

AFO (Audio Frequency Overlay) Transmitter-Receiver type 6

AFO equipment with easy maintenance due to plug-in construction

The AFO equipment has a proven track record for many years as a detector track circuit for level crossings, especially since the adoption of type 3 which uses narrow-band FSK modulation that contributes to improved noise immunity. The AFO Transmitter-Receiver type 6 offers the same basic performance as type 3 and type 5 with enhanced maintainability, display function, failure alarm function and monitoring function due to the plug-in construction.

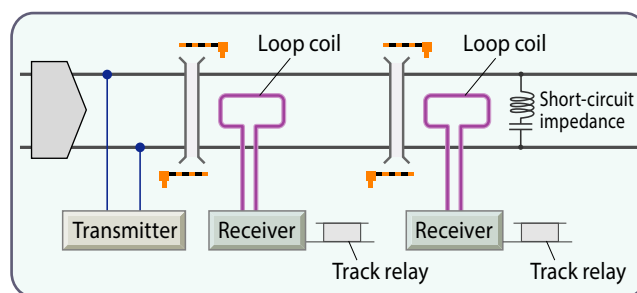
Functionality Improvements

- Improved alarm function via failure alarm output (by relay contacts) and failure indicator LED.
- Fine adjustment control in 1dB steps added to the attenuator in addition to rough adjustment control in 3dB steps to facilitate adjustment of the level of received signals.
- Failure memory stored in the non-volatile failure memory to facilitate failure analysis.
- Monitor output function via RS-232C interface.
- Easy overhaul due to the plug-in capability of each component.

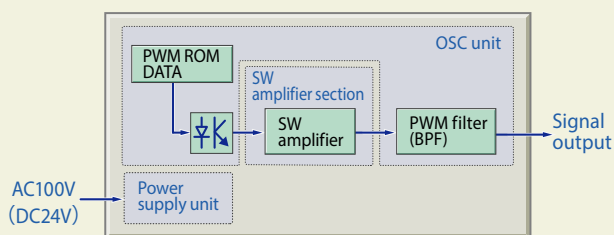
Frequency Setting

- The frequencies can be changed by changing the plug-in unit available for different frequencies as is the case for the type 5.

Example of a detector track circuit for level crossings



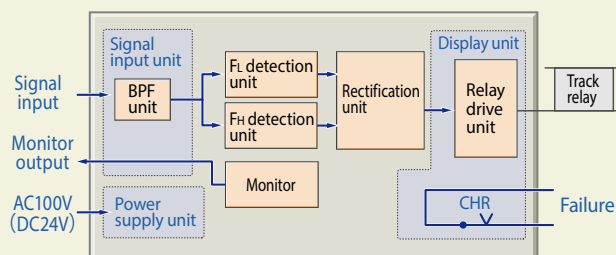
Transmitter



Item	Specifications	
Signal system	FSK modulation	
Carrier frequency (fo) [kHz]	2.3, 3.7, 4.15, 5.8, 6.4, 7.65, 8.55, 9.82, 10.95	11.8, 13.3, 15.4, 16.8
Transmission voltage [V]	1/1	5
	1/2	2.5
	1/4	1.25
Power supply consumption	100V AC 70VA or less (24V DC 70W or less)	

() applies to DC power supply type.

Receiver



Item	Specifications	
Signal system	FSK modulation	
Carrier frequency (fo) [kHz]	2.3, 3.7, 4.15, 5.8, 6.4, 7.65, 8.55, 9.82, 10.95, 11.8, 13.3, 15.4, 16.8	
Input change range	0~36dB (11 steps by 3dB, 3 steps by 1dB)	
Demodulation system	Beat detection	
Demodulation wave [Hz]	f1=70Hz f2=90Hz	
Time characteristic [second]	Operation	1.2±0.3 or 3.2±0.3*
	Recovery	1.2±0.3 or 0.8±0.2*
Power supply consumption	100V AC 35VA or less (24V DC 35W or less)	

* Select time element according to the settings in the BPF unit.
() applies to DC power supply type.