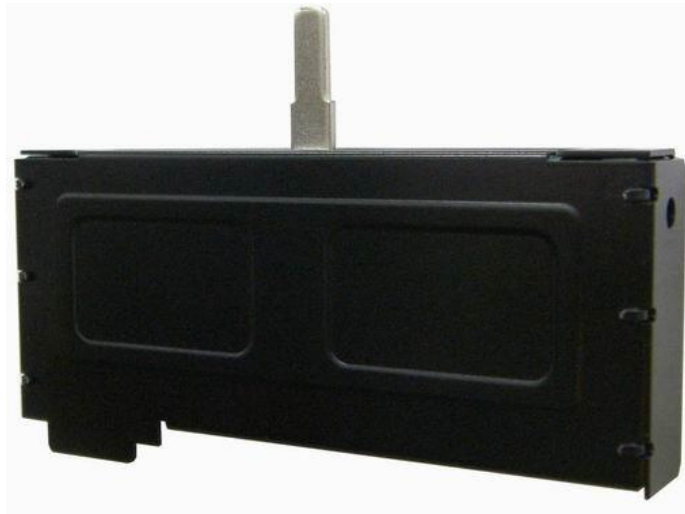
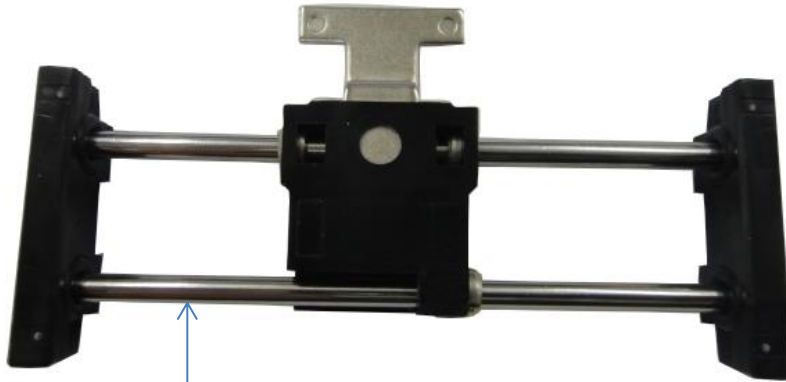


Revolutionary Technique

Long life (*Ten Million Cycles*) and Contactless VR



Revolutionary Technique



precision-processed steel bar and reduce the friction at the lowest.



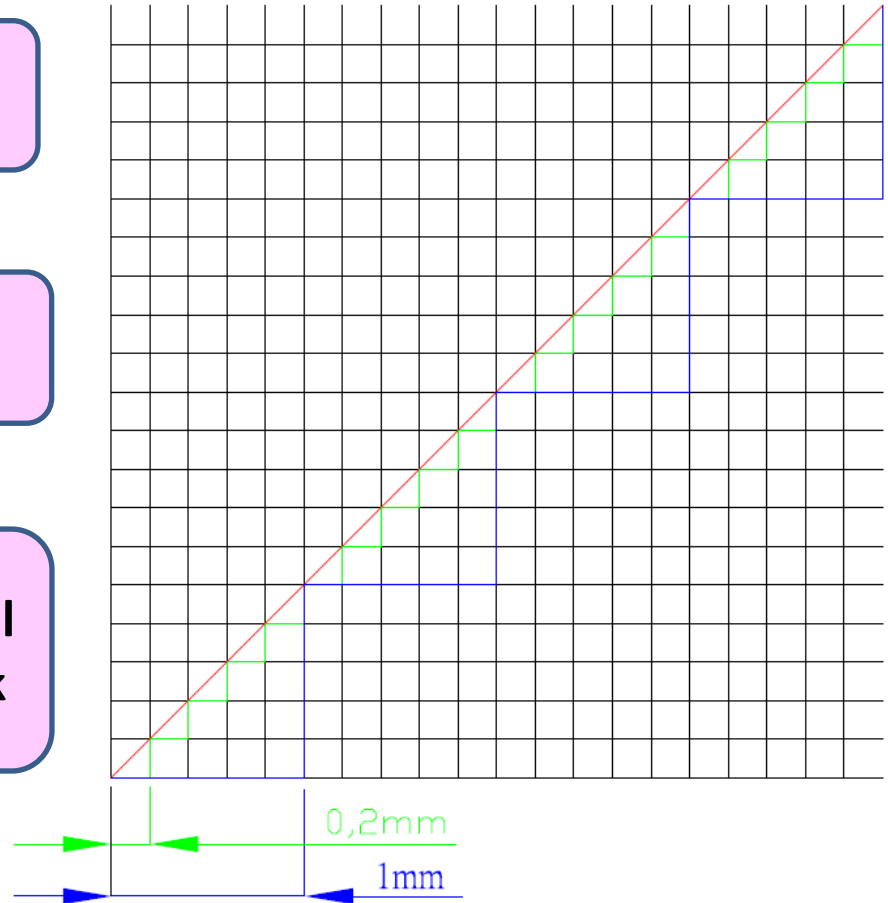
Metal ring coated with special lubricant .
The durability reach to 1,000KM

Revolutionary Technique

1. Magnetic-sensing

2. Analog MCU output voltage 0~5V is instead of traditional VR

3. Output resolution 0.2mm/dot (Other brand: 1mm/dot), which still can make traditional VR taper work well.



	Electronic	Life cycle	Resolution	Precision
<Forward> Contactless VR	Magnetic-sensing	10KK Cycles	0.2mm/dot	±3%
<Other brand> Contactless VR	Capacitive-sensing	2KK Cycles	1mm/dot	±10%
Traditional VR	Carbon - film resistor	300K Cycles	Linear	±3%

Application Reference



DJ Controller



CROSS FADER

*This photo only explanation example, may not reflect actual use.

