# **MULTISPAN**

# **Product Manual**

16 Channel Scanner

# MS-5716 R



#### Multispan Control Instruments Pvt Ltd

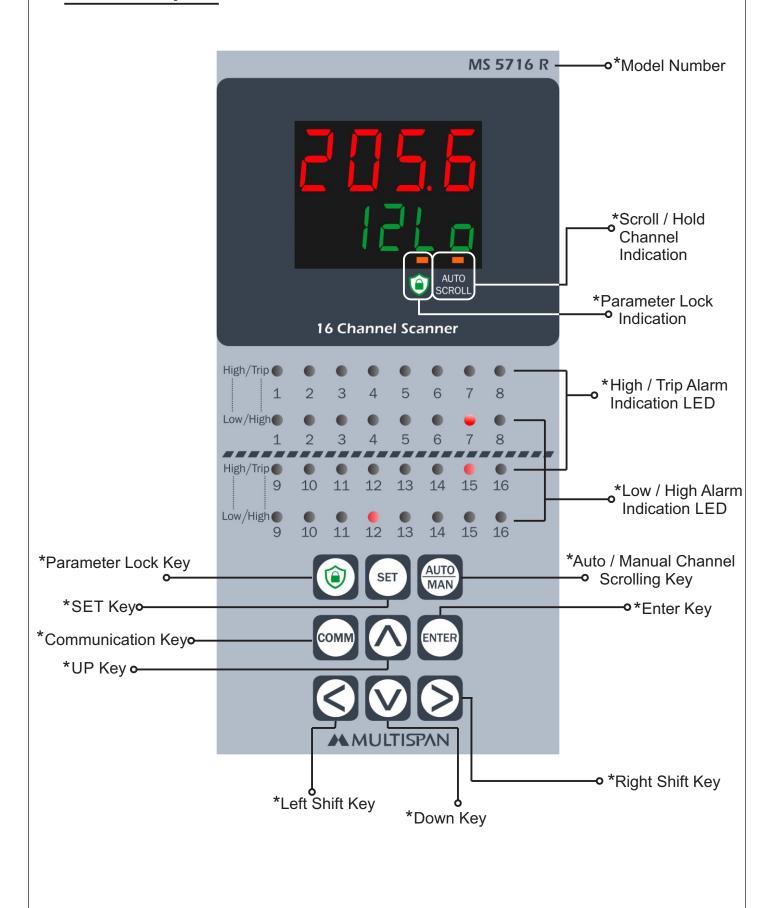
72/B, Phase 1, GIDC Estate, Vatva, Ahmedabad-382445, Gujarat, India.

+91-79-40029250

+91-9978991471

# **Product Inception**





#### **Technical Specification**

| Model                    | MS-5716 R  |   |  |
|--------------------------|--|---|--|
| Display                  | UPPER: 4 Digit 7 seg 0.70", RED LED Display<br>LOWER: 4 Digit 7 seg 0.50", GREEN LED Display                         |   |  |
| Size (mm)                | 193 (H) X 97.5 (W) X 169 (D) mm  |   |  |
| Panel Cutout             | 189 X 92 mm  |   |  |
| Inputs and<br>Range      | Thermocouple  J 0 to 600°C  K 0 to 1200°C  Analog input Range 0 - 10V DC 0 - 20mA DC 4 - 20mA DC  Range 0 - 999 To 9 | RTD PT-100/3W -99 to 400°C PT.1/3W -99.0 to 400.0°C |  |
| Output                   | 8 Relay, (NO-C) 1C/O 5A@230V AC. Note:- 1C/O 5A@230V AC for resistive load.  |   |  |
| Power Supply             | 100 to 270V AC , 50/60 Hz, Approx 10VA   |   |  |
| Operating<br>Temperature | 0 To 55℃   |   |  |
| Relative<br>Humidity     | Up to 95% RH Non Condensing  |   |  |

#### **Procedure**

1) Do all connections as per the wiring diagram.

To Configure: 1. Input Selection (J, K, PT-100, PT.1, 0 - 10V DC, 0 - 20mA DC & 4 - 20mA DC).

