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Broadcast v2.0 documentation.

This program is free distributed to AMSAT community.

This is a beta version, please test it and report any bug!

This is the first non beta version.

## Very important:

This application, in order to run correctly, do need a folder named "BROADCAST FILES" at the same level of the application!

DON'T place application and folder too deep in your hard disk.

#### Feature:

- 1) Real time and batch receiving from RAW data file from a KISS TNC.
- 2) Save broadcast file and hole list for future completion.
- 3) Decode PACSAT FILE HEADER into an " PFH" text file.
- 4) Extract final file into a "BODY" file.
- 5) Full on screen monitor of received frame.
- 6) Full graphic hole list display.
- 7) Fill partial file for more simple reading; tag holes with << XXX bytes missed >>.

# Hints:

- 1) Never remove or rename the "Broadcast files" folder.
- 2) Don't perform realtime receiving from UoSAT 9600bps.
- 3) Don't remove non TeachText files from "Broadcast files" folder.
- 4) To speed up realtime operations on old Mac keep Broadcast window closed.
- 5) Be sure your RAW data file are saved in full binary mode with no stripping or translation of characters.

## Use:

- 1) Run application, automatically it wait for incoming data from modem port; you can change speed from BROADCAST menu.
- 2) If you want save incoming data for further analysis (for example telemetry decoding) select OUTPUT from FILE menu. To close reselect.
- 3) Select INPUT from FILE menu if you want decode a RAW file. To close reselect.
- 4) Broadcast file receiving and saving is fully automatic, simply wait for the end of data; you can show file activity selecting HOLE LIST from FILE menu.
- 5) To extract from completed file select EXTRACT PFH & BODY from broadcast menu.
- 6) To make a file request: choose Partial file to ask for filling a partial received file, you are prompted for the file and a request is automatically build and send. Choose new file to ask for a new file ID, a new Satellite callsign or blocksize. Blocksize is retained also choosing cancel so you can change the default blocksize for partial file request.

#### File menu:

Input

Open a raw data file and close serial port. If a file is already opened: close file and reopen serial port.

# Output

Open an output file to save incoming data. If a file is already opened: close it.

## Broadcast

Show Broadcast window or close it

Hole List

Show Hole List window or close it.

Kiss On

Try to force kiss mode on a TNC2. (KISS ON <CR> RESTART <CR> are sended to serial port).

Kiss Off

Try to force a TNC2 exit kiss mode. (<192><255><192> are sended to serial port).

Quit

Exit application and close all files.

#### Broadcast menu:

## **Extract PFH & BODY**

Extract PACSAT file header and file body from a complete received file. If file is TEXT ask to strip line feed. Then ask to empty MASTER file to save disk space. You can scroll in the PFH, then choose "User" to save with USER FILE NAME from PFH; "System" to save with FILE NAME from PFH; "Title" to save with BBS TITLE from PFH; "New" to save with new name; "Cancel to abort saving. You can view the file (if text) with view button.

# Fill Holes

Fill holes in partial files for easy reading and tag hole indicating how large it is.

## Send Request

Send a request frame to satellite. You can select a partial file to request that file or enter new file ID and block size.

# Repeat Request

Send the last request again.

## **Serial Settings**

Change speed of serial port, check "Make default" to make change fixed.

## Changes from v1ß9:

1) Extracting PFH & BODY you can view the file without save.

#### ATTENTION:

THIS PROGRAM DON'T PERFORM CRC CHECK OF DATA IN BROADCAST FRAME.

YOU CAN HAVE CRASH DECODING RAW DATA FILE WITH CHARACTERS STRIPPED OR TRANSLATED; REALTIME RECEIVING FROM 9600 UOSAT3 IS SUPPORTED ONLY ON A VERY FAST MACHINE (SE/30, IICI, IIFX are ok; IISI, IICX are not ok).

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