QST63
WWW.ZL2VH.NZ
NEW ZEALAND ASSOCIATION OF RADIO TRANSMITTERS - BRANCH 63 UPPER HUTT
Branch 63 Clubrooms
Park Street, Upper Hutt

# ZL2VH Newsletter – April 2026



## President's Report

Next trip to Mt Climie is on for Monday 6 April 2026 – weather dependant on the day. Meeting time is 9:00 am outside my address on Plateau Road. This is Easter Monday, so who's available? We are looking to install the 10 GHz Beacon, track maintenance especially from the Emergency Services hut to ours and possibility a paint job on the huts. If you can make yourself available this would be ideal.

On Wednesday 18 March 2026, trip to Mt Climie installed the new Tait TB7300 50 Watt FM repeater (first new repeater in 25 years). The DSTAR/FM Icom ID-1200VD Repeater was also installed. The Kiwi SDR Receiver was removed for repair/diagnostic investigation. Two ethernet cables were run from the North to the South Hut – this allows internet connectivity for the Tait and ICOM Repeaters. Thanks to ZL2TWS, ZL2UP, ZL2UGL and ZL2UFI.

And we say farewell to Allan ZL3LAB as heads to Hamilton and its surrounds. Thanks for being a Repeater Trustee and club member. Good luck for the future.

**Jock White Field 2026**

Log has been submitted to the Contest Manager. Total of 92 SSB and 9 CW contacts.

**1292 Repeater: desensing**

The new ICOM RP1200VD repeater was installed on 18 March 2026, and the old repeater removed to the clubrooms. However, the repeater is desensing and is basically unusable.

Repeater desensing is a receiver performance issue where the repeater's own transmitter noise or signal overwhelms its receiver, reducing sensitivity. This occurs when weak isolation allows strong transmitted signals to leak into the receiver, leading to noisy, quiet, or reduced-range reception. It is usually solved by improving antenna spacing, upgrading duplexers, or filtering.

The Repeater Trustees are working through this issue, and more information will be made available or published when know. The repeater is beaconing at present so it will serve that purpose, but it was not purchased for this alone.

**AGM: Friday 24 April 2026, at 7:30 pm**

The clubs AGM will be held on Friday 24 April 2026, at 7:30 pm.

Please note this in your diaries/calendars so you can attend or have a proxy vote listed for voting. The March/April 2026 issue of the NZART Magazine Break-In will have the remits for the AGM on Kings Birthday Weekend as well for discussion. See you there.

