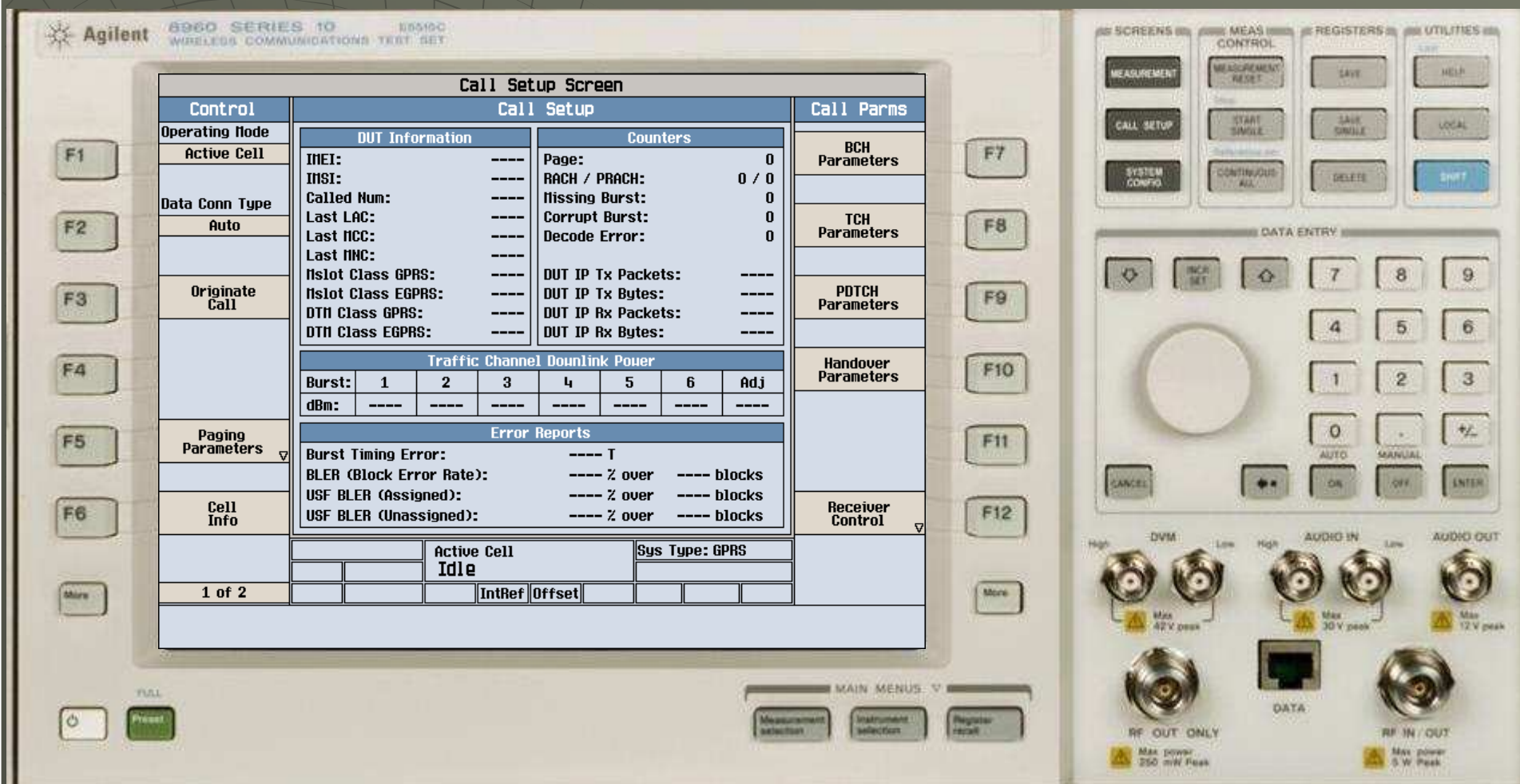




# 8960 WCDMA self calibration

Agilent SSU China  
Yun JianXin

- ◆ E1987A A.05.24启动界面，如果仪器以E1968A启动，本流程只部分适用。



# ◆ 按下“System Config”按钮

System Config

Agilent 8960 SERIES 10 89510C WIRELESS COMMUNICATIONS TEST SET

### System Config Screen

Control	Configuration Summary	Utilities				
F1 Instrument Setup	<b>Instrument Information</b> Application: Fast Switch Test App E1987A A.05.24 Format: GSM/GPRS GPIB Address: 16 Lan IP Address: 1.1.1.6 Subnet Mask: 255.255.255.0 Default Gateway: Last Calibration: 06 Apr 2007 Serial Number: GB45360649					
F2 Format Switch	<b>Options Installed</b> 002 RF Source 2 003 Flexible Radio Link					
F3 Application Selection	<b>License Status</b> GSM TA L GPRS TA L EGPRS TA L Phase & Amp1 vs Time T 58 days Fast Device Tune N GSM Fast Device Tune N WCDMA TA L F10 Lists All Applications					
F4	<b>Active Cell</b> Idle <b>Sys Type: GPRS</b>					
F5 RF IN/OUT Amptd Offset	<table border="1"> <thead> <tr> <th>IntRef</th> <th>Offset</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>		IntRef	Offset		
IntRef	Offset					
F6 RF Output Port RF In/Out	<table border="1"> <thead> <tr> <th>IntRef</th> <th>Offset</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>		IntRef	Offset		
IntRef	Offset					
More	1 of 2					

