



THE QUARTERLY NEWSLETTER OF THE CANBERRA MODEL AIRCRAFT CLUB JANUARY 2026

Edited by GA Durant-Law



From the President



This is the second edition of our newsletter, which with your help we hope to produce quarterly, although sometimes life events get in the way of the editor. It's your club so you need to let us know what you would like to see in the newsletter beyond a summary of committee decisions. Please feed your ideas to the committee or directly to Graham Durant-Law, who is writing the newsletter.

2025 was a year of consolidation and growth at CMAC. We currently have 100 members and, very happily, 13 Juniors are included in that number. Juniors are our future and the more youngsters we introduce to our fabulous hobby, the longer it will live for us old guys to enjoy. I encourage you all, when you see youngsters at the club, to make a point of speaking to them and encouraging them to pursue aeromodelling, in whatever form appeals to them.

Now a few words about CMAC culture. Clubs like CMAC only exist because of the goodwill of their members and the work of elected officials – the committee. Our Constitution requires that we have a committee to manage the day-to-day operations of the club, to ensure the financial viability of the organization and to allow us to all enjoy our hobby in a safe and friendly environment.

Recent events suggest to me that some members may not be completely in agreement with certain aspects of current management and operation. That is to be

expected – we can rarely satisfy everyone completely. Everyone has a view of the world and how our CMAC world should be managed.

The mechanisms for getting your views, suggestions and complaints to the committee are very simple. If there is anything you would like to comment/suggest/complain about, please do it orally or in writing to a committee member. But, regardless of the method, there is only one way in which we should express those views – with courtesy. Our committee members are all volunteers – they give their time freely and willingly to the club, in order that we can all enjoy the hobby. They do not deserve to be treated with disrespect. They should be able to enjoy a day of flying at CMAC just like any other member, without having to put up with verbal abuse, argument and criticism.

The committee needs your feedback and constructive suggestions and communication, so that we can manage the club for your benefit. If you see the need for something to be fixed or improved, however big or small, please approach the committee in the first instance – we may already have a fix in the works. And, if you really want something fixed, be prepared to help carry out the work necessary.

Finally, I would encourage you all to consider standing for a committee position at the next AGM. It is only with the involvement of more members in the club's management that we get a truly representative committee.

I thank the current committee for their efforts this financial year with the running of the club, and the hours of work that go on behind the scenes to keep the club running, safe and compliant

I wish you all the very best for 2026. May every takeoff end in a successful landing

From the Secretary



The secretary has nothing significant to report. There has been routine correspondence between the various agencies we work with regularly.

I would like to remind the club membership to ensure the visitor's book is used. Apart from anything else this has implications for our insurances if an accident occurs.

From the Treasurer



CMAC is in a comfortable financial position, with no significant expenditure pressures likely soon.

We recently asked Revenue ACT for clarification on our rates and entitlements. Despite having no government-supplied services whatsoever - no power, no water, no sewage, no garbage collection - we are charged rates exceeding \$3,500 per annum, as well as rent exceeding \$4,500 per annum. Unfortunately, we have not been granted a subsidy, reduction, or waiver.

The committee has endorsed the proposal to allow half year renewal of associate

memberships. Wording of forms and web pages will be amended soon.

From the Chief Flying Instructor



Since the last newsletter we have successfully qualified five silver wing pilots. They are Graham Durant-Law, Prabhjot Singh, Poul Francis, and Hans Heck. We are also fortunate to have thirteen juniors under training now!

For the new pilots – congratulations! Remember your journey is just beginning and you need to hone your basic skills. Now that you are solo and on your own that the real learning takes place as your confidence grows. It's no different to learning to ride a bike. Unfortunately crashing is part of the journey. Don't be discouraged. Dumb thumbs afflict all of us from time to time and always when we least expect it. Shrug it off, rebuild and fly again, but remember be brilliant at basics always!

From the Safety Officer



Snakes are prevalent around the flying field and even the clubhouse. Do you know what to do in the event of a snake bite? Do you know that there is a snake bite kit located on the kitchen bench in the club house?