Frankfurt 2016 Prolight+sound



Website:

<http://pls.messefrankfurt.com/frankfurt/en/aussteller/ausstellersuche.exhibitorDetails.html/forward-electronics-co-ltd.html?ci=show>

Forward Long Life (Ten Million Cycles) and Contactless VR

一. **Background:**

- (1) To reduce the inconvenience for the audio players and DJs - replacing the Cross Fader frequently.
- (2) The Cross Fader of mixer controller is frequently used. However, the maximum of the life cycles in this field is only three hundred thousand cycles! This is unable to meet the users' need.
- (3) The users are looking for the revolutionary product: VR with Long-Life cycles!

二. **Structure:**

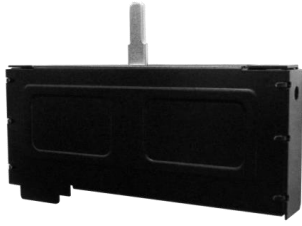
- (1) It consists of precision-processed steel bars, and the metal rings are coated with special lubricant. The life cycle is ten million cycles and the durability reaches to 1,000KM
- (2) The external case is covered by electroforming metal. It enhances the surface texture and weather ability, even the high hardness!

三. **Advantage:**

- (1) Contactless magnetic-sensing controller reaches the need for long-life cycles.
- (2) Analog MCU output voltage 0~5V is instead of traditional VR
- (3) Output resolution 0.2mm/dot (5dot/1mm), which still can make traditional VR taper work well.
- (4) It is easy to remove the connector with an additional wiring loom.

SLIDE SENSOR

45mm Magnetic Slide Sensor



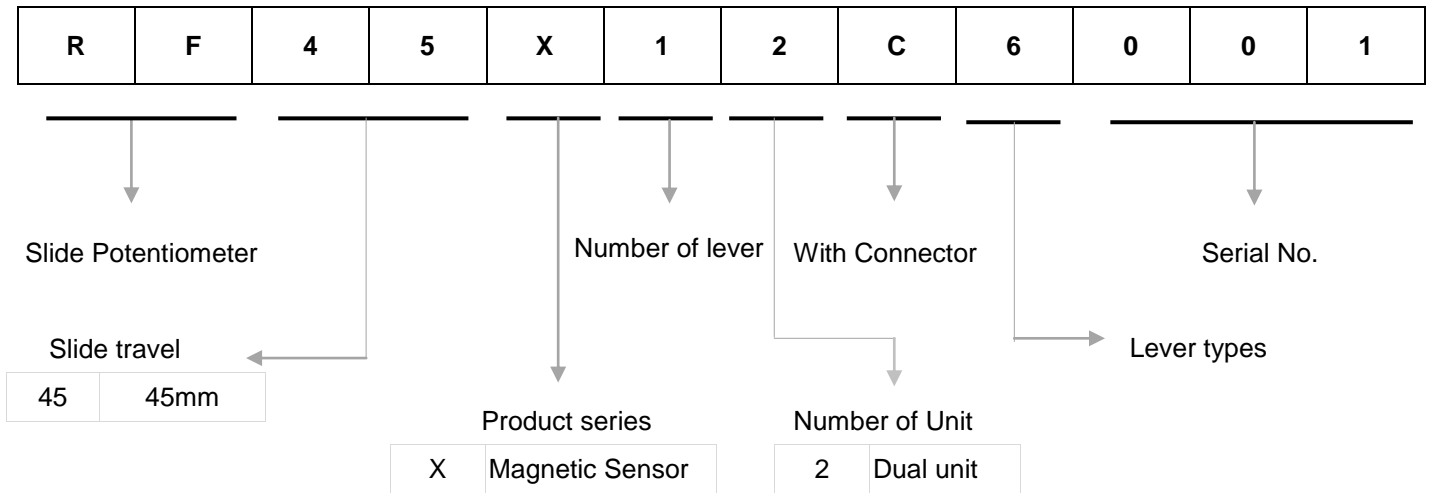
◆ FEATURE

- Non-contact magnetic structure
- Extremely light feeling slide.

◆ APPLICATIONS

- Fader for mixer , professional audio equipment.

◆ PRODUCTS NUMBERING SYSTEM



◆ COMMON SPECIFICATIONS

Characteristics	Specification
Operating temperature range	-10°C to +70°C
Input voltage	5V±3%
Output type	Voltage(absolute)
Output characteristic	X type (Refer from Position-Voltage plot below)
Output error	3%(MAX)
Stroke resolution	5 points/mm
Operating force	20 gf max
Sliding service life	10,000,000 cycles

◆ LEVER TYPES

Material	Metal lever	
Lever type	6	9
	t=1.2	t=1.2
Dimensions		
Length (L)	11	15
		8.2

DIMENSIONS

Unit : mm

Model	Dimensions
RF45X	 <p>CONNECTOR PITCH 2.5mm, 4-POLES</p> <ul style="list-style-type: none"> R Output-R F Output-F G Ground V_{cc} Input