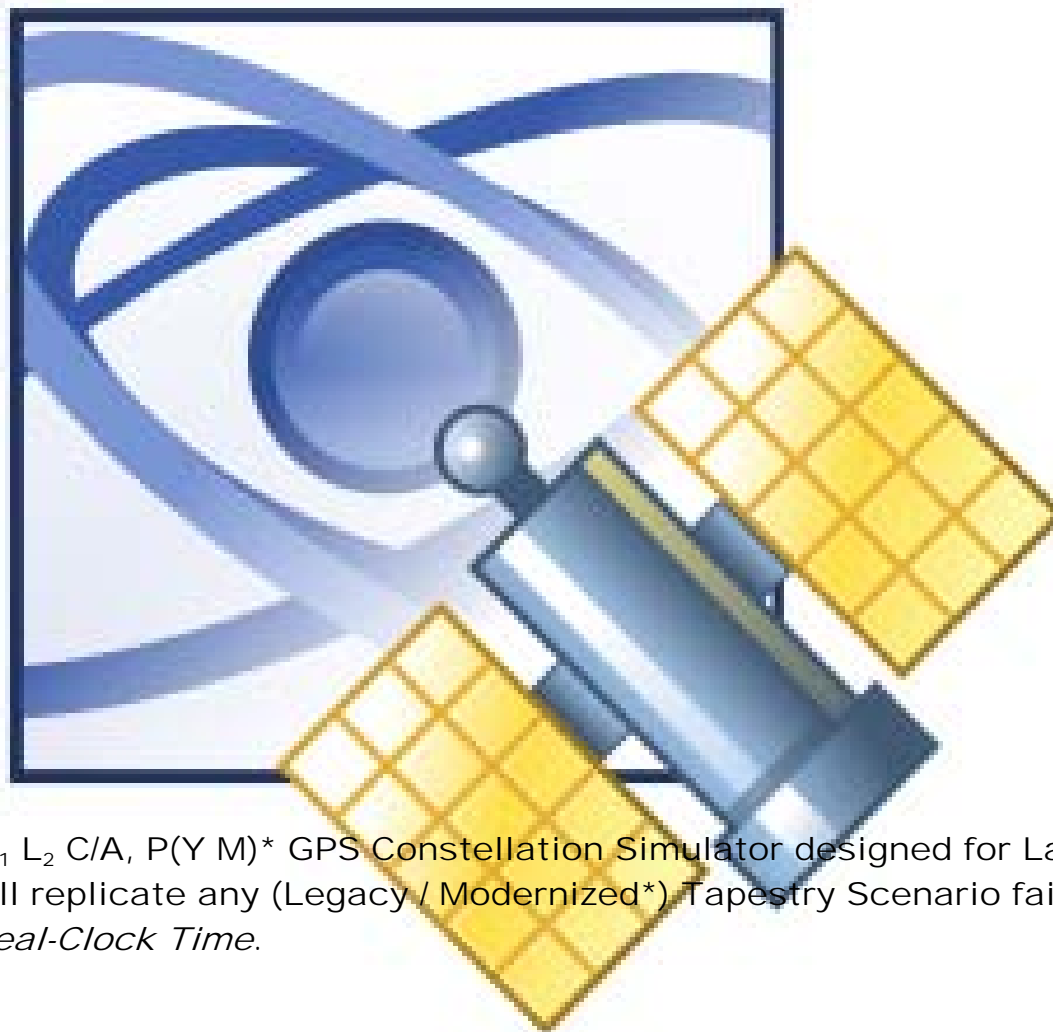


LABBOX

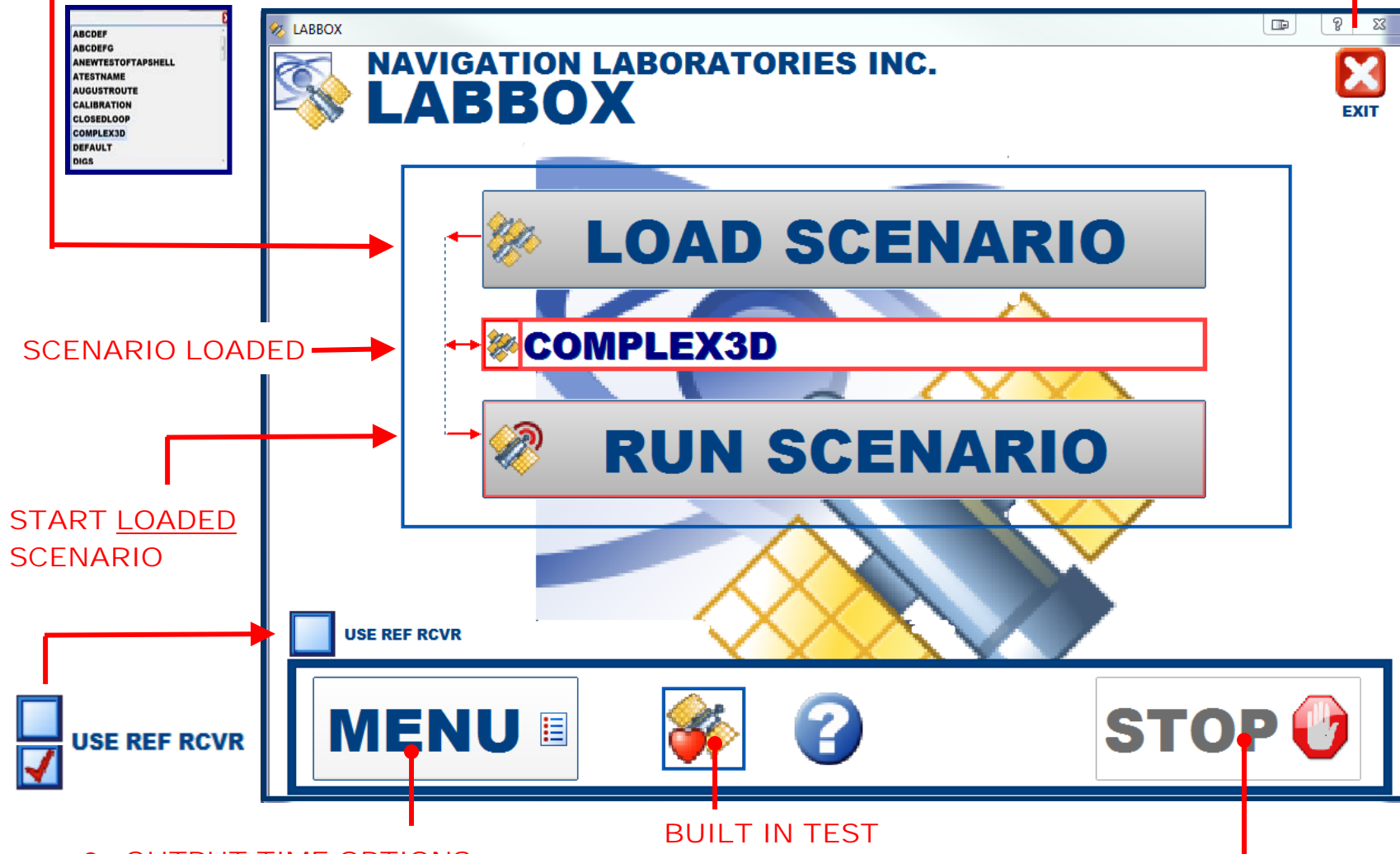
 L_1 L_2 DESKTOP CONSTELLATION SIMULATOR

LABBOX is a 16 channel L_1 L_2 C/A, P(Y M)* GPS Constellation Simulator designed for Laboratory desk-top use. LABBOX will replicate any (Legacy / Modernized*) Tapestry Scenario faithfully in either *Scenario-Time* or *Real-Clock Time*.

