

SREENIVASULU CHEVURU/SR.INSTRUCTOR/ZRTI/MLY/SC

🎯 KAVACH SYSTEM – QUICK REFERENCE FOR STATION MASTERS

📱 Purpose of Kavach

- ◆ Indigenous Automatic Train Protection (ATP) System by Indian Railways.
 - ◆ Prevents SPAD, overspeeding & collisions.
 - ◆ Works with Colour Light Signalling & Electronic Interlocking.
 - ◆ Supplementary safety aid — does *not* replace G&SR Rules.
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💻 STATION MASTER OPERATION CUM INDICATION PANEL (SM-OCIP)

- 📍 Installed near Station Master's desk for instant access.
 - 📶 Monitors system health, generates/cancels SOS, and acknowledges alerts.
 - 📁 Instructions included in Appendix-C of SWR.
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⚙️ Panel Components

- 🔑 SM Key – Turn to “IN” position to activate.
 - 💡 LED Indicators – Show system & SOS health.
 - 💻 LCD Display – Station ID, Kavach status, SOS details.
 - 🔔 Audio Buzzer – Alerts for SOS.
 - Buttons:
 - 👉 ⚫ **COMMON** – Used with SOS/CANCEL
 - 👉 ⚪ **SOS** – Generate SOS
 - 👉 ⚪ **CANCEL** – Cancel SOS
 - 👉 ⚪ **TSR/ACK** – Acknowledge alert (future use: TSR)
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💡 LED INDICATIONS & ACTIONS

LED	INDICATION	MEANING	SM ACTION
● GREEN HEALTH OK	ON	Normal	—
● RED HEALTH FAIL	ON	Station Kavach Unhealthy	Inform S&T Staff
● RED SOS (Blink)	ON	SOS Generated/Received	Acknowledge & Inform Control

✋ MANUAL SOS OPERATION

- ✳ Step 1: Insert Key → Turn “IN”
- ✳ Step 2: Press **SOS + COMMON** simultaneously
 - ⌚ All Kavach-fitted trains within **3000 m** radius will stop DEAD automatically.
- ✳ Step 3: Cancel SOS when clear using **CANCEL + COMMON**.
 - ⌚ Normal operation resumes when:
 - ✓ SOS Cancelled
 - ✓ Train >1500 m from Source
 - ✓ No SOS received for 3 minutes.

🚩 ACKNOWLEDGEMENT

- 🟡 Press **TSR/ACK** button to silence buzzer and confirm receipt.

🖨 FAILURE REPORTING

- ✍ Maintain register of all failures/restorations.
- 📞 Inform S&T Department immediately.

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MAKES IN USE

 Medha | Kernex | HBL (Minor layout variations)

GENERAL GUIDELINES ✓ DOs

- Follow G&SR and operating rules.
- Treat Kavach as safety support only.
- Isolate Kavach during:
 - ◆ Wrong line dispatch (TSL working)
 - ◆ Shunting beyond station section
 - ◆ NI working.

DON'Ts

- Don't operate without turning key "IN".
 - Don't depend solely on Kavach for decisions.
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FREQUENTLY ASKED QUESTIONS

- 1 RFID Tag Missing/Damaged:** Inform Divisional Signal Control.
 - 2 SM-OCIP Instructions:** Refer Appendix-C of SWR.
 - 3 Accidental SOS:** Cancel using **CANCEL + COMMON** (Key "IN").
 - 4 Kavach vs Non-Kavach Trains:** Protection only if defaulting train has Communicating Kavach & RFID tags installed.
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💡 STATION MASTER'S ACTION CHECKLIST

- 🕒 Observe – Monitor LEDs & LCD.
 - ✋ Act – Generate SOS if unsafe.
 - 📞 Inform – Control, LPs, All Concerned.
 - 📝 Record – Every SOS/failure/restoration.
 - ✓ Restore – Cancel SOS after full clearance.
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🎯 Safety Through Smart Supervision – KAVACH Empowers You to Act Swiftly, Safely, and Smartly.