SAIPA Radio Deckless Requirments

1. **Mobis comprises of main standards of parts.**

2. **Besides the Mobis standards, some tests of standard KES DC676 will be considered as follows:**

    i) **Item No. 7-3-8, thermal durability test (400Hrs at 100 centigrade degree)**

    ii) **Item Nos.7-6-5 & 7-4-6 , mechanical durability test for pressure and rotational switches (10000 cycles and 49 N Force)**

3. **Band switches of radio shall be altered as follows:**

    AM: 531-1602 KHz (2 Band)

    FM: 87.5-108MHz (3 Band)

    SW1: 2.940-7.735 MHz (1 Band)

    SW2: 9.500-18.135 MHz (1 Band)

    Also, fine tuning shall be available in AM 9KHz & FM 50KHz. Meanwhile, for manual search, every step at FM wave shall be 50 KHz and the AM shall be 9 KHz.

4. **After complete switching Off/On the engine, the sound volume shall be at the preset value of the initial position of Radio. but BASS, TRE ,BAL,FAD shall refer the passenger's setting.**

5. **Audio set code must be fixed and user should not be able to change it. order of password reception after the fault code shall comply to the SAIPA's test cycle (first time, reception promptly, second time after 5 minutes, third time after 15 minutes, fourth time after 30 minutes, fifth time after 60 minutes and up to 20th time 60 minutes) and at the 20th time radio shall be completely locked (lock symbol must be shown on display) and no password shall be admitted.**

6. **After turning off the radio, track shall resume where it was turned off (not the onset of track).**

7. **Connection of deck to main board should be via flat cable and disconnection connector. (preferably)**

8. **Servo board for controlling the deck should be on-deck, not on the main board (preferably).**

9. If push on LCD , it must be cleared and without any phanous and shadow. our offer is to use a clear protector between panel and LCD.

10. D+ and D- denote album change and not change of 10 tracks. by pressing Disp. Switch, first track No. and the time of which and by pressing again, album name and other text data should appear disp. Operating while track changes (returning to the former/next track) shall not be inactive .

If album changes number is more than one intended, after pressing APS switch, with use volume knob, going over the album shall be possible and by re-pressing that switch, directory can be available. Also, the above capability must be considered for flash memory.
In radio mode, it is proposed by pressing APS switch for few seconds, should trigger auto search for all sub-bands selected band (at FM: FM3, FM2, FM1 and AM: AM2, AM1). Momentarily pressing the switch will start scanning all the saved stations.

11. Component dimensions shall comply to SAIPA's DWG. .

12. Components must subject to EMC test and repeated for certain cyclic periods. Besides, the unit (components) to be even tested at the international lab. Centers. The base of EMC test evaluation will be ECE R10, Rev 3. It is to be noted that EMC test has been defined in Mobis standard, But according to the SAIPA's new requirements the above test shall be based on R10 standard.

13. Mounting bracket thickness shall be more than 1mm and in order to increase mechanical stiffness, ribs should also be added to the bracket. Upper and lower metal cover of Radio shall not mechanically move due to applied pressure and ribs and forming in order to increase strength shall be added. Also, the location of panel mounting to Radio case shall be integrated with high strength.

14. All around the panel must have 2.6 mm fillet radius.

15. The supplier should have Iran code and also it should be possible to print barcode on lable (14 Digit) and specific information by jet print on radio cover assemble line. also barcode scanner should be prepared for record information about radio. in addition in order to inform method of coding and tracing radio ,for jet printing and

barcode scanner, according to instruction, the representative should contact with Sazeh Gostar Co. Engineering Department.

16. The mechanical operation of every key must be separately from other key so that every pressure or move any key don't be oscillating and movement to other key component (double key and …not accepted).

17. In All Car Audio models, it needs green color back light for night illumination function, if +12V input for night illumination there isn't, the back light must not exist. USB port for SAIPA X132 models must be vertically (in graphical image it has been horizontally but in drawing it is vertically).

18. Regarding to SAIPA request, it needs the back light color change to white color (black back ground with white color for text) according to the timing chart.

19. All front panels' parts must be in black color; all printing must be in white color and must exist backlight for them. Except for Power knob that must be in red color printing and backlight.

20. It needs to exist 2 parts as guide in both side of CD slot in front panel with white color light.

21. The Stereo indicator must appears when the Car Audio is received a FM stereo station.

22. The car Audio must shows Playing mode (CD or USB) in display as well as.

23. To find supplier name of each Car Audio in after sales service, it needs after turning on, the car audio shows SAIPA then supplier Name for 2 Sec. in the display.

24. The radio station memorization function must be with beep sound.

25. Loud function must exist in 111 and 131 Models, but in 132 and 141 is not mandatory. When the loud is active, Bass and treble must be adjustable. Over design options such as clock , JAZ not used.

26. Car Audio Fuse must be 10A maximum.

27. The unit can turn on with any key but must turn off only with Power knob.

28. Treble, Bass, Balance and fader functions must active with pushing Rotary Volume knob and their ranges are from -10 to +10.

29. The volume range must be from 0 to 50 and its rotation must be 2.5 rotate maximum.

30. **In all models (except X111 and X131 that have mute knob), the mute function active with instance pushing of power knob.**

31. **The function for radio search knobs is: search manual to next or previous step with instant pushing them. And search automatically to next or previous radio station when they are pushed more than 2 second.**

32. **The main connector for power and speaker must be based on ISO standard. Antenna jack must be based on JASO standard. The position of ISO connector must be Left below and for Antenna Jack must be right below from front view.**

33. **Speaker Power out must be 4*25 W**

34. **Radio memories knobs (1 to 6) function in CD and USB must be as below in sequent: PAUSE, INT, RPT, RDM, D- , D+**

35. **The indicators for the functions: MUTE, PAUSE, INT, RPT, RDM must appears on display when are activate.**

36. **With Fast forward and fast reverse function, the functions PAUSE, INT, RPT, RDM must not deactivate if they have activated before.**

37. **In eject function; the CD must unload from the unit easily without any gear and in one step.**

38. **Warranty time in warranty card printing must print with this sentence: "warranty time is equal to warranty time of the Car ".**