* optional

SELECT SCENARIO
TO LOAD

CLOSE LABBOX



- OUTPUT TIME OPTIONS
- REMOTE CONTROL
- TRANSFER SCENARIO FROM MEDIA TO LABBOX
- BUILT IN TEST , POWER CALIBRATION

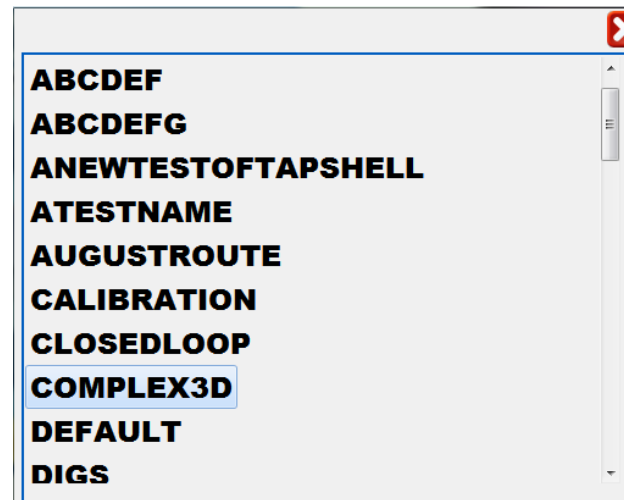
STOP RF OUTPUT

LOAD SCENARIO

THE LOADED SCENARIO IS
SHOWN HERE



TO ADD SCENARIOS USE THE
TRANSFER FUNCTION [MENU]
OR "MAKE A SCENARIO" [MENU]



