Audio System HU-803
Advanced User Mode and Hidden Menus

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Advanced User Mode

With the radio switched off, press and hold down [Volume] for at least 5 seconds.

- Turn [1-20/DISC] to select a function
- Press [1-20/DISC] to cycle between possible values

Function	Description
SET TO DEFAULT	Resets all AUM (Advanced User Mode) functions to factory settings.
AF **ON**/OFF	Automatic Frequency update – Ensures that the strongest available transmitter for a program is selected.
REG LOCK/**SWITCH**	Regional – Makes it possible to continue to listen to a regional transmitter, even if the signal is weak.
EON LOCAL/**DISTANT**	Enhanced Other Network – Determines whether the radio program you are listening is to be switched off before a traffic report or news broadcast (if these functions are selected) only if the signal is strong (LOCAL) or whether the radio must also try to capture weaker signals (DISTANT).
NETWORK **ALL**/TUNED	Network – Allows you to decide whether the radio program you are listening is to be switched off before a traffic report or news broadcast (if these functions are selected) only if the report is on the channel you are listening (TUNED), or whether the program is to be switched off regardless of which radio channel the report or broadcast is on (ALL).
ASC **ON**/OFF	Active Sound Control – Automatically matches the sound volume to the speed of the car.
ASC Low/**Med**/High	Active Sound Control – Determines the ASC level.
SRC ON/**OFF**	*SRC = ?* – Activates or deactivates the noise reduction in poor reception conditions. Normally used when the radio is in the AM band.
SRC **Low**/Med/High	*SRC = ?* – Determines the SRC level.
BACK and SAVE	Saves any changes and revert to normal operation.
BACK without SAVE	Discards any changes and revert to normal operation.

Diagnostic Mode

With the radio switched off, press and hold down [AUTO], and press [Volume] to power on the radio. The following will be displayed for 4 seconds:

```
DIAG WAIT!
```

Immediately followed by:

```
Main  23 Sub  25
```

For some reason, this last display seems to vary from time to time. Other observed values are: `Main  29 Sub 22` and `Main  29 Sub  24`.

- Turn [1-20/DISC] to select a function

Function	Description
`Main-A  Exist`	? (Display flashes)
`Sub-A   Exist`	?
`Ext-AMP Exist`	External amplifier detected.

Area Selection

With the radio switched off, press and hold down [1-20/DISC], press [Volume] to power on the radio, and continue to hold down [1-20/DISC] for at least 5 seconds.

- Press [1-20/DISC] to cycle between possible values
- Turn [1-20/DISC] to select a function

Function	Description
`AREA EU/US/AU`	Allows you to select the area where the radio is to be used: Europe (EU), North America (US) and Australia (AU).
`BACK and SAVE`	Saves any changes and revert to normal operation.

If no selection is made within 5 seconds, the radio will discard any changes and revert to normal operation.

Hidden Equalizer

With the radio switched off, press and hold down [SOURCE], press [Volume] to power on the radio, and continue to hold down [SOURCE] for at least 5 seconds.

- Press [SOURCE] to select a function
- Turn [SOURCE] to adjust value

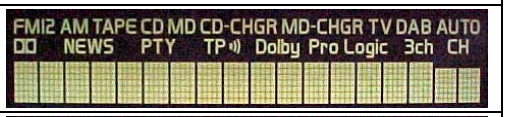
Function	Description
FRONT Low1 3	Adjusts the very low frequencies in the front. Valid values are from 0 to 6. Factory default for S60 is 4.
FRONT Low2 3	Adjusts the low frequencies in the front. Valid values are from 0 to 6. Factory default for S60 is 4.
FRONT Mid 3	Adjusts the mid frequencies in the front. Valid values are from 0 to 6. Factory default for S60 is 6.
FRONT High 3	Adjusts the high frequencies in the front. Valid values are from 0 to 6. Factory default for S60 is 4.
REAR Low 3	Adjusts the low frequencies in the back. Valid values are from 0 to 6. Factory default for S60 is 4.
REAR Mid 3	Adjusts the mid frequencies in the back. Valid values are from 0 to 6. Factory default for S60 is 0.
REAR High 3	Adjusts the high frequencies in the back. Valid values are from 0 to 6. Factory default for S60 is 6.
Noise Sequence OFF	Activates the noise sequencer. A noise sequencer is essentially a noise generator that allows the adjustment of the levels in the system so to achieve the correct balance between the different channels by injecting a noise signal into each of the channels (left, right, centre, surround). Use the sequencer to adjust the balance control until each of the 4 channels individually plays at the same apparent loudness from one of the front seats. Whilst sufficiently accurate balance can usually be achieved by ear, you can use a sound level meter if greater precision is desired. To use this function, the radio must be in Dolby Pro Logic mode. Possible values are: Lch (left channel), Rch (right channel), Cch (center channel), Sch (surround channel) or OFF.