## Repeater Report

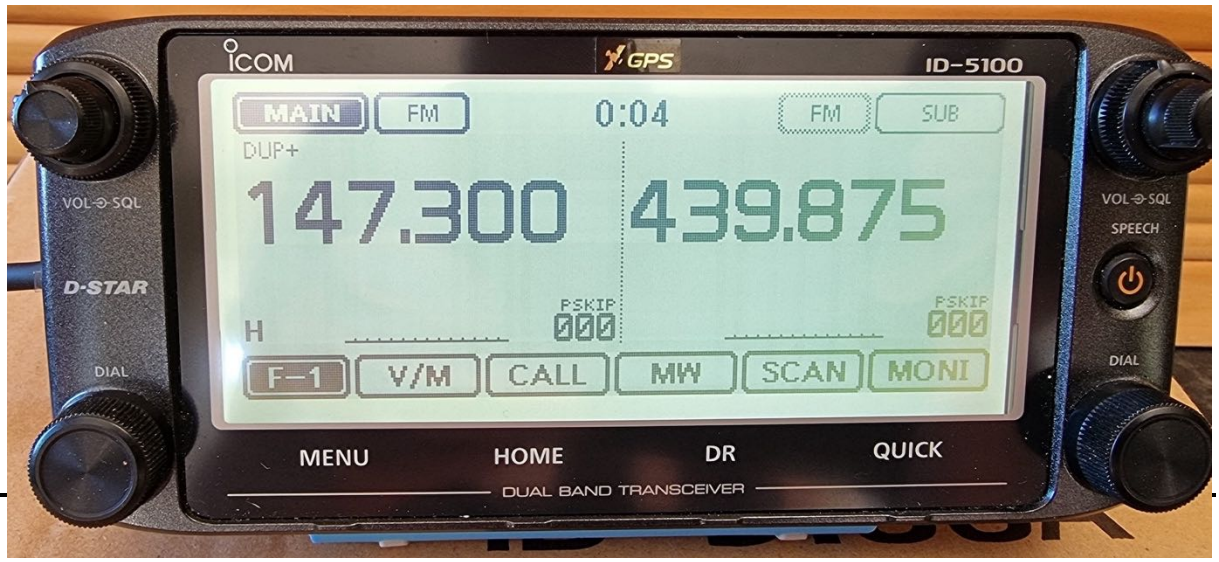
**Repeater: Status**

| | |
|---|---|
| Climie KiwiSDR | Off Air – removed for maintenance. |
| 10 m Beacon (28.229 MHz) | On Air |
| 3 cm Beacon (10368.275 MHz) | Off Air – antenna/beacon removed for maintenance. |
| D-Star 5425, 860, 1292 | On Air – 1292 has desense issues. |
| 730 | On Air |

395 (6 m) On Air

## For Sale: ICOM ID-5100

Jim ZL2HI has an ICOM ID-5100 for sale. It comes with the original box, manual, and 3D printed stand for the head unit. See the pictures below. Send all inquiries to Jim via email at: James Dillon qwikrepairzltd@gmail.com


ICOM
BASIC MANUAL
DUAL BAND TRANSCEIVER
ID-5100A
ID-5100E
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.
Icom Inc.
ICOM HM-207
146.580

## RM Italy LA144 Linear SSB/FM Amplifier: Review

By John M. Wysocki ZL2TWS February 2026

The LA144 Linear amplifier is a true linear amplifier operating in Class A.
I wanted an add-on SSB/FM power amplifier for QRP radios such as the FT-817/FT-818, IC-705 and IC-905.

The LA144 does this on the VHF amateur band.

Checking the specification graphs, 1 Watt in gives 25 Watts out and 2.5 Watts in gives 45 Watts out. I measured 27 Watts and 48 Watts.

This is an ideal power to use with an FT-817 or IC-705 running QRP and not over heating those rigs especially while using FT8 digital modes, Repeater DX'ing and VHF field day operation.


The RM Italy web site: https://www.rmitaly.com/en/product-category/linear-amplifier-en/

Listed many amplifiers for various purposes. RM also list dealers from where you can purchase.

I chose the LA144 because I didn't want to have more than 60-70 Watts output that could burn the mobile roof mounted antenna I am using. I use the LA144 with no more than 2.5 Watts input.

There are other higher powered models available and a model for UHF.
I already had a Tokyo Hi-Power HL-30U with 35 Watts output, so didn't need to replace that.

The most interesting feature with the LA144 is that it is class A. As soon as input RF above 100 milliwatts is detected the LA144 draws 9-10 Amps continuous current from the 13.8 VDC power supply. Zero Amps in RX and 9-10 Amps with any level of RF input.

The SSB front panel switch only adds a time delay so that the internal relay does not drop between voice drops. In traditional linear amplifiers, SSB switches usually apply the bias, but not with the LA144. The SSB switch is a timer. When using on a repeater it must be back in FM otherwise the repeater tail is possibly not heard if under 1 second duration.

**WARNING:** RM have built this with a power module biased for Class A operation and draws full output current no matter what the RF drive power is.

