

## How to use VIRTUAL RADIO – RDS

“Virtual RDS” is useful to send to the listeners the information regarding the actual ON AIR program through RDS System.

Information (like song name, artist or program name) will be send thought RDS PSN (Program Service Name) or RT (Radio Text)

Here you are how to set the different software involved into the project:

### AEV Virtual Radio settings:

The user can define a filter of the “types” that are enabled to transmit information through RDS.



It's possible (for example) to define that only “Music” and “News” Types are enabled to transmit info.

Filter setting is available into file OnAir.ini :

[...]

[RDS]

File=C:\Virtual Radio\Accessories\Rds\rds.txt

TypesToShow=Music,News

The system controls if the actual “ON AIR” material “Type” is into the OnAir.ini Type list. If not, the system turn off automatically the transmission of the additional information and send only the “RDS default” information (ex. Station name).

## RDS 4500 settings:

As said before, information (like song name, artist or program name) are sent through RDS PSN (Program Service Name) or RT (Radio Text)

AEV SpA advise the user that International Specifications don't allow Program Service name "dynamics". For the safety of the listener "The use of PSN to transmit text other than a single eight character name is not permitted".  
AEV SpA suggest to use the Radio Text channel.

Different settings of RDS4500 are required if is used RT or PSN channel. These settings are useful to allow a data transmission optimization.

### - RDS Settings using **Radio Text**.

Using RDSPCSAT.exe software, we suggest to set the Group repetition time with these parameters:

Group Nr.	Repetition Time	Channel A	Channel B
Group Nr. 0	30 %	030	000
Group Nr. 1	0 %	010	000
Group Nr. 2	69 %	070	000
Group Nr. 3	0 %	000	000
Group Nr. 4	1 %	001	000
Group Nr. 5	0 %	000	000
Group Nr. 6	0 %	000	000
Group Nr. 7	0 %	000	000
Group Nr. 8	0 %	000	000
Group Nr. 9	0 %	000	000
Group Nr. 10	0 %	000	000
Group Nr. 11	0 %	000	000
Group Nr. 12	0 %	000	000
Group Nr. 13	0 %	000	000
Group Nr. 14	0 %	000	010
Group Nr. 15	0 %	000	011

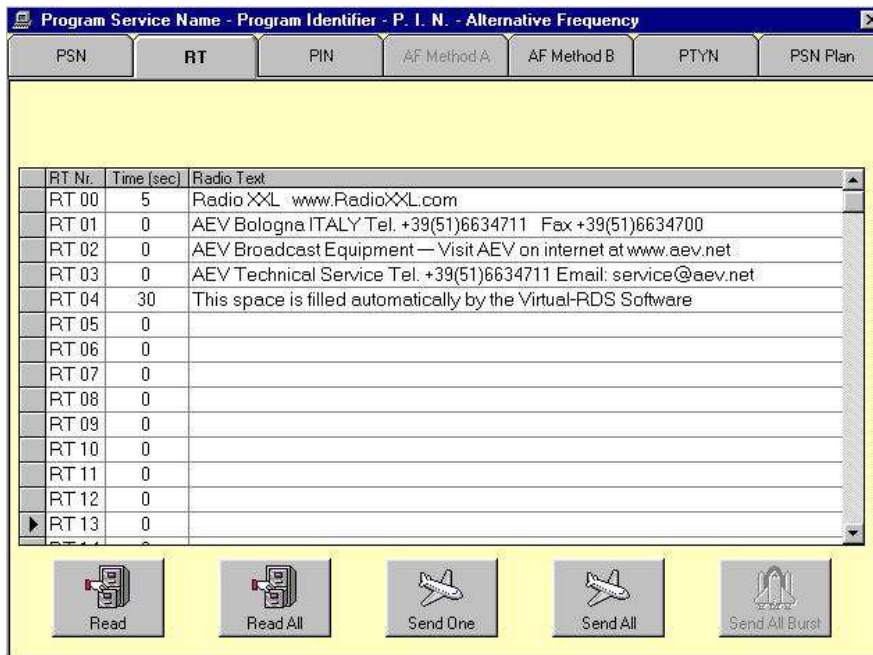
Fast basic tuning information

Send All Burst  
Send All  
Send One  
Read All  
Read One

Now RT transmission has an high priority vs. PSN.

Now it's important to insert the default RT line.

