



TORNZ

- Large spanned attenuation – 20 dB with no amplification
- Check of equipment function before announcement
- Remote attenuation measuring
- VD (Power Segment) allows local announcement from the AUT phone set
- Automatic announcement equipment can be connected



General Description

TORNZ is a public address system destined for unattended way stations and enables reporting from SUT (Tornz Subscriber Box) up to 98 VD (Power Segment) by the single, group or general DTMF dial. Stations and way stations are interconnected by a pair of line or trunk cable. To span attenuation at longer distances a transmission system can be used. Call recording equipment can also be added.

Basic Technical Description

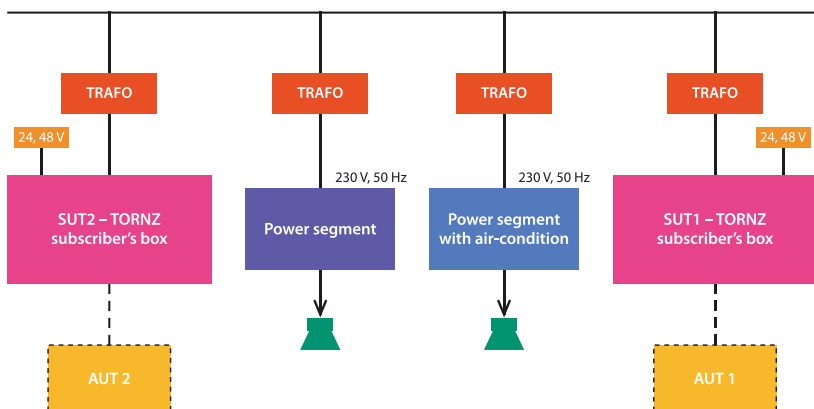
SUT (Tornz Subscriber Box) is a sheet metal box with electronics in a vertical working position.

The same box is also a part of VD (Power Segment) where it is placed in a metal frame together with a power amplifier, 24 V DC source, checking circuit, auxiliary relays and circuit breakers.

SUT and also VD are controlled by an automatic telephone set or from a relevant set of the standard multi-line telephone.

When operator picks up the phone and dials a three digit number he receives „Emergency report” tone. Subsequently operator reports his case and hangs up.

When the connection is made and the key-signature sounds on the VD (power segment) side the VD (power segment) operation is checked and the result reported back to SUT. If the VD (power segment) check finds out that the equipment is not in order SUT receives the report interpreted into the receiver as busy tone. Then the report cannot be made.



Block diagram





Basic Technical Parameters

SUT	Power supply	12–48 V, the source must meet protective transformer standards
	Max. power consumption	7 W
	Electric strength between live parts and ground	500 V, 50 Hz
	Insulation resistance between live parts and ground	5 M Ω
VD	Power supply	230 V, 50 Hz
	Max. power consumption	350 W (including air conditioning)
	Electric strength between live parts and body	4000 V, 50 Hz
	Insulation resistance between live parts and ground	20 M Ω
Mutual Parameters	Input impedance	> 4 k Ω
	Output impedance	> 4 k Ω
	Output level (speech signal and DTMF dialling)	0 dBm (+4 dBm /-3 dBm)
	Input level of the speech signal	min. -26 dBm
	Output level of DTMF dialling	min. -20 dBm
	Transmission medium	local, line and trunk cable (also the PCM transmission system can be used)