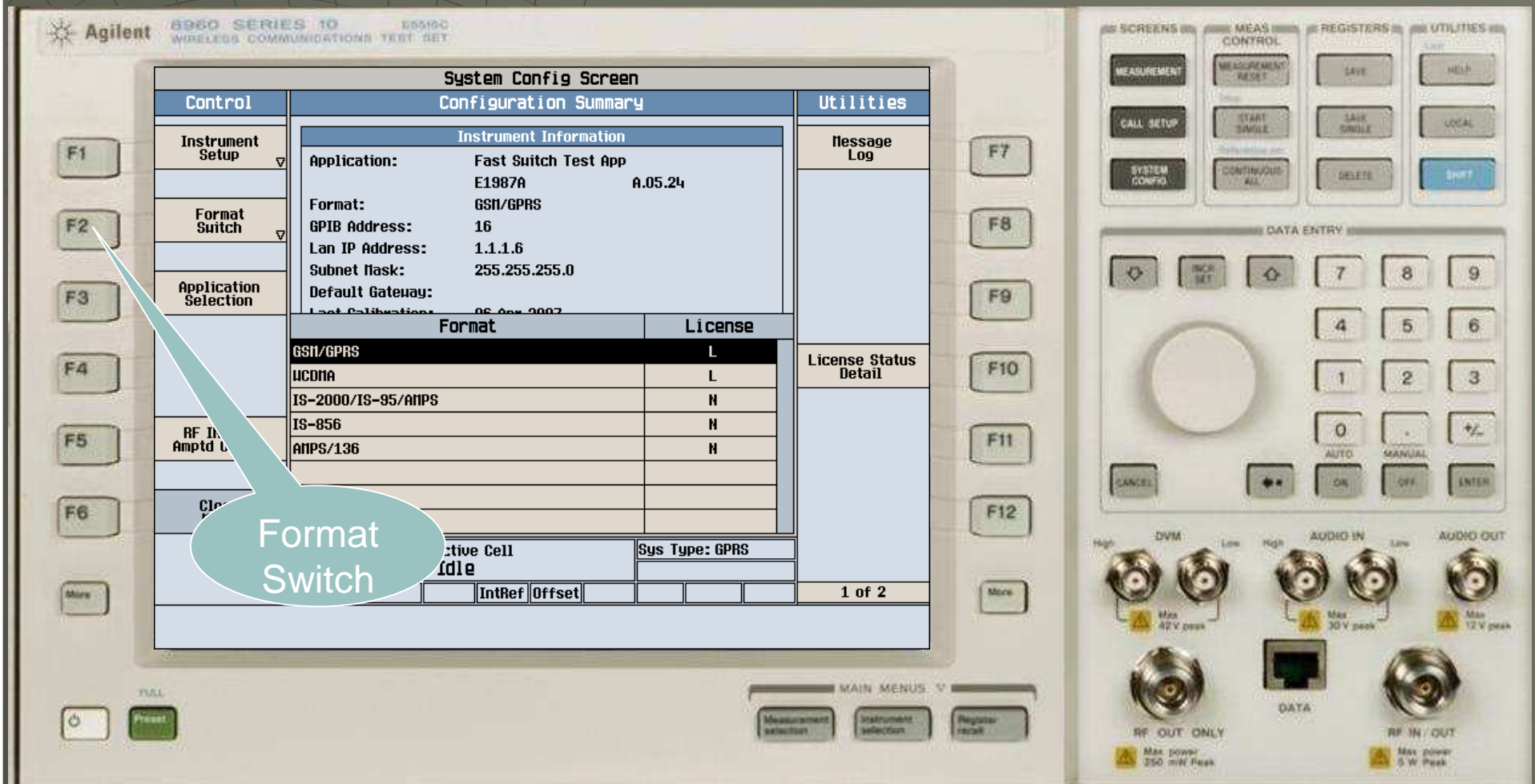
UTILITIES: Message Log, License Status Detail, 1 of 2