≥2. Relay mode

➢ If 1 Relay per group LOW HIGH
HIGH / TRIP

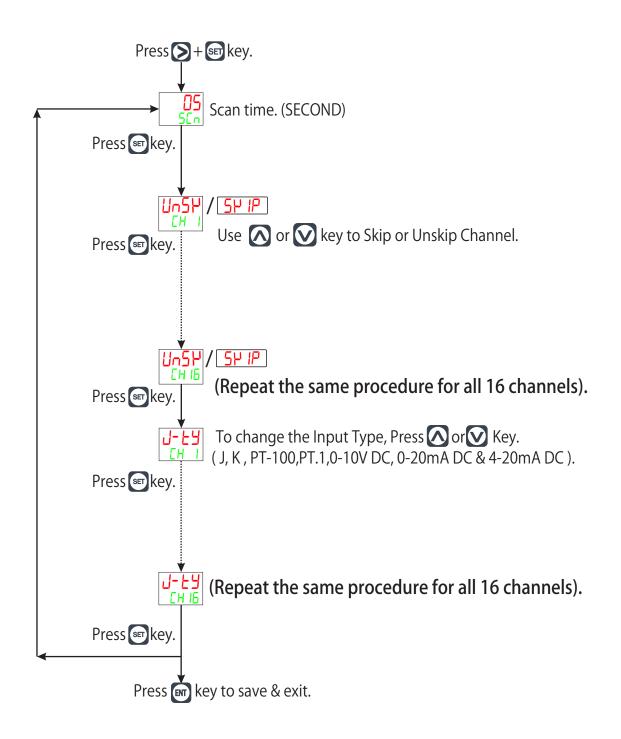
HIGH / LOW

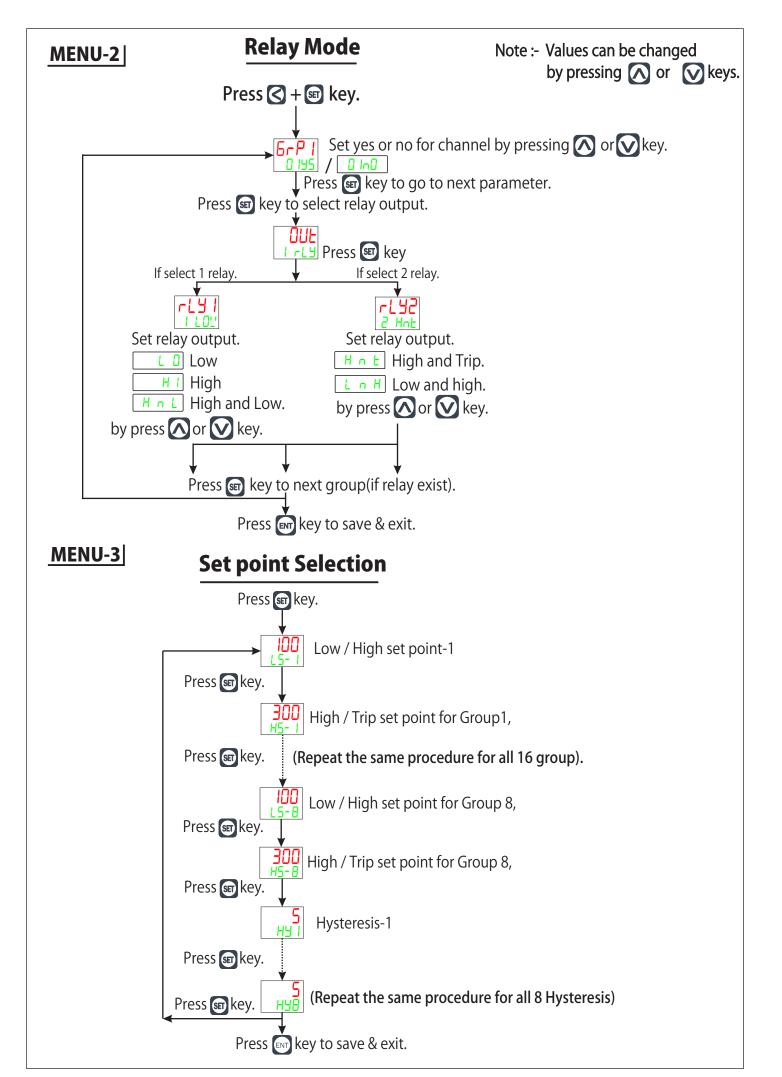
- > 3. Set point selection.
- $\gg$  4. Analog range selection .
- ≥ 5. Offset and Correction factor selection.
- 2) To add offset & correction factor, press + keys together.
  - > Set offset for each channel if required.
  - $\triangleright$  Off set range will be  $\pm 25^{\circ}$ C for J, K, PT-100 temperature input.
  - $\triangleright$  Off set range will be  $\pm 25.0^{\circ}$ C for PT.1 temperature input.
  - > Offset range will be -999 to 999 for analog input.
  - > Correction factor range will be -999 to 999 only for analog input.
- 4) Press key for continuous scrolling or manual scrolling.
- 5) In Hold mode use 🚫 & 💟 key to select next channel.
- 6) If key is pressed then, user will only be able to view all the parameters values, but would not be able to change any of the parameters.

