



HERSCHEL
SPIRE

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TFTS Startup Procedure

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Distribution

RAL

Host system	Windows 2000 SP2
Word Processor	Microsoft Word 2000 SR1
File	



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1 Scope of Document

This document describes how to get the TFTS ready to perform a continuous or step and integrate scans.

2 Applicable Documents

	Title	Author	Reference	Date
	TFTS data ICD EGSE-ILT Startup procedure	Ian Schofield Sunil Sldher & Miguel Angel Requena	SPIRE-UoL-PRJ-001452 Issue 1.3 SPIRE-RAL-DOC-001630 Issue 0.7	24-June-2003

3 Constraints

- EGSE Router and EGSE Gateway must be running.
- CDMS Simulator must be running.
- SCOS2000 must be running.
- DPU must be powered on.

Refer to document EGSE-ILT-Startup-Procedures (SPIRE-RAL-DOC-001630) for more information on how to achieve this situation.



4 TFTS Startup procedure

4.1 Start the TFTS computer

Objective:	Switch on the TFTS computer
Initial Conditions:	DPU powered ON and OBS is running. Telemetry being generated: CDMS Simulator housekeeping packets with APID 0x7F6 , type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502 , type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500 , type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) TFTS computer is ON or OFF
Final Conditions:	DPU powered ON and OBS is running. Telemetry being generated: CDMS Simulator housekeeping packets with APID 0x7F6 , type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502 , type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500 , type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential)
Constraints:	None
Total Duration:	2 minutes (if the PC is off)

Step.	Action
	<p>The TFTS PC is located on the bottom shelve of the big trolley where all the PCs are. See figure 1 computer on the right.</p> <ol style="list-style-type: none"> 1. Check if the computer is on. In the Belkin switch box push the button 2 labelled FTS. This will bring up the TFTS PC screen. Sometimes the screen seems to be wrong, just push any other button in the Belkin switch and then push the FTS one. This will bring the TFTS PC screen up. 2. If the computer is on skip the next step. 3. If the computer is off switch it on .Login : administrator Password : herschel



4.2 Start Unidex500 motion controller

Objective:	Switch on the stage motion controller
Initial Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) Unidex 500 Motion Controller is off</p>
Final Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) Unidex 500 Motion Controller is on</p>
Constraints:	None
Total Duration:	0 minutes

Step.	Action
	<p>The motion controller is located in the second shelf of the big trolley that houses all the computers. Push the green button on the bottom left hand side (seen from in front of the Unidex 500 Motion Controller) See figure 2. Bottom unit.</p>



4.3 Switch on the counter board

Objective:	To switch on the counter board.
Initial Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) Unidex 500 Motion Controller is on DPU counter board is off</p>
Final Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) Unidex 500 Motion Controller is on DPU counter board is on</p>
Constraints:	Unidex 500 Motion Controller must be on
Total Duration:	0 minutes

Step.	Action
	<p>The DPU counter board is located in the second shelf of the big trolley just on top of the motion controller. See figure 2Top unit. Find the button in the back right hand top side of the counter board unit.</p> <p>When you switch on the unit the four LEDs in the front side will shine .They will keep like that until the TFTS server is started (next point)</p>



4.4 Starting the TFTS server

Objective:	Start sending TFTS telemetry to the EGSE router
Initial Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) Unidex 500 Motion Controller is on DPU counter board is on TFTS server is off</p>
Final Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) TFTS Nominal housekeeping packets with APID 0x7f5, type 3, subtype 25. Unidex 500 Motion Controller is on DPU counter board is on TFTS server is on</p>
Constraints:	<p>Unidex 500 Motion Controller must be on DPU Counter Board must be on</p>
Total Duration:	0 minute

Step.	Action
	<ol style="list-style-type: none"> In SCOS select the TFTS HK PARAMETERS REPORT alpha numeric display. There is a small icon in the TFTS machine desktop called TFCS_CS, is the server executable. Double click on it and an interface will pop up with three buttons. Single click in the Start Server one. As soon as you click the button TFTS HK telemetry packets with APID 0x7f5 will start being sent to the router.



4.5 Prepare the TFTS for a scan

Objective:	Reset the TFTS and take the stage to home position in order to perform a scan.
Initial Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) TFTS Nominal housekeeping packets with APID 0x7f5, type 3, subtype 25. Unidex 500 Motion Controller is on DPU counter board is on TFTS server is on</p>
Final Conditions:	<p>DPU powered ON and OBS is running. Telemetry being generated:</p> <p>CDMS Simulator housekeeping packets with APID 0x7F6, type 3, subtype 25. SPIRE Nominal housekeeping packets with APID 0x502, type 3, subtype 25. SPIRE Critical housekeeping packets with APID 0x500, type 3, subtype 25. TFCS housekeeping packets with APID 0x7f4, type 3, subtype 25. (Preferably but not essential) TFTS Nominal housekeeping packets with APID 0x7f5, type 3, subtype 25. Unidex 500 Motion Controller is on DPU counter board is on TFTS server is on Stage is at home position.</p>
Constraints:	<p>Unidex 500 Motion Controller must be on DPU Counter Board must be on TFTS server must be on</p>
Total Duration:	2 minute