The system controls if the actual "ON AIR" material "Type" is into the OnAir.ini Type list. If not, the system turn off automatically the transmission of the additional information and send only the "RDS default" information (ex. Radio XXX [www.RadioXXX.com](http://www.RadioXXX.com) into RT00line)

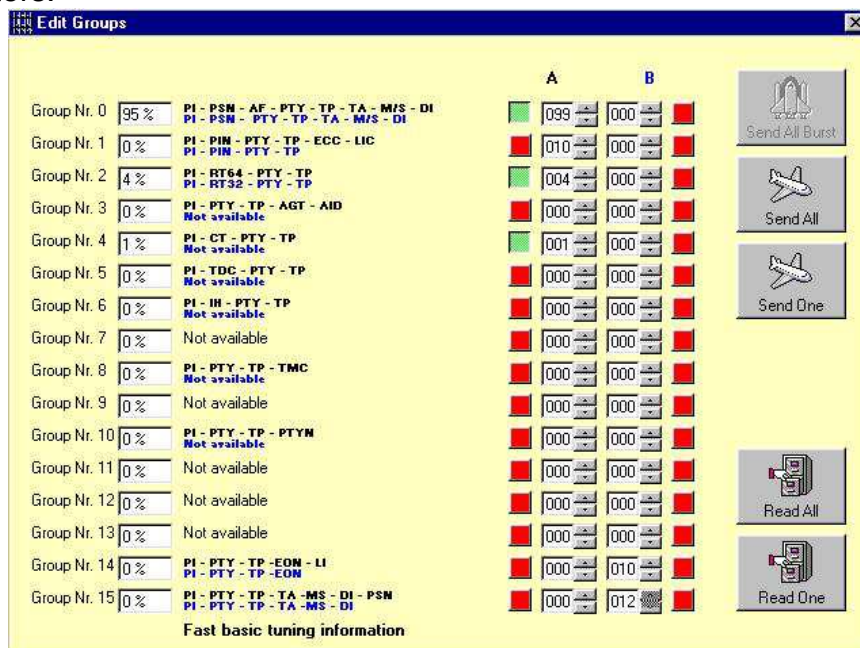


If the actual "ON AIR" material "Type" is into the OnAir.ini Type list, the info of RT00 line is transmitted alternatively with RT04 line (this line is updated automatically by VirtualRDS Sw.

VirtualRDS updates only line RT04, the maximum length is 64 characters.

- RDS Settings using **Program Service Name**.

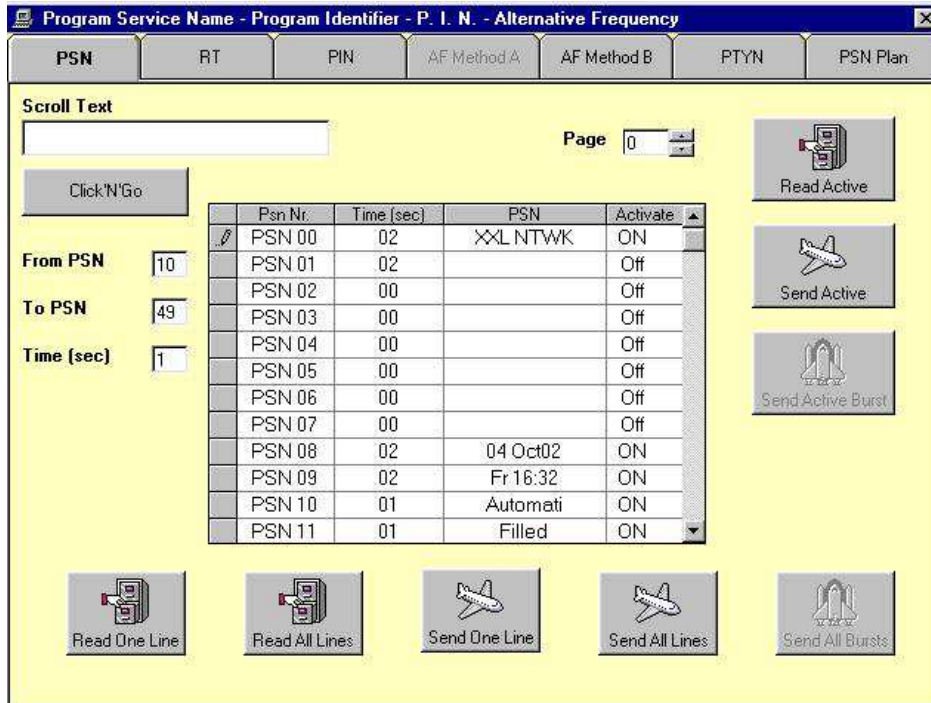
Using RDSPCSAT.exe software, we suggest to set the Group repetition time the with these parameters:



Now PSN transmission has an high priority vs. RT

Now it's important to insert the default PSN line.

The system controls if the actual "ON AIR" material "Type" is into the OnAir.ini Type list. If not, the system turn off automatically the transmission of the additional information and send only the "RDS default" information (ex. XXX NTWK into PSN00 line and TIME DATE into PSN08 09)



If the actual "ON AIR" material "Type" is into the OnAir.ini Type list, the info of PSN00, 08, 09 lines are transmitted alternatively with PSN 10-50line (this lines are updated automatically by VirtualRDS Sw.

