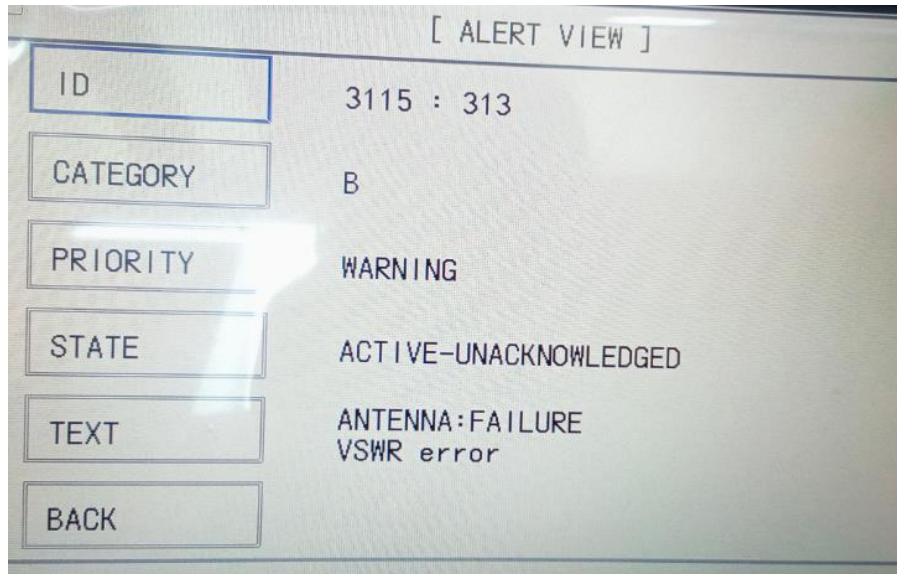


## How to rectify the unknown VSWR alarm of NHR-1500

Problem: unknown VSWR alarm after transmitting.



### Solution:

1. Upgrade the firmware of control unit to version of V1.18 20230418 or newer.  
If possible, the firmware of transceiver unit can be upgraded to V1.13 20230406 or newer.  
With new firmware, the transmitter will be automatically tuned before transmitting. If tuning OK, high VSWR will not happen easily.
2. Check the antenna coupler, it should tune OK on each band. "READY" signal should be sent from the antenna coupler to the transceiver unit.  
The antenna coupler will make "Ta..Ta..Ta.." sound when tuning at new frequency never used.  
If tuning fails at one or some bands, the antenna coupler or RF cable & antenna may have some problems.
3. Check the RF cable with connectors and the antenna.  
Usually the problem comes from them.  
The RF cable should be at least RG213.  
Sometimes even enough the connector is measured well, it can't stand high RF power and results in high VSWR.
4. If all above steps have been followed, VSWR alarm doesn't disappear. Please follow below step.

If tune OK at each band, and communication with coast station is successful, you may turn off the VSWR software protection temporarily.

SERVICE-ADVANCE-OTHER SET-VSWR PROTECT. Password is 66733733.

You can turn OFF the item, then SET to confirm. After that, VSWR alarm will be muted.