Step.	Action
	<ol style="list-style-type: none"> 1. In SCOS TOPE window there is a procedure called Perform_TFTS_Scan.tcl. Single click on "Run" (If Test Control Server is not running a message will appear warning about this), single click on OK. A GUI will pop up after you have clicked ok, this GUI allows you to operate the TFTS from SCOS. See figure 3. 2. In the GUI there is a button called Reset TFTS, single click on it, a command will be issued to reset the TFTS. 3. Wait ~ 2 seconds. Then push Home TFTS, in this moment you should see the stage moving. This command will send the stage to its home position. <p>In this moment the TFTS is ready to perform scans.</p> <p>You can use the GUI to perform continuous or step and integrate scans .</p>

5. Images



Figure 1



Figure 2

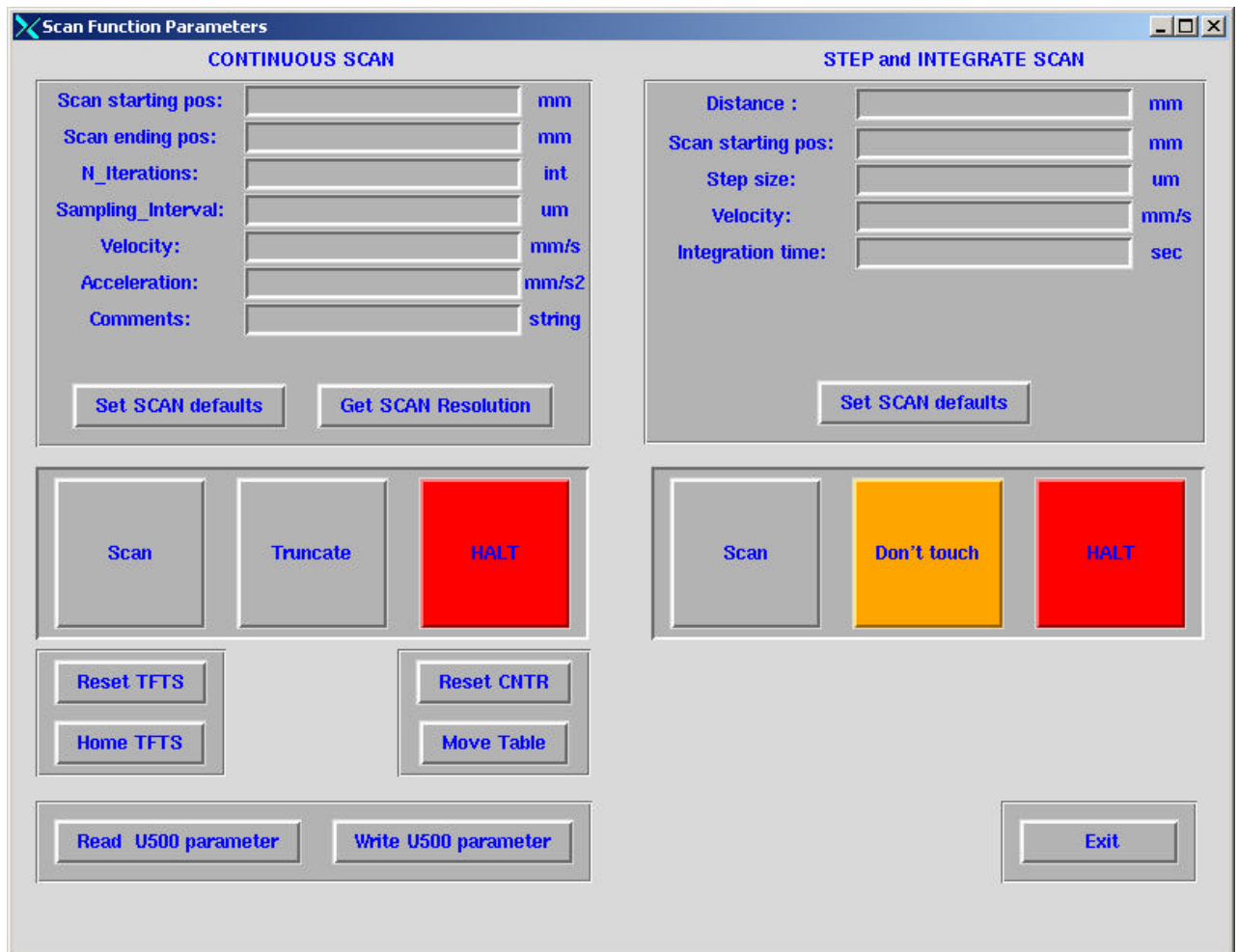


Figure 3