DATA ENTRY: 7, 8, 9, 4, 5, 6, 1, 2, 3, 0, +/-, AUTO, MANUAL, OFF, ENTER, CANCEL, ←, →

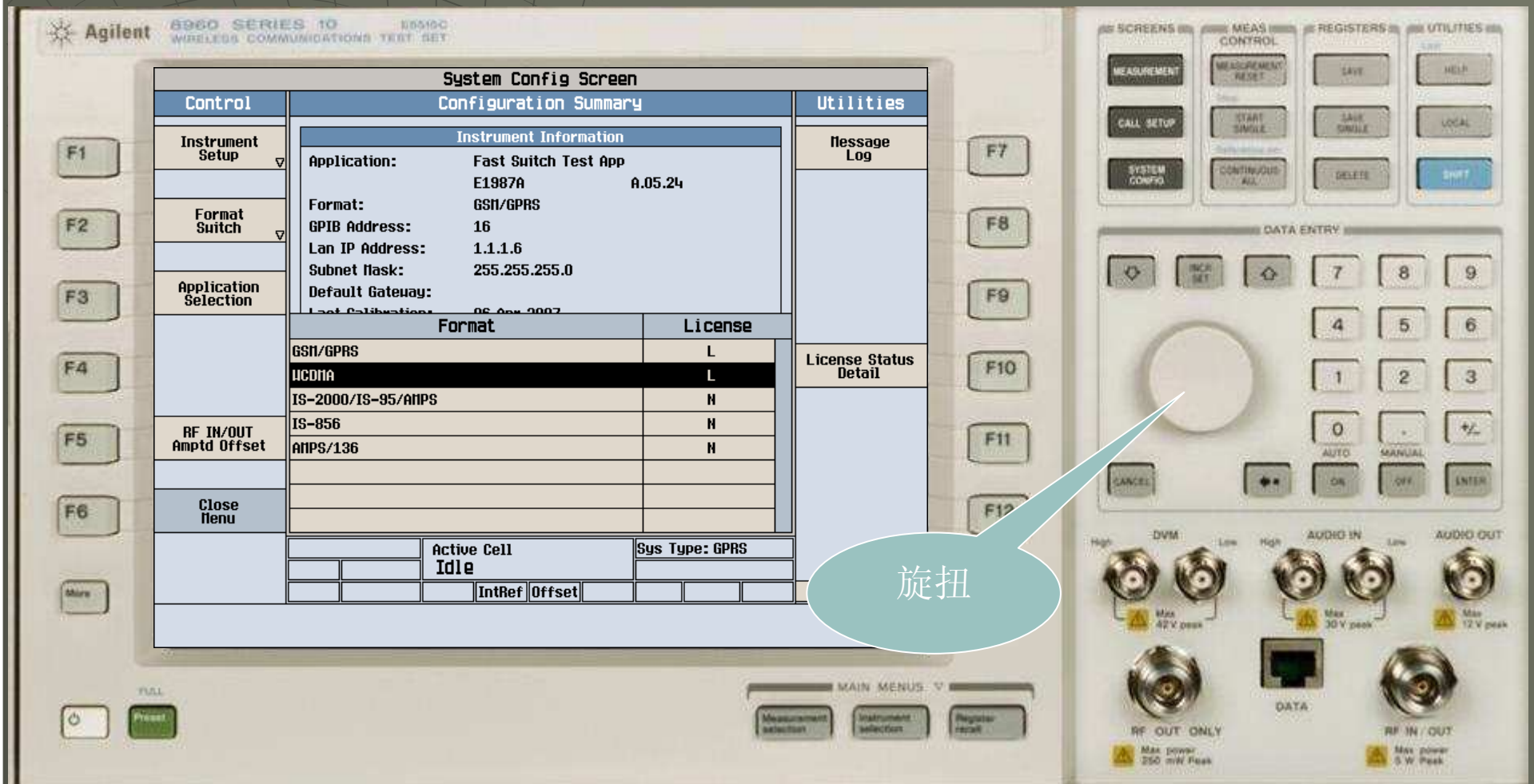
MAIN MENU: Measurement selection, Instrument selection, Register recall

RF OUT ONLY: Max power 250 mW Peak  
 RF IN / OUT: Max power 5 W Peak

- ◆ 按下“F2”按钮，即选择“Format Switch”



- ◆ 旋转旋钮，选择WCDMA模式，按下旋钮



# ◆ 8960进入WCDMA测试模式

Agilent 8960 SERIES 10 89510C WIRELESS COMMUNICATIONS TEST SET

### Call Setup Screen

Call Control	Active Cell Operating Mode	Call Parms
Operating Mode	UE Information	Cell Power
Active Cell	INSI: INEI: Power Class:	-75.00
	UE Expected Open Loop Transmit Power	dBm/3.84 MHz
	Initial PRACH TX Power: -22.70 dBm	Channel Type
Originate Call	Initial DPCH TX Power: -11.55 dBm	12.2k RNC
	Call Processing Status	Paging Service
Paging Parameters	Current Service Type: None MM Status: None GMM State: None Current DPCH Offset: 0 chips	RB Test Mode
Handovers	HSDPA Information	HSDPA Parameters
	UE Rep HS-DSCH Cat: ---- Cur UE HS-DSCH Cat: ---- Block Error Ratio: ---- % ACKs Received: ---- Throughput: ---- kbps NACKs Received: ---- Blocks Transmitted: ---- statDTXs Received: ----	34.121 Preset Call Configs
Clear UE Info	Active Cell Idle	Channel (UARFCH) Parms
	Sys Type: UTRA FDD	
1 of 4	IntRef Offset	1 of 3

