My SEQ story

by David Koudys

I have never known a time when LEGO® wasn't in my life and I've never had a 'dark age'. And yet my interests in our chosen hobby have changed over the years. When I was younger, the 357 Fire Station and 730 Steam Shovel with Carrier were my favourite and most rebuilt sets (yes, I'm older than the minifig – even the ones without moving arms). While in high school, Technic pieces were populating the floor of my bedroom and I built an interface card for my Commodore 64 to control the 4.5V Technic motors. Once in college, most of my friends were done with their LEGO® bricks. It was during this time that I found another key element for my love of the LEGO® hobby – the second hand market. I started off by acquiring my friends' collections, then I started looking at newspaper ads and hitting garage sales and flea markets. With the advent of the internet, I would pour over various websites like Kijiji and eBay.

When the RCX programmable brick came out in 1999, I was immediately hooked and already had an extensive parts inventory. The RCX got me into rtlToronto with their numerous robot competitions where I met so many wonderful people. Then I discovered LUGNET – wow – mind blown. LUGNET was the single defining point of my appreciation for the worldwide AFOL community, period. That's another aspect of the LEGO® hobby that explains why I've never had a 'dark age' – throughout the years I've got to meet all these awesome people and participate in so many great events.

Even today I still keep looking through various sources for anything 'LEGO® Cool'. And this is where my story really begins. I might not know everything about the 4.5 volt era of our LEGO® hobby, but I thought there wouldn't be much that would surprise me.

I was wrong.

One day late last year I was on my Facebook Buy and Sell when I came across a post that appeared to have an abundance of LEGO® 4.5 volt wires and 'C' size battery boxes. I wasn't that interested in expanding my 4.5 volt collection, but there was an intriguing addition in the lot for sale – a box labelled 'SEQ' which had what looked like 4.5 volt sockets. I immediately assumed it was some sort of precursor to the RCX. However, I had never heard of such an animal and when I googled SEQ I found nothing related.

A LEGO® mystery is something that will always pique my interest, especially on the secondhand market, so I just had to buy this lot. I picked it up for just 45 dollars – a bargain by any stretch, at least for me. Historically, I've occasionally found that a LEGO® lot which looked cool and unique turns out to be bland and disappointing after the purchase. But that didn't happen here. As soon as I got this lot home, I delved right in. Yes, the battery boxes (19 of them!) were a little 'meh', and the 4.5 volt wires were very dated (and almost ubiquitous in my collection), but the reason I wanted this lot was for these SEQs



(and there were four of them).

I grabbed one, put 3 'C' cells in one of the battery boxes, plugged it into what I assumed was the power input, and the unit turned on. One of the many good things about the SEQ is that there is no switch for on and off – you provide power and the unit just comes on.

That was step 1. Steps 2 and beyond were trying to ascertain how this thing works. I disassembled one unit to see if I could get more information regarding who made it and how to use it. There was a sticker inside the case that listed a company name (ProCom), an address (somewhere in the UK), and a phone number. I thought maybe I could find this ProCom company and get some information – or at the very least a user manual (as one didn't come in the box). Unfortunately, the address and the phone number were no longer valid.

So I posted on LUGNET:

"I know I'm posting to what some would say is a very obscure site these days (LUGNET) about a very obscure finding (4.5 volt programmable brick) from a very defunct LEGO® Technic theme (4.5 volt), but there will be a few of us 'old timers' that may appreciate this."

In that LUGNET post, I put a link to my first SEQ YouTube vid:

Day 1 with the SEQ - https://youtu.be/7NECA1q9-gU







This is where I detailed what I had figured out so far.

It turns out that there were still people out there getting updates from LUGNET. I was contacted by a good friend in the UK after he saw my posting. Over a plethora of emails back and forth, we figured out what the majority of the buttons do, and how to program the SEQ.

This led to subsequent videos:

Day 2 - https://youtu.be/BkBs5KvwV_0

In the second video, I detailed what we were finding out about the various buttons on the SEQ. Day 3 – <u>https://youtu.be/71g4hc_Qvms</u>

This video shows the various button inputs on the SEQ and what they do, or at least what I think they do. I also discuss the programming aspect, with a few examples. I then used the SEQ to power an old TC Logo platform and got to see the programming in action.

Day 4 - https://youtu.be/KNNjYBnxPe0



This is where I incorporated the SEQ entirely into a moving platform. I went back to my 'tried and tested' tank platform, and used a 9V battery box (the 6x 'AA' one, not the 9V battery version) with a 9V-connector-to-4.5V-connector to power the SEQ.

This was a very exciting moment for me – seeing the SEQ move itself around the table was awesome.

I've continued to use the SEQ but haven't found out much more. There are still a few remaining mysteries, as some buttons just don't seem to do anything that I can figure out. Also, out of the four SEQs, there are some which don't seem to function as well as the others. Maybe time wasn't so kind to them.

In the end, I have concluded that the SEQ was a third-party build made by a very intelligent fan in the UK. I don't know how far this person went with it, but obviously a few ProCom SEQs got as far as Toronto, Canada decades ago. I am just extremely happy to have come across the post last year. Finding the SEQ covered all my personal LEGO® hobby bases – acquiring cool LEGO® stuff in the second hand market, obscure electronic Technic, using LUGNET, and working closely with other fantastic AFOLs.

I have to thank my good friend, Malcolm, in the UK for his knowledge of circuits and his generosity in sharing his insights with me. Without him, I'd still be running 4.5 volts to the SEQ and nothing would be working at all. I would also like to thank HispaBrick Magazine® for allowing me to share my story and findings with other fans! It is so appreciated! Our chosen hobby has been utterly wonderful through the years, and I find it just keeps getting better.



