Application Note : RAN201002R1

How To Test Data Channel Using RWC2010B

SLS / EPG / SPI / DLS

June 2022

1. SLS - Slideshow

The RWC2010B provides a function to test SLS using the PAD or Packet Data channel. You can download your own picture files into the RWC2010B. Picture files for SLS testing must be in PNG format and the file size must be small enough. Some PNG files can be downloaded from RedwoodComm's file server using a PC program as described in section 1.3.

1.1 SLS Test Using Data Channel

The SLS packet data channel can be configured as a secondary component of the existing DAB service as below.

SERVICE_00

PRIMARY	COMPONENT_00
SECONDARY_1	COMPONENT_01

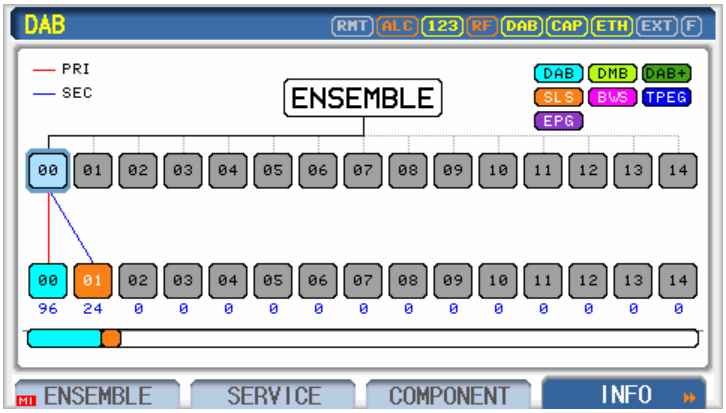
COMPONENT_00

MODE	DAB
— CONTENTS	any mp2 file

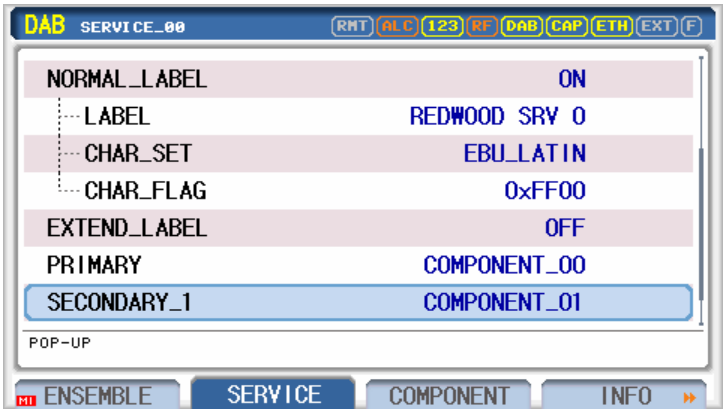
COMPONENT_01

MODE	SLS
— CONTENTS	peyto_lake.png (208 x 104)

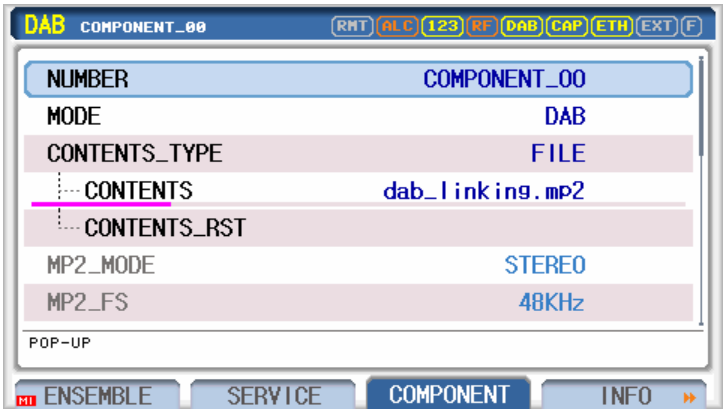
rwc_logo_240x160.png
rwc_logo_320x240.png
rwc_logo_480x320.png



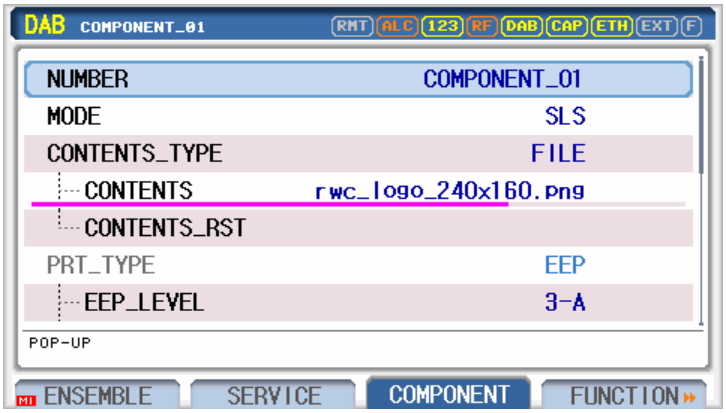
[Ensemble Structure]



[Service 00]



[Component 00 - DAB]



[Component 01 - SLS]

Things To Check

- Does your receiver display the selected slideshow image?
- EEP_BPS

1.2 SLS Test Using PAD

The SLS using the PAD channel can be configured in the primary component as below.

