

P5

The newsletter of
The Severnside Television Group

August 2001

A big welcome to all our new members.

Congratulations to Paul & Marina (G8YMM) on the birth of their second son Darren John on the 14th July 01.



NO CONTEST



I have been in touch with Mrs. Wookey. Although she has no foot & mouth on the farm, restrictions are still in place which means she can't move the livestock or sell them. In September she may be forced to slaughter some of her animals because of shortage of winter accommodation for them. We do not wish to impose ourselves on her farm at this most difficult time for her & her Family so we will not be taking part in our normal contest station. Weather permitting Ivor & I may go out on some hilltop with 23cms & 2.3Ghz on the weekend of 8th & 9th September.

We have put on hold the plans to upgrade the equipment at GB3XG due to foot & mouth restrictions at the site.

Thank you for all the help our members gave at recent rallies which really boosted the funds. I would like to thank Ian G6TVJ who has retired from the post of chief engineer but remains on the committee. Thank you to Brian GW6BWX on taking the post of chief engineer and Ken G4BVK for taking over as repeater keeper. Please remember it is Ken's license & notice of verification that allow us to run GB3ZZ & GB3XG.

73, Viv. G1IXE chairperson

Our apologies for the late appearance of this issue. Your Editor has been away in far off lands, sadly for work not pleasure, and didn't take a photocopier with him! Hopefully, the next issue will be on schedule but please send articles for publication as soon as possible. The reason this issue is rather thin is that very little has been submitted to print. If you have any articles, please send them to P5 Editor, 12 Cotswold Way, Risca, Gwent. NP11 6QT or email to betwixtbbs@cs.com

New Repeater Progress Report.

Most of you are aware that GB3ZZ is getting rather old now and has recently suffered a few problems. Its age also means that some of its parts are impossible to get hold of so pray they don't break down or the repeater may be off the air for a considerable period of time. Its replacement is slowly taking shape but is still some way off being ready to try out "for real". Time is my worst enemy so development is going far slower than I would like but progress is being made, albeit at a snails pace. I thought it time to let everyone know where I'm up to.

The core of the new logic is now operational. The Morse identification circuits, video routing, sound routing and on-screen captions are all working well. There are 16 general-purpose logic outputs available for controlling other equipment on the site and the picture detecting circuits are working reasonably well. I'm not completely happy with the picture detector yet but it can already sniff out a signal from the noise with pretty good accuracy. There are 8 video sources to the transmitter and 8 pairs of audio sources, allowing either stereo sound or one sound and one data channel to be passed to the transmitter. The frequency response of the video is flat from DC to 5MHz and then falls sharply to notches at 6.5, 7.0 and 7.5MHz, preventing unwanted out of band signals reaching the TX. The sound response is currently flat from DC to 60MHz! But when the pre-emphasis circuits are added, this will be tamed to a more realistic 14KHz.

At present the power drawn by all these circuits is very small. Less than one Watt is consumed, far below the 25W or so drawn by the same functions in the present repeater. I believe I can drop this to under half a Watt by using a different type of PAL device in one of the stages.

From a users point of view, the main difference will be that the current *xx# page numbering system will be replaced with a three digit code, *xxx#. The first digit being to identify which repeater the code is intended for. If you consider that repeaters may become linked, this makes sense because commands can pass through intermediate repeaters but only work on the one recognising the first digit as its own ID.

