

KP25&27 Rectification Explanation Document

Applicable Models: KP25A, KP25X, KP27A, KP27X

Document Type: Instruction Manual

Version: V1.0

1. Rectification Background

1.1 Issue Overview

- We have identified certain deficiencies in the current product, where the AIS signals transmitted by the device fail to display the MMSI code when received by MarineTraffic base stations. These issues negatively impact user experience and require immediate corrective actions to ensure product quality and meet customer expectations.

2. Detailed Operating Steps

2.1 Preparation of Tools

Tools/Materials Preparation	Instructions
• Screwdriver	
• Soldering Iron	Temperature:320~380°C
• Safety Goggles	

Tools Illustration Guide

- Screwdriver



- Soldering Iron

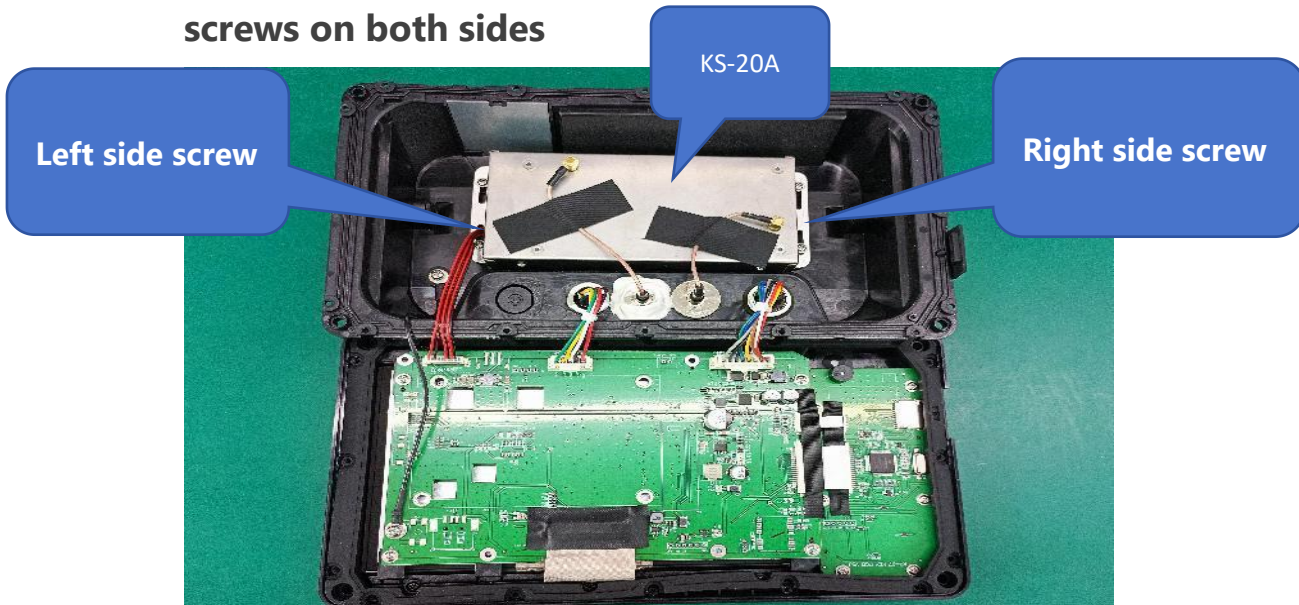


2. Implementation Steps for Modification

2.1 Remove the rear case screws using a screwdriver



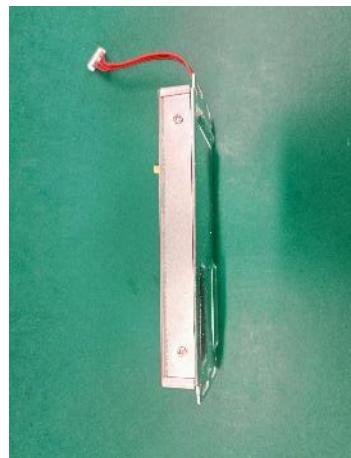
2.2 Locate the KS-20A shielding metal case and remove the screws on both sides