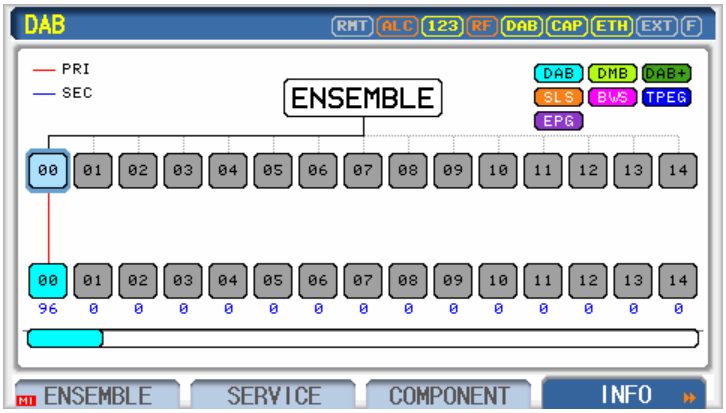
SERVICE_00

PRIMARY COMPONENT_00

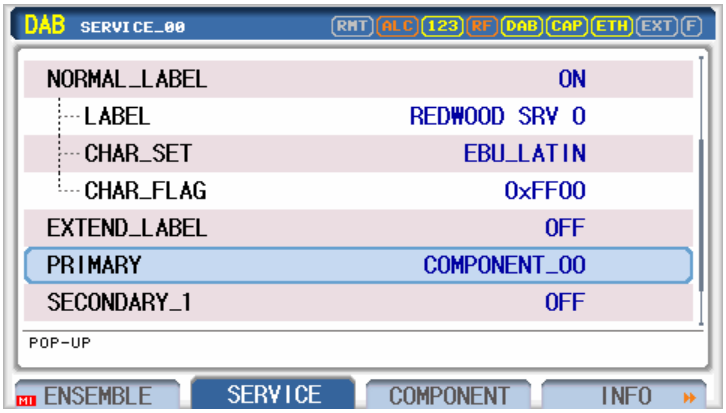
COMPONENT_00

MODE DAB

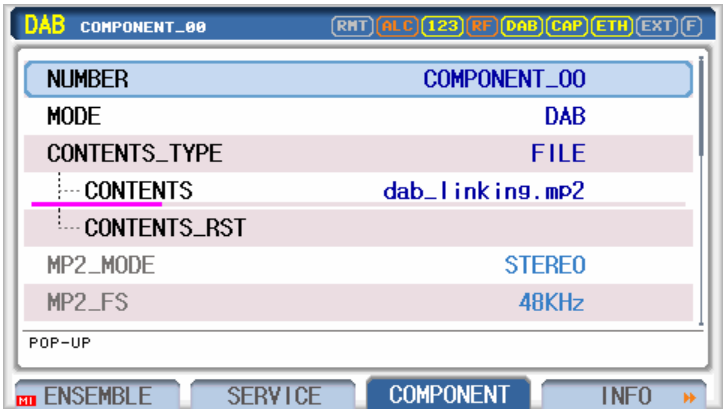
CONTENTS	any mp2 file
PAD_TYPE	SLS
CONTENTS	peyto_lake.png (208 x 104)
	rwc_logo_240x160.png
	rwc_logo_320x240.png
	rwc_logo_480x320.png



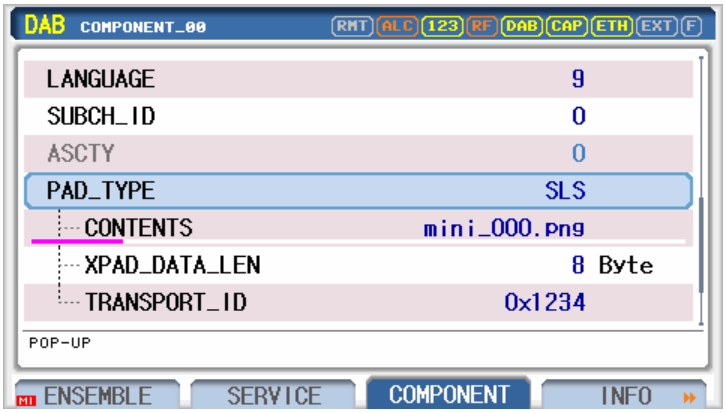
[Ensemble Structure]



[Service 00]