Snake bites are nothing to joke about. They are scary and often painful. They can also be fatal if left untreated; therefore, you need to act fast.

STEP 1: Call 000 from your mobile for an ambulance, rest the casualty and avoid unnecessary movement.

STEP 2: Place a wound dressing over the bite. Do not wash the venom off the skin. It will be used later for identification

STEP 3: Apply a pressure bandage firmly over the bite. Alternatively use crepe bandages, clothing or similar material. If bitten on the torso apply direct pressure with padded material.

STEP 4: Apply further pressure bandages on the bitten limb, starting at the fingers or toes and extending upward to cover as much of the limb as possible. Mark the location of the bite on the bandage with a pen if possible.

STEP 5: Immobilise the bitten limb with splints or an arm sling. Reassure the patient and keep them still until the ambulance arrives.

Remember, a big part of attending to a wound is to keep calm, and to encourage the patient to do the same.



DO NOT wash the bite area — venom left on the skin and clothing can help identify the snake.

DO NOT apply a tourniquet or a strap to stop blood flow.

DO NOT cut the wound.

DO NOT try to suck the venom out.

DO NOT try to catch or kill the snake.

ACTAA Safety Matters

November 2025

Club Insurance: The MAAA and a member club are currently involved in a significant Public Liability claim (including legal fees so far amounting to over \$180,000) because of a member of the public making a claim for medical expenses following an incident at a club field.

The incident involved a member of the public falling from a ramp. This has led to consideration of club infrastructure generally and the suitability of club environments to members and visitors. Accordingly, we will conduct a review of the club and surrounding area and check all infrastructure (club houses, paths, walkways, steps, ramps, fire equipment, electrical installations etc.) to ensure that our club environment remains safe for members and visitors alike. Anything that could be improved should be reported to a committee member so that we can schedule repairs or replacements.

CASA Requirements: The MAAA has reported that CASA is rigidly enforcing their regulatory requirements, particularly when an incident is reported to them. One area they are looking at is the 30m rule where remotely piloted aircraft (models and drones) are flown near people not involved in the operation of the model aircraft or drone. A common misunderstanding of the 30m rule is that the model aircraft or drone can be flown over a person, as long as it is over 30m in height. This is not the case. The 30m rule is a minimum lateral distance that the aircraft or drone can be flown from any nonparticipant. The aircraft or drone cannot be flown over a non-participant at any height above ground.

Review of CMAC

Operating Procedures

CMAC maintains local operating procedures to put the MAAA MOP into our context and cover local issues, to ensure that all club participants and visitors are as safe as possible. We last reviewed our procedures for currency in 2021/22, so the committee has commenced a review and will be looking for your input. We have reintroduced references to night flying as our agreement with CASA no longer precludes them, and refined the requirements for maintaining physical control of your model when exiting the starting area on the way to the runway. As has been the case previously, the Committee will release a draft copy of the procedures to all members with these enhancements for your comments. Please do take the opportunity to raise any other safety related suggestions that you think would help. Your engagement will ensure we have the best possible safety system, and all members are aware of our procedures.

Know Your Radio

For Spektrum users! The latest firmware update is available for NX and iX Air Transmitters as well as Spektrum Receivers. This firmware version now allows NX users to update the BNF model templates folder directly using the NX WiFi “Check for Updates” option (excludes NX7e), without needing to access a shared drive with your PC. Detailed instructions are available on the Spektrum

Wiki: <https://wiki.spektrumrc.com/.../nx-how-to-update-your-bnf...>



Please see the change logs listed below for the entire list of new features as well as corrections and improvements.

NX AirWare Change

Log: <https://horizonhobby.cc/NXChangeLog402>

iX AirWare Change

Log: <https://horizonhobby.cc/iXChangeLog20210>

Club Raffle

VQ Models (Vietnam), through their Australian distributor Albury RC Models & Hobbies, donated to the club a new VQ Wirraway ARF. We bought, at a highly discounted price from Albury RC, suitable e-retracts for the model and long-time club stalwart and Committee member, Jack Pittar, kindly donated a new OS .55AX. This makes up a prize valued in excess of \$700!