INCLUDED PREBUILT SCENARIOS:

STATIC - 24 HOURS
1/5 G FIGURE EIGHT - 4 HOURS
1/2 G FIGURE EIGHT - 4 HOURS

1/5 G RACE TRACK - 4 HOURS
1/2 G RACE TRACK - 4 HOURS

1/2 G PITCH TO ALTITUDE RACE TRACK - 4 HOURS
1 G PITCH TO ALTITUDE RACE TRACK - 4 HOURS

USE LABBOX CONTROLS TO
CHANGE INITIAL TIME AND
LOCATION



RUN SCENARIO

STARTS THE [LOADED] SCENARIO
OUTPUT

SCREEN 1

● RUN STATUS

TIME
1643 13 2011:7:3 0:0:13

SCENARIO COUNTER

6%

GEODETIC
187 SECONDS

ECEF
34.00701 -117.99962 -0.00 M 100.0 M/S
-2484799.6 -4673302.3 3547090.7 M
48.3 35.5 80.0 M/S

MENU **STOP**

PAUSE /RESUME
STATUS DISPLAY



NEXT SCREEN
(OF 3)



SCREEN 2

L1	L2						
				6			
		RANGE(M)	RATE(M/S)	IONO (L1 L2)	TROPO(M)		
1	2	24987634.8	-589.8	13.0	21.4	13.5	
2	4	24403896.1	-644.7	12.0	19.8	10.4	
3	7	25386302.9	709.2	13.7	22.5	31.0	
4	8	22106341.9	564.1	7.0	11.6	4.0	
5	9	22828709.5	-683.6	9.2	15.2	5.7	
6	11	24087255.7	478.7	10.2	16.8	8.9	
7	15	22801084.9	464.6	8.0	13.2	4.5	
8	17	20457698.2	167.2	4.6	7.5	2.4	
9	26	24951890.6	-490.7	14.3	23.6	27.1	
10	28	22484975.6	273.2	6.8	11.3	4.0	
11	0	0.0	0.0	0.0	0.0	0.0	
12	0	0.0	0.0	0.0	0.0	0.0	
13	-	-	-	-	-	-	
14	-	-	-	-	-	-	
15	-	-	-	-	-	-	
16	-	-	-	-	-	-	

STOP

CLICK THIS TO RETURN TO
RUN STATUS SCREEN 1



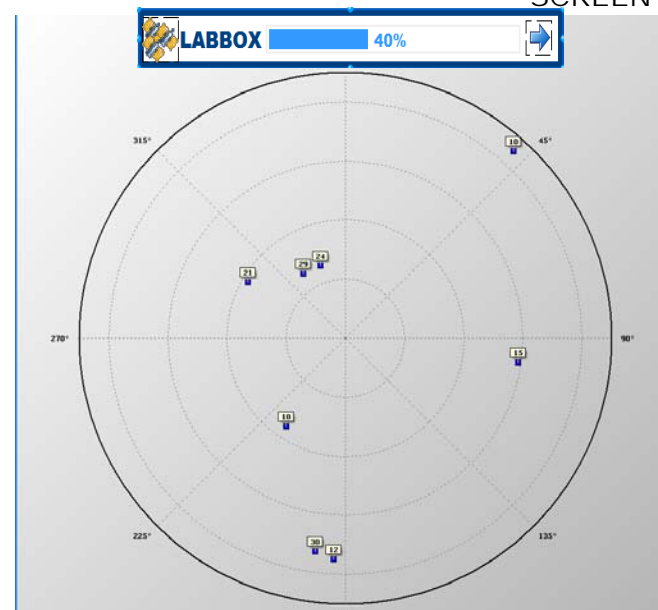
SHOW THE RUN STATUS AND
POWER SCREEN

RF Control (dB)

mon RF Gain(dB):