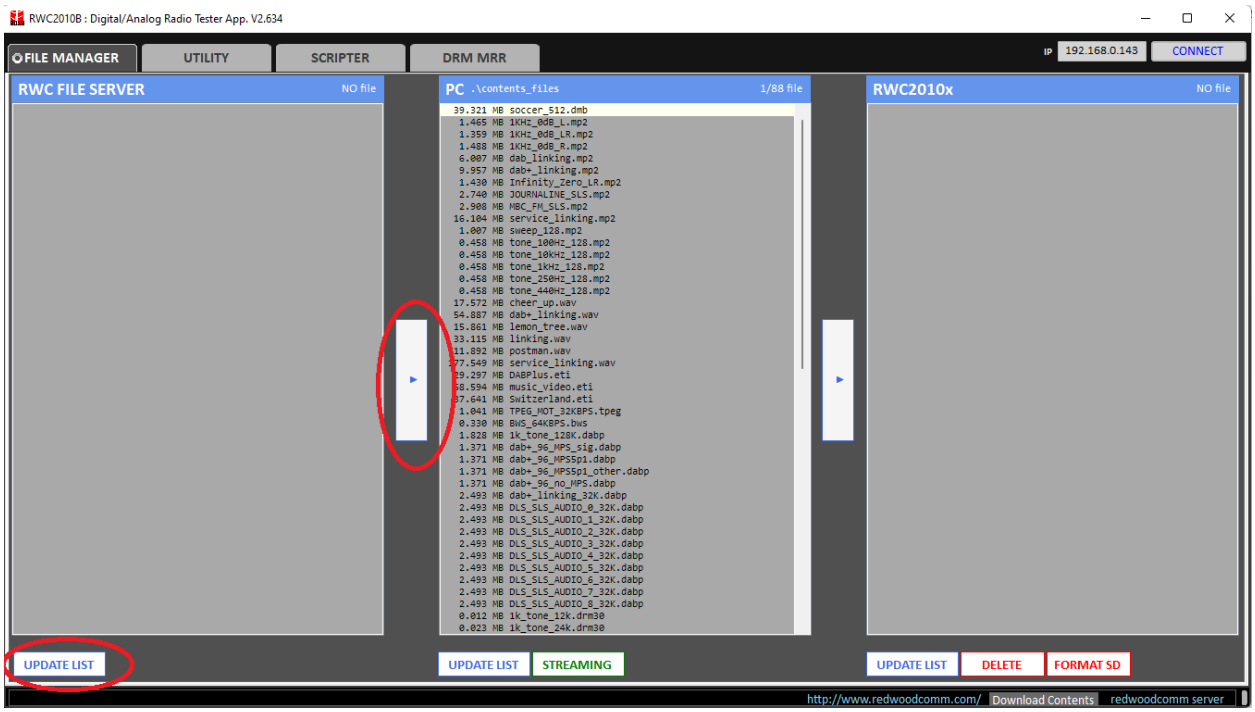
[Component 00 - DAB]



[Component 00 PAD - SLS]

1.3 Example of PNG file download using a PC program

To get example PNG files, run the RWC2010_utility.exe program and select the FILE MANAGER. Then, click the update list icon to get the file list from RedwoodComm's file server in the lower-left corner. Select the files you want to download and click the download icon (arrow button between RWC FILE SERVER and PC).


RWC2010B : Digital/Analog Radio Tester App. V2.634
FILE MANAGER
UTILITY
SCRIPTER
DRM MRR
IP
192.168.0.143
CONNECT
RWC FILE SERVER
NO file
PC .\contents_files
1/88 file
39.321 MB soccer_512.dmb
1.465 MB 1KHz_0dB_L.mp2
1.359 MB 1KHz_0dB_LR.mp2
1.488 MB 1KHz_0dB_R.mp2
6.007 MB dab_linking.mp2
9.957 MB dab+_linking.mp2
1.430 MB Infinity_Zero_LR.mp2
2.740 MB JOURNALINE_SLS.mp2
2.908 MB MBC_FM_SLS.mp2
16.104 MB service_linking.mp2
1.007 MB sweep_128.mp2
0.458 MB tone_100HZ_128.mp2
0.458 MB tone_10KHZ_128.mp2
0.458 MB tone_1kHz_128.mp2
0.458 MB tone_250HZ_128.mp2
0.458 MB tone_440HZ_128.mp2
17.572 MB cheer_up.wav
54.887 MB dab+_linking.wav
15.861 MB lemon_tree.wav
33.115 MB linking.wav
11.892 MB postman.wav
77.549 MB service_linking.wav
29.297 MB DABPlus.eti
58.594 MB music_video.eti
37.641 MB Switzerland.eti
1.041 MB TPEG_MOT_32KBPS.tpeg
0.330 MB BWS_64KBPS.bws
1.828 MB 1k_tone_128K.dabp
1.371 MB dab+_96_MPS_sig.dabp
1.371 MB dab+_96_MPS5p1.dabp
1.371 MB dab+_96_MPS5p1_other.dabp
1.371 MB dab+_96_no_MPS.dabp
2.493 MB dab+_linking_32K.dabp
2.493 MB DLS_SLS_AUDIO_0_32K.dabp
2.493 MB DLS_SLS_AUDIO_1_32K.dabp
2.493 MB DLS_SLS_AUDIO_2_32K.dabp
2.493 MB DLS_SLS_AUDIO_3_32K.dabp
2.493 MB DLS_SLS_AUDIO_4_32K.dabp
2.493 MB DLS_SLS_AUDIO_5_32K.dabp
2.493 MB DLS_SLS_AUDIO_6_32K.dabp
2.493 MB DLS_SLS_AUDIO_7_32K.dabp
2.493 MB DLS_SLS_AUDIO_8_32K.dabp
0.012 MB 1k_tone_12k.drm30
0.023 MB 1k_tone_24k.drm30
RWC2010x
NO file
UPDATE LIST
UPDATE LIST
STREAMING
UPDATE LIST
DELETE
FORMAT SD
http://www.redwoodcomm.com/
Download Contents
redwoodcomm server

2. EPG - Electronic Program Guide

The RWC2010B provides the function to test EPG using the PAD or Packet Data channel. The start time and duration of the program can be edited in the RWC2010B GUI. You can edit up to 10 program schedules.