Tickets are available from the club Treasurer, Terry Griffiths, and are \$10 each. Terry will be at the field most Tuesdays and Sundays, so make sure you have some cash in your pocket! You can also contact him at treasurer@cmac.org.au and he will organize tickets (and payment) for you.



The raffle, at this stage, will be drawn at our Scale Rally, or before if fully subscribed – 100 tickets will be sold. All proceeds will benefit our Trainer & Juniors fund, established by the Committee to fund the club trainer and training aids to assist new flyers. Our CFI, Marty Lagos, and other club instructors have been busy with the influx of new and returning members, including (at last count) 13 minors! Your support of the raffle will greatly assist its success – and you might pick up a great new addition to the hangar!

Working With Minors

We now have 13 minors in the club, which is good news, but with it brings some requirements. We recently checked on the requirement for instructors and others to have a “Working with Vulnerable People Card”. A “Working with Vulnerable People Card” is only required if the club has significant membership or involvement by children or other vulnerable people, and the contact is more than three days in a four-week period or seven days in a twelve-month

period. Accordingly, our instructors are not required to hold a card, BUT it is considered best practice that they do.

We have several instructors who put a lot of time into instructing both seniors and minors. The club will pay for these instructors' Working with Vulnerable People Cards to ensure we comply with best practice principles.

CMAC has a standing rule that any member, who is instructing or even associating with a minor (anyone under the age of 18) at the club, MUST be accompanied by the minor's parent or guardian at all times. The parent or guardian has the primary role in supervising the minor. This seems to be working well but we need to be diligent in following this rule.

Club Member David Millar

At 94 years young David Millar is still flying regularly. We all hope we are as spritely and still able to fly when we are in our ninth decade!



Curious about Aerobatics?



QMAC will be hosting NSW F3A Precision Aerobatics' first competition for 2026 on 7–8 February. NSW F3A Precision Aerobatics would love to encourage more pilots to discover the benefits of flying precision aerobatics.

Whether you're considering entering the competition or simply want to learn more, our members will be on hand to help you develop your skills. You don't need a specialised aircraft to get started as most low-wing sports planes are perfectly suitable.

Upcoming Events

20 -22 March: CMAC Scale Rally

18 April: Hilltops Club ANZAC Day Gunfire Breakfast

25 – 26 April: Wagga Model Aero Club Military and Civilian Scale Rally.

29 April – 08 May: World Control Line Championships, Perth

16 May: CMAC Fun Flying Day in support of the Australian World Scale Championships Team

2026 Scale Rally

Planning for the CMAC annual scale rally is well under way. The rally will occur on 20, 21, and 22 March. We are looking for help from club members to assist with the general running of the event. Please let a committee member know of your availability, even if it is only for a few hours.

Work Parties

Mowing is an ongoing requirement around the club. We also have general maintenance requirements from time to time. Unfortunately, this has been left largely to just a couple of individuals. It would be good if a few more folks volunteered for the odd job here and there, particularly ground maintenance: 15 minutes on the mower or a whipper-snipper is quite cathartic sometimes! In the next little while, and before our scale rally, we will have a few working bees. Please come and help. Many hands make lighter work.

For Sale Notices on Our Facebook Page

Malcolm Street has a VQ Tony (46 sized) ARF kit for sale. The top of the box is a bit tired, but everything is fine inside and complete. Never been started. He's looking at \$200 or nearest offer.



Ron Barnes has a MG Old timer with a 2.4M wingspan (2 piece) for sale. It is currently electric running on 5s 4000mah Lipo battery. It flies well and is in good. He would consider selling just bare airframe for \$150 or as is and just add your battery and receiver for say \$280 or nearest offer.



