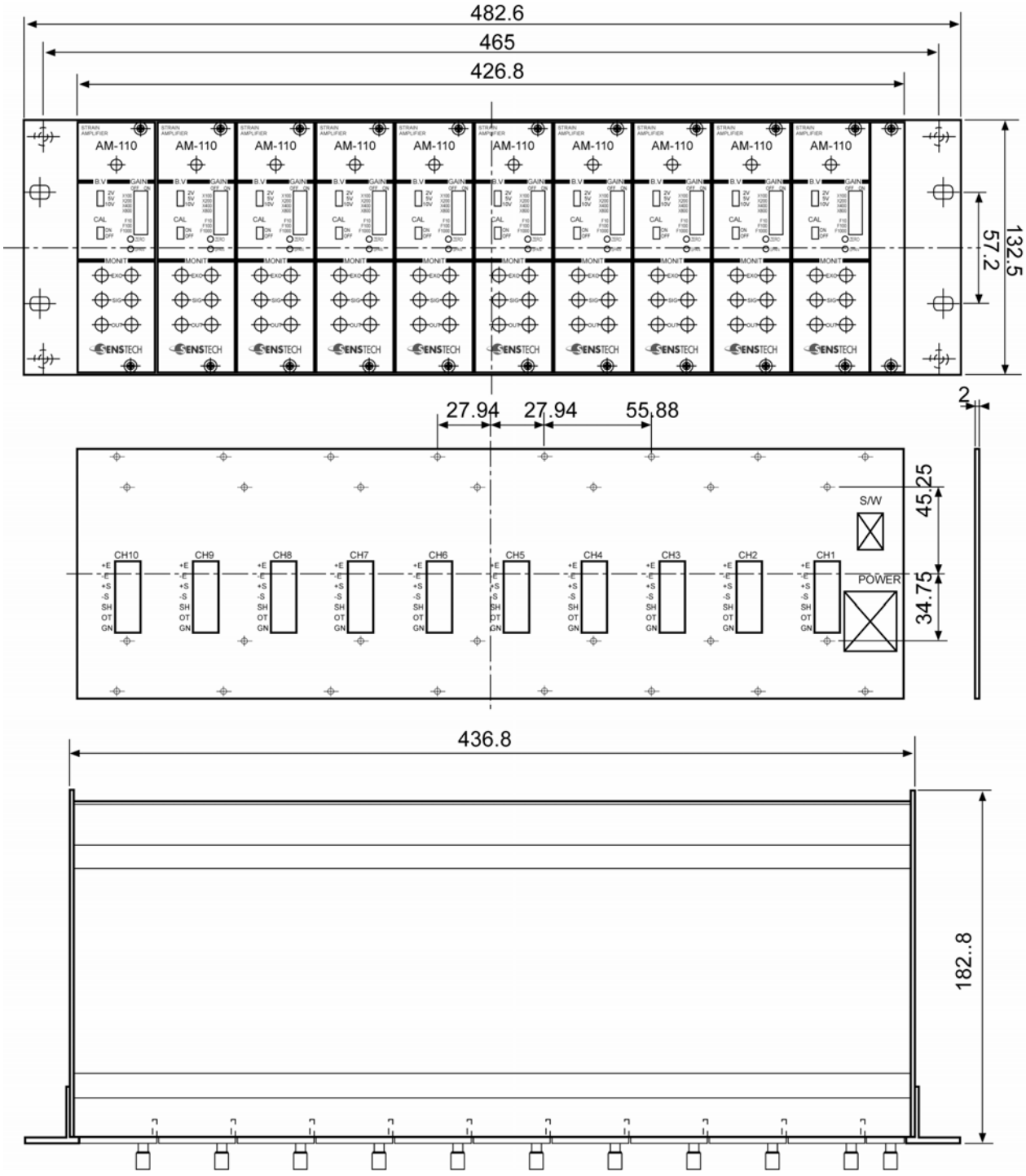
② Gain adjustment (ON = 1, OFF = 0)

DIP SWITCH	X1	X100	X200	X300	X400	X500	X600	X700
SW8(X100)	0	1	0	1	0	1	0	1
SW7(X200)	0	0	1	1	0	0	1	1
SW6(X400)	0	0	0	0	1	1	1	1
SW5(X800)	0	0	0	0	0	0	0	0

DIP SWITCH	X800	X900	X1000	X1100	X1200	X1300	X1400	X1500
SW8(X100)	0	1	0	1	0	1	0	1
SW7(X200)	0	0	1	1	0	0	1	1
SW6(X400)	0	0	0	0	1	1	1	1
SW5(X800)	1	1	1	1	1	1	1	1

6. Dimension




482.6
465
426.8
AM-110
132.5
57.2
27.94
27.94
55.88
2
45.25
34.75
S/W
POWER
CH10
CH9
CH8
CH7
CH6
CH5
CH4
CH3
CH2
CH1
436.8
182.8