CONTEST FORUM

RTTY CONTESTING

(GETTING STARTED)

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Mike Sims, K4GMH

RTTY CONTESTING

- TO BE COVERED
  - Getting started on RTTY
  - Getting started in RTTY Contesting
  - Additions

GETTING STARTED ON RTTY - Equipment

- ⚙ **Radio Capability**
  - **Receiver**
    - External Speaker Connection, or
    - Independent Audio Output
  - **Transmitter**
    - Audio Frequency Shift Keying (AFSK)
      - Independent Audio Input (preferred), and/or
      - Microphone Input
    - Frequency Shift Keying (FSK) Input (not a necessity)

GETTING STARTED ON RTTY - Equipment (cont.)

- ✪ **Computer**
  - **Sound Card**
    - Line In (preferred), or
    - Microphone Input
    - AFSK
      - Line Out (preferred), or
      - Speaker Output
    - FSK
      - Serial Communication Port or USB to Serial Adapter
  - **Software (RTTY)**
    - Compatible with Computer

GETTING STARTED ON RTTY - Equipment

- Interconnection Between Receiver, Transmitter and Computer
  - Comprehensive Source of Information for Connecting Radios to Computers Can Be Found at: http://www.qsl.net/wm2u/interface.html and is titled "Understanding Soundcard Interfacing"

Understanding

Soundcard Interfacing

by Ernie Mills, WM2U. http://www.qsl.net/wm2u
Please print this article and use it as a hand out at Club talks and lectures
Interface (Russian) tnx to Andrey Otroshenko, RA3DOA

This page is an attempt to correlate the interfacing schemes for various **Radio models**, and **Sound Card** configurations. Since 26th December 1998, when the sound card version of **PSK31** was first introduced to the Ham community, and after much dialog, experimentation and confusion, an interfacing pattern slowly emerged. I feel that an **understanding** of this pattern is valuable and can save you a lot of time and grief. Please note that each circuit references various letters which will correlate with the Radio pin-outs on the various popup tables available. Just click the manufactures button below, pick your radio and read off the hook-up points.

Kenwood	Yaesu	ICOM	Alinco	...more

I Urgently need other Radio hook-up info.and corrections. Please e-mail me, WM2U , or submit this Form for it's inclusion onto this page.

You have a **Kenwood Radio** and your hookup information is not here! Don't panic! Goto the **Kenwood**. Amateur Radio site, then to the "Jump To" pull down menu and... hey presto! If it is not on this list, it was never made.

If you can't find it here try this great **TNC to Radio page; Hook-Up Magic**

Ok! Ok! so you prefer to buy (that's a dirty three letter word) a ready made Computer to Radio Interface. Check out this nice package by N1ZZ and K1UHF. They call it the **RIGblaster**

Wait!!! are you hooking up a fully computer controlled Radio? One with a virtual consol? The **Kachina**, **Pegasus** or whatever? Hey! first read **Georges Notes**
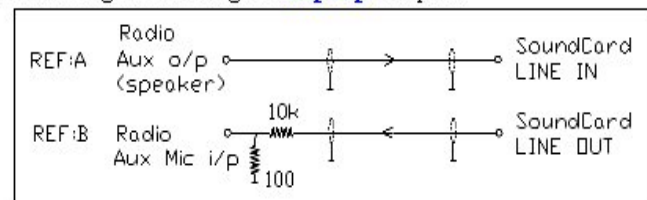
STOP!!! If you are a **FT1000MP** owner, look no further. **Doug McCann, VA3CR** has a web page dedicated solely to that fine machine. This great site is a one stop information authority and missing it will be your loss. You are warned :) Check out **http://www.va3cr.net/**.

- Great Hookup Site
- KM1Z Fran
- Hook-it-up
- W5BBR Bill
- RIGblaster
- SignaLink
- KC7DH Chuck
- K4ABT Buck
- IMD Meter
- PSK Meter

Thomas Giella, KN4LF, has also a great web site showing hookup information for the **FT1000MP Mk5**. Check it put at ~ **http://www.kn4lf.com/kn4lf10.htm**

Ok, Almost there, but before we get into it, please read this email I received off **Jack, K8PET** if you are thinking of interfacing to a **LapTop** computer.

First off, **keep it as simple** as you can. This circuit shows a single connection between the Radio Audio Output and The Sound card LINE IN, and a simple 100:1 attenuated connection between the Radio Aux. Mic IN and the Sound Card LINE OUT.