2.1 EPG Test Using Data Channel

The EPG packet data channel can be configured as a secondary component of the existing DAB service as below.

SERVICE_00

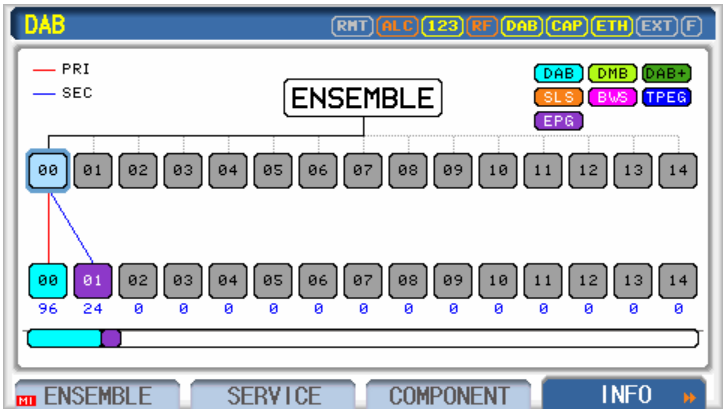
PRIMARY	COMPONENT_00
SECONDARY_1	COMPONENT_01

COMPONENT_00

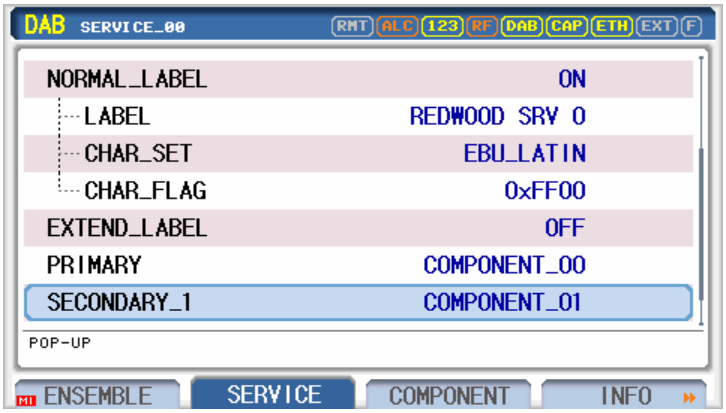
MODE	DAB
CONTENTS	any mp2 file

COMPONENT_01

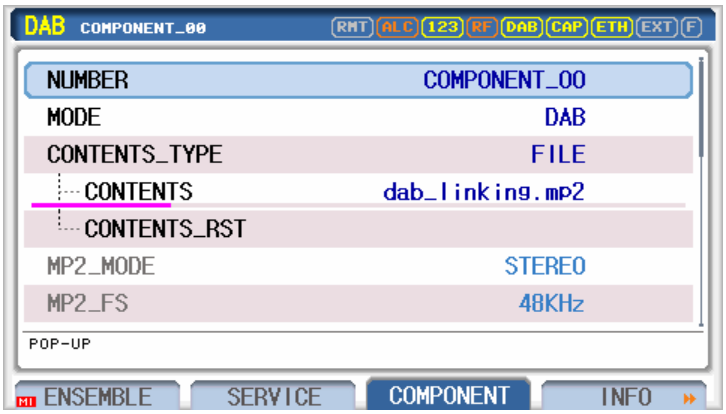
MODE	EPG
CONTENTS	(none; internally allocated)
EEP_BPS	32 KBPS



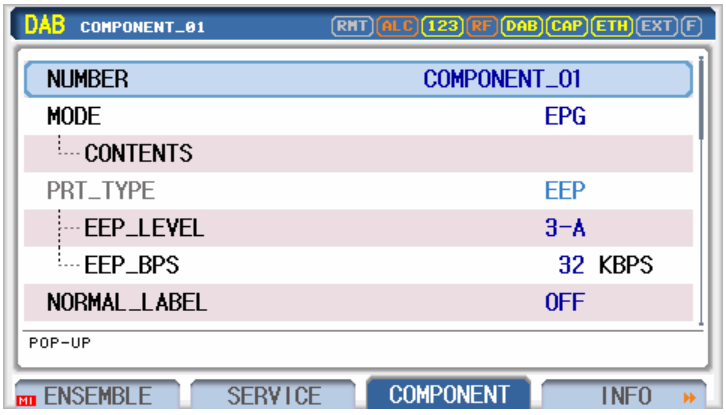
[Ensemble Structure]



[Service 00]



[Component 00 - DAB]



[Component 01 - EPG]

2.2 EPG Test Using PAD

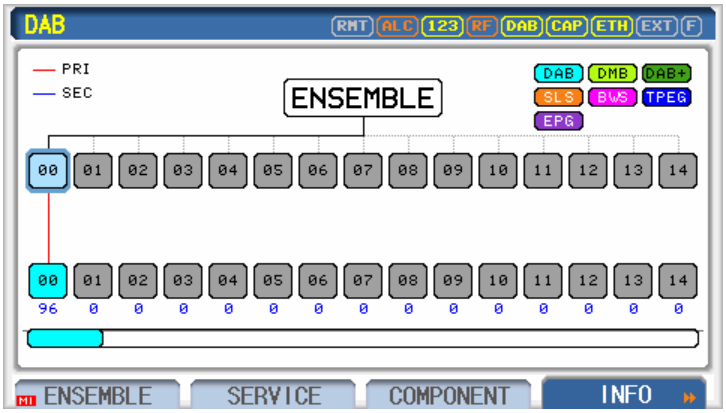
The EPG using the PAD channel can be configured in the primary component as below.