Advanced Diagnostic Menu

With the radio switched off, press and hold down [⏮], press [Volume] to power on the radio, and continue to hold down [⏮] for at least 5 seconds.

NOTE: The radio source must be "RADIO FM" *for this menu to appear.*

- Turn [1-20/DISC] to select a function
- Press [1-20/DISC] to enter sub-function or cycle between possible values

Function	Sub-Function	Description
`Ver 1316SP72 00 04`		Seems to be the version of the EEPROM.
`DISPLAY CHECK`	*Everything on*	
	Half 1	
	Half 2	
	Blank	
	Accented characters	
`VOICE CHECK`	`VOICE Lch ON`	?
	`VOICE Rch ON`	?
	`VOICE OFF`	?
`BEEP CHECK`	`BEEP ON`	Turns on continuous beep signal.
	`BEEP OFF`	Turns off beep signal.
`DTC CHECK`	`Main-A Exist`	? (Display flashes)
	`Sub-A Exist`	?
	`Ext-AMP Exist`	External amplifier detected.
`VOLUME CHECK`	`VOLUME –xxdB`	Displays the current volume set by turning [VOLUME]. The value of *xx* varies between –82dB (silence) to –00dB (max volume). Pressing [1-20/DISC] instantly sets the volume to –27dB.
`CD7 AUDIO ON/`**`OFF`**		*? – I don't know what this does. When ON, a strange TICK-A-TICK noise can be heard.*
`REASON Int ON/`**`OFF`**		?
`STOP ADJUST`	`STOP 26db LV=`*`xx`* `67`	? *– I don't know what this does. The value of* xx *varies continuously: DD, DA, DE, etc.*
`AF-C ADJUST`	`AF-C 47dB LV=`*`xx`* `A2`	? *– I don't know what this does. The value of* xx *varies continuously: DD, DC, DE, etc.*

EEPROM INTIALIZE	EEPROM WAIT	Reinitialises the EEPROM. After a few seconds, the display shows: EEPROM INITIALIZED.
EJ+<< ENTRY ON/**OFF**		*This is strange. I though it changed the button sequence required to enter the Advanced Diagnostic Menu to* [⏏] + [⏮] *and* [VOLUME] *but I am not sure of what happened. It might have prevented me from accessing this menu if the radio source is CD.*

Fix All 3 Settings

With the radio switched off, press and hold down [⏭], press [Volume] to power on the radio, and continue to hold down [⏭] for at least 5 seconds.

Function	Description
FIX ALL3 SETTING	? – *I don't know what are those 3 settings.*

The above message is displayed for 3 seconds and then the radio reverts to normal operations.

Extended Settings

With the radio switched off, press and hold down [⏮], press [Volume] to power on the radio, and continue to hold down [⏮] for at least 5 seconds.

- Turn [1-20/DISC] to select a function
- Press [1-20/DISC] to enter sub-function or cycle between possible values
- Turn [SOURCE] to adjust value

Function	Sub-Function	Description
DIVER TEST ON/**OFF**		Activates the diversity test. When activated, a little 1 or 2 appears to the right of the FM indicator on the display. *I am not sure of the purpose of that test but it seems it shows which antenna has the strongest reception as it alternates between 1 and 2 as the car moves.*
REASON Int ON/**OFF**		?

<table>
<tr>
<td>CONSTANT Disp >>>></td>
<td>ASC/BAR/DAB/PI/OFF</td>
<td>Uses the radio display to constantly display some information on one of the following functions:

ASC (Active Sound Control)
M 0km>-57+00=-57
The first value is the ASC level (L=Low, M=Med, H=High), followed by the current speed (in km/h), the volume level (in dB), the correction factor and the adjusted volume (in dB). The correction factors, depending on the ASC level and the speed, are determined as follows:

<table>
<tr><td></td><td colspan="3">Speed (km/h)</td></tr>
<tr><td><u>Corr.</u></td><td><u>L</u></td><td><u>M</u></td><td><u>H</u></td></tr>
<tr><td>+1</td><td>72</td><td>48</td><td>40</td></tr>
<tr><td>+2</td><td>104</td><td>72</td><td>56</td></tr>
<tr><td>+3</td><td>136</td><td>96</td><td>64</td></tr>
<tr><td>+4</td><td>...</td><td>120</td><td>80</td></tr>
<tr><td>+5</td><td></td><td>144</td><td>88</td></tr>
<tr><td>+6</td><td></td><td>...</td><td>104</td></tr>
<tr><td>+7</td><td></td><td></td><td>112</td></tr>
<tr><td>+8</td><td></td><td></td><td>128</td></tr>
<tr><td>+9</td><td></td><td></td><td>...</td></tr>
</table>

BAR (?)
 
This seems to be the signal strength of the 2 aerials. The HU-803 is equipped with a “Diversity Aerial System” that allows the radio to automatically select, from one of the two aerials, the strongest signal for the best possible reception (on the FM band). The bar on the left seems to correspond to aerial 2 and the bar on the right to aerial 1.

DAB (Digital Audio Broadcasting)
5A 0 0 0000 00
I haven’t found the purpose of that display.

PI (Program Info???)
107.34A2D C500C3 C
The first 5 digits (“107.3” in this case) are the frequency of the selected radio station, the 4 next digits (“4A2D” in this case) seem to be the additional info such as the station name, news availability, etc. Finally, the 6 following digits (“C500C3” in this case) represent the signal strength of aerial 2 (“C5” in hexadecimal notation), “00” (I don’t know) and the signal strength of aerial 1 (“C3” in hexadecimal notation).</td>
</tr>
<tr>
<td rowspan="3">LEVEL Setting >>>></td>
<td>LVA 12dBu 37H</td>
<td></td>
</tr>
<tr>
<td>LVB 19dBu 56H</td>
<td></td>
</tr>
<tr>
<td>LVC 26dBu 67H</td>
<td></td>
</tr>
</table>

	LVD 33dBu 6AH	
	LVE 40dBu 86H	
	LVF 47dBu A2H	
	LVG 54dBu A9H	
	LVH SM Drop 4DH	
	LVI AM Drop 2AH	
	LVJ DIV FIX 60H	
	LVK DIV M<->S 10H	
	LVL NOISE 10H	
	LVN DIV SMJUD 50H	
	EXIT	
AFS Setting >>>>>>	NORMAL Trig 15ms	
	NORMAL Min 1500ms	
	SMETER Trig 20ms	
	SMETER Min 1000ms	
	TUNNEL Min 60s	
	+LV AF 27H	
	+LV REG 47H	
	+TQ AF 10H	
	+TQ REG 47H	
	LOW AF 6T	
	EXIT	
DAB Setting >>>>>>	LINKAGE ->FM 5S	
	LINK TO FM BER 3H	
	LINKAGE -> DAB 5s	
	LINK TO DAB BAR 4H	
	DAB PTY/TA-R 30s	
	DAB BG(TP) 60s	
	EXIT	
OTHER Setting >>>>	DIVER Timer 5000ms	
	DIVER S<->M 5ms	
	SRC Detail 0H	
	TC Timer 900ms	
	RC Timer 900ms	
	FM BG(TP) 45s	
	FM BG(SID) 180s	
	PI Defect 600ms	
	NORDS Defect 56ms	
	RDS Judge 40.0ms	
	PLL Lock 0.1ms	
	SM Wait AFS 0ms	
	SM Wait Round 5ms	
	EON Wait 2s	
	EON Prohibit 3s	
	PRE FAST-M 1.2ms	
	POST FAST-M 2.5ms	
	BASS LIMIT Max+1	Varies from Max-6 to Max+6
	BASS LIMIT Step2	
	REASON Time 1000ms	
	DIV LVK UP 20H	
	DIV KUP COUNT 1H	
	DIV KDNTIM 500ms	
	EXIT	

NS TABLE Setting >	0-000/1-0BF/2-11F	
	3-17F/4-1DF/5-23F	
	6-29F/7-2FF/8-35F	
	9-3BF/A-41F/B-47F	
	C-4DF/D-53F/E-59F	
	EXIT	
AF Status >>>>>>>>		
POOL Status >>>>>>		
EEPROM >>>>>>>>>>>		
TP SEARCH ON/**OFF**		
RESET Run		
TEST Exit		