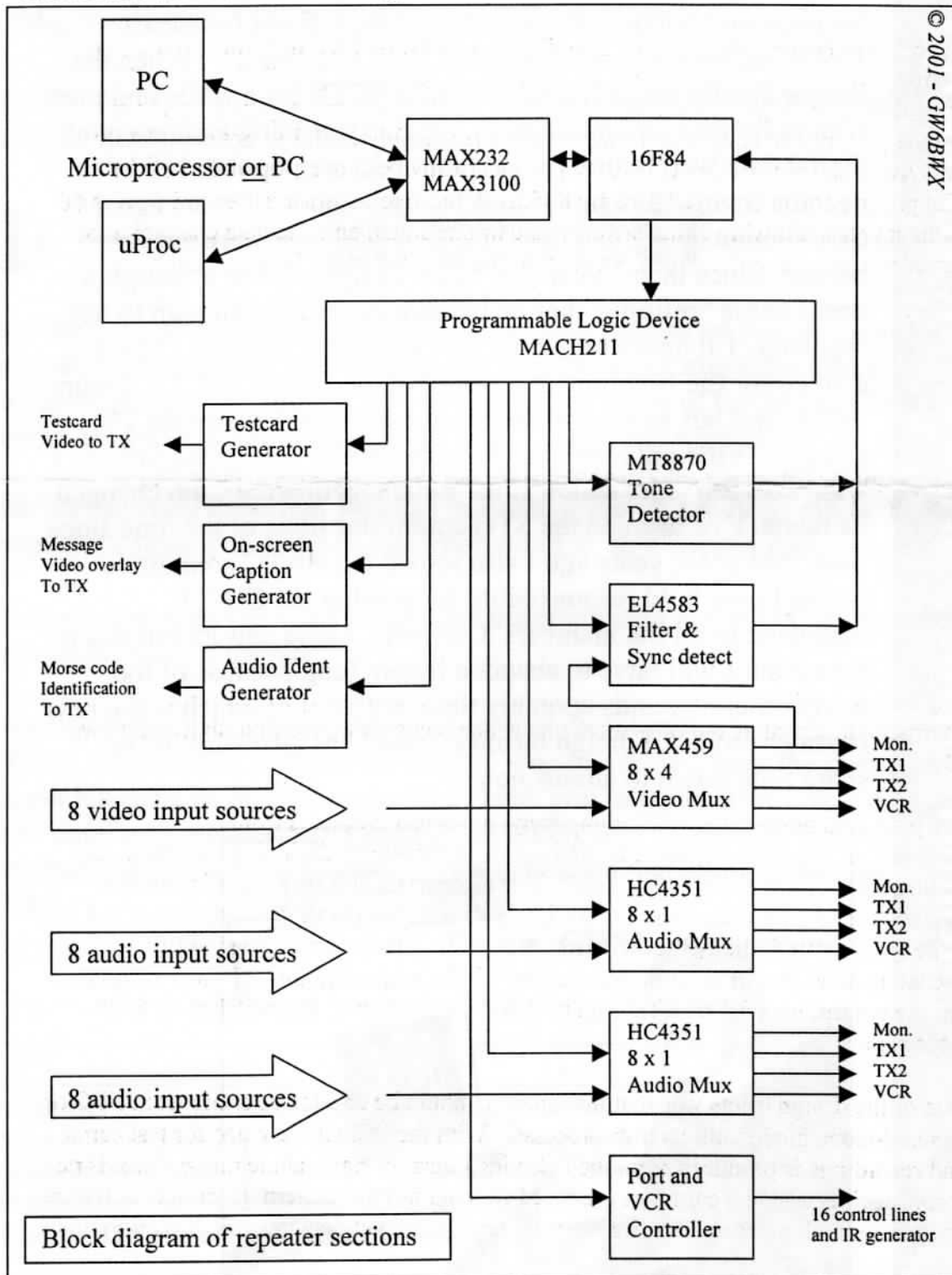
The plan is to remove the VCR completely, it has had problems from day one, and that was ten years ago. Instead, recordings will be made by digitising the sound and picture then storing them on hard disk. This also has the advantages of immediate rewind and no tape wear. For the time being though, a replacement machine of the same type currently in use but with less wear will be substituted. To simplify exchange of VCRs, in the new system they will be controlled through their infra-red remote control interfaces rather than by direct connection to the switches on their front panels.

One of the design briefs was that the repeater should be controlled either from a PC or in stand-alone mode with its own processor. With the PC, all the video for test cards and recordings is produced from the PC's video card. In stand-alone mode, there is no record facility and test cards are produced from an in-built pattern generator. Software for the stand-alone controller has been written but not yet debugged (I'm writing this

in Romania and I didn't bring the repeater boards with me!); the test card pattern generator is still on the drawing board!

When all the debugging is finished, I then have to design and make PCBs to hold it all together, another job that will take several weeks to complete. The finished repeater controller might be small enough to fit on a single Eurocard (approx 4" x 6") board but I'm guessing it will probably overflow onto several boards to make it easier to lay out and construct.

Here is an outline of the new design:



Member Profile: Brian Kelly, GW6BWX

I started young, back in the late 1950's when my father, the late G1DAA made the mistake of leaving some old ex-aircraft radio equipment around. As a child I was in to just about everything so a box with lights and dials was just too much to ignore. I was hooked and within a few years was listening to the short wave bands on a home made TRF receiver. I passed the RAE at the age of 14 but didn't apply for a license for 10 years. That decade wasn't wasted; I became involved with television both as a business and hobby and spent many happy hours broadcast TVDXing with a home-converted VHF 625 line TV. When the license finally arrived, I dabbled with SSTV for a while and then with radio data communication, regularly sending and receiving digital data well before packet radio became popular. I didn't become involved in fast scan ATV until about 12 years ago. My first attempts were on 70cm but 23cm and 3cm were not far behind. Since then I've added 13cm equipment too although it needs some "refining" before being user friendly enough to use regularly. I'll never forget my first encounter with the Club. I arrived for the first time as a visitor at the Bristol FM TV Group AGM, and left as a committee member of the Severnside TV Group! As the only member from the Wales side of the Severn, I was "coerced" into action at the same meeting the Club changed its name. I've been on the STG committee most of the time since then. About six years ago I also joined the BATC committee where I now hold responsibility for posting the CQ-TV magazine to all the members. Currently, I also edit P5 but this is a position I will have to abandon before long because of too many other demands upon my time, not least of which is the new repeater project. Foreign business travel has also whittled my spare time down to almost none.