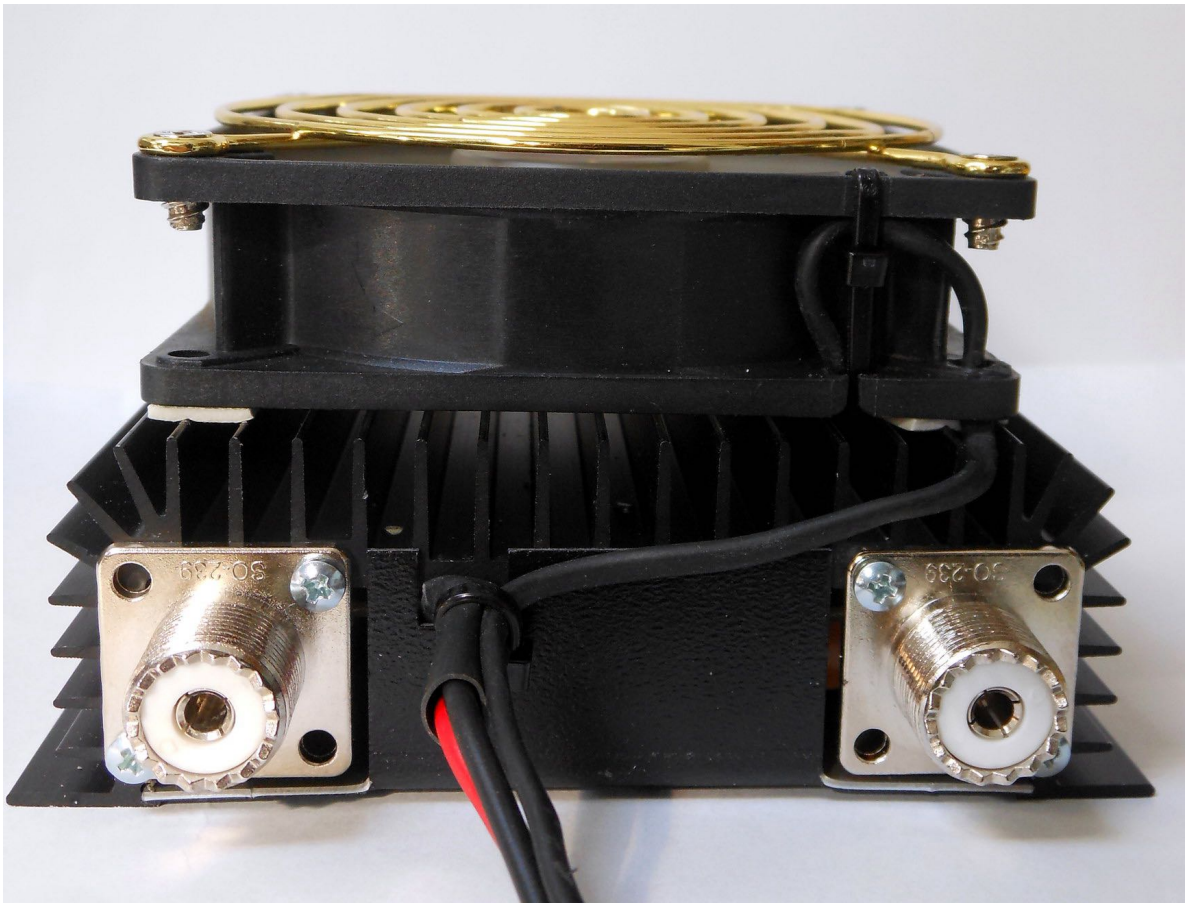
So, a suitable 10 Amp continuous power supply or direct connection to a vehicle battery is always required. SSB/FM it doesn't matter. The current duty cycle is 100%.

Underneath the LA144 is labelled for input and output and has a warranty seal.


**Cooling Fan Required:** Because the heatsink on the amplifier block is very small, and must keep the price point lower, it doesn't take much SSB or FM talk time for the block to get very hot.

The amplifier will not last long if repeated heating and cooling cycles stress the components.

My solution (as others have also done) is to fit a 12V 90 mm computer fan to the top of the heatsink, to not void the warranty. I have wired the fan externally to the incoming DC power wired provided and used industrial double sided tape to hold the fan down in each corner.



