CHIRP - New Model # 2835

Status:	Closed	**Priority:**	Normal
Author:	Mike Maynard	**Category:**	
Created:	08/26/2015	**Assignee:**	
Updated:	02/14/2020	**Due date:**	
Chirp Version:	daily		
Equipment Loan Offered:	Yes		
Subject:	Kenwood TK Commercial series		

Description

I use a small variety of Kenwood commercial radios, and it would be nice to be able to use Chirp for them.

Models include

TK-730
TK-830
TK-780
TK-880
TK-790
TK-890
TK-2160
TK-3160
TK-7160
TK-8180

What would it take to get these added?

Related issues:

related to New Model # 3363: Kenwood TK-790 Single Head	**In Progress**	**02/20/2016**
related to New Model # 4395: Kenwood TK-280	**In Progress**	**01/11/2017**
duplicates Bug # 2685: Support for Commercial Kenwood radios	**Rejected**	**06/30/2015**
duplicated by New Model # 3183: Kenwood TK-880	**Rejected**	**01/18/2016**
duplicates New Model # 743: Kenwood TK-8180	**Closed**	**04/01/2013**
duplicated by Bug # 4041: Kenwood TK760G-1 and Kenwood TK-7160E are suppurted...	**Closed**	**09/19/2016**

Associated revisions

Revision 3300:64358ea7dae1 - 02/05/2020 11:50 pm - Dan Smith

Add Kenwood TK-7180 model support

This is just a small variation on the TK-8180 driver.

Related to #2835

Revision 3301:4fcae119d1ba - 02/06/2020 12:32 am - Dan Smith

Fix an off-by-one error with TK-x180 radios

Settings selections with a default could be off-by-one.

Related to #2835

Revision 3302:505abb41a8ab - 02/06/2020 12:33 am - Dan Smith

Remove a errant debug print() in TK-x180 driver

Found during #2835

Revision 3303:a5394ddbf527 - 02/06/2020 02:46 am - Dan Smith

Add Kenwood TK-2180 and TK-3180 model support

Related to #2835

History

#1 - 08/26/2015 03:59 pm - Tom Hayward

I did some work mapping the TK-790 and TK-2180. The bigger issue is their programming scheme doesn't match Chirp's UI, so some compromises would be required to show the channel data in Chirp. They don't have a single list of channels, like Chirp. They have a handful of channels lists (banks). Chirp doesn't have a good way to present this like you're used to in the Kenwood software.

#2 - 08/26/2015 04:12 pm - Mike Maynard

So basically the main list showing all memories wouldnt be easily possible? I guess I dont understand the structure of the CHIRP program.

Isnt there a way to have chirp read and combine the banks to provide the complete list of memories, and use the banks tab to choose which group they are in, in the kenwood programming?

I would be glad to help in anyway possible.... and FYI, the other radios in the group program pretty much the same way.

With the work you have already started, you would cover half the radios I listed... I suppose once you figure out a method for one 'programming model' it would be pretty simple to expand to additional sets.

#3 - 08/26/2015 04:35 pm - Tom Hayward

Mike Maynard wrote:

> *Isnt there a way to have chirp read and combine the banks to provide the complete list of memories, and use the banks tab to choose which group they are in, in the kenwood programming?*

Not impossible, but like I said, it's a compromise. Everything could be combined into one big list, but this would be confusing both on the software development end and for the user. One solution I had in mind was to rework the Chirp UI to better handle banks, but this is a big commitment I haven't had time for.

#4 - 08/26/2015 04:37 pm - Mike Maynard

What language are you using for Chirp? Maybe its something I can bash my way into figuring out a UI resdesign to assist...

#5 - 11/08/2015 05:47 pm - Pavel Milanes

I have recently make some work on the TK-760G model, but communication protocol seems to have a kind of checksum on each block, that stop me to go further, can you help me?

73

#6 - 11/12/2015 05:55 pm - Pavel Milanes

Pavel Milanes wrote:

> *I have recently make some work on the TK-760G model, but communication protocol seems to have a kind of checksum on each block, that stop me to go further, can you help me?*
>
> *73*

I worked it out!

