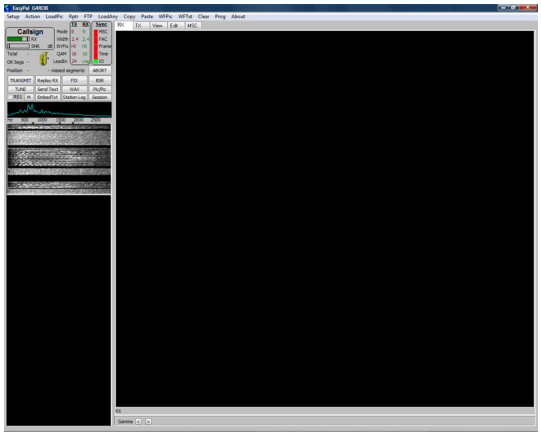
EasyPal Main Screen Help

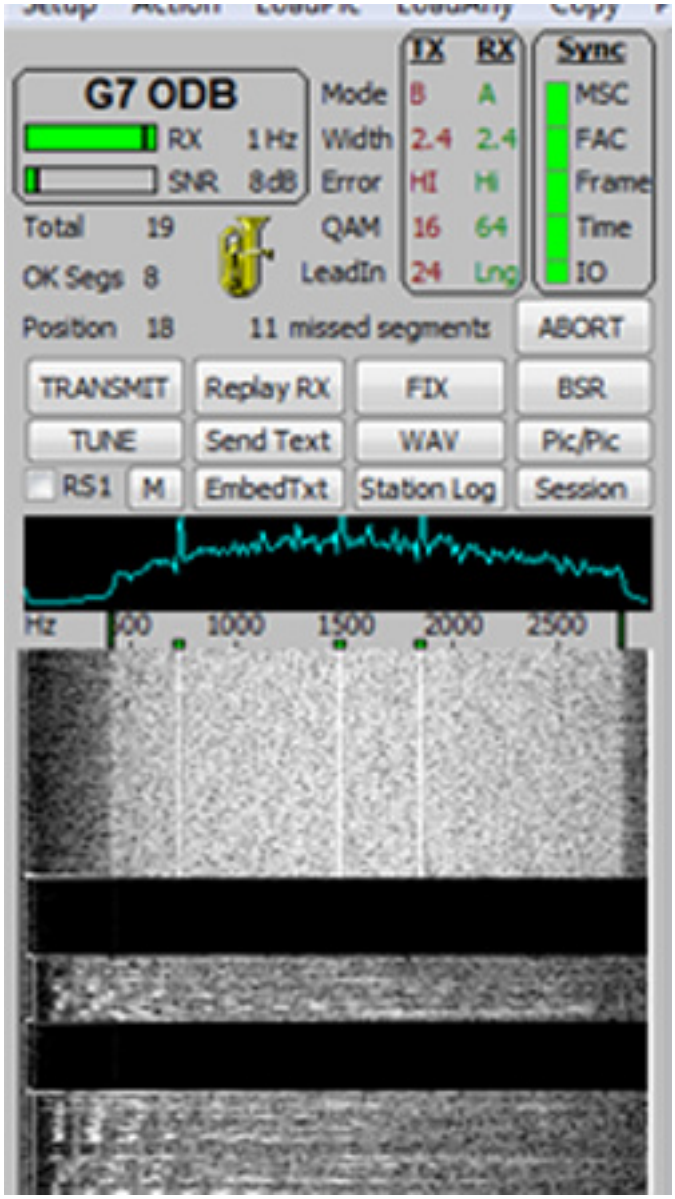
MAIN SCREEN OPTIONS AND CONTROLS

The EasyPal Main Screen is the most used screen within the Program. From here you can control all the main functions within EasyPal... switch to TX.. Change Modes.. Load Pictures, View past received and transmitted pictures and much much more.



The **EasyPal Main Screen** with TX Picture window activated.
TX Mode in this case is B / 2.4 / HI /16 /24 shown under TX in RED
RX Mode is A / 2.4 / HI / 64 / Lng shown under RX in GREEN

The TX Picture details are shown above the TX Window:
SECS Displays the length of the transmitted signal in Seconds
20K Displays the currently selected picture size in Kbytes
SLIDER + marker Adjusts the amount of jpeg-2000 compression applied to the Picture. Higher compression results in more Picture degradation.
SET Sets the file size after adjustment with the Slider and shows the result on the Picture AFTER Compression
GAMMA < > Adjusts the GAMMA Correction of the Selected TX File.