SERVICE_00

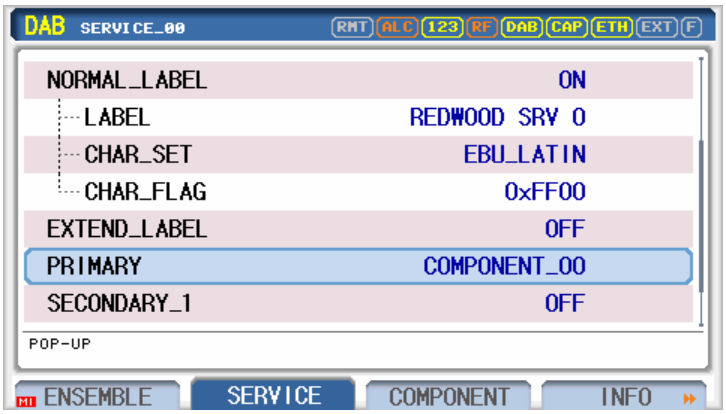
PRIMARY	COMPONENT_00

COMPONENT_00

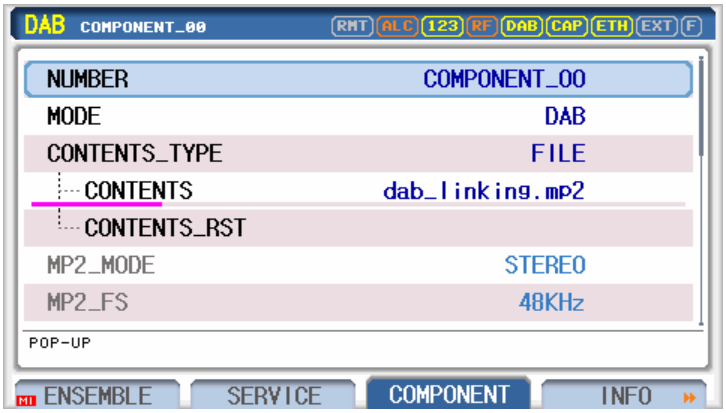
MODE	DAB
CONTENTS	any mp2 file
PAD_TYPE	EPG
CONTENTS	(none; internally allocated)



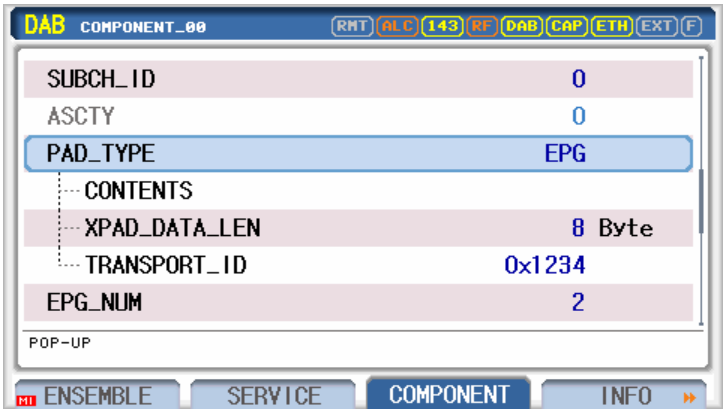
[Ensemble Structure]



[Service 00]



[Component 00 - DAB]



[Component 00 PAD - EPG]

3. SPI - Service and Programme Information

The RWC2010B provides the function to test SPI using the PAD or Packet Data channel. The program logo files are fixed as the RedwoodComm logo files. So users do not need to download logo files. Some example PNG files can be downloaded from RedwoodComm's file server using the PC

3.1 SPI Test Using Data Channel

The SPI packet data channel can be configured as a secondary component of the existing DAB service as below.

SERVICE_00

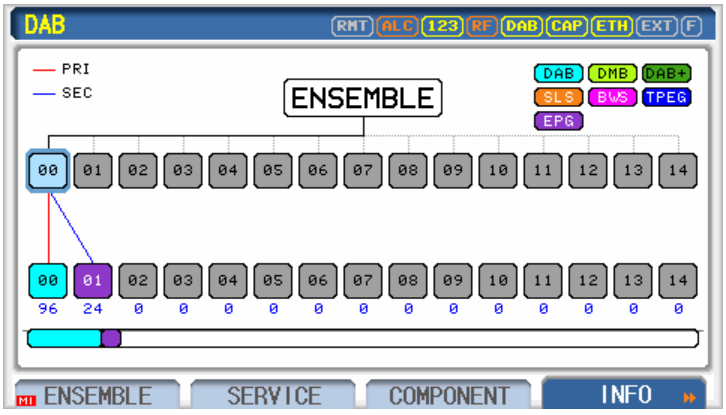
PRIMARY	COMPONENT_00
SECONDARY_1	COMPONENT_01