2.3. Use a screwdriver to remove the screws on both the top and bottom sides of the shielding metal cover.



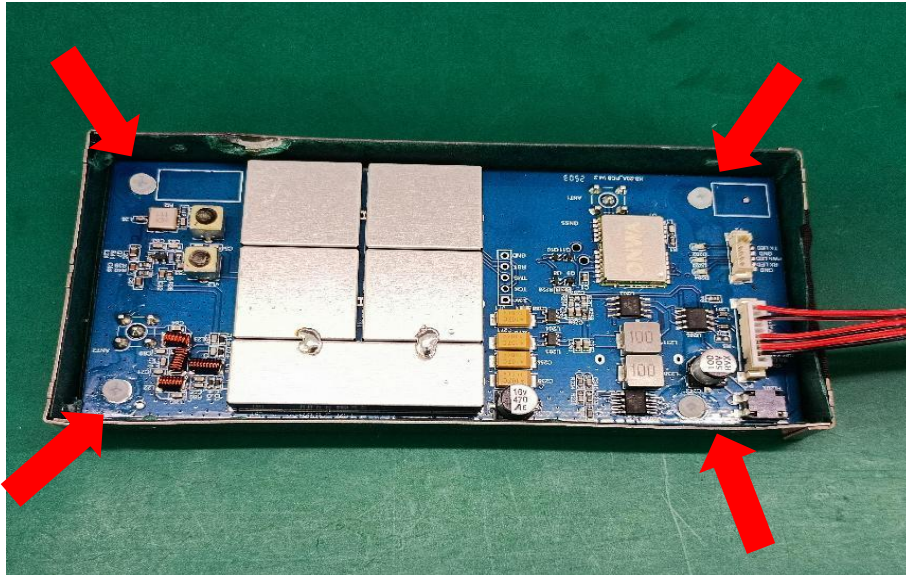
Top Screws



Bottom Screws

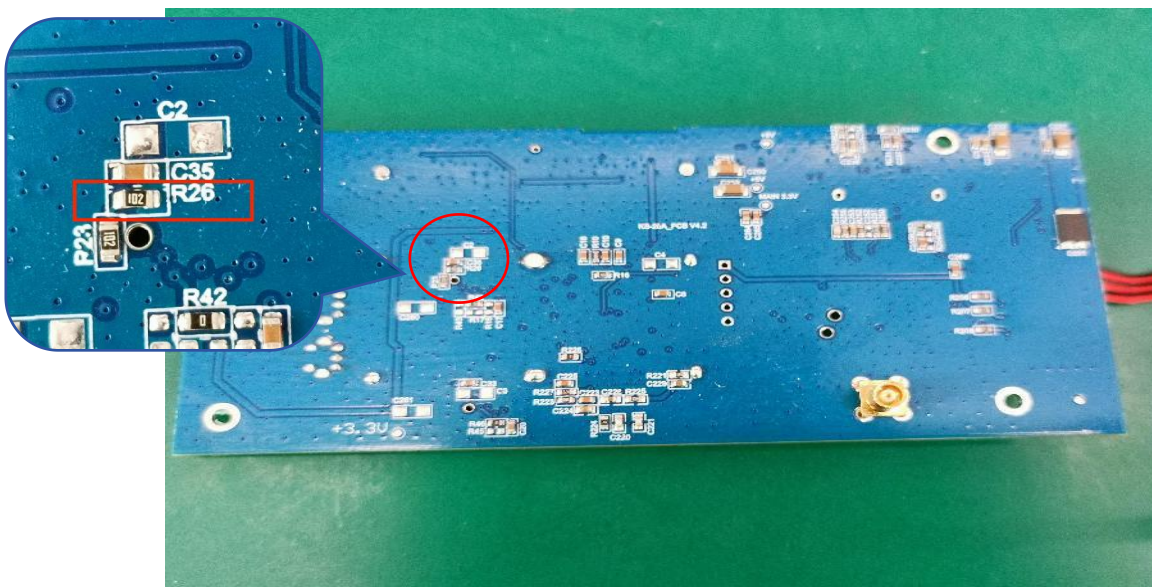
2.4. Use a screwdriver to remove the internal plastic screws.

Note: The plastic screws are secured with adhesive and may be difficult to disassemble.



2.5. Flip the motherboard to the back side, use a soldering iron to heat and remove resistor R26 to complete the modification.

(In special cases where a soldering iron is unavailable, diagonal cutters may be used to clip off the resistor. Avoid damaging other components during the operation.)



2.6 Place the motherboard back into the shielding metal casing, fasten the plastic screws, secure the shielding metal casing with screws, reinstall it into the main unit, and tighten the screws on the outer casing to complete the operation.



2.7 Test Results

After connecting the device to the antenna and waiting for a while, access the MarineTraffic website and search for the device's own MMSI code. If the device's own MMSI is found, the rectification is successful this time.

A screenshot of the MarineTraffic website interface for vessel ONWA 2108. The page shows a map of the Pacific Ocean with the vessel's location marked in South China. The vessel is identified as a fishing ship with MMSI 412552108. The interface includes navigation tabs, a map, a departure history section for Lagos, and detailed vessel information panels for general data and latest AIS information.

ONWA 2108 Fishing, MMSI: 412552108

Where is the ship?
Fishing ONWA 2108 is currently located in the South China (reported 11 minutes ago)

What kind of ship is this?
ONWA 2108 (MMSI: 412552108) is a Fishing and is sailing under the flag of China. Her length overall (LOA) is 29 meters and her width is 17 meters.

General	
Name	ONWA 2108
Flag	China
IMO	-
MMSI	412552108
Call sign	-
AIS transponder class	Class B
General vessel type	Fishing
Detailed vessel type	Fishing
Service Status	Upgrade to unlock
Port of registry	Upgrade to unlock
Year built	Upgrade to unlock

Latest AIS information	
Navigational status	Class B
Position received	12 mins ago
Vessel's local time	2025-03-25 19:37 (UTC+8)
Latitude/Longitude	Upgrade to unlock
Speed	0 kn
Course	331 °
True heading	331 °
Rate of turn	-
Draught	-
Reported destination	-
Matched destination	-
Estimated time of arrival	-
AIS source	Terrestrial

3.Precautions

3.1Burn Prevention

- The soldering iron tip can reach temperatures exceeding 300°C—do not touch. Keep it away from power cables during operation.

- Always place the soldering iron on a stand to prevent tipping.

3.2Ventilation

- Solder fumes contain lead and harmful gases (e.g., rosin vapors).

Operate in a well-ventilated area or use a fume extractor.

3.3Anti-Static Measures

- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.