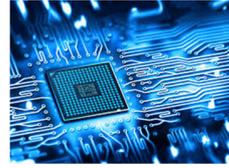


HANDSET CONNECTION TO MT50

TDS-028 Issue 01 Zitel Technical Bulletin



Thank you for your interest in Zitel - we are a UK based manufacturer of PAGA/MBS and Intercom products. Our systems are mainly designed for use in the Military, Marine, Hazardous Oil, Gas and Petrochemical industries.

Zitel MT50 talk back system is designed to allow subscribers to communicate to a master position with subscriber operation based on using either:

- a) Combined microphone/shout-back loudspeaker configuration.
- b) Dedicated noise-cancelling microphone and separate paging loudspeaker horn.

For certain applications it is advantageous to employ standard analogue telephone style handset sets in place of the above arrangement. The paging loudspeaker is still retained to allow master to subscriber signalling and maintain paging capabilities.

MT50 TELEPHONE HANDSET BRIDGE

The Zitel MT50 is specifically designed to provide reliable two-way voice communications in an aggressive environment including potentially explosive atmospheres.

It is possible to incorporate standard analogue telephone handsets at subscriber positions (with or without key pad). These units can be arranged to connect directly to MT50 via the Zitel MT50-T telephone handset bridge, in such configuration the handset is phantom powered by the MT50 host and supports two way communications. The MT50-T bridge is located inside the central MT50 equipment enclosure. A typical handset enabled subscriber station comprises of:

- i. Telephone handset.
- ii. Paging loudspeaker horn which can be cabled back to the MT50 either by dedicated single-pair cables or by a combined two-pair cable.

The maximum cable length between telephone subscriber and MT50 is 1000Metres assuming use of 1mm² cross sectional area twisted-pair cable conductors.

Operation

The telephone handset subscriber operates on a 'hot line' basis and requires no key pad, the user lifts the handset off cradle and the MT50-T interface signals the master position that a subscriber is calling by delivery of a short call tone to the master loudspeaker. The master accepts the subscriber call in request and a two way communications link is established. The master maintains ultimate speech direction control and can override subscriber speech at any time. Speech from the master is delivered both to the subscriber handset earpiece and is also broadcast over the paging horn speaker associated with the subscriber.

Typical explosion proof subscriber handsets, right, with and without keypad dial.



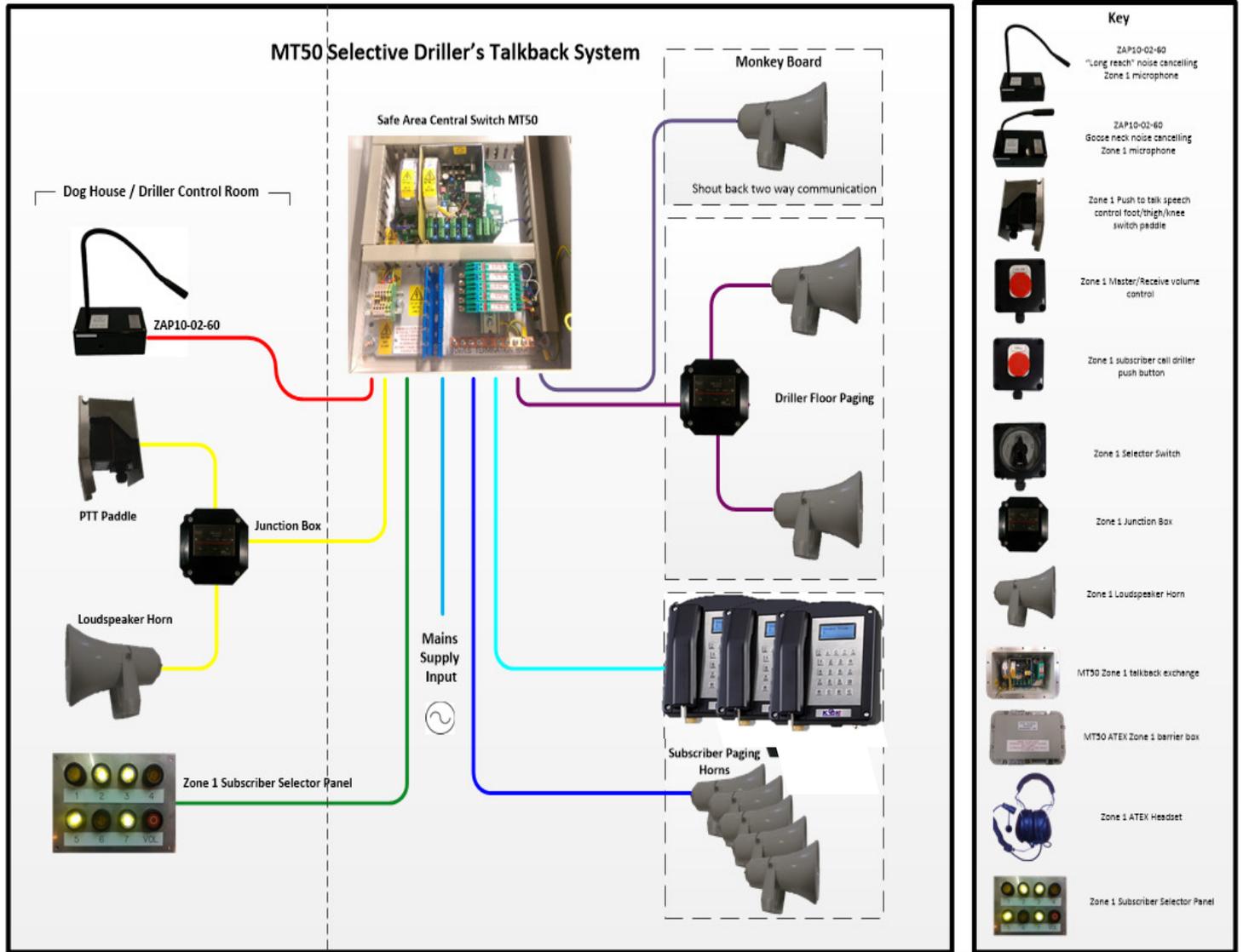
ZITTEL LIMITED

email: sales@zittel.com web: www.zittel.com tel: +44 (0) 115 9202888
mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Zitel Ltd and are Subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Zitel Ltd. Zitel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.

It is possible to deliver the MT50-T interface in P-type execution, i.e. MT50-TP. With this interface a telephone handset subscriber position equipped with a key pad dial can now initiate a selective communication to another subscriber on a full duplex handset to hand set privacy basis.

With a private two-way communication established the master position can override at any time to break into the conversation.



ZIZTEL LIMITED

email: sales@ziztel.com web: www.ziztel.com tel: +44 (0) 115 9202888
 mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Ziztel Ltd and are Subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Ziztel Ltd. Ziztel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.