

Corrected Amendment No. 2 to Specification No. IRS: TC 75-99

टेलीफोन / Tele : 2451200 (PBX)
2450115 (DID)
फैक्स / Fax : 91-0522-2458500



अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226 011

Government of India - Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226 011



No. STT/G/TCSC-32 (2005)

Dated: 20.10.2005

The General Manager (S&T),

1. Central Railway, CST, Mumbai-400001
2. Eastern Railway, Fairly Place, Kolkata-700001
3. Northern Railway, Baroda House, New Delhi-110001
4. North Frontier Railway, Maligaon, Guwahati-781011
5. North Eastern Railway, Gorakhpur-273012
6. Southern Railway, Park Town, Chennai-600003
7. South Central Railway, Rail Nilayam, Secunderabad-500371
8. South Eastern Railway, Garden Reach, Kolkata-700043
9. Western Railway, Churchgate, Mumbai-400020
10. East Central Railway, Hajipur-844101
11. North Western Railway, Jaipur.
12. North Central Railway, Allahabad
13. East Coast Railway, Bhubaneswar
14. West Central Railway, Jabalpur
15. South East Central Railway, Bilaspur
16. South Western Railway, Hubli.
17. The General Manager (S&T)/CORE, Civil Lines, Allahabad- 211011.
18. The General Manager (S&T), Metro Railway, 33/1, Chowringhee Road, Kolkata
19. The CPM, IRPMU, Shivaji Bridge, Behind Shanker Market, New Delhi-110001.
20. The Director/IRISET, Lalaguda, Tarnaka Road, Secunderabad.
21. The Managing Director/RailTel, Bank of Baroda Building, Parliament Street, New Delhi.
22. The Executive Director/CAMTECH, Maharajpur, Gwalior.

Sub: Corrected Amendment No. 2 to Specification No. IRS: TC 75-99 for
4 Wire/ 2 Wire Portable Control Telephone.

Ref: i) This office letter of even no. Dated 28.12.2004 pertaining to minutes of
32nd TCSC.

ii) This office letter of even no. Dated 7.3.2005 and Railway Board's order
on the minutes of 32nd TCSC.

A copy of the corrected Amendment No.2 for 4 Wire/ 2 Wire Portable Control
Telephone is sent herewith for your information and reference please.


The Amendment No.2 issued vide this office letter of even number dated
06.4.2005 has been withdrawn.

Corrected Amendment No.2 to Specification No. IRS: TC 75-99.

SCHEDULE OF IMPLEMENTATION

Duly corrected Amendment No.2 enclosed herewith will come into force w.e.f. 1st December, 2005. All the firms are hereby advised to submit the improved sample in the Telecom Laboratory, RDSO, Lucknow through QA/S&T, RDSO for incremental testing as per the amendment. On successful completion of the testing, the firms/manufacturers concerned will be approved with the current amendment.

Enc: As above.


(M.K. Yadav)
For Director General/Telecom 28/10/05

Copy to: 1. The Secretary (Telecom), Railway Board, Rail Bhawan, New Delhi
for information please.

2. ED/QA (S&T), 4th Floor, Annexe-II, Manak Nagar, Lucknow

3. The Director/Jt. Director Inspection (S&T), RDSO: -

- i) 4th Floor, West Wing, 17, N.S. Road, Kolkata-700001
- ii) IRCOT Complex, Behind Shanker Market, Near Shivaji Bridge, New Delhi-110001.
- iii) 1st Floor, New Annexe Bldg., Churchgate Station, Western Railway, Mumbai-400020.
- iv) Ground Floor, DRM Office Bldg., Southern Railway, Bangalore-560023 for information and necessary action please.

4. Copy forwarded to the following approved firms for information, implementation and compliance thereof.

1. M/s Epsilon Electronic Equipment & Components Pvt Limited, B-2, Electronic Industrial Estate, Kushaiguda, Hyderabad-500062.


2. M/s INDISCO, 8, Upton Estate, Panki, Kanpur-208022.

3. M/s Bentron Power Systems, 21/1, Kedarnath Chatterjee Road, Behala, Kolkata-700034.

4. M/s Tummala Electronics Limited, SB-54, 2nd Cross, Peenya Industrial Estate, Bangalore-560058.

5. Smt. Latika Singh, SE/Tele for record.

Enc: As above.