Oh! before we start a little word on the **component abbreviation** used on these diagrams. Since the decimal point was not showing up too well in cases like 4.7k ohm I adopted the **European** system which uses the 'k' as the decimal point. So the 4.7k ohm now will be marked as 4k7 ohm.

RTTY CONTESTING - Getting Started

- **Equipment**
  - Receive Filters (400 Hz - XTAL or DSP)
  - Computer Control (Computer Aided Tuning - CAT)
  - Radio w/ Readily Programmable Memories
  - Transmitter Able to Maintain Power Level During RTTY Transmission - 100 % Duty Cycle
  - SO2R Helps
  - RTTY S/W Compatible w/ Contest Logging S/W

RTTY CONTESTING - Contests

- Source of RTTY Contest Information
  - "RTTY Records and Rules"
    http://www.rttycontesting.com/

RTTY RECORDS, RULES & RESULTS PAGE
Update 01/31/2005

Contest Rules	Date	Official Results	Records	E-Mail	Website	Comments
SARTG New Years	Jan 1, 2005	2004	💾	📧	🌐	
ARRL RTTY Roundup	Jan 8-9, 2005	2004	💾	📧	🌐	
BARTG Sprint	Jan 22-23, 2005	2004	💾	📧	🌐	
UK DX RTTY	Jan 29-30, 2005	-		📧	🌐	*New Date for 2005*
XE RTTY (FMRE)	Feb 5-6, 2005	2003	💾	📧	🌐	
CQ/RJ WPX	Feb 12-13, 2005	1996-2004	💾	📧	🌐	
NCJ NA QSO Party	Feb 26-27, 2005	2004	💾	📧	🌐	
NCJ Sprint	Mar 13, 2005	2003		📧	🌐	
BARTG Spring HF	Mar 19-21, 2005	2004	💾	📧	🌐	
EA-WW (Spain)	Apr 2-3, 2005	2004	💾	📧	🌐	
SP (Poland)	Apr 23-24, 2005	2004	💾	📧	🌐	
ARI (Italy)	May 7-8, 2005	2004	💾	📧	🌐	
VOLTA (Italy)	May 14-15, 2005	2004	💾	📧	🌐	
Anatolian WW RTTY	May 21-22, 2005	2003	💾	📧	🌐	
ANARTS (Australian)	Jun 11-12, 2005	2004	💾	📧	🌐	
DL-DX RTTY	Jul 2-3, 2005	2004	💾	📧	🌐	
UK DX RTTY	Jul 9-10, 2005	-		📧	🌐	
NCJ NA QSO Party	Jul 16-17, 2005	2003	💾	📧	🌐	
SARTG DX	Aug 20-21, 2005	2004	💾	📧	🌐	
SCC RTTY (Slovenia)	Aug 27-28, 2005	2003	💾	📧	🌐	
Russian WW	Sep 3, 2005	2003	💾	📧	🌐	
CIS DX RTTY	Sep 10-11, 2005	-		📧	🌐	
CQ WW DX	Sep 24-25, 2005	1995-2003	💾	📧	🌐	
Makrothen	Oct 8-9, 2005	-		📧	🌐	
JARTS (Japan)	Oct 15-16, 2005	2003	💾	📧	🌐	*New E-mail for logs!*
WAEDC (QTC)	Nov 12-13, 2005	2003	💾	📧	🌐	
TARA RTTY Melee	Dec 3, 2005	2003	💾	📧	🌐	
OK RTTY	Dec 17-18, 2005	2003	💾	📧	🌐	

RTTY CONTESTING - Contests

- ☸ **Choose the Contests**
  - Your Capabilities
  - Equipment Capabilities
- ☸ **Operate in Contests - Even for Practice**
  - Understand RTTY Exchange Vs Other Modes
    - Search & Pounce Typical Responses:
      - CW: 5NN T5; RTTY: K7SV TU 599 05 05 K4GMH
  - Number of Participants in Different Contests
    - 2005 WPX RTTY 1334 Logs