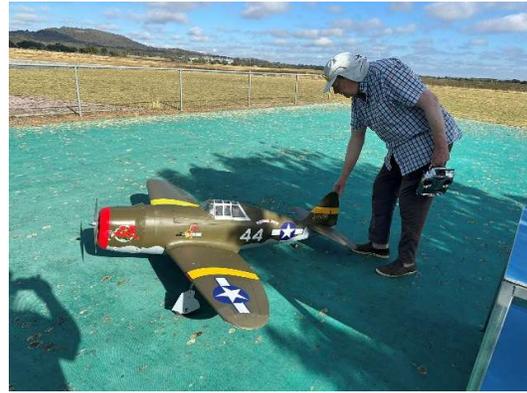
Ron Barnes also has a Savage Bobber for sale. It has a stainless-steel tube fuselage structure, a 92-inch wingspan and is currently set up for 10s electric operation. It could also be set up with 30cc gas/petrol engine. Ron would consider selling just the bare fuselage for \$1,200 or as is and you add the batteries and receiver for \$1,550 or nearest offer.



Around the Field









How TO SETUP AN ON-BOARD GLOW SYSTEM (V.3)

A BEGINNERS GUIDE

(Tested on DX8 & NX10)

Trevor Dalziell 30 October 2025

Note: It is assumed the reader has a working knowledge of his transmitter and is conversant with channel adjustments and mixing.

What is an On-board glow system and why would you need it?

As you know, the glow plug in a glow engine needs to be energised with about 1.5 volts to make the element glow. This 1.5V is provided via a glow igniting system like a “Glow Stick”. After the engine is started, the 1.5V is removed and the element continues to glow via thermal catalytic reaction thus keeping the engine running.

At high revs this glow is maintained automatically but at low revs the glow may not be enough to maintain reliable combustion. This results in the engine stopping or failing to respond quickly to a throttle increase.

The answer is to energise the glow via an “On-board glow”.

This has the added advantage of being able to dispense with the “Glow Stick”.

There are many devices on the market, but the unit I prefer is the RCEXL.

These units are quite small and easy to install but require a little bit of transmitter programming to get it to do exactly what you want.

Note: The units I’ve been using require an input voltage of between 7.4V and 12.5V DC. This is written on the unit. However, the instruction sheet says to use a 2S LiPO battery which is 7.4V. This might be OK.

However, I’ve been using a five cell NiMh battery of around 6.25 volts. This seems to work fine although it’s below the recommended battery voltage.

More on this below.

The unit itself is programmed to give full glow drive at a low throttle setting, low glow drive at about half setting and no glow drive at full throttle. At full throttle, the glow plug element would then maintain glow via normal thermal catalytic reaction. Refer to the instructions that came with the RCEXL.

Preferences

Some modellers like to switch the glow either fully on or off (no glow drive) via a transmitter switch and not be controlled by any throttle setting.

Also, it's possible to use a three-way switch and have full/half/no glow drive, again with no relationship to the throttle setting. There is nothing wrong with this but it ties up a "valuable" three-way switch which could be used for another purpose.

The main problem with using just a switch to control the glow is you would need to remember to switch it on when the engine is at idle. This could be on the ground or on approach for a landing. This is the very time you want the glow to be on. If you were to forget, then the engine might cut out which is something you don't want to happen at any time.

This article describes how to arrange the glow to respond to the throttle setting. It also shows how to use a switch to disable it when not needed. This is invaluable when testing.

Which Radio?

I'm using a Spektrum NX10 Tx and a Spektrum AR8010T Rx. It should also work with the DX8 but the DX8 Mixing menu is a little different and not as versatile.

You should be able to use any system, but you will need a spare receiver channel and mixing in your transmitter.

If you are doing this for the first time, I'd suggest you rig up a test system away from the model. This will allow you to see exactly what is going on and allow you to decide which is the best system for you. Doing it in the model is fiddly and confusing. It's best to do it on the test bench.

But let's not jump ahead just yet.

First, we need to set up the transmitter so that the throttle channel is mixed with a second channel. I used AUX3 (channel 8).

Note: In the receiver, CH8 is referred to as AUX3 whilst in the transmitter it is called A8.

Testing

The best way to start the test is to connect one servo to the throttle channel and another servo to the AUX3 channel. The idea here is to test if you have the mixing correct for the two channels.

1. In Servo Setup, set the Throttle Travel to 100 / 100, Sub Trim to 0 and Reverse to Normal.
2. Scroll to Mixing and choose Mix 1: as shown in Fig:1.