COMPONENT_00

MODE	DAB
CONTENTS	any mp2 file

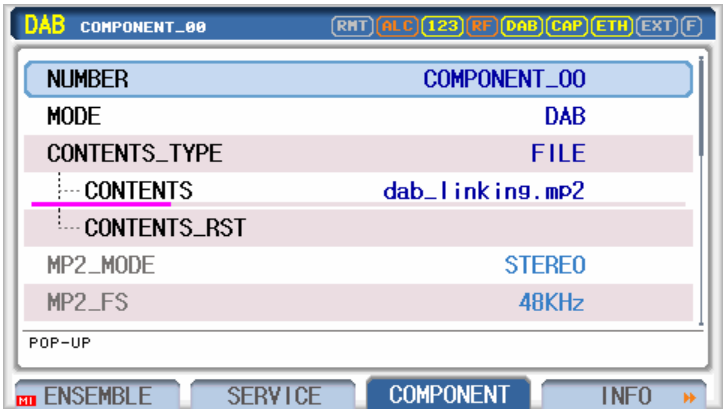
COMPONENT_01

MODE	SPI
CONTENTS	(none, internally allocated)
EEP_BPS	32 KBPS

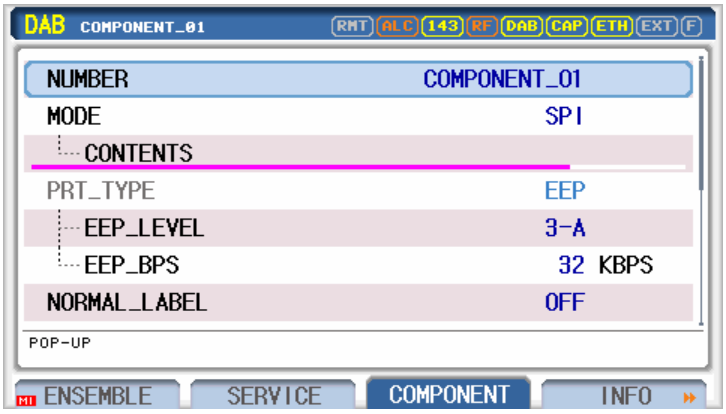


[Ensemble Structure]

[Service 00]



[Component 00 - DAB]



[Component 01 - SPI]

3.2 SPI Test Using PAD

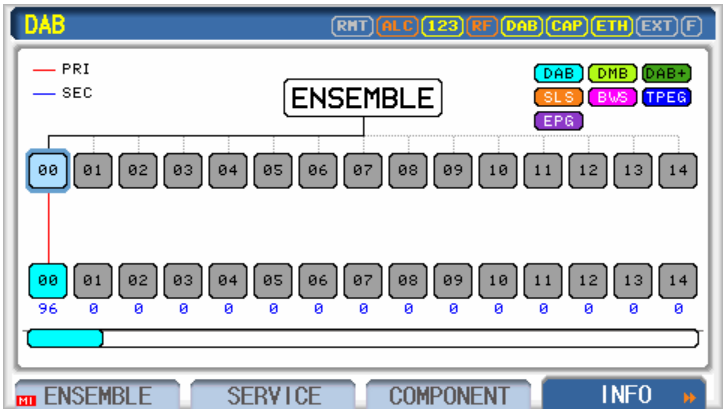
The SPI using the PAD channel can be configured in the primary component as below.

SERVICE_00

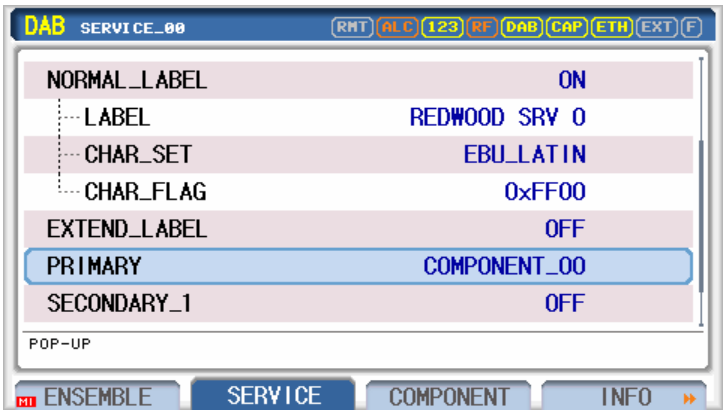
PRIMARY	COMPONENT_00

COMPONENT_00

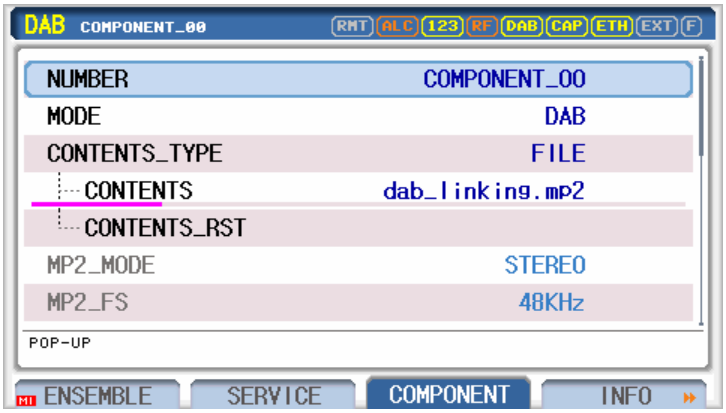
MODE	DAB
CONTENTS	any mp2 file
PAD_TYPE	SPI
CONTENTS	(none; internally allocated)



