TPWS Handheld Signal Generator (THHSG)

by Unipart Rail





The Hand Held Signal Generator (HHSG) has been designed to provide functional testing of vehicle's train-borne TPWS sub-system within the depot environment. The equipment consists of a handset with an integral aerial, an external test aerial, interconnection cable, and wand. This HHSG has a connector that takes two inputs from the vehicle OTMR to be used as feedback from the vehicle. This allows closed loop testing on the TPWS hardware by applying a TPWS frequency to the wand (test coil) and receiving the trip level back from the vehicle where Set A or Set B frequency tripped at.



The TPWS Hand Held Signal Generator is programmed to transmit sequences of signal pulses, initialised by the handset controls. Each single pulse consists of a TPWS operating frequency / frequencies, emitted for a specific duration. Time intervals between these different pulses are arranged to simulate TPWS Trackside Sub-System signal profiles.

Simulated TPWS Signal Sequences	
Normal Direction	Over-Speed Sensor, Slow.
Normal Direction	Over-Speed Sensor, Fast.
Normal Direction	Train-Stop
Wrong Direction	Over-Speed Sensor, Slow.
Wrong Direction	Over-Speed Sensor, Fast.
Wrong Direction	Train-Stop