Submitted Logs (without checklogs+swl)
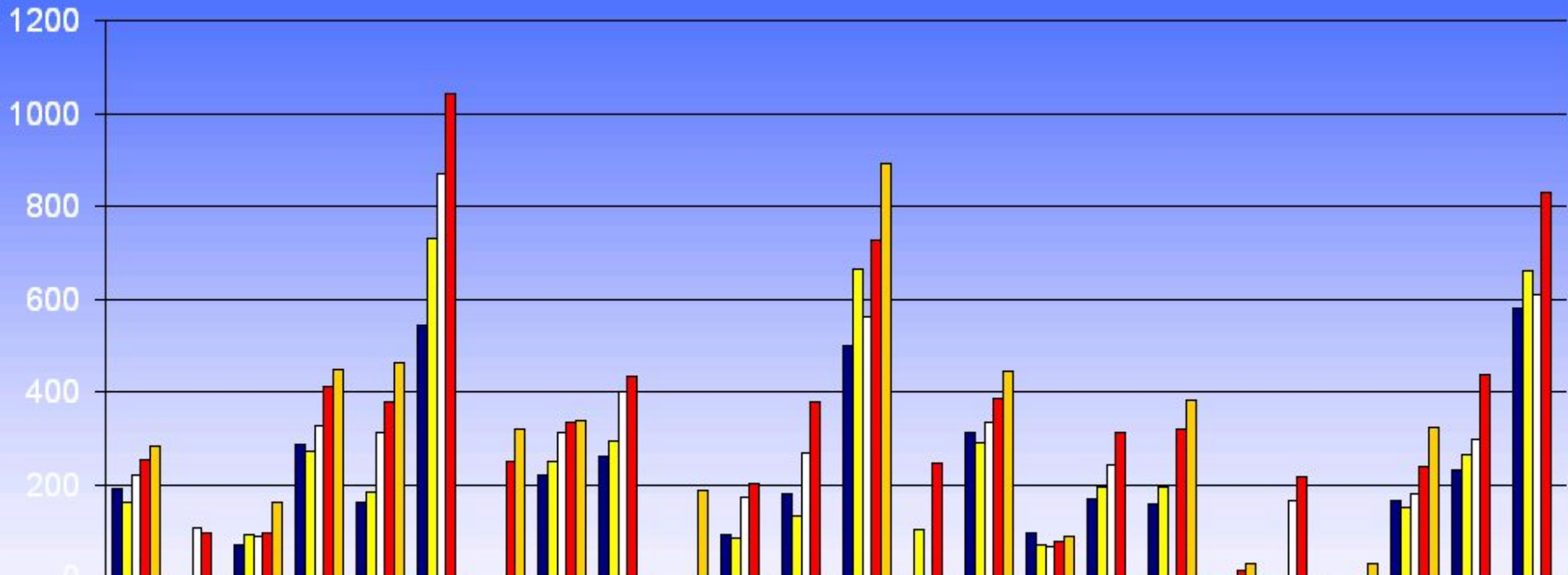
	ANAR TS	ANAT OLIAN	ARI	BART G	BART GS	CQRJ	DLDX	EAW W	JART S	MAKR O	MEXIC O	OKW W	ROUN DUP	RUSSI AN	SART G	SART NY	SCC	SPDX	TARA-GRID	TARA-M	TARA-SK	VOLT A	WAE	WPX
2000	192		69	288	160	543		222	262		93	178	498		313	97	170	157				166	233	579
2001	160		92	272	185	730		250	294		84	132	666	102	289	70	194	196				151	265	659
2002	220	107	88	327	313	868		313	401		171	267	563		334	66	244			165		179	298	611
2003	254	97	96	410	377	1044	249	335	432		203	379	726	245	385	76	312	318	14	218		237	435	830
2004	283		162	449	462		320	337		188			891		445	87		382	31		28	324		

RTTY CONTESTING - Contests

- Operate in Contests - Even for Practice (cont.)
  - Learn to Tune-In a RTTY Signal in a Contest
  - Frequencies and Frequency Range
    - 80 meters: 3570 to 3615 KHz (JA 3520 to 3525 KHz)
    - 40 meters: 7030 to 7100 KHz
    - 20 meters: 14070 to 14120 KHz
    - 15 meters: 21070 to 21120 KHz
    - 10 meters: 28075 to 28120 KHz
    - No 160 meter and WARC Band RTTY Contesting

RTTY CONTESTING - Contests

⚙ **Operate in Contests - Even for Practice (cont.)**

- **Club Score**
  - PVRC 5 Million Points Eligibility
- **Other Reasons**
  - RTTY World Ranking List