This Picture shows an active Receive of a Transmission from G7ODB

Notice ALL Sync Display indicators are GREEN
Total 19 = Total number of segments that make up the Image being transmitted
OK Segs 8 = The number of correctly Received segments so far
Position 18 = Number of Segment currently being Decoded
11 Missing segments = 11 segments remaining for a complete receive.
The THREE peaks within the Receive Passband... BLUE waveform across the audio passband
The Waterfall Display which shows the signal so far received.. a Vertically downward scrolling representation of the Received signal

More Detailed explanation follows:

Main Screen Controls

ABORT Click to **ABORT** a Transmission and switch to Receive
TRANSMIT When Clicked this Button switches to **TRANSMIT**.
Current selected Transmit Picture will be Transmitted using the selected Mode and Options
REPLAY RX Re- Transmits the picture last received. Automatically switches to TX
FIX Sends a FIX in reply to a BSR. See GLOSSARY for Details
BSR Bad Segment Request. Click this to send a BSR signal. See GLOSSARY
TUNE Transmits a TUNE signal (See ACTION MENU for more details)
SEND TEXT Sends a TEXT file as entered
WAV Allows selection and Loading of a WAV audio file for Transmission.
Clicking "Set as begin.wav" transmits the selected wav file at the beginning of each transmission. "set as end.wav" transmits
the selected wav file at the end of each transmission. The "remove" options clear the appropriate selections.
Click "TX Now" to transmit the selected wav file immediately without transmitting an image.
PIC/PIC Allows you to select Multiple Pictures within a Picture for Transmission.
Select an Image for transmission using LoadPic.Click "Pic/Pic". Select another Image to merge with the first. This Image can be resized and moved as required.
Additional Images can be added as required.
An additional small window also appears that allow you to enter and add Text to the Images.
Click "Merge to TX" to complete the montage and process the completed Image for Transmission.
EMBEDTXT Allows Text to be Embedded within a Transmission. See ACTION MENU USER DETAILS EMBED TEXT
for more details.
Box and "RS1" Left click to toggle RS encoding for transmitted files.
Right click the TEXT to toggle the 4 levels of encoding. Shows the current **RS Type Encode setting** . See GLOSSARY

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M Opens a Small RX Monitor window and closes the Main Screen window.
Very useful if you want to Monitor Received Images while doing other things on your PC. Screen is resizable.

EMBEDTXT Allows Text to be Embedded within a Transmission. See ACTION MENU USER DETAILS EMBED TEXT for more details.

STATION LOG Displays the CALLSIGN and details of the sender of each Received Picture since the current EasyPal session was started.. Details may be Edited on Screen and Saved for next session

SESSION Displays details of RX and TX instances since the current session of EasyPal was started. Callsign, RX or TX, Time and Mode details are displayed

Upper Screen Display

TX shows the current Mode settings for TX . DRM submode selected for transmit. Right click mode parameter to toggle through settings.
Any changes to the mode are saved for future sessions when the program is closed.
Default DRM Mode should be Mode B, Width 2.5 khz, Error HI, QAM 16, and LeadIn 24. Interleave is always Long and cannot be changed.
These settings are the best choices for general use on the HF bands.
LeadIn 12 will reduce transmit time by reducing the number of redundant segments. For very short transmissions such as Text messages, LeadIn 12
may be too short a time for all stations to achieve MSC sync before the transmission is finished. In this case, select LeadIn 24.

RX DRM submode received. FAC must be green before the mode can be detected and the callsign decoded. In addition to those mode settings that
may be changed on transmit, the RX will also reveal the interleave setting. Lng for long and Sht for short. The receive mode settings are automatic and do not require the
operator to make any changes for receiving any DRM mode.

MODE Mode selected
WIDTH Signal bandwidth selected
ERROR Error Rate Correction selected
QAM QAM rate selected
LEADIN lead In length selected

CALLSIGN Shows the CALLSIGN of the Transmission Station. Note the Validity of the Callsign is not checked. The Displayed Callsign is simply the Callsign entered by the

Transmission station in Setup.
DOUBLE CLICKING a Displayed Callsign links to EZCALLS and displays the relevant information for the Callsign
However, other EZ programs may be desired. Right click the CALLSIGN and the desired program exe file may be selected.
Double clicking the callsign for the first time will load the selected program.
Later double clicks will transfer the callsign to that program. (the program must be EasyPal compatible)
RX Display bar showing the Relative strength of the RX signal AUDIO LEVEL
SNR DB The relative Signal to Noise Ratio in DB of the Received Signal
TOTAL The TOTAL Number of Segments in a Transmission
OK SEGS The Number of OK Segments Received
MISSING The Number of MISSING / CORRUPT Segments Received
POSITION The Current Segment Number being received.
The **TUBA GRAPHIC** Plays a few Notes of a Tuba as a Transmission !

SYNC DISPLAY aka TRAFFIC LIGHTS

MSC Master Service Channel in the DRM signal
FAC Fast Access Channel in the DRM signal
FRAME Frame Sync Signal
TIME Timing Sync Signal
I/O Signal present at Soundcard

These Indicators turn from OFF to **RED** to **GREEN** in ASCENDING ORDER. ALL Indicators must be **GREEN** for a Picture to be received correctly (depends on the Mode of the Transmitted Signal)
The Levels of your **RECEIVE SIGNAL** from Receiver via Interface to PC Soundcard have a direct effect on these Indicators.
MSC is the most difficult to lock.. careful adjustment of your Received signal level may be necessary to obtain constant MSC lock.

