

How to restore ROBOT_ACTIVATION and SYSMAST.SV files

Overview:

This procedure requires a physical teach pendant since you will need to do a controlled start.

You will also need a previous working MD backup instance of the robot located on a USB.

- Perform Controlled Start
- Restore SYSMAST.SV and ROBOT_ACTIVATION.STM files
- Apply DCS params
- Reset pulsecoder alarms

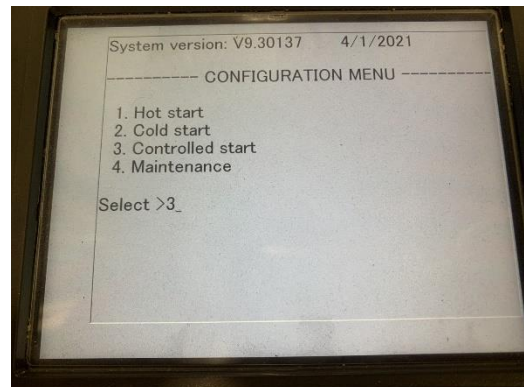
Perform a controlled start

To perform a controlled start, do the following:

1. Turn off FANUC robot control box.
2. On the teach pendant, press and hold **[PREV]** and **[NEXT]** keys
3. While still holding **[PREV]** and **[NEXT]**, turn on the robot control box.
4. Keep holding the keys until you enter the configuration menu.
5. Press option 3 when in the configuration menu. Wait for pendant to complete boot up process.

The configuration menu looks like this.

Press option 3 to perform a controlled start.



You will know you've successfully performed a controlled start when the pendant reboots and shows this screen:



Restore SYSMAST.SV and ROBOT_ACTIVATION.STM

After performing a controlled start, you will be able to restore SYSMAST.SV and ROBOT_ACTIVATION.STM. This step requires you do the following:

- Plug USB into control door
- Set UD1 as device
- Restore SYSMAST.SV and ROBOT_ACTIVATION.STM
- Perform Cold start

Plug USB into control door

Plug the USB with the robot MD backup into the USB port located on the control box's door.



Set UD1 as device

You will need to set the device you want the pendant is searching files through to the USB plugged into the control box door. To do this, do the following:

1. Navigate to the FILE page (Press [MENU] > [5] File).
2. While in the FILE page, press [F5] Util > [1] Set Device > [6] USB Disk (UD1:).

You will know you successfully set the device to UD1 if you see the this on the top left of the screen.

```
UD1: \
```

Restore SYSMAST.SV and ROBOT_ACTIVATION.STM

Do the following steps to restore the 2 files:

1. After setting UD1 as the device we're searching through, select all files to view all files in the USB.

```
UD1: \*.* 1/32  
1 * * (all files)
```

2. Navigate to the folder containing the robot MD backup. Press [ENTER] to view contents inside that folder.
3. Search for ROBOT_ACTIVATION.STM inside the robot MD backup folder. Highlight that file and press [F3] Load > [F4] Yes to load the file.

Note: you might need to press [F4] again to confirm the second question.

FILE

UD1:_ROBOT_BACKUPS\ST-10 ROB 58/162S\RND_ROBOT - GOOD*.*

54	UPDATE	VR	133	UPDATE
55	VCMRINIT	VR	890	VCMRINIT
56	WRITE_IO	VR	119	WRITE_IO
57	WRITE_LABELS	VR	67	WRITE_LABELS
58	ROBOT_ACTIVATION	STM	32	ROBOT_ACTIVATION
59	SCRIPT_VERSION	STM	1401	SCRIPT_VERSION
60	TPEINS	XML	1747	TPEINS
61	ERRALL	LS	12904	ERRALL
62	ERRACT	LS	54	ERRACT
63	ERRMOT	LS	6304	ERRMOT
64	ERRSYS	LS	6154	ERRSYS
65	ERRAPP	LS	54	ERRAPP
66	ERRPWD	LS	54	ERRPWD
67	ERRCURR	LS	7849	ERRCURR