SCREENS MEAS CONTROL REGISTERS UTILITIES

MEASUREMENT MEASUREMENT RESET SAVE HELP

CALL SETUP START SINGLE SAVE SINGLE LOCAL

SYSTEM CONFIG CONTINUOUS ALL DELETE SHIFT

DATA ENTRY

7 8 9

4 5 6

1 2 3

0 +/-

AUTO MANUAL

CANCEL ON OFF ENTER

DVM High Low High Low AUDIO IN Low AUDIO OUT

Max 42 V peak

Max 30 V peak

Max 12 V peak

RF OUT ONLY Max power 250 mW Peak

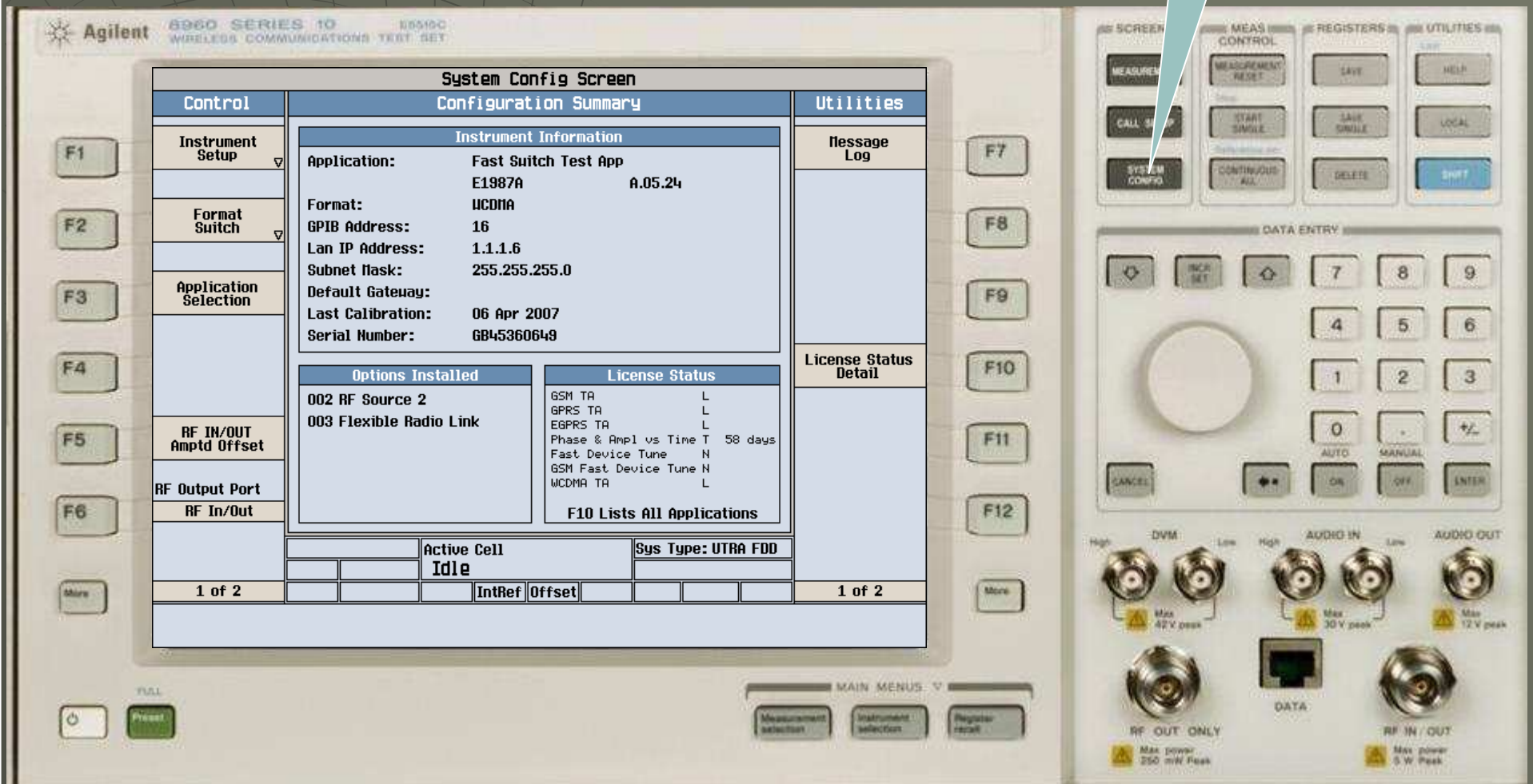
DATA

RF IN / OUT Max power 5 W Peak

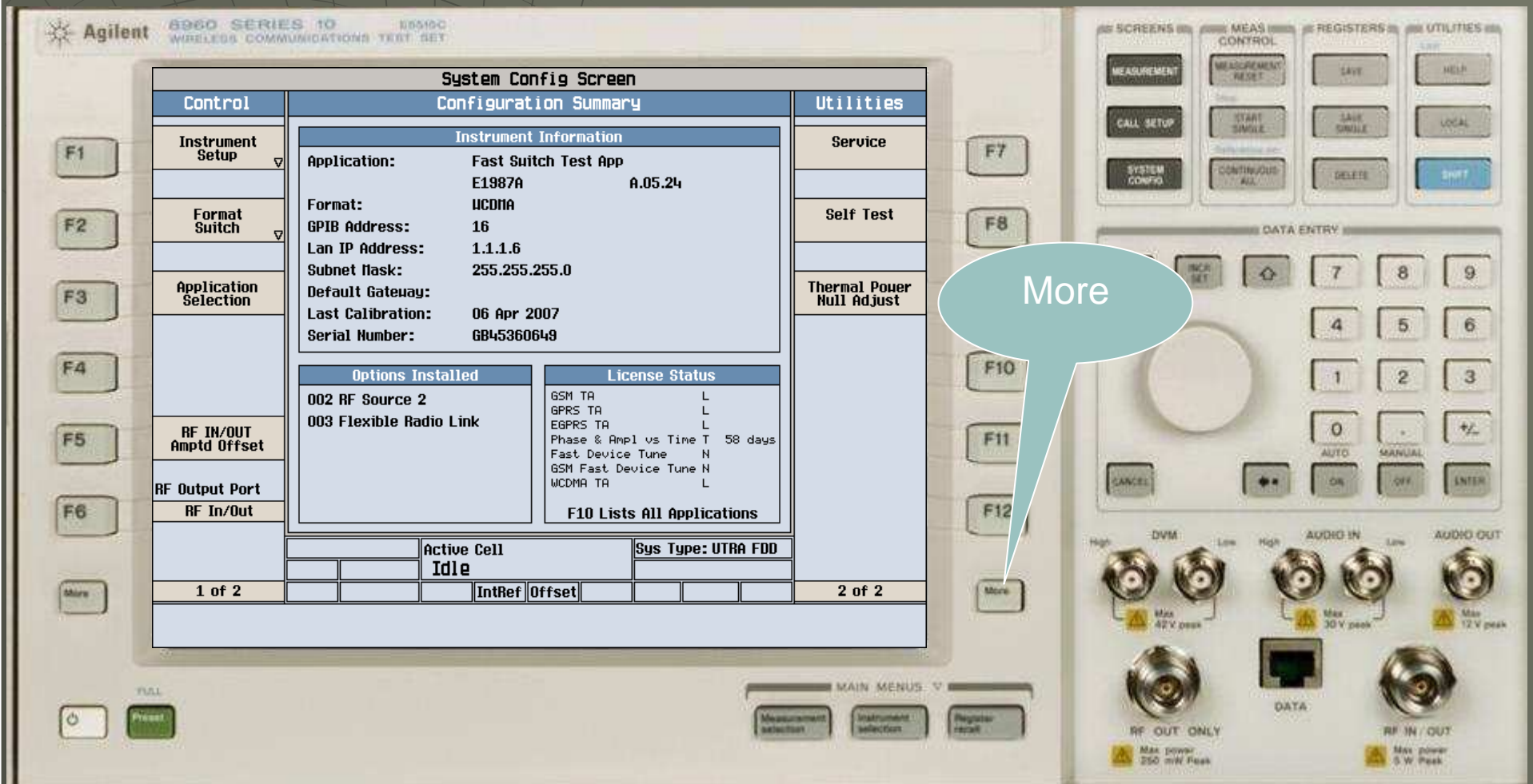
MAIN MENU: Measurement selector Instrument selector Register recall

