

PACS_Phot_Sequencer_Setup_OBS
 File: H_COP_PAC_D303.xls
 Author: R. Biggins



Procedure Summary

Objectives

The objective of this procedure is to tune the bolometer clocks

Based on procedure:
 PACS_Phot_Sequencer_Setup_OBS (v1)

Summary of Constraints

This procedure should be executed as part of the Short Functional Test (HeII conditions)

RT Science must be enabled to receive the Science HK packets

Spacecraft Configuration

Start of Procedure

PACS in NO_PRIME (SAFE) mode
 - PACS is generating Photometry HK

End of Procedure

PACS in NO_PRIME (SAFE) mode
 - PACS is generating Photometry HK
 - PACS is generating Science HK

Reference File(s)

Input Command Sequences

Output Command Sequences

HCPD303

Referenced Displays

ANDs **GRDs** **SLDs**
 ZAZ98999

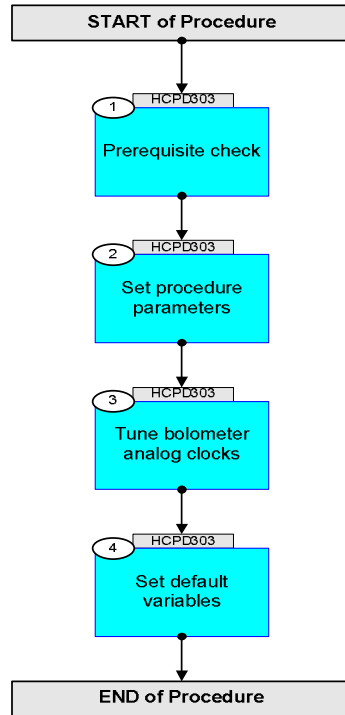
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
15/08/08		1	Created	R. Biggins	
14/11/08	2	2	Updates due to initial testing - New step (1) added for prerequisite check - Initial OBSID value changed to FP	R. Biggins	
15/04/09	2.3	2.01	Validation : Final updates before flight - Summary updated - TC flags updated	R. Biggins	

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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
<p><i>TC Seq. Name : HCPD303 (Setup sequencer)</i></p> <p><i>TimeTag Type: B</i> <i>Sub Schedule ID:</i></p> <p style="text-align: center;">□</p>				
1		<i>Prerequisite check</i>		Next Step: 2
1.1		<i>HSC/ICC input</i>		□
		Verify that the HSC/ICC has supplied a valid OBSID value: OBS_ID = 0xnnnn nnnn		
2		<i>Set procedure parameters</i>		Next Step: 3
	ET=+00.00.00 UT=+00.00.00	DMC_SET_OBSID <i>Command Parameter(s) :</i> OBSERVATION_ID PP069420 <i>TC Control Flags :</i> GBM IL DSE --Y -- --- <i>Subsch. ID : 90</i> <i>Det. descr. : SET OBSID IN DMC</i>	PC078420 OBS_ID	
		Verify Telemetry DM_OBSID PM028420	OBS_ID	AND=ZAZ98999
3		<i>Tune bolometer analog clocks</i>		Next Step: 4
		NOTE: The following commands should all execute without generating TM(1,8) packets.		
		<i>The following TC stops the bolometer clocks</i>		
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC <i>Command Parameter(s) :</i> BOLOMETER_COMMAND PP071420 <i>TC Control Flags :</i> GBM IL DSE --Y -- --- <i>Subsch. ID : 90</i> <i>Det. descr. : SEND COMMAND TO BOL CONTROLLER</i>	PC103420 9000000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		<i>The following TCs fine tune the timing of the bolometer clocks</i>		
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c000014 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c0111b4 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c024874 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c034ce4 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c044fec <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c058c2c <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c069124 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c079334 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c089b14 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 c09a100 <hex>	
		The following TCs will start the bolometer clocks and start acquisition of science and housekeeping packets.		
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 9000001 <hex>	
	ET=+00.00.01 UT=+00.00.01	DMC_SEND_COMMAND_BOLC DMC_SEND_COMMAND_BOLC Command Parameter(s) : BOLOMETER_COMMAND PP071420 Subsch. ID : 90 Det. descr. : SEND COMMAND TO BOL CONTROLLER	PC103420 9020001 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		NOTE: The verification of the generation of Science packets cannot be done on the MCS, but can be seen on the NCTRS (VC7)		
4		Set default variables		Next Step: END
	ET=+00.00.01 UT=+00.00.01	DMC_SET_OBSID Command Parameter(s) : OBSERVATION_ID TC Control Flags : Subsch. ID : 90 Det. descr. : SET OBSID IN DMC	DMC_SET_OBSID PP069420 GBM IL DSE --Y -- --	PC078420 00000000 <hex>
	ET=+00.00.00 UT=+00.00.00	DMC_SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID Subsch. ID : 90 Det. descr. : SET BBID IN DMC	DMC_SET_BBID PP070420	PC079420 40000000 <hex>
		Verify Telemetry DM_OBSID	PM028420	= 00000000 <hex> AND=ZAZ98999
		Verify Telemetry DM_BBID	PM029420	= 40000000 <hex> AND=ZAZ98999
End of Procedure				