Fig:1

- Choose Curve as shown in Fig:2 (this is where you can set precisely when the glow operates in the throttle curve)

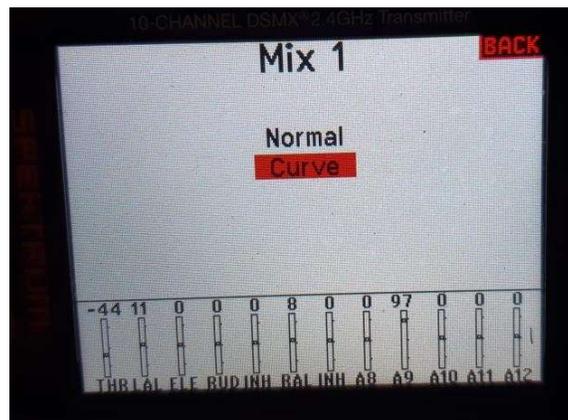


Fig:2

- Choose THR > A8 and Switch H (or your switch of choice) Fig:3.

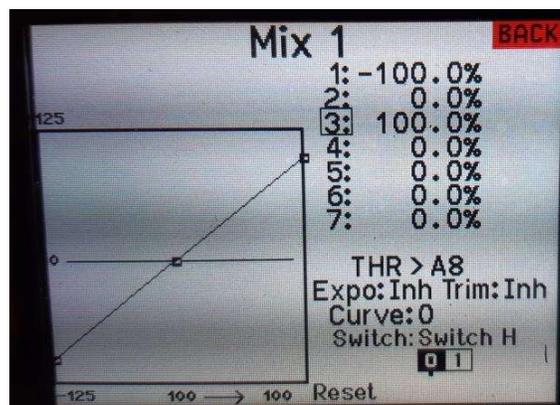


Fig:3

Setup the curve as shown for when the switch is ON

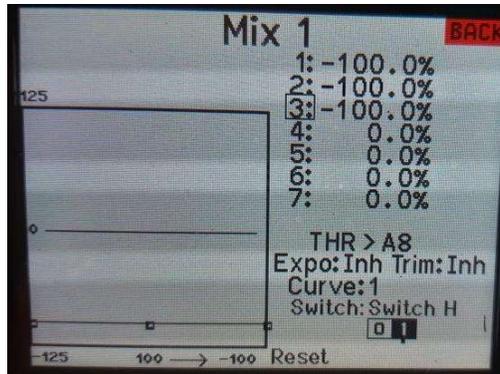


Fig:4

Setup the curve as shown in Fig:4 for when the switch is OFF.

5. Now if you go back to Mixing you will see that THR is mixed with A8 and you are using switch H to turn it on or off. Fig:5



Fig:5

Go back to the main screen. Now as you move the throttle, the two servos should move exactly the same. If you turn the switch off, then the CH8 servo should move to one extreme and not move when you move the throttle.

You can also view this on the monitor screen. The Throttle and A8 should move in unison.

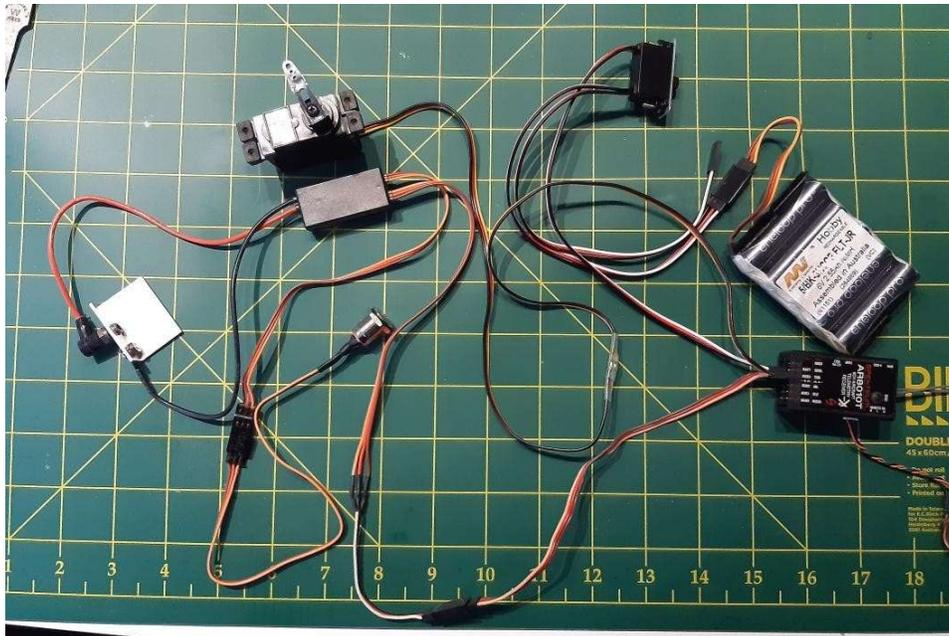
Experiment by changing the curves.