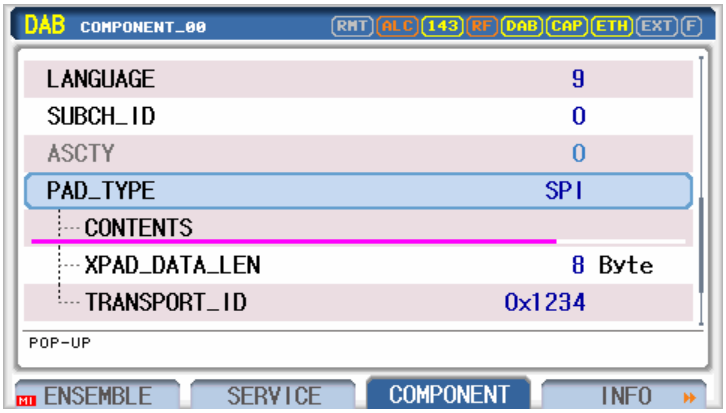
[Ensemble Structure]



[Service 00]



[Component 00 - DAB]



[Component 00 PAD - SPI]

4. DLS - Dynamic Label Service

The RWC2010B provides the function to test DLS/DL+ using the PAD channel. DLS strings can be edited in the GUI of RWC2010B. We recommend the RWC2010_utility.exe program is used for DLS editing as described in 4.2, which makes editing non-Latin texts easier.

4.1 DLS/DL+ Test Using PAD

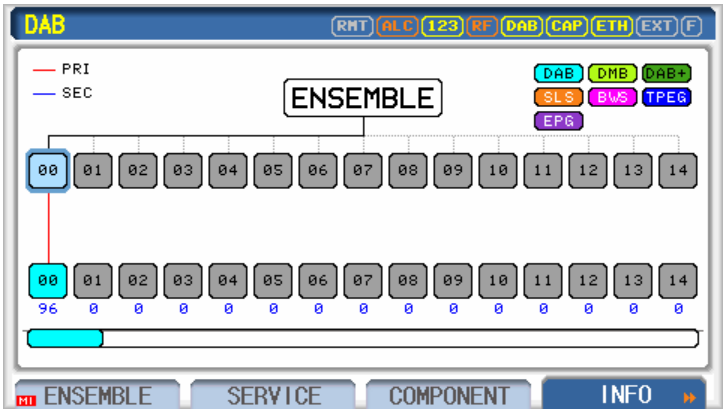
The DLS/DL+ PAD channel can be configured in the primary component as below.

SERVICE_00

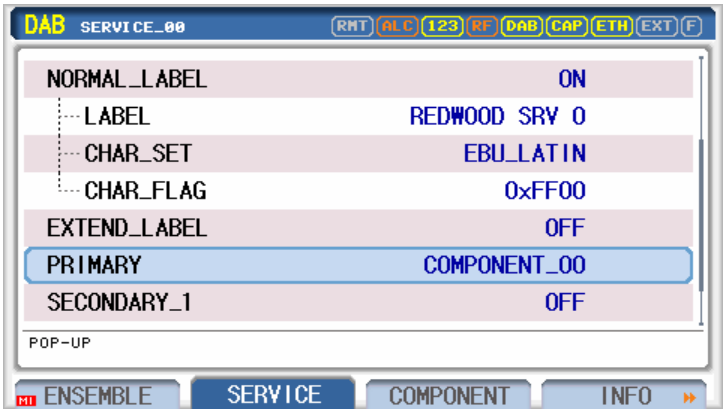
PRIMARY	COMPONENT_00

COMPONENT_00

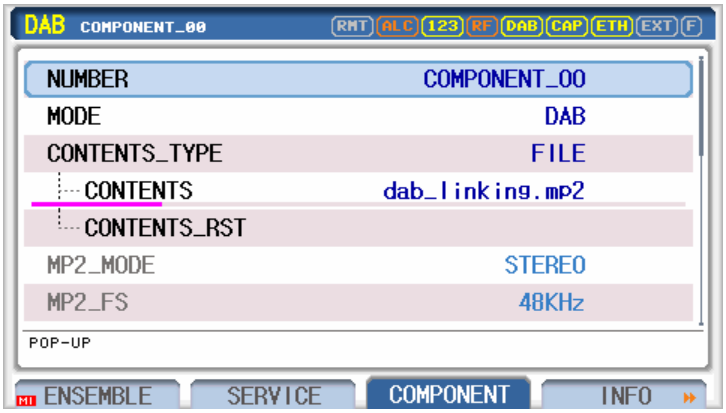
MODE	DAB
CONTENTS	any mp2 file
PAD_TYPE	DLS
DLS	Editable