Chan	Sv	L1 Atten	L2 Atten	El
All				
1		10	15.4	5
2		12	16.9	15
3		15	9.0	31
4		18	8.1	55
5		21	6.6	52
6		24	6.3	65
7		29	6.4	64
8		30	14.9	18
9				
10				
11				
12				

SCREEN 3



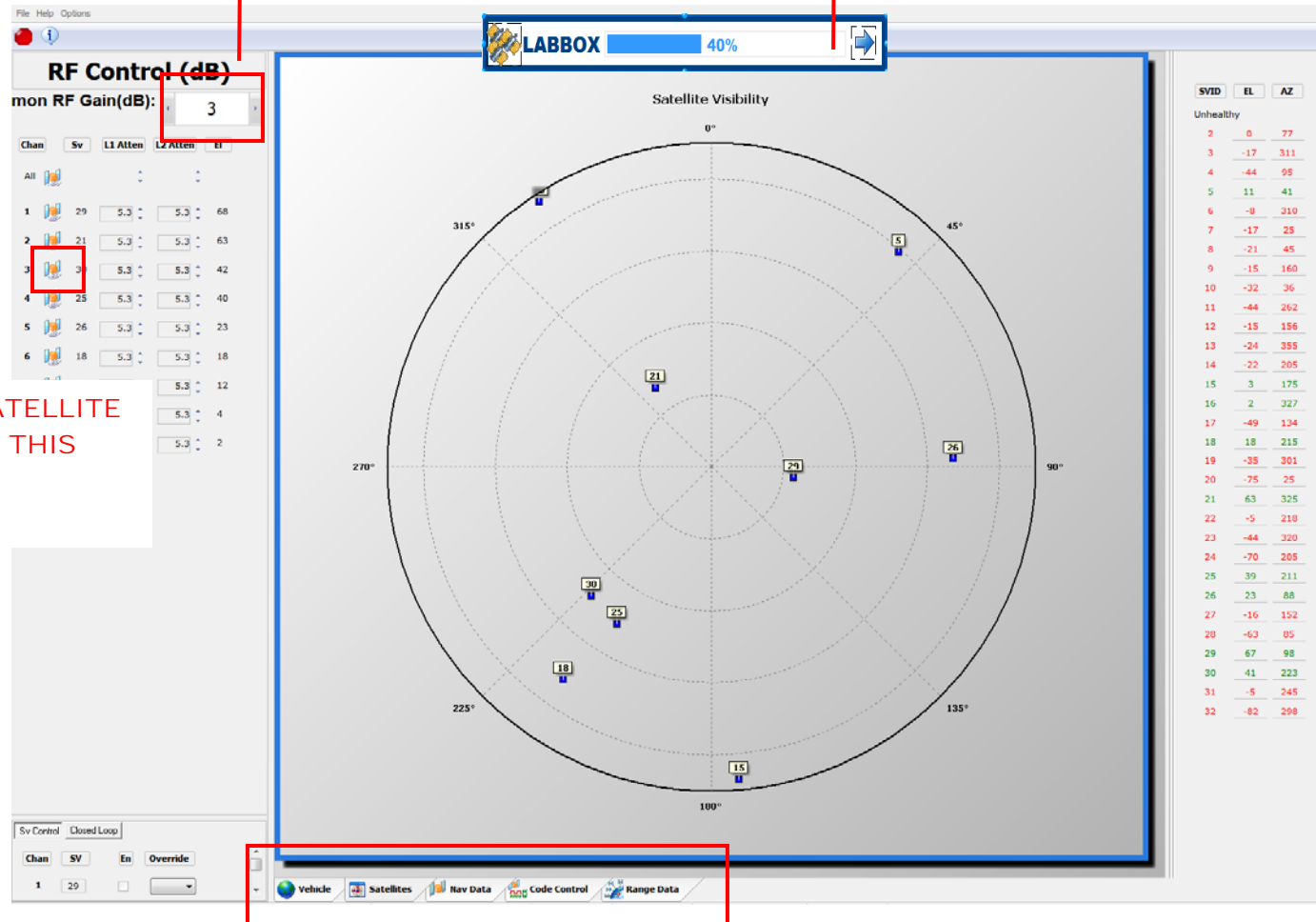


RUN SCENARIO

ADJUST POWER LEVEL USING UP/DOWN
COUNTERS

% SIMULATION COMPLETED
CLICK TO RETURN TO LABBOX SCREEN

TURN OFF A SATELLITE
OUTPUT CLICK THIS
ICON

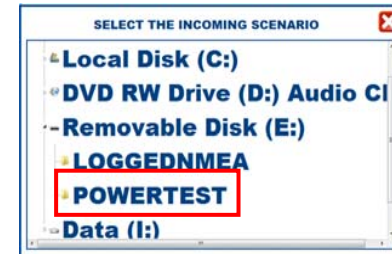


TO PRODUCTIVELY ACCESS ADDITIONAL FEATURES OF THIS RUN-
SCREEN, CONNECT A USB-MOUSE; AND SEE [USING RUN SCENARIO
FOR THE TAPESTRY SYSTEM](#)