Note:- Values can be changed by pressing or keys.

www.multispanindia.com

# **Input Selection**



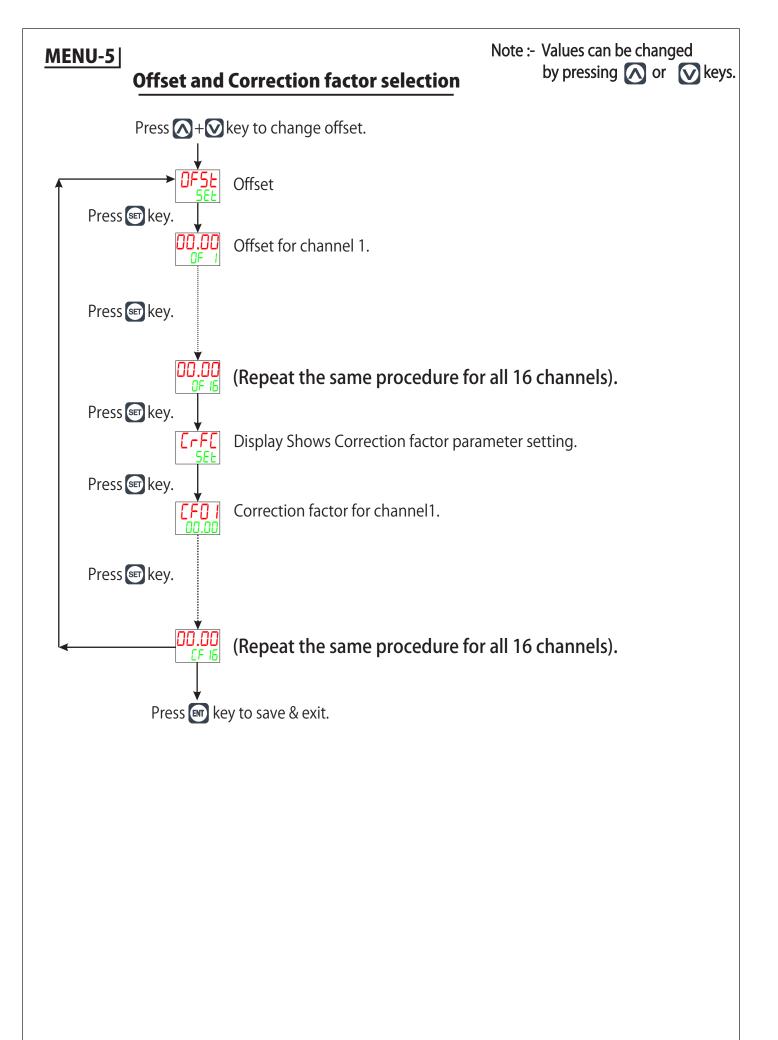


**NOTE:** DP (Decimal Point) is Common for all channels. Position can be changed by pressing or keys.

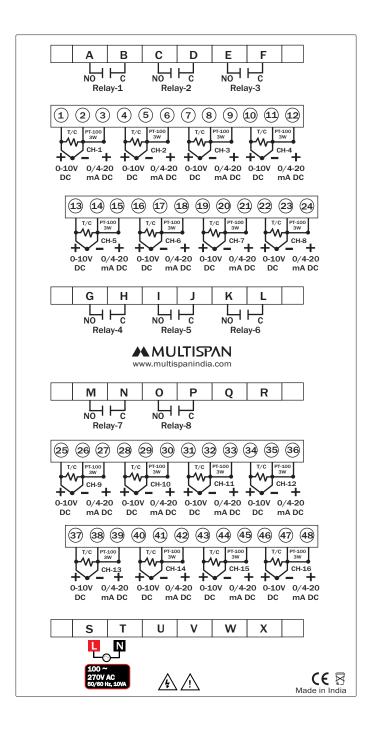
Press key to save & exit.

