

Automatic insulation testing and AC/DC voltage endurance testing

# Multi-point Automatic Testing for High Voltages

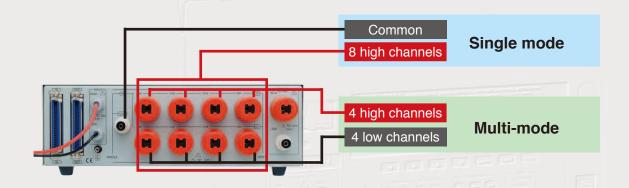
# Max. 32 ch

The 3930 is a high voltage scanner that allows high voltage inputs to be output from any channel. A single unit is equipped with 8 channels (using single mode), and up to four units can be connected to give a total of 32 channels. In addition, the 3930 can be used in combination with the AUTOMATIC INSULATION/WITHSTANDING HITESTER 3153, displaying its capabilities as an unattended automatic testing device for multiple point insulation and AC/DC voltage endurance testing.

### Emphasis on Safety The 3030 feetures isolated hi

The 3930 features isolated high voltage input and output, as well as insulated control signal lines and an insulated power cord. Further, when multiple units are connected, the 3930 can detect wrongly set (duplicated) IDs and stop all output.

The 3930 has two operation modes, single mode and multimode. The single mode has a common channel with eight high channels, while the multi-mode has four high and four low channels, and the 3930 can scan any point on these channels.





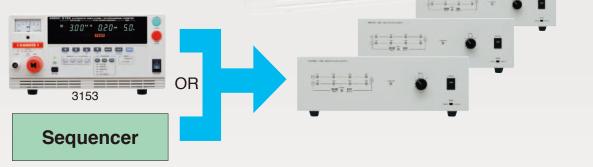


## Control the 3930 using a multi-purpose sequencer

In addition its control using the 3153's program function, the 3930 is a multipurpose high voltage scanner that can be controlled using general logic and a sequencer.

A maximum of four units can be connected at any one time.

●When using the 3930 in combination with the 3153, a separate power source is not necessary, since power is supplied from the control signal input connector.



#### ■ Functions

Operation modes : Multi- and single modes

Mode setting method : External switch

Number of channels : Multi-mode; 4 high channels and 4 low channels

Single mode; 8 high channels and a common channel

: AC 5 kV/DC 5 kV Rated voltage used

Operation display : The lamp lights when power is supplied to the unit

The lamp lights when the specified channels are used

Control method : General-purpose control

#### ■ Relay area

Maximum open and : 5000 V DC, 5000 V AC

closed voltage

: 1.0 A (open and closed capacity: 50 W) Maximum open and

closed current

Contact point indirect :  $500 \text{ m}\Omega$  or less, with 1 mA AC

contact resistance

Contact point maximum: 50 W

capacity

Operation time : 6 ms or less Recovery time : 6 ms or less

#### ■ Control signal

ID authentication signal : ID\_XE\_OUT: ID exists (X; 0 to 3)

ID\_XE\_OUT: ID overlapping (X; 0 to 3)

Signal level : The signal level voltage (Viso v) is input externally, and

the voltage (Viso\_v) must be within the range 5 to 24 V : Hi; Viso\_v + 1.0 V max., Viso\_v - 1.5 V min.

Input signal level

Lo; Viso\_v - 4.0 V max., Viso\_com - 0.5 V min.

Output signal level : Open collector output

(with no load) Hi; VISO\_v max, VISO\_v - 0.5 V min.

Lo; Viso\_com + 0.5 V max., Viso\_com- 0.5 V min.

#### ■ General specifications

: Standards for current leakage when applying voltage Degree of Accuracy

Single mode, no output cable, and all output relays

turned on for both AC and DC.

When applying DC (1000 V);  $0.1~\mu A$  or less/unit When applying AC (5 kV, 50/60 Hz only); 0.4 mA or

(Differs depending on the status of the connection cable) : 0°C to 40°C, 80% rh or less (no condensation) Operation temperature

Storage temperature : -10°C to 50°C, 90% rh or less (no condensation)

range

Operation environment : Indoors, altitude of 2000 m or less Withstand voltage : High voltage terminal - between the chassis:

AC 10 kV, 10 mA, 1 min

: Vscv 24 V DC, ±10% Power (applied using the control signal input connector)

Maximum rated power : 12 VA

: 316 mm (12.44 in)W × 100 mm (3.94 in)H × 350 mm Dimensions and mass

(13.78 in)D, 4.2 kg (148.1 oz)

: Control input connector connection cable ×1, H.V. Test Standard accessories

lead 9615-01 (red) ×8, H.V. Test lead (black) ×1, Grounding cable ×1, Instruction manual ×1

Conformance tandards : EMC; EN61326-1:1997+A1:1998 CLASS A

Safety; EN61010-1:1993+A2:1995

Power supply unit

Degree of pollution: 2, overvoltage category I (anticipated overvoltage category: 330 V)

Other : Output prevention protection circuit using the ID

authentication signal

Output prevention protection circuit using the mode

authentication signal

LED display of the terminal being output

#### Model: HIGH VOLTAGE SCANNER 3930

Model No. (Order Code) (Note)

3930 (For the 3153 and similar products)

Accessories: Control input connector connection cable ×1, H.V. Test lead 9615-01 (red) ×8, H.V. Test lead (black) ×1, Grounding cable ×1, Instruction manual ×1



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