# 再次按“System Config”按钮

System Config

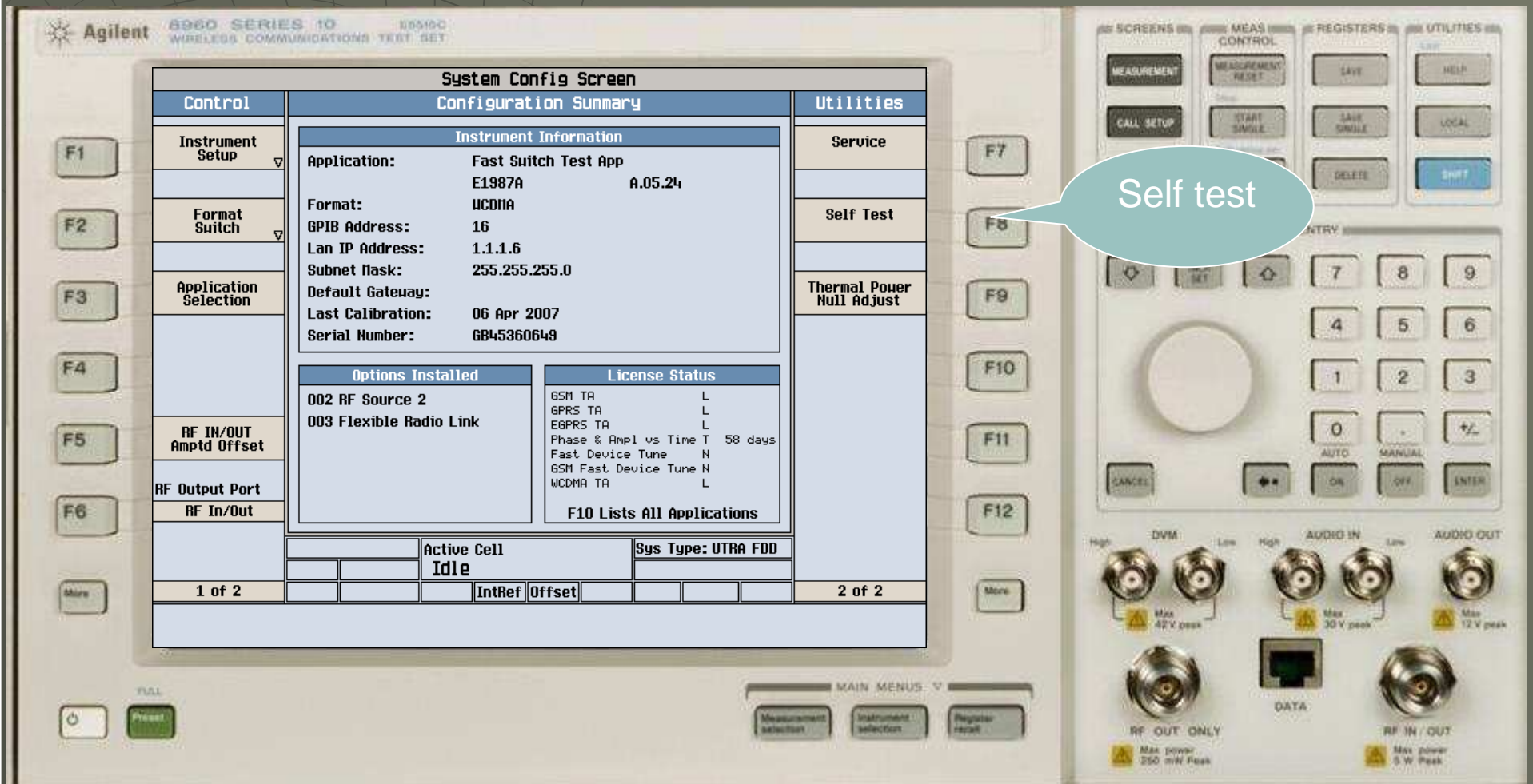


# ◆ 按下“More”按钮

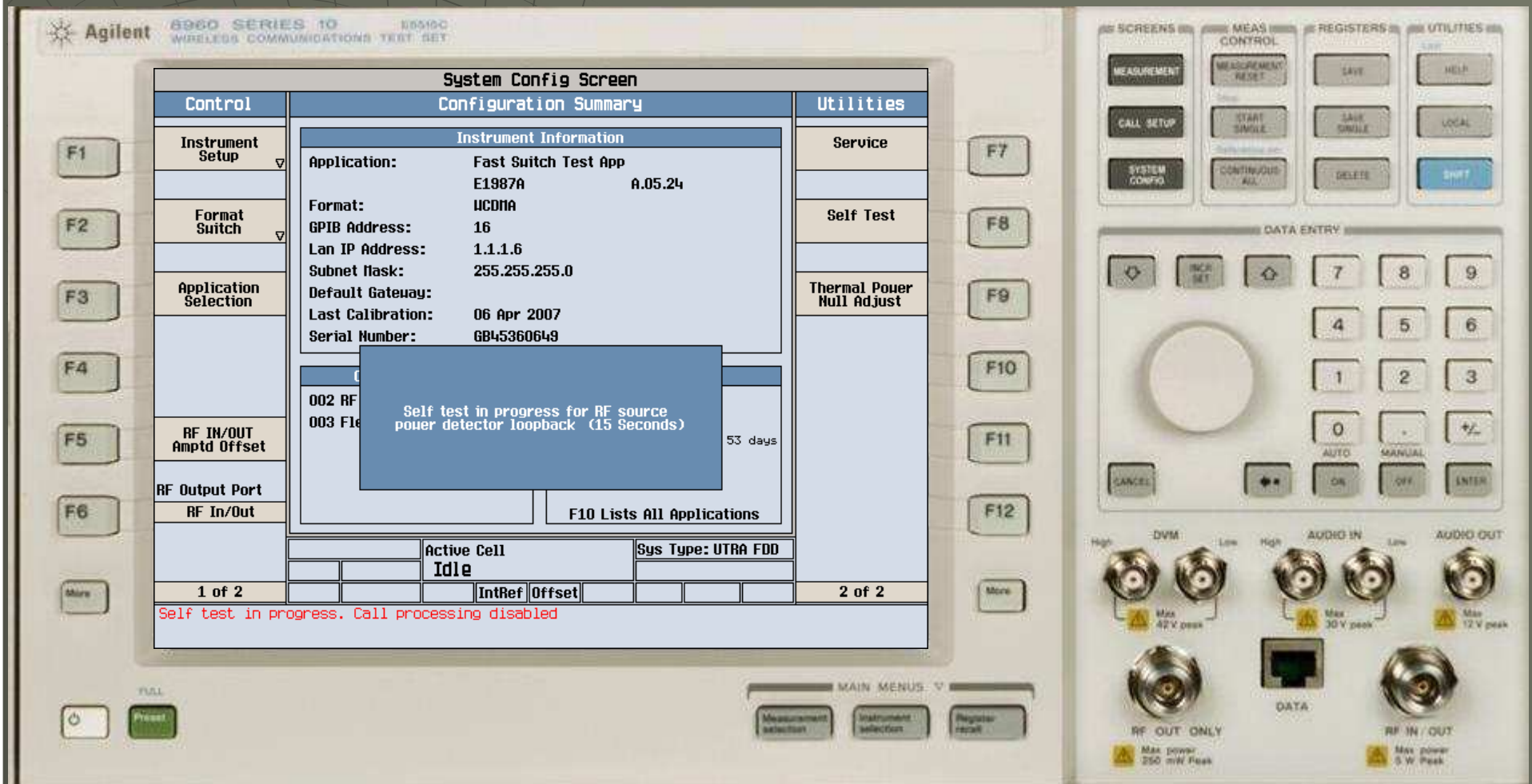




◆ 按下F8，选择“Self Test”