Connect the RCEXL On-board glow unit

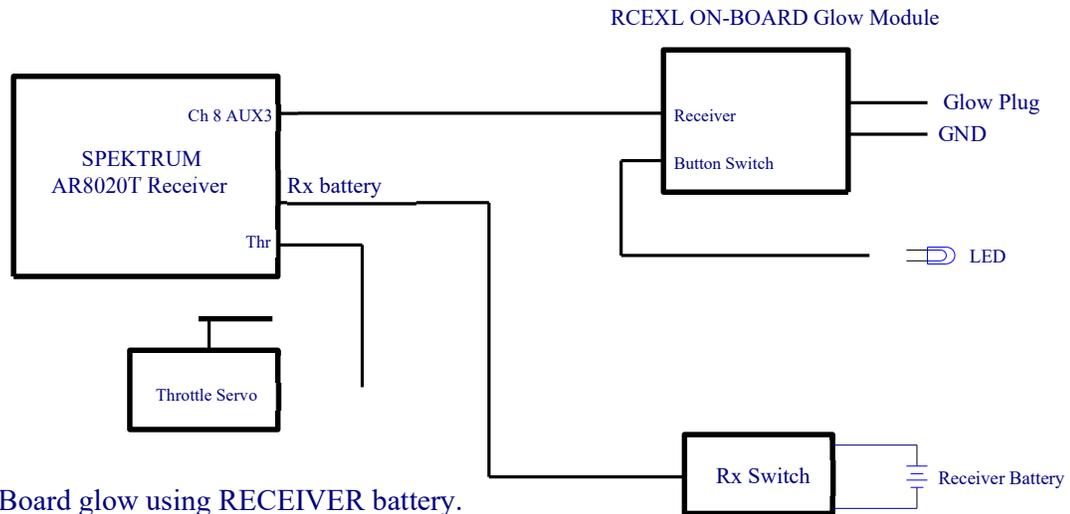
Now that you've tested the mixing, you can now remove the servo from CH8 and connect the On-Board glow unit.



Make up a small jig with a working glow plug. Don't forget to connect the black earth wire as shown.