The RWRL Points Table
Continual
Last Update: 10-March-2005

Contest	Year	SOAB	Others	Maximum Points
ARRL RTTY Roundup HP	2004	210	78	184875
ARRL RTTY Roundup LP	2004	602	78	209375
BARTG Sprint Expert	2004	34	11	89438
BARTG Sprint	2004	417	11	113375
XE RTTY	2004	310	0	77500
CQ WPX HP	2004	203	272	217563
CQ WPX LP	2004	512	272	236875
CQ WPX ROOKIE	2004	15	272	205813
BARTG HF Expert	2004	39	110	93500
BARTG HF	2004	300	110	109813
EA WW	2004	226	113	84750
SP DX (none SP)	2004	279	17	90313
SP DX (SP only)	2004	87	17	78313
ANARTS	2004	277	6	70750
DL-DX RTTY	2004	104	161	76563
DL-DX RTTY Lim. Ant.	2004	55	161	73500
SARTG DX HP	2004	110	94	86625
SARTG DX LP	2004	190	94	91625
SCC RTTY HP	2004	79	9	68813
SCC RTTY LP	2004	205	9	77688
SCC RTTY Assisted	2004	50	9	68000
CQ WW DX HP	2003	165	329	226813
CQ WW DX LP	2003	468	329	245750
CQ WW DX Assisted	2003	83	329	221688
Makrothen HP	2004	72	15	59438
Makrothen LP	2004	201	15	67500
JARTS HP	2003	120	8	89188
JARTS LP	2003	305	8	100750
WAEDC RTTY HP	2004	184	25	125188
WAEDC RTTY LP	2004	389	25	138000
OK DX HP	2004	85	126	89125
OK DX LP	2004	194	126	95938

RTTY CONTESTING - Contests

- **Operate in Contests - Even for Practice (cont.)**
  - Other Reasons (cont.)
    - RTTY-Contest-Scene RTTY Top-Ten Trophy 2005
      - Trophy to Top Ten in SO and MO

RTTY CONTEST CALENDAR

Y	M	D	UTC	h	RTTY-CONTEST	HOMEPAGE	DEADLINE*	TL
2005	JAN	01	08:00	3h	NEW YEAR	SARTG	38	NC
		08	18:00	30h	ROUNDUP	ARRL	30	
		22	12:00	24h	SPRINT	BARTG	9	
		29	12:00	24h	UK-DX	GMCC	213	
	FEB	05	18:00	24h	MEXICO	FMRE	5	?
		12	00:00	48h	WPX	CQ	MARCH 11, 2005	
		26	18:00	12h	NAQ			NC
	MAR	05	22:00	4h	Open Ukraine	UARL		NC
		06	08:00	4h				
		13	00:00	4h	NCJ-SPRINT			NC
		19	02:00	48h	SPRING	BARTG		
	APR	02	16:00	24h	EA RTTY	URE		
		16	00:00	24h	TARA SCIRMISH	TARA		NC
		23	12:00	24h	SP-DX	RVG		
	MAY	07	20:00	24h	ARI DX	ARI		
		14	12:00	24h	VOLTA	Volta		
		21	18:00	27h	ANATOLIAN	TA9J	267	
	JUN	11	00:00	48h	ANARTS WW	VK2CTD		
		25	12:00	24h	UKR-DX-DIGI	UR5FAV		?
2004	JUL	03	11:00	24h	DL-DX	DRCG		
		17	18:00	12h	NAQ			NC
	AUG	07	00:00	24h	TARA GRID DIP	TARA		NC
		21	00:00	24h	SARTG	SARTG		
		28	12:00	24h	SCC	SCC		
	SEP	04	00:00	24h	RUSSIAN WW	RADIO.RU		
		11	12:00	24h	CIS-DX	SRARS	150	
		25	00:00	48h	CQ/RJ WW	CQ	132	
	OCT	09	00:00	24h	MAKROTHEN	DK3VN		
		10	00:00	4h	NCJ-SPRINT		NaN	NC
		16	00:00	48h	JARTS	JARTS	100	
	NOV	06	12:00	24h	UKR-DX	UCC	94	
		13	00:00	48h	WAEDC	DARC		
	DEC	04	00:00	24h	TARA"Melee"	TARA		NC
		18	00:00	24h	OK WW	CRK		

* or open last results from deadline in days
TL: NC = Not count for TOPLIST !
? = Not count for TOPLIST 2004

RTTY CONTESTING - Additions

- ⚙ **Optimize DSP Filters in the RTTY S/W**
  - • Pre-recorded .wav Files Under Various Conditions (see NCJ March/April 2005)
  - • PathSim from AE4JY Web Site to Generate Files
- ⚙ **Dual Soundcards or Other Dual RTTY Decoding**
  - • Use Same Signal Source
  - • Output of Each Decoder is Displayed Separately