Load UD1:_ROBOT_BACKUPS\ST-10 ROBOT BACKUPS\RND_ROBOT - GOOD\ROBOT_

PREV YES NO

PREV [ENTER] [F3] MENU SELECT EDIT DATA FCTN TOP [DISP] Show Keys

4. Repeat Step 3 for the SYSMAST.SV file.

FILE

UD1:_ROBOT_BACKUPS\ST-10 ROB 6/162S\RND_ROBOT - GOOD*.*

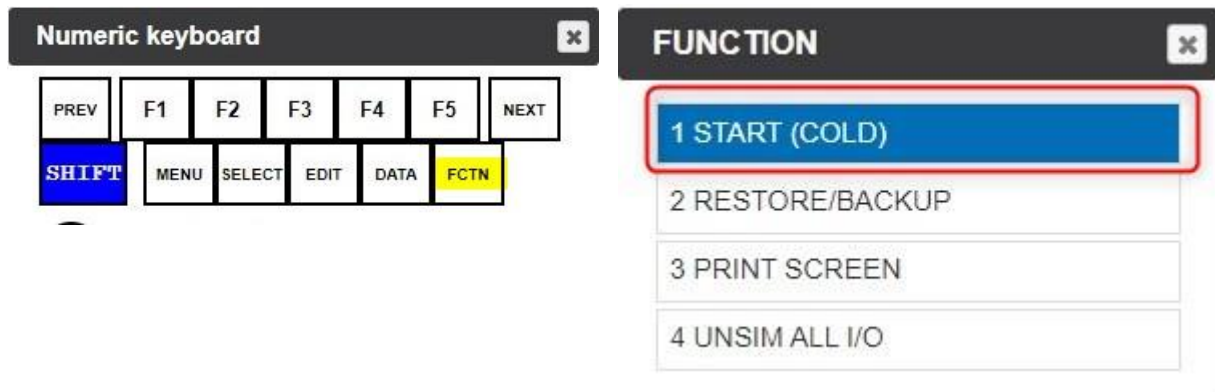
1	.. (Up one level)	<DIR>	.. (Up one level)	
2	FRAMEVAR	VR	47305	FRAMEVAR
3	NUMREG	VR	1637	NUMREG
4	SYSVARS	SV	127615	SYSVARS
5	SYSSERVO	SV	11026	SYSSERVO
6	SYSMAST	SV	3149	SYSMAST
7	SYSMACRO	SV	2485	SYSMACRO
8	DIOCFGSV	IO	20459	DIOCFGSV
9	SYSFRAME	SV	661	SYSFRAME
10	STRREG	VR	885	STRREG
11	SYSUIF	SV	5282	SYSUIF
12	RCMCFG	XML	1151	RCMCFG
13	VARCHG	XML	66790	VARCHG
14	POSREG	VR	2758	POSREG

PREV [TYPE] [DIR] **LOAD** [RESTOR] [UTIL] >

PREV [ENTER] [F3] MENU SELECT EDIT DATA FCTN TOP [DISP] Show Keys

Perform cold start.

To perform a cold start, press **[FCTN]** > **[1]** Start (Cold). Wait for the control to reboot itself.



Apply DCS Params

After loading SYSMAST.SV file, you will need to reapply DCS params. To do this, do the following:

1. Navigate to the SYSTEM page (press **[MENU]** > **[0]** -- NEXT -- > **[6]** SYSTEM).
2. Go to the DCS page (press **[F1]** Type > **[9]** DCS)
3. Press **[F2]** Apply > type 1111 > **[F4]** Ok to apply the params.
4. When prompted, Cycle power on the robot control box.

Reset Pulsecoder Alarms

After reloading the SYSMAST.SV, you will need to clear the pulsecoder alarms. These alarms will not be cleared on a RESET PRESS. You will need to do the following:

1. Navigate to the SYSTEM page (press **[MENU]** > **[0]** -- NEXT -- > **[6]** SYSTEM).
2. Go to the Master/Cal page (press **[F1]** Type > **[3]** Master/Cal)
3. Clear the pulsecoder alarms (press **[F3]** RES_PCA > **[F4]** Yes)
4. Press **[RESET]** to clear the alarms. You should be able to clear the alarms at this point.