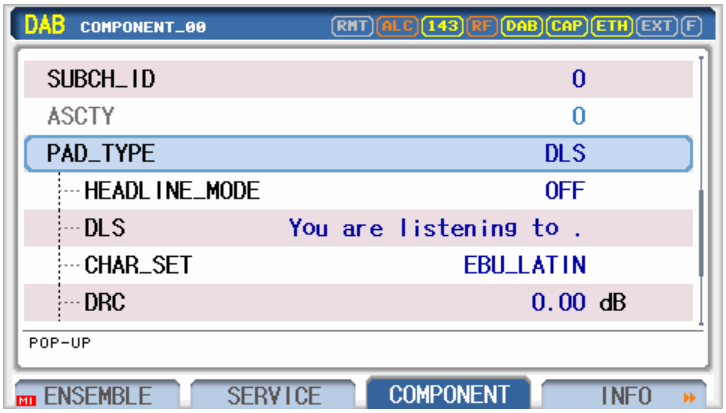
[Ensemble Structure]



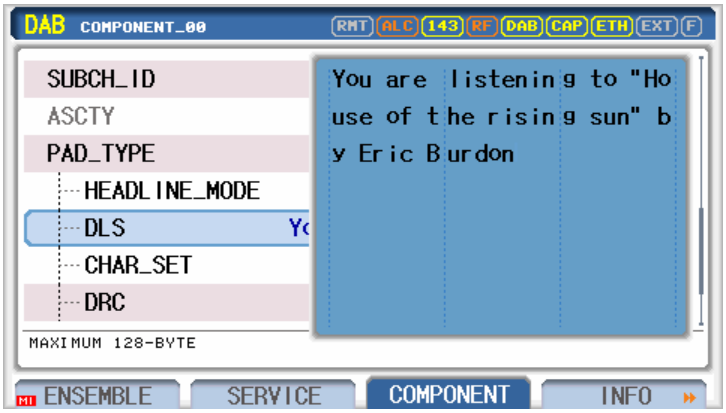
[Service 00]



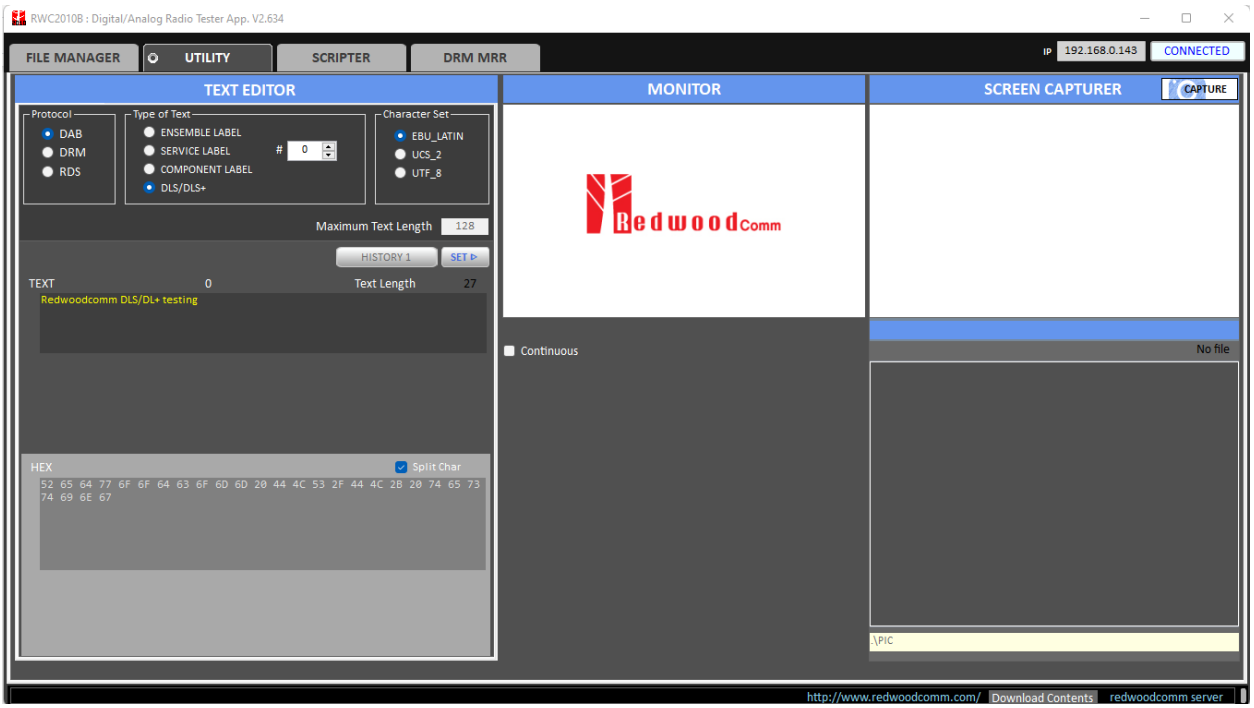
[Component 00 - DAB]



[Component 00 PAD - DLS]



[DLS Editor]

4.2 DLS Editing Using PC program

RedwoodComm provides an easy way to edit multiple languages using a PC program as below.