

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to transition to Dissipative 1 mode

Based on procedure:
 HifiManCmdSetIntoDissipative_I (v1)

Summary of Constraints

Spacecraft Configuration

Start of Procedure

End of Procedure

HIFI in Dissipative 1 mode

Reference File(s)

Input Command Sequences

Output Command Sequences

HFHR2D1

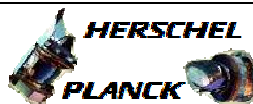
Referenced Displays

ANDs GRDs SLDs
 ZAZ9C999

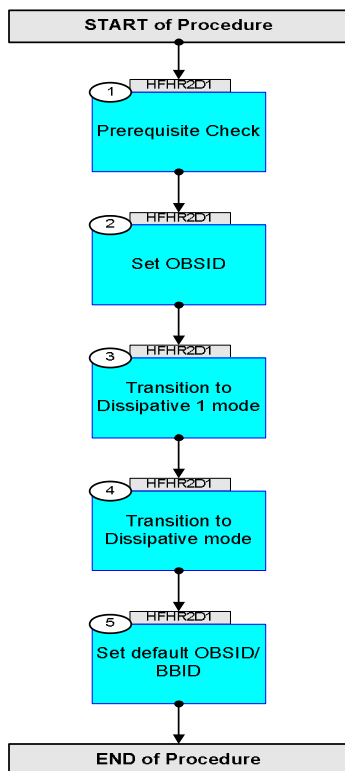
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
10/12/2009		1	Created	R. Biggins	
15/02/2010	3	2	Step 4: TC HC030289 ET to be removed	R. Biggins	
16/02/2011	3.1	3	Manual flags updated	R. Biggins	

HifiManCmdSetIntoDissipative_I
File: H_FCP_HIF_R2D1.xls
Author: R. Biggins



Procedure Flowchart Overview



HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
TC Seq. Name : HFHR2D1 (Set to Dissipative 1) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
1		Prerequisite Check		Next Step: 2
1.1		HSC/ICC input		<input type="checkbox"/>
		Verify that the HSC has supplied a valid OBSID value OBS_ID = 0xnnnn nnnn		
		Verify that the HSC has supplied a valid heater voltage value HL_HEAT = 6 Volts (def)		
2		Set OBSID		Next Step: 3
	ET=+ UT=+00.00.00	HIFI_Set_OBS_ID Command Parameter(s) : HIFI_BB_ID HP001197 HIFI_OBS_ID HP000197 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 70 Det. descr. : Set Observation-ID and Building-Block-ID	HC014289 1EF20001 <hex> OBS_ID	
		Verify Telemetry BB_ID_per_hk HM004190	= 1EF20001 <hex>	AND=ZAZ9C999
		Verify Telemetry OBS_ID_per_hk HM003190	OBS_ID	AND=ZAZ9C999
3		Transition to Dissipative 1 mode		Next Step: 4

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	HIFI_HL_Normal HIFI_HL_Normal Command Parameter(s) : HIFI_BB_ID HP001197 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 70 Det. descr. : Send single command to switch LCU to normal mode	HC082289 19E20001 <hex>	
	ET=+ UT=+00.00.01	HIFI_Conf_nom_LCU_ch0 HIFI_Conf_nom_LCU_ch0 Command Parameter(s) : HIFI_BB_ID HP001197 Subsch. ID : 70 Det. descr. : Create macro-command to switch off the bands	HC049289 434569217 <dec>	
	ET=+ UT=+00.00.10	HIFI_HL_heater HIFI_HL_heater Command Parameter(s) : HIFI_BB_ID HP001197 HL_heater HP397194 Subsch. ID : 70 Det. descr. : Send single command to control the LCU heater	HC086289 434569217 <dec> HL_HEAT	
4		Transition to Dissipative mode		Next Step: 5
	ET=+ UT=+00.00.00	HIFI_HL_dissipative HIFI_HL_dissipative Command Parameter(s) : HIFI_BB_ID HP001197 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 70 Det. descr. : Send single command to start dissipative mode	HC199289 434307073 <dec>	
		Verify Telemetry HL_MODE_S HM258194	= dissipative	AND=ZAZ9C999