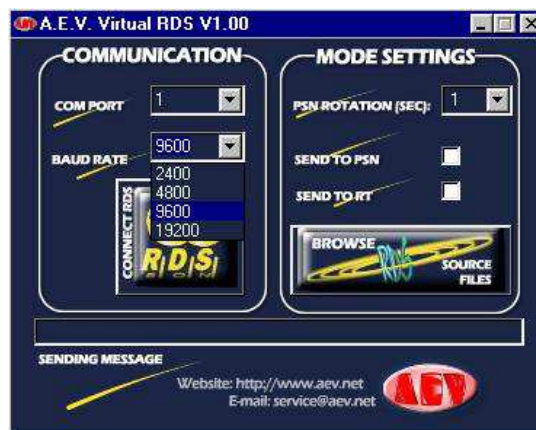
VirtualRDS updates only line from PSN10 to PSN49, the maximum length is 40 characters.

### VIRTUALRDS settings:

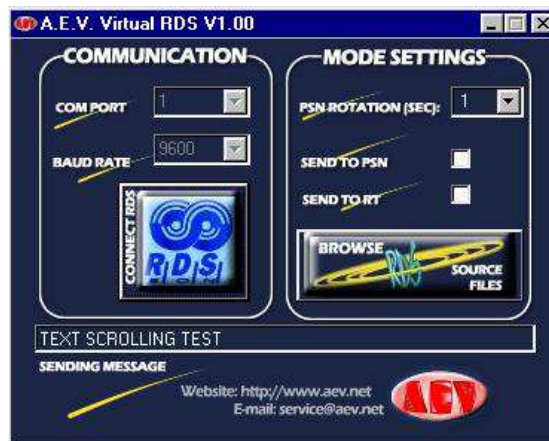
The first step is to set the COM parameters:

Select the COM PORT

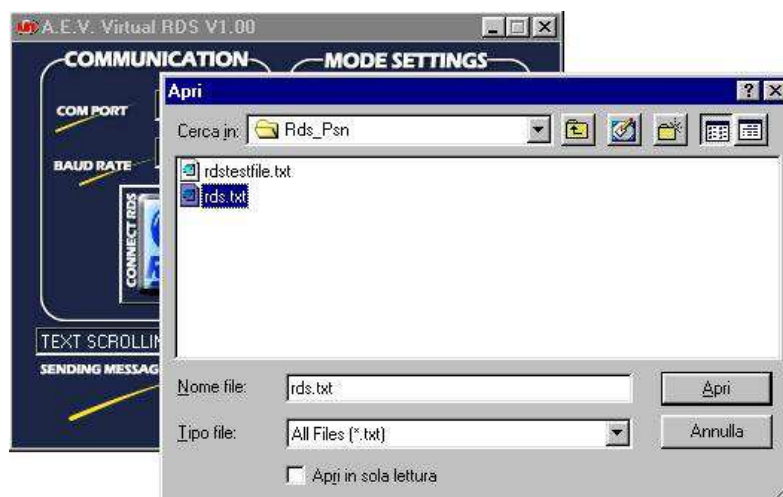
Select the BAUD RATE ( RDS 4500 default baud rate is 9600 n 8 1)



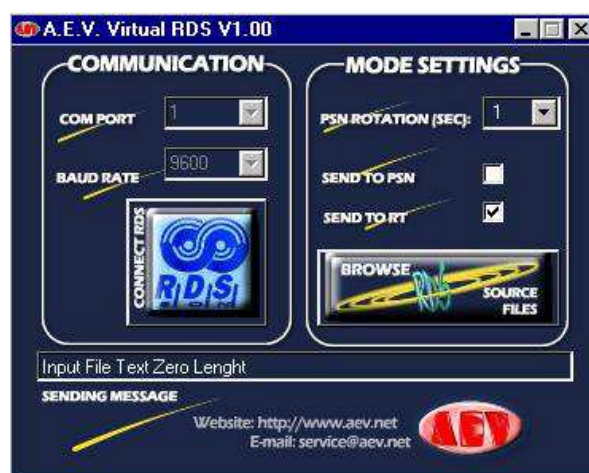
Now “click” on Connect RDS button: after the connection the button becomes blue, now VirtualRDS is connected to RDS 4500.



Using “Browse” button it’s necessary to browse and select the file “rds.txt” generated by Virtual Radio.



Now it’s necessary to select if the “song info” must be transmitted with the Radio Text or the Program Service Name.



Now the system is ready to transmit the Virtual Radio info through RDS system.

The info that is actually transmitted is displayed into "SENDING MESSAGE" window.

The system controls if the actual "ON AIR" material "Type" is into the OnAir.ini Type list.  
If not, Virtual Radio sw. generate a "zero length Text file" (RDS.TXT is empty)  
A "zero length Text file" turn off automatically the transmission of the additional information  
and send only the RDS Radio Text or PSN default information.