At least for the kenwood TK-760G that use a checksum on each block of data, this is the schema:

```
==================================
def _checksum(data):
    cs = 0
    for byte in data:
        cs += ord(byte)
    return cs % 256==================================
```

Was just as simple as search on the chirp code for checksum algorithms, and then try and error on every one

Still working on the TK-760G... will rise the ticket for new model once I have it mapped...

73

#7 - 01/20/2016 08:57 pm - Pavel Milanes

I found a friend with a TK-790 and it's willing to borrow me the radio, this will cover at least 3 of the radios in your list.

The issue on the bank management and how to show in the interface I think it's easy, see for example my work on the TK-760G family, on issue #2999.

I will update the issue when the work on the radio begins.

For new users: all that's needed to get support for a new radio is to get the specific radio in the hands of a chirp's developer willing to do the job.

73

#8 - 01/23/2016 01:56 pm - Mike Maynard

Pavel - I can loan a TK-880, and a TK-2160 as well. I even have a TK-730 I could loan you, but its not aligned for transmit.

730 may be cost prohibitive on shipping though.

#9 - 01/25/2016 06:08 pm - Pavel Milanes

Thanks for the offer but... "Huston we have a problem..."

I live in Cuba island, and any postal shipment is subject to custom laws in which "officially you can not simply send me a radio"

Sure you can try, but it's a 50/50 chance of lose the radio, I have a UV-5R and a FD-268A using that way, but it requires sending trough DHL to return back the parcel if any trouble; check that all those radios are common "cheap" radios that a friend took the risk of send via simple email, directly from China.

And then we have the second problem: I'm 99% sure I can't send you the radio back, one for custom laws and other for the price of the shipment being prohibitive to me.

I'm waiting anxiously the fall of the embargo/blockade to see if this stupid restrictions falls of the wall for good.

The only 90% sure way is to carry the radio in a trip to Cuba as a "gift to a friend", and program it as a PMR/FRS (at least in the display ;-)) which are license-less as in the rest of the world.

In my chirp page is my email, drop me one if you want more details, 73

#10 - 02/20/2016 01:11 pm - Pavel Milanes

Hi Mike, I have started to add support for the TK-790.

Check and follow this separate issue #3363

73 CO7WT

#11 - 10/17/2016 09:20 am - Mike Cook

Tom Hayward wrote:

> *I did some work mapping the TK-790 and TK-2180. The bigger issue is their programming scheme doesn't match Chirp's UI, so some compromises would be required to show the channel data in Chirp. They don't have a single list of channels, like Chirp. They have a handful of channels lists (banks). Chirp doesn't have a good way to present this like you're used to in the Kenwood software.*

Mike
Looking to program TK-2180 any one with sugestions?

#12 - 10/17/2016 09:51 am - Tom Hayward

> *Looking to program TK-2180 any one with sugestions?*

KPG-89DK works well. Punch that into Google and you'll find it available for download.

#13 - 07/08/2019 07:59 pm - Dan Smith

- Status changed from New to Rejected

(deleted)

#14 - 07/08/2019 08:03 pm - Dan Smith

- Status changed from Rejected to In Progress

- Chirp Version changed from 0.4.0 to daily

FYI, I'm starting work on a TK-8180 driver, which should be adaptable to the 7180 and 2180/3180 without much trouble. It's going to be a little weird because of the zone structure of this kind of radio, but I think it'll be workable.

Anyone still interested in this family that could help with testing?

#15 - 07/08/2019 08:38 pm - Mike Maynard

Dan, I am pretty sure I have a TK-8180 kicking around, I could assist with testing.

Keep me posted!

#16 - 07/11/2019 04:49 pm - Dan Smith

Mike, thanks for the offer. If you could check out #743, there are more details there. I'm pushing the first rev of the 8180 driver tonight, so it will be in the build tomorrow. If you happen to have a 7180, 2180, or 3180 that would be uuber helpful, as I don't have those to test (although I'll definitely have to make changes for them to be supportable first).

#17 - 02/14/2020 03:56 pm - Dan Smith

- Status changed from In Progress to Closed

This is done.