(M.K. Yadav)
for Director General/Telecom 28/10/05

Corrected Amendment No.2 to Specification No. IRS: TC 75-99 for 4 Wire/2
Wire Portable Control Telephone.

The following amendments are issued in IRS: TC 75-99. The existing clauses will henceforth be read as given below: -

Clause No. 4.3.7 – The box shall be finished with powder coated paint, inside and outside with admiralty gray.

Clause No. 4.4 - Handset

Clause No. 4.4.1 – Handset of the telephone shall be made of ABS material. ABS raw material shall be procured from a reputed manufacturer like Bhansali Polymer, Lanxes ABS Ltd., Bayers, L.G. and HPCL conforming to the property mentioned in Appendix B (Clause 4.4.1). Raw material manufacturer's test certificate has to be submitted at the time of type test. The test carried out on finished product shall be as per para-3 of Appendix B.

Clause No. 4.4.2 – The microswitch provided with handset shall be from LCSO/CACT approved sources having valid and current type approval certificate.

Clause No. 4.5.1 – CACT approved Electrodynamic Transducer shall be used as a transmitter.

Clause No. 4.6.1 – Receiver shall be Electrodynamic Transducer type procured from CACT approved sources.

Clause No. 4.7.2 - These transformers shall conform the functional requirement of the equipment and meet the parameter specified in Clause No. 4.7.3, 4.7.4, 4.7.5, 4.7.6, 4.7.7 and 4.7.8.

Clause No. 4.7.8 – The complete windings shall be protected by proper insulation or suitably protected by potting with epoxy compound to avoid ingress of moisture.

Clause No. 4.11.1- Two line terminals, marked as L1 , L2 shall be provided with insulating nuts .Switch shall work on one side with 2W control line and opposite side on 4W control circuit .2W and 4W shall be legibly engraved on mounting plate filled with red paint or screen printed.

Clause No. 5.1.2 - Insulation Resistance: The insulation resistance between all terminals of six pin plug & L₁ – L₂ connected together and the main body of the 4W/2W portable control telephone shall not be less than 100 Mega Ohms when tested with a 500V DC Megger/million mega ohm meter at ambient temperature.

Clause No. 5.1.3 (iii) - Receive Efficiency: The test set up is as shown in Fig.3. The line shall be simulated by non-inductive resistance of 300+300 ohms. The level at 1000Hz across terminals L₁ and L₂ shall be adjusted to -12dBm. The level across R₁ and R₂ shall not be less than -18dBm. The total harmonic distortion shall not be more than 3%. The selector switch shall be at 2 Wire side. For 4 Wire (Fig.3b), change the selector switch from 2 wire to 4 wire side, the line shall be then simulated by non inductive resistance of 560+560 ohms. The level and frequency at Rx terminals of six-pin plug shall be adjusted to -20 dBm at 1000 Hz respectively. The level measured across terminals R₁ and R₂ shall be greater than -26dBm. The frequency response of cl: 5.1.3 (i), and 5.1.3 (iii) shall be ± 3dB in the frequency range of 300 to 3400 Hz.

Clause No. 6.6.2 – (e) Type test on Electrodynamic transducer as per clause 9 of IRS: TC 74-97 shall be carried out. If the Electrodynamic Transducer used as transmitter & receiver in 4 Wire/2 Wire portable control telephone is procured from the CACT approved sources, then the type test specified in clause 9 of specification of IRS TC: 74-97 need not to be carried out.

Cl. No. 3.1, 4.2.2 (b), 4.4.3, 4.3.7 & 4.11.4 – In the above mentioned clauses please read “hand set” in place of “HMT”.

New Clause Appendix B Para-3: - Test on Finished Product made of ABS material.

A special sample of the size as required and mentioned in the test method ASTM D-1525 and ASTM-D-792, should be manufactured from the same raw material as used for moulding the body of Telephone or a part of the Telephone body will be cut to conduct the tests mentioned below: -

<u>Properties</u>	<u>Specified values</u>	<u>Test Method</u>
1. Specific Gravity	1.04 – 1.07	ASTM D-792
2. Vicat Softening Point	100 - 108° C	ASTM D – 1525

-End of Amendment-