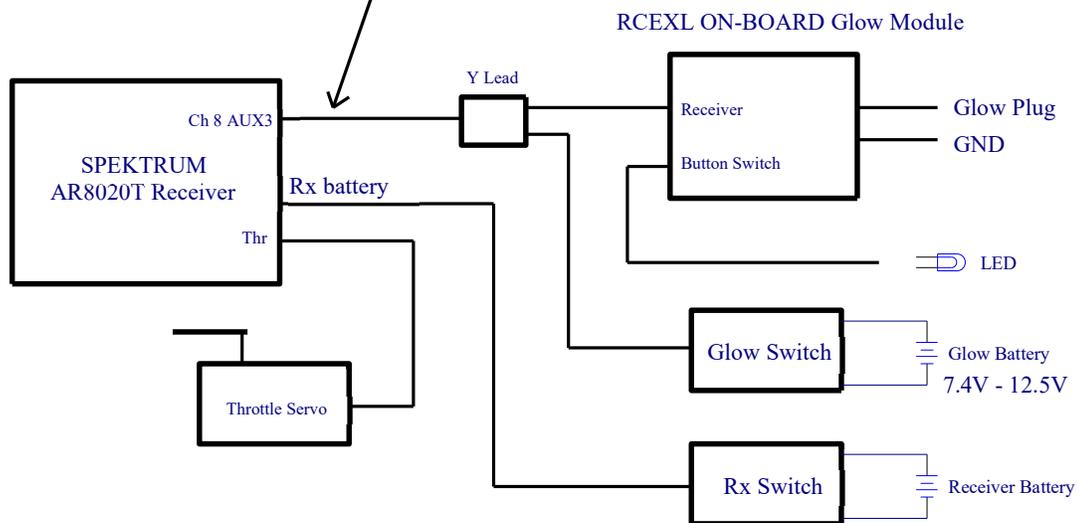
Connect the glow unit as shown



On-Board glow using RECEIVER battery.

As shown, the On-board glow unit is powered from the same battery that powers the receiver. It's OK to do this but you should be aware that extra power is being drawn from the receiver battery. You should satisfy yourself that your battery can handle the extra load.

NOTE: Disconnect the RED power wire



On-Board glow using SEPARATE 7.4V-12.5V battery.

Alternatively, a separate battery can be used for the On-board glow. This would require the inclusion of a Y lead for the extra battery and the disconnection of the +ve lead of the AUX3/ Receiver cable.

Note: As noted previously, the RCEXL unit would normally require a battery voltage of at least 7.4V but they seem to work OK using a 5 cell NiMH battery.

Speak to the author on how to do this.

Setting the throttle curve. This is where you can experiment with where you want the glow to start and at what level of glow.

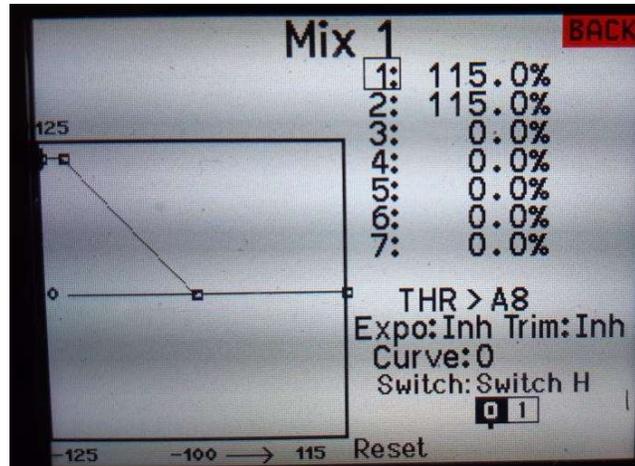


Fig:6

Set the Mix 1 curve as shown in Fig: 6 with the switch on. Note there is a point added. This will give you full glow at the bottom curve of the throttle up to a few clicks from the bottom end.

Note: If you don't get full glow then try increasing the 1 & 2 points from 115% up to say 125%.

As you move the throttle up, the glow will become dim until you get to about half throttle. Further on and the glow will be off.

Leave the curve as for when the switch is OFF. See Fig:4.

Notes: The LED that comes with the RCEXL is very useful for showing what is happening. The push button can also be used to control the RCEXL directly.

- Minimum throttle: Bright glow - LED should be on solid.
- Half throttle: Dim glow - LED should be flashing. □ Maximum throttle: No glow - LED should be off.

Extra: You will notice that as the LED lights up solid for full glow, the glow plug element doesn't glow to full brightness until about 3 seconds. This seems to be a characteristic of the RCEXL unit and I don't think it can be adjusted. You just need to be aware that it's not instant.

Installation

When you are satisfied that your test setup is working as expected, you can install the system in your model.

If you are using a separate battery for the glow and your battery is a 3S (11.1V) then the RCEXL unit will get quite warm so be sure that the RCEXL heatsink is not covered. I suggest you install the LED in

the model where you can see it and where you can access the push button. You can check the status of the glow by observing the LED. The engine should continue to run at idle, i.e. full glow. Try turning off the on-board glow and the engine may stop as it cools down. This will show that you do indeed need the on-board glow system in your aircraft.