Lock failure is shown on the **PROGRESS BAR** at the bottom left of the Main Screen as a **RED** Line. Valid Reception is shown in
GREEN
This Bar only appears when a Valid signal header has been received and the receive signal is being processed by EasyPal.
Depending on the Mode of Transmission **RED** lines in the Progress Bar may result in a

FAILURE TO DECODE message after reception completes.

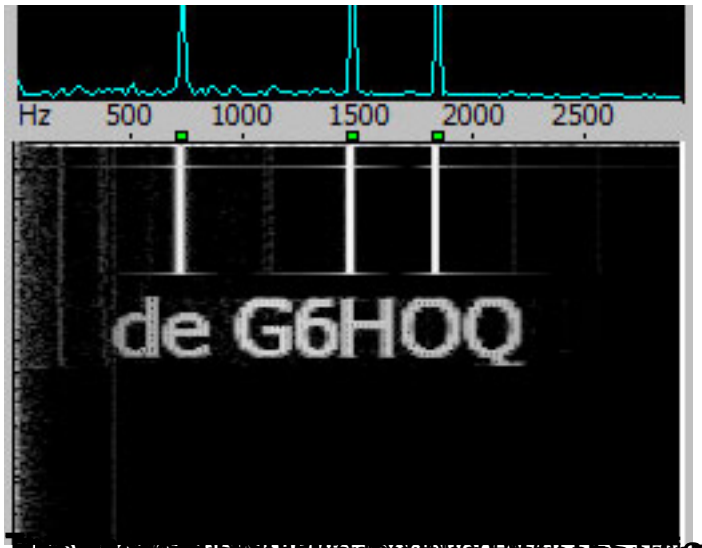
A **BSR** request can be used to ask the Transmission station (or any other station that has the requested information) to re-transmit a **FIX** transmission to Fix (Repair) the Corrupted Receive file.

Beware: The FIX transmission re-transmits the requested Segments of the corrupt file several times. A FIX can take much longer to Transmit than the full Picture.
If you have many errors in the Progress Bar the quickest way may be to Re-Transmit the entire file again.

LOWER WINDOWS

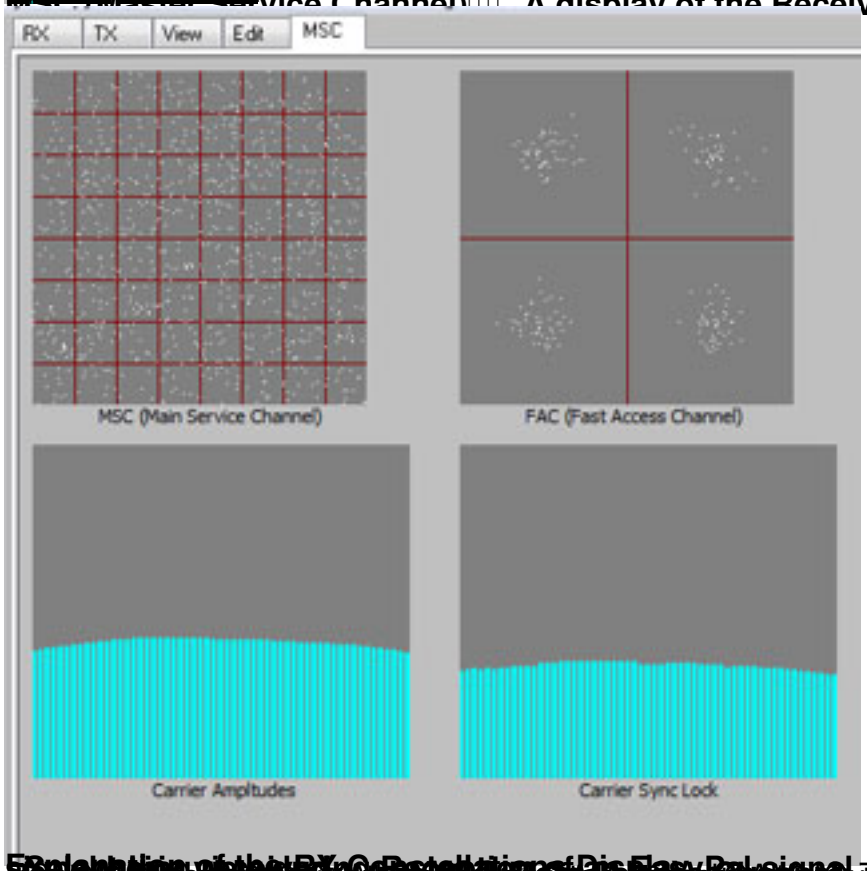
The **First Lower Window displays** an Oscillograph representation of the Receive Signal.
Displayed as a Blue Line the height of which relates to the frequency response of the received signal as it appears on your Soundcard. This display shows in REAL TIME.
The Three Channel tones used by EasyPal should be shown as Three Peaks in the waveform.
For Best Reception the frequency response should be as flat as possible with three distinct peaks corresponding to the three channel tones being transmitted.
The three channel tones should align directly above the Three Green markers on the

Second Lower Window Display... aka the WATERFALL





MSC (Main Service Channel) A display of the Receive Signal purity





Click to Open selected picture to your default web browser via a temporal folder. Use with