MENU



IMPORT A SCENARIO FROM
USB DRIVE OR OTHER
MEDIA



MENU



TRANSFER



REMOTE CONTROL



CALIBRATE POWER

SW VERSION 1017

OPERATE LABBOX
VIA ETHERNET

CALIBRATE

START



BUILT IN TEST

HW BIT

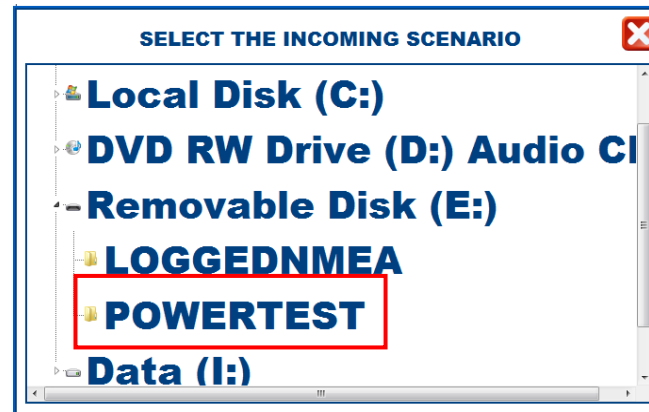


SW VERSION 1006

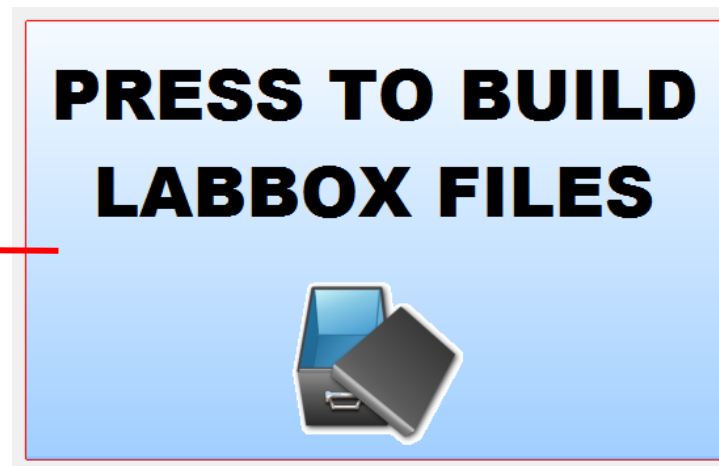
TRANSFER

TRANSFER A SCENARIO TO THE LABBOX

SELECT SCENARIO
FOLDER



TRANSLATES THE
SCENARIO TO LABBOX
FORMAT (REQUIRED)



CALIBRATE POWER

SEE THIS [DOCUMENT](#) FOR
CALIBRATION PROCEDURES

Tapestry Single Channel Simulator

Power Options Help

Time (s): 89 RF Gain: 0.0

		Atten	Range Rate	Range Acc	
RF:	0	L1 1 0.2	0.00	0.00	<input type="checkbox"/> New Doppler
Chan:	1	L2 0.2			

SVID Select: 1 L1 Range: 1000.00 L2 Range Diff: 0.00

☐ L1 Carrier ☐ L1 C/A ☐ L1 P ☐ L1 Nav ☐ L1 WAAS

☐ L2 Carrier ☐ L2 C/A ☐ L2 P ☐ L2 Nav

CALIBRATE

START

BUILT IN TEST

HW BIT

SW VERSION 1006

Built-In-Test

Tapestry BIT Results

+5V Detected	FAIL
+12V Detected	FAIL
Xilinx 1 Init	FAIL
Xilinx 1 Programmed	FAIL
Xilinx 2 Init	FAIL
Xilinx 2 Programmed	FAIL
Xilinx 3 Init	FAIL
Xilinx 3 Programmed	FAIL

