

IMPROVED CONNECTOR TECHNOLOGY INCREASES THE SAFETY AND RELIABILITY OF TETRA PORTABLES

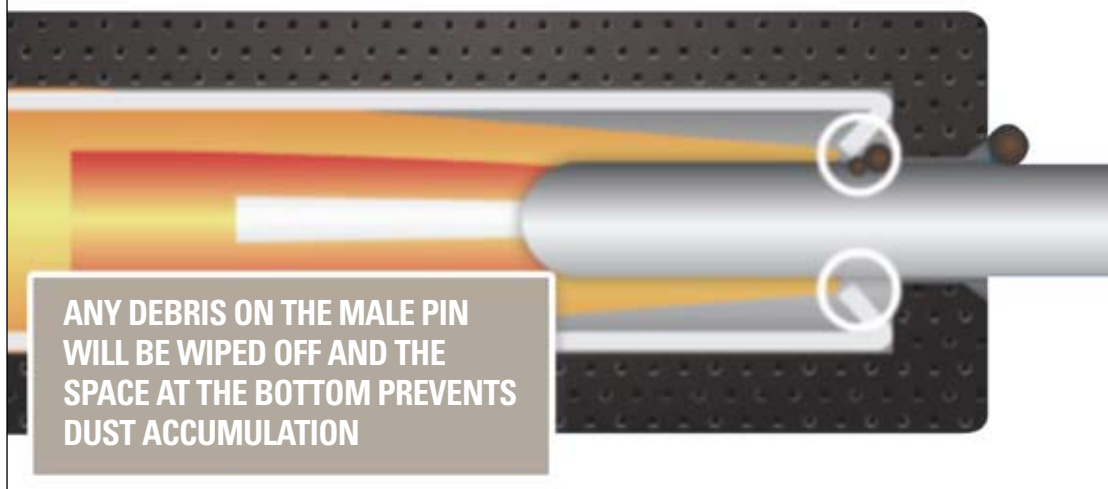
WHITE PAPER

IMPROVED CONNECTOR TECHNOLOGY INCREASES THE SAFETY AND RELIABILITY OF TETRA PORTABLES

THE NEW RANGE OF MOTOROLA TETRA RADIOS FEATURE CLASS LEADING CONNECTOR TECHNOLOGIES WHICH IMPROVE ALL ASPECTS OF RADIO PERFORMANCE WHEN USED WITH ACCESSORIES. MOTOROLA RECOGNISES THAT CONNECTORS MUST WITHSTAND THE SAME TOUGH ENVIRONMENT THAT THE RADIO ITSELF DOES, AND MUST CONTINUE TO FULLY FUNCTION WITH MULTIPLE CONNECTIONS AND DISCONNECTIONS EACH DAY, AS WELL AS ACCIDENTS AND ABUSE.

BOTTOM CONNECTOR

SELF-CLEANING DESIGN WILL SOLVE MOST OF THE IN-FIELD ISSUES



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RUGGED BOTTOM CONNECTOR

The bottom connector on the radio will be used for charging and programming. It will be exposed to dirt and mud if the radio is dropped. The bottom connector has therefore been designed to be waterproof and easy to clean. The bottom of the radio can be cleaned with a wet brush and then rinsed under a tap. In addition the charger/ programmer connection is designed so that when the radio is docked the pins are wiped as they engage, thereby ensuring the best possible contact. Any dirt falls away and will not block the charger.

The pins in the base of the radio are protected inside a recess. The pins themselves are strong and will withstand the ingress of sharp objects and small stones if dropped onto rough surfaces. In terms of contact resistivity, the new radio delivers the best connectivity for bottom connectors in the market. This ensures high data signal integrity and reliable charging.

Minimal insertion and extraction force allows the ease of insertion into programming ports/charging cradles. The connector is capable of over 10,000 attach/detach cycles.

TOUGH AND FAST SIDE CONNECTOR

Motorola is introducing this new side connector which has excellent pull strength together with a 2 second or less connection time which does not need a screw type fitting. Operators in the field will be able to quickly connect or disconnect accessories in the dark by feel. The connector resists dust and moisture and meets IP55 requirements. As with the bottom connector excellent low-resistivity is provided.

Importantly, the connector is able to transfer the 2 Watt audio power to accessories such as Remote Speaker Microphones (RSMs). 2W audio is a feature of the new radios enabling clear and high audio output when it is necessary in very noisy conditions.

THE COMBINED RESULT

The combination of these two new connectors is a step-up in the ruggedness of the radio, the connectors resist all types of abuse including dirt, rough handling, and long-term corrosion. The fast changing side connector will be a big plus for users who change accessories frequently, sometimes in the dark or underneath clothing. Taken together these connectors greatly enhance the users experience of the MTP3000 Series TETRA Radio.



Image shows the bottom of a prototype radio after being dropped onto a bed of nails many times. You can see where the nails have impacted on the radio without bending the pins.



Connector can be detached with one hand in less than two seconds.

For more information on the full range of our solutions, please visit us on the web at:
www.motorolasolutions.com/mtp3000

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J350_TETRA_CONNECTOR_TECHNOLOGY_WHITE_PAPER_(05/12)