Press set key.

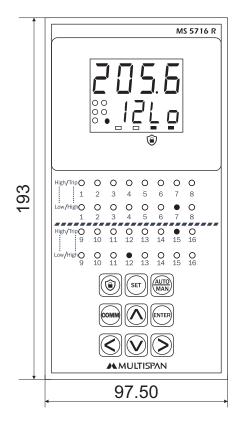
(Repeat the same procedure for all 16 channels).



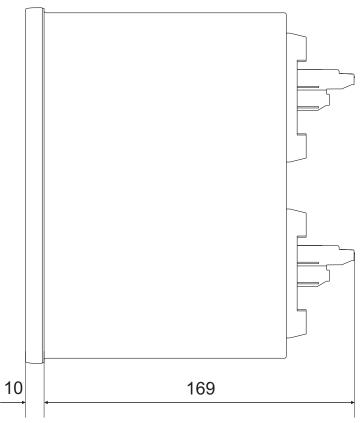
# **Terminal Diagram**



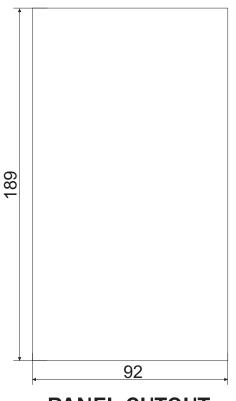
# **Mechanical Dimensions**



**FRONT VIEW** 



**RIGHT SIDE VIEW** 



**PANEL CUTOUT** 

# **Safety Precautions**

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If all the equipment is not handled in a manner specified by the manufacturer, it might impair the protection provided by the equipment .

=> Read complete instructions prior to installation and operation of the unit.

WARNING: Risk of electric shock.

## **Warning Guidelines**

1) To prevent the risk of electric shock power supply to the equipment must be kept OFF while doing the wiring arrangement. Do not touch the terminals while power is being supplied.

2) To reduce electro magnetic interference, use wire with adequate rating and twists of the same of equal size shall be made with shortest connection.

3) Cable used for connection to power source, must have a cross section of 1mm or greater. These wires should have insulations capacity made of at least 1.5kV.

- 4) When extending the thermocouple lead wires, always use thermocouple compensation wires for wiring for the RTD type, use a wiring material with a small lead resistance ( $5\Omega$  max per line)and no resistance differentials among three wires should be present.
- 5) A better anti-noise effect can be expected by using standard power supply cable for the instrument.

#### **Installation Guidelines**

- 1) This equipment, being built-in-type, normally becomes a part of main control panel and in such case the terminals do not remain accessible to the end user after installation and internal wiring.
- 2) Do not allow pieces of metal, wire clippings, or fine metallic fillings from installation to enter the product or else it may lead to a safety hazard that may in turn endanger life or cause electrical shock to the operator.
- 3) Circuit breaker or mains switch must be installed between power source and supply terminal to facilitate power 'ON' or 'OFF' function. However this mains switch or circuit breaker must be installed at convenient place normally accessible to the operator.
- 4) Use and store the instrument within the specified ambient temperature and humidity ranges as mentioned in this manual.

## **Mechanical Installation**

- 1) Prepare the panel cutout with proper dimensions as shown in figure.
- 2) Fit the unit into the panel with the help of clamp given.
- 3) The equipment in its installed state must not come in close proximity to any heating source, caustic vapors, oils steam, or other unwanted process by products.
- 4) Use the specified size of crimp terminal (M3.5 screws) to wire the terminal block. Tightening the screws on the terminal block using the tightening torque of the range of 1.2 N.m.
- 5) Do not connect anything to unused terminals.

#### Maintenance

- 1) The equipment should be cleaned regularly to avoid blockage of ventilating parts.
- 2) Clean the equipment with a clean soft cloth. Do not use isopropyl alcohol or any other cleaning agent.
- 3) Fusible resistor must not be replaced by operator.

| Note: |  |
|-------|--|
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |
|       |  |

| Note:   |                            |
|---|----------------------------|
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
|   |                            |
| Product improvement and upgrade is a constant procedure. So for more updated operating Please contact our helpline: +91-9081078683 /9081078681 or Email at: service@multi | g information and support, |