Refresh Exit

Program Digital Board

3/9/2012 1:45:31 PM BIT Count: 2.1.1.0

? +5V / +12V FAIL
CHECK THAT BOTH AC PLUGS
ARE ATTACHED,
CHECK FUSE (1.5 A)

REMOTE CONTROL

Message Status

Num Msgs Sent: 0
Num Msgs Rcvd: 0

Ethernet Server Interface Status

Client NOT Connected
Port: 5307

RCI Status

PPS Counter (s): 0
2 Millisecc Counter (ms): 0
Counters Stopped ☒
Reset Counters
External pulse reset not armed.
Sim HW Counters / External Reset Pulse

TapRci Status: Idle

TapMsec Status

Simulator Mode: Idle

Simulation Status

Current Week: Start Week:
Current Seconds: Start Seconds:
Secs Into Sim: RF Gain:
Seconds Left:

Vehicle State

Lat: Vel North:
Lon: Vel East:
Alt: Vel Down:

Channel SVID L1 Attn L2 Attn E Az

Version: 2.21.1.23 3/18/2012 3:05:57 PM

TO PRODUCTIVELY ACCESS ADDITIONAL FEATURES OF THIS RUN-SCREEN, CONNECT A USB-MOUSE AND SEE,
[REMOTE CONTROL INTERFACE MANUAL.PDF](#)

LABBOX: INITIAL SETUP



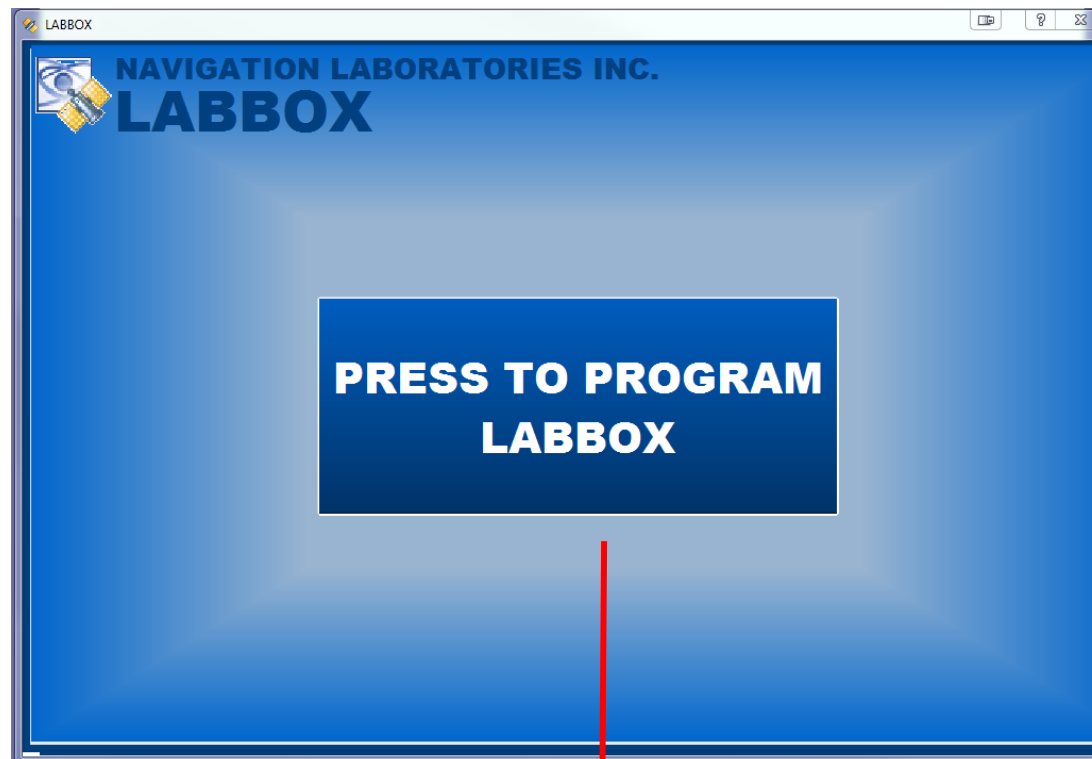
BOTH AC RECEPTACLES MUST BE CONNECTED



LABBOX: INITIAL SETUP / POWER-UP

ON POWER-UP,
THE PROGRAM LABBOX APPEARS.
PRESS THE PROGRAMMING BUTTON

THE LABBOX IS READY FOR USE !



FLASHES THE FPGA AND RUNS BUILT IN TEST