◆ 如图所示，Self test 进行中



# ◆ Self test 完成

Agilent 8960 SERIES 10 88510C WIRELESS COMMUNICATIONS TEST SET

### System Config Screen

Control	Configuration Summary	Utilities
F1 Instrument Setup	<b>Instrument Information</b> Application: Fast Switch Test App E1987A A.05.24 Format: UCDMA GPIB Address: 16 Lan IP Address: 1.1.1.6 Subnet Mask: 255.255.255.0 Default Gateway: Last Calibration: 06 Apr 2007 Serial Number: GB45360649	Service Self Test Thermal Power Null Adjust
F2 Format Switch	<div style="border: 1px solid black; padding: 10px; text-align: center;">             Self test passed           </div>	
F3 Application Selection		
F4		
F5 RF IN/OUT Amptd Offset		
F6 RF Output Port RF In/Out		
More	Active Cell: Idle Sys Type: UTRA FDD	
	1 of 2   IntRef   Offset   2 of 2	

F10 Lists All Applications

53 days

MAIN MENU: ▾  
 Measurement selection | Instrument selection | Register recall

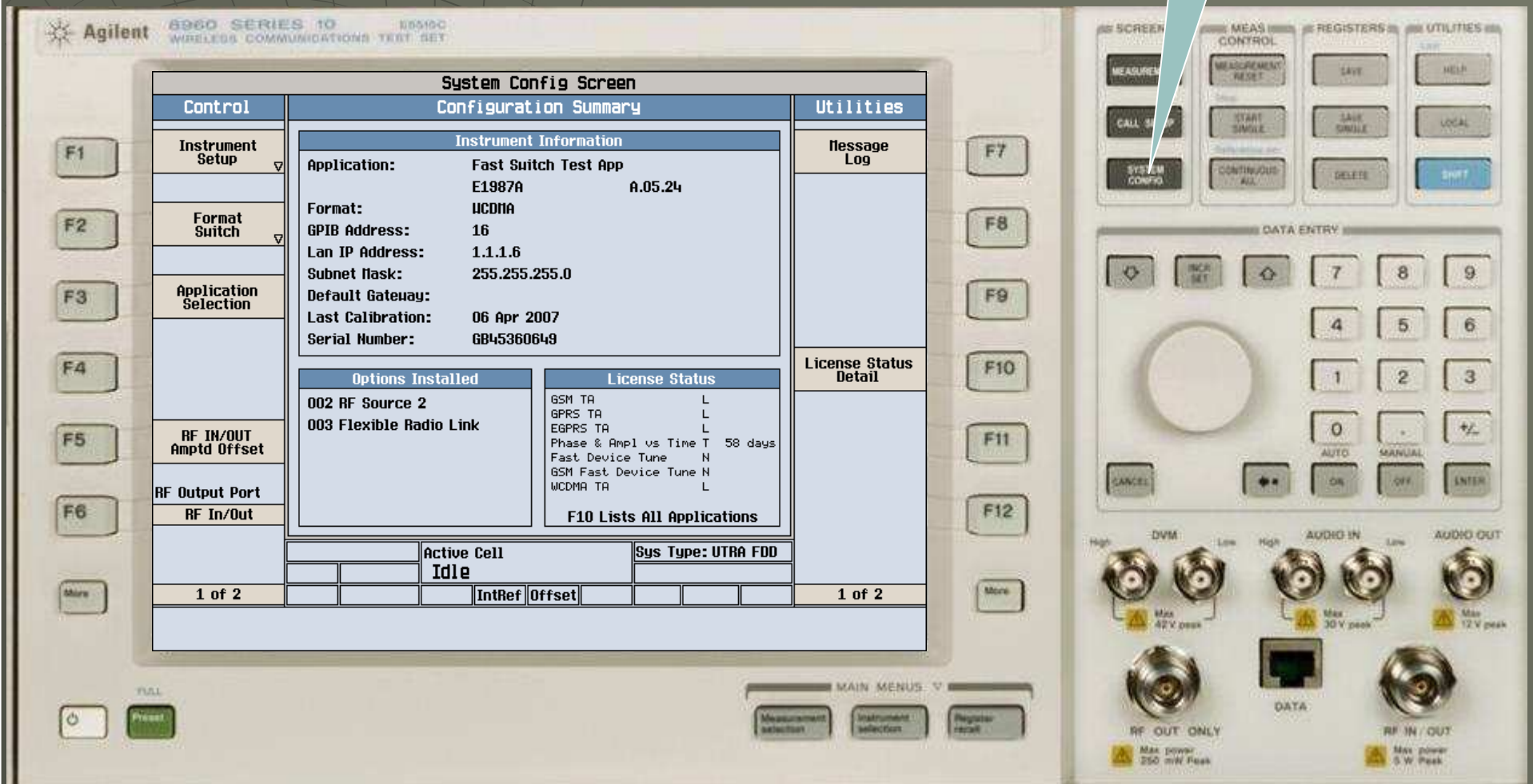
SCREENS: MEASUREMENT, CALL SETUP, SYSTEM CONFIG  
 MEAS CONTROL: MEASUREMENT RESET, START SINGLE, CONTINUOUS ALL  
 REGISTERS: SAVE, SAVE SINGLE, DELETE  
 UTILITIES: HELP, LOCAL, Shift