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	HIFI_Configure_FCU_Power <p style="text-align: center;">HIFI_Configure_FCU_Power</p> <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HF_CPR_Mixer_H_S HP203191 HF_CPR_Mixer_V_S HP204191 HF_CPR_Chopper_S HP205191 HF_CPR_UCH_S HP206191 HF_CPR_UCV_S HP207191 <i>TC Control Flags :</i> GBM IL DSE --Y -- --- <i>Subsch. ID : 70</i> Det. descr. : Switch ON or OFF the five FCU-boards (mixer H/V, chopper, IF HV)	HC027289 18380001 <hex> ON (Def) ON (Def) ON (Def) ON (Def) ON (Def)	
	ET=+ UT=+00.00.00	HIFI_R_Configure_FCU <p style="text-align: center;">HIFI_R_Configure_FCU</p> <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HF_CPR_MX BAND HP202191 HF_CH1_DPFPF1 HP176191 HF_CH2_FIF1_Drain_V HP177191 HF_CH2_FIF1_Drain_C HP178191 HF_CH2_FIF2_Drain_V HP179191 HF_CH2_FIF2_Drain_C HP180191 HF_CH2_SIF1_Drain_V HP181191 HF_CH2_SIF1_Drain_C HP182191 HF_CH2_SIF2_Drain_V HP183191 HF_CH2_SIF2_Drain_C HP184191 HF_CH2_SIF3_Drain_V HP185191 HF_CH2_SIF3_Drain_C HP186191 HF_CV1_DPFPF1 HP191191 HF_CV2_FIF1_Drain_V HP192191 HF_CV2_FIF1_Drain_C HP193191 HF_CV2_FIF2_Drain_V HP194191 HF_CV2_FIF2_Drain_C HP195191 HF_CV2_SIF1_Drain_V HP196191 HF_CV2_SIF1_Drain_C HP197191 HF_CV2_SIF2_Drain_V HP198191 HF_CV2_SIF2_Drain_C HP199191 HF_CV2_SIF3_Drain_V HP200191 HF_CV2_SIF3_Drain_C HP201191 HF_CPR_CH_SINE_S HP211191 HF_CPR_CH_LOOP_S HP210191	HC183289 406323201 <dec> 0 <dec> (Def) 0 <dec> 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) 0.075 V (Def) 0.5 mA (Def) ON (Def) CLOSE (Def)	

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		HF_CPR_CHFPG1 HP212191 HF_CPR_CHFPG2 HP213191 HF_CPR_CHFPG1 HP214191 HF_CPR_CHFPG2 HP215191 HF_CPR_CHFPG2 HP216191 HF_CPR_Cal_Heater_C HP217191 HF_CH1_MXBIAS_V HP172191 HF_CH1_MX_MG_C HP173191 HF_CV1_MXBIAS_V HP187191 HF_CV1_MX_MG_C HP188191 HF_R_Chopper_Rot HP455191 HF_CH1_DPACT_C HP174191 HF_CV1_DPACT_C HP189191 Subsch. ID : 70 Det. descr. : Configure the FCU-subsystem (redundant)	17 <dec> 201 <dec> (Def) 1010 <dec> 885 <dec> (Def) 149 <dec> (Def) 1.1 mA 0.5 mV 15.0 mA 0.5 mV 15.0 mA -2.33 V 0.0 mA 0.0 mA	
	ET=+ UT=+00.00.03	HIFI_CH1_MX_MG_C Command Parameter(s) : HIFI_BB_ID HP001197 HF_CH1_MX_MG_C HP173191 Subsch. ID : 70 Det. descr. : Send single command to set H mixer magnet current	HIFI_CH1_MX_MG_C HC096289 406323201 <dec> 0.5 mA	
	ET=+ UT=+00.00.00	HIFI_CV1_MX_MG_C Command Parameter(s) : HIFI_BB_ID HP001197 HF_CV1_MX_MG_C HP188191 Subsch. ID : 70 Det. descr. : Send single command to set V mixer magnet current	HIFI_CV1_MX_MG_C HC099289 406323201 <dec> 0.5 mA	
	ET=+ UT=+00.00.01	HIFI_Config_HRS_H_att_lo Command Parameter(s) : HIFI_BB_ID HP001197 HRH_switch HP091192 HRH_1U_ATT HP105192 HRH_1L_ATT HP106192 HRH_2U_ATT HP107192 HRH_2L_ATT HP108192 HRH_3U_ATT HP109192 HRH_3L_ATT HP110192 HRH_4U_ATT HP111192 HRH_4L_ATT HP112192 HRH_Up_OL1_M HP093192	HIFI_Config_HRS_H_att_lo HC028289 434765825 <dec> H (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 67 <dec>	