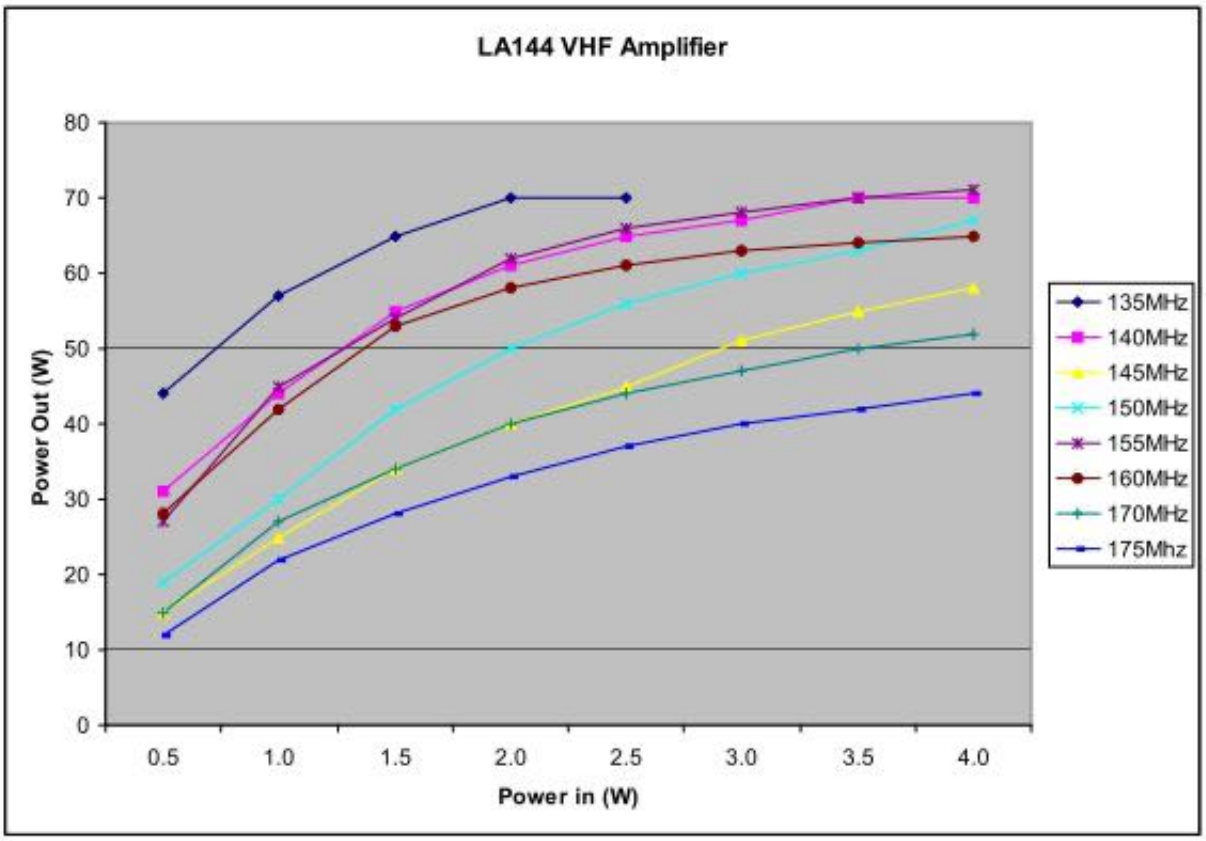
LA144 Specifications and output data sheet:

Freq. Range: 135-175MHz continuous (requires a fan as above)
Max input current 10A
Fuse: 10A (internal)
Input Power: 0.5-4W max.
Output Power: 70W max. (Nominal 60W)

This is a great small but powerful amplifier.

I purchased the LA144 from one of the RM recommended dealers (88 Radio) and it was delivered to my door including freight charges for NZ$331.84. This included a 300 mm RG-58 PL-259 to PL-259 jumper QRP radio interconnection cable.

The different technology using full time Class A was new to me and after having on air SSB QSO's with excellent speech quality reports, I am impressed with performance driven by QRP rigs.