DATA ENTRY: 7, 8, 9, 4, 5, 6, 1, 2, 3, 0, +/-, AUTO, MANUAL, OFF, ENTER, CANCEL, ←, →

DVM: High, Low, Max 42V peak  
 AUDIO IN: High, Low, Max 30V peak  
 AUDIO OUT: Max 12V peak  
 RF OUT ONLY: Max power 250 mW Peak  
 RF IN / OUT: Max power 5 W Peak

# 再次按“System Config”按钮

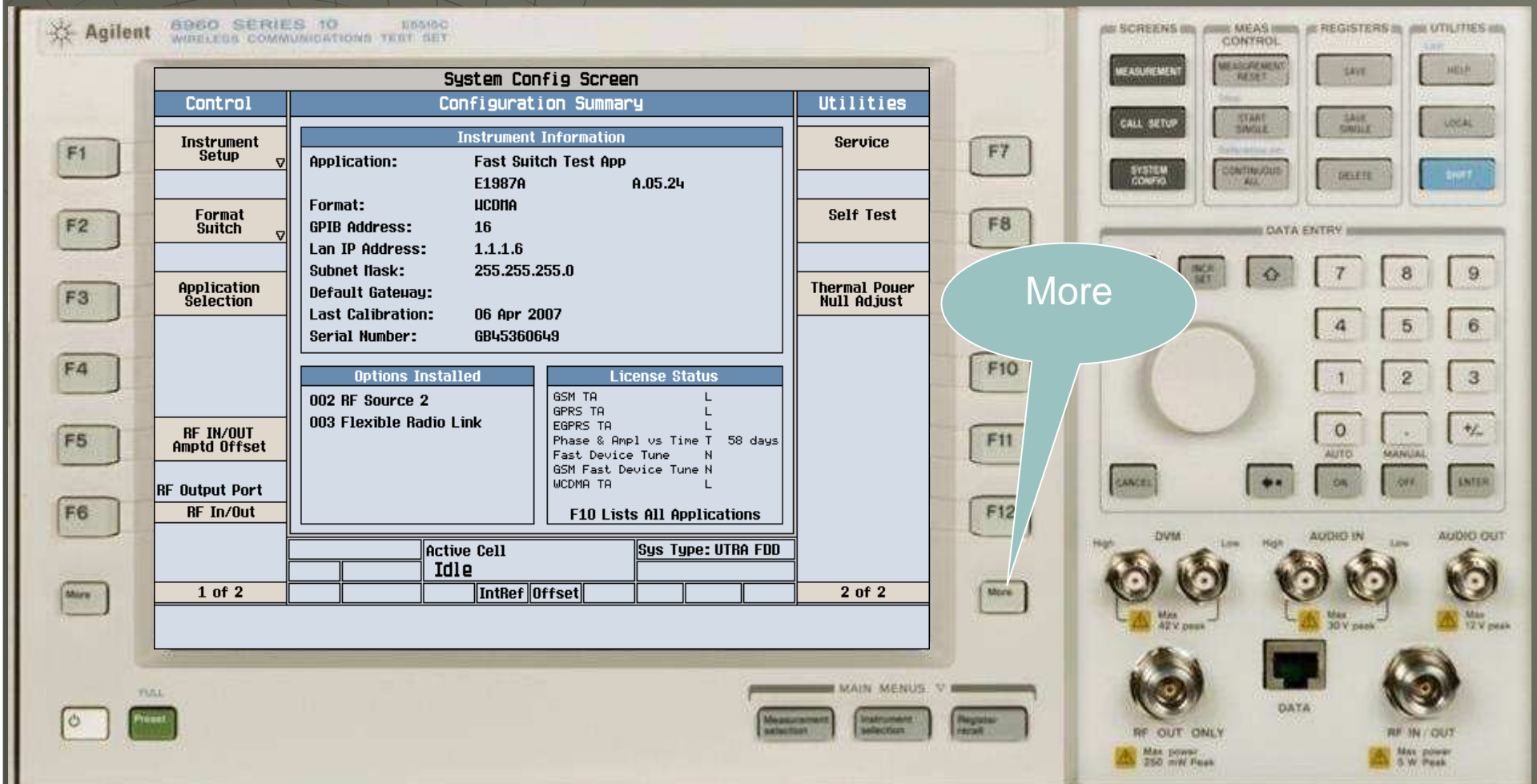
System Config