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		HRH_Up_OL1_A HP092192 HRH_Up_OL2_M HP095192 HRH_Up_OL2_A HP094192 HRH_Up_OL3_M HP097192 HRH_Up_OL3_A HP096192 HRH_Up_OL4_M HP099192 HRH_Up_OL4_A HP098192 HRH_Down_OL5_M HP101192 HRH_Down_OL5_A HP100192 HRH_Down_OL6_M HP103192 HRH_Down_OL6_A HP102192 HRH_Down_OL7_M HP104192 Subsch. ID : 70 Det. descr. : Configure the attenuators and local oscillators of HRS-H	5 <dec> 69 <dec> 7 <dec> 71 <dec> 9 <dec> 74 <dec> 1 <dec> 51 <dec> (Def) 5 <dec> (Def) 49 <dec> (Def) 0 <dec> (Def) 7 <dec>	
	ET=+ UT=+00.00.00	HIFI_Config_HRS_V_att_lo HIFI_Config_HRS_V_att_lo Command Parameter(s) : HIFI_BB_ID HP001197 HRV_switch HP121192 HRV_1U_ATT HP135192 HRV_1L_ATT HP136192 HRV_2U_ATT HP137192 HRV_2L_ATT HP138192 HRV_3U_ATT HP139192 HRV_3L_ATT HP140192 HRV_4U_ATT HP141192 HRV_4L_ATT HP142192 HRV_Up_OL1_M HP123192	HC030289 434765825 <dec> V 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 15.5 dB (Def) 76 <dec>	
		HRV_Up_OL1_A HP122192 HRV_Up_OL2_M HP125192 HRV_Up_OL2_A HP124192 HRV_Up_OL3_M HP127192 HRV_Up_OL3_A HP126192 HRV_Up_OL4_M HP129192 HRV_Up_OL4_A HP128192 HRV_Down_OL5_M HP131192 HRV_Down_OL5_A HP130192 HRV_Down_OL6_M HP133192 HRV_Down_OL6_A HP132192 HRV_Down_OL7_M HP134192 Subsch. ID : 70 Det. descr. : Configure the attenuators and local oscillators of HRS-V	3 <dec> 78 <dec> 5 <dec> 80 <dec> 7 <dec> 82 <dec> 9 <dec> 51 <dec> (Def) 5 <dec> (Def) 49 <dec> (Def) 0 <dec> (Def) 7 <dec>	