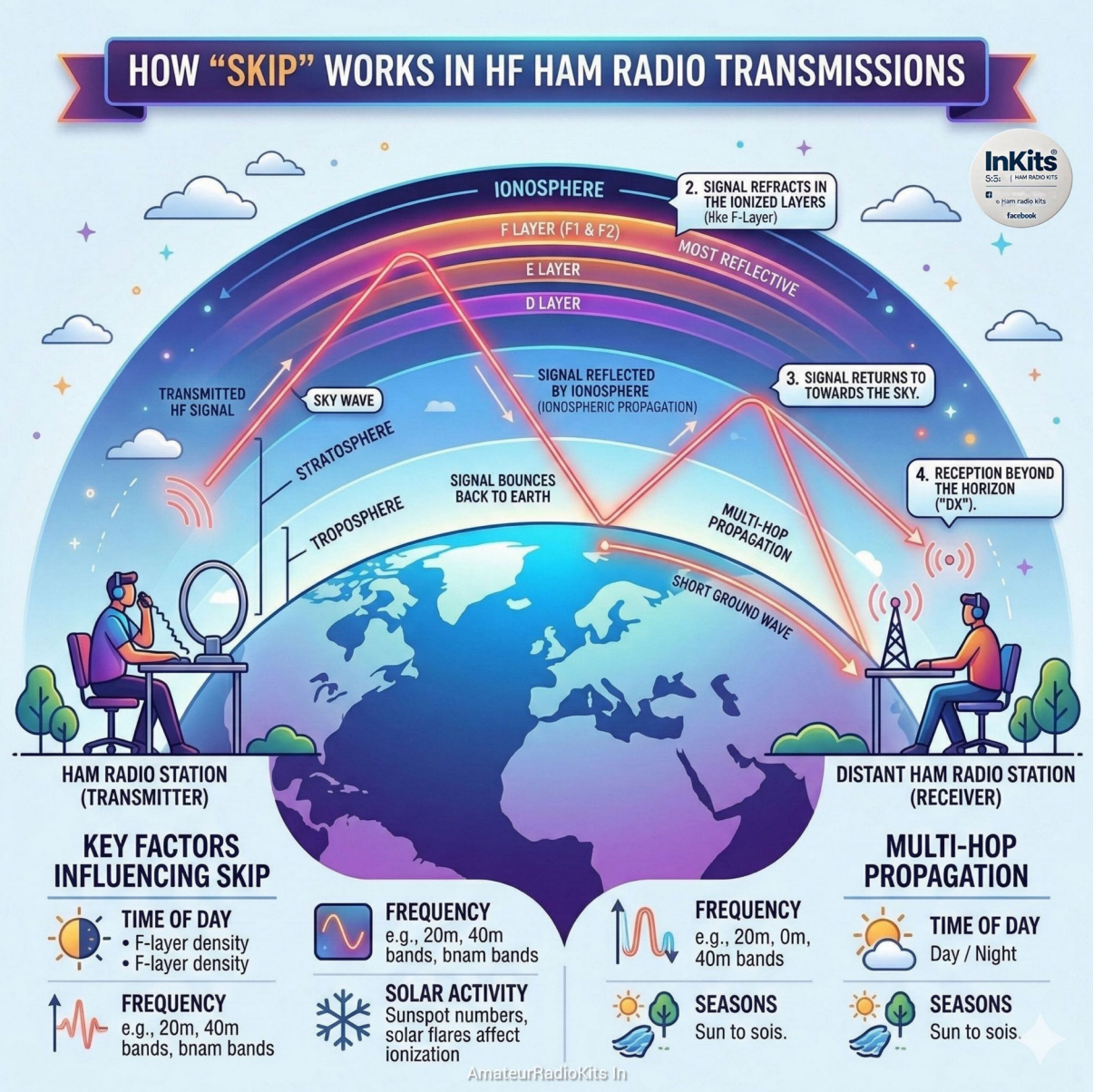

The only downside is the need for a larger PSU, which you would need to do full power anyway, and the need to fit an external fan. Again, a price point difference that RM have over other sellers.

73 and Good DX. John ZL2TWS

## Ever wonder how Ham Radio signals travel around the world without satellites?

It's all about the SKIP!

When we transmit on HF (High Frequency) bands, our radio waves head for the sky. Instead of disappearing into space, they hit the Ionosphere—a layer of the atmosphere "electrified" by the sun.




Think of it like a giant, invisible mirror in the sky:

The Launch: Your signal travels up as a "Sky Wave."
The Refraction: The Ionosphere bends the signal back toward Earth.
The Skip: The signal "skips" over the horizon, landing thousands of miles away!
The Multi-Hop: Sometimes it bounces off the ocean/ground and back up to the sky to travel even further (DX!).

Since it depends on the sun, conditions change between day and night. That's why some bands are "open" at noon, and others come alive at midnight!

## EME Newsletter

https://eme.radio/432-and-above-newsletter/432-and-above-2026-02