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	HIFI_Config_HRS_H_blocks <p style="text-align: center;">HIFI_Config_HRS_H_blocks</p> <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HRH_Block_1 HP113192 HRH_Block_2 HP114192 HRH_Block_3 HP115192 HRH_Block_4 HP116192 HRH_Block_5 HP117192 HRH_Block_6 HP118192 HRH_Block_7 HP119192 HRH_Block_8 HP120192 <i>Subsch. ID : 70</i> Det. descr. : Configure the autocorrelation blocks of HRS-H	HC029289 434765825 <dec> corr_wide corr_wide corr_wide corr_wide corr_wide corr_wide corr_wide corr_wide	
	ET=+ UT=+00.00.00	HIFI_Config_HRS_V_blocks <p style="text-align: center;">HIFI_Config_HRS_V_blocks</p> <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HRV_Block_1 HP143192 HRV_Block_2 HP144192 HRV_Block_3 HP145192 HRV_Block_4 HP146192 HRV_Block_5 HP147192 HRV_Block_6 HP148192 HRV_Block_7 HP149192 HRV_Block_8 HP150192 <i>Subsch. ID : 70</i> Det. descr. : Configure the autocorrelation blocks of HRS-V	HC031289 434765825 <dec> corr_wide corr_wide corr_wide corr_wide corr_wide corr_wide corr_wide corr_wide	
	ET=+ UT=+00.00.01	HIFI_switch_zero_WBS_H <p style="text-align: center;">HIFI_switch_zero_WBS_H</p> <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HW_Zero_S HP162193 <i>Subsch. ID : 70</i> Det. descr. : Send single command to control the WBS-H zero-switch	HC078289 439287809 <dec> ON (Def)	
	ET=+ UT=+00.00.00	HIFI_switch_zero_WBS_V <p style="text-align: center;">HIFI_switch_zero_WBS_V</p> <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HW_Zero_S HP162193 <i>Subsch. ID : 70</i> Det. descr. : Send single command to control the WBS-V zero-switch	HC079289 439287809 <dec> ON (Def)	

HifiManCmdSetIntoDissipative_I
 File: H_FCP_HIF_R2D1.xls
 Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	HIFI_Configure_WBS_H HIFI_Configure_WBS_H <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HWH_LASER1_S HP158193 HWH_LASER2_S HP159193 HWH_Heater HP160193 HWH_Latchup_S HP161193 HWH_ATT_Band_4 HP157193 HWH_ATT_Band_3 HP156193 HWH_ATT_Band_2 HP155193 HWH_ATT_Band_1 HP154193 HWH_ATT_IN HP153193 <i>Subsch. ID : 70</i> <i>Det. descr. : Configure WBS-H</i>	HC032289 1A2F0001 <hex> OFF (Def) OFF (Def) 0 <dec> (Def) Levell 7 dB 7 dB 7 dB 7 dB 15 dB	
	ET=+ UT=+00.00.00	HIFI_Configure_WBS_V HIFI_Configure_WBS_V <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HWV_LASER1_S HP168193 HWV_LASER2_S HP169193 HWV_Heater HP170193 HWV_Latchup_S HP171193 HWV_ATT_Band_4 HP167193 HWV_ATT_Band_3 HP166193 HWV_ATT_Band_2 HP165193 HWV_ATT_Band_1 HP164193 HWV_ATT_IN HP163193 <i>Subsch. ID : 70</i> <i>Det. descr. : Configure WBS-H</i>	HC033289 1A2F0001 <hex> OFF (Def) OFF (Def) 0 <dec> (Def) Levell 7 dB 7 dB 7 dB 7 dB 15 dB	
5		Set default OBSID/BBID		Next Step: END
	ET=+ UT=+00.00.01	HIFI_Set_OBS_ID HIFI_Set_OBS_ID <i>Command Parameter(s) :</i> HIFI_BB_ID HP001197 HIFI_OBS_ID HP000197 <i>TC Control Flags :</i> GBM IL DSE --Y -- --- <i>Subsch. ID : 70</i> <i>Det. descr. : Set Observation-ID and Building-Block-ID</i>	HC014289 0 <hex> (Def) 0 <hex> (Def)	
		Verify Telemetry BB_ID_per_hk HM004190	= 0 <hex>	AND=ZAZ9C999
		Verify Telemetry OBS_ID_per_hk HM003190	= 0 <hex>	AND=ZAZ9C999

HifiManCmdSetIntoDissipative_I
File: H_FCP_HIF_R2D1.xls
Author: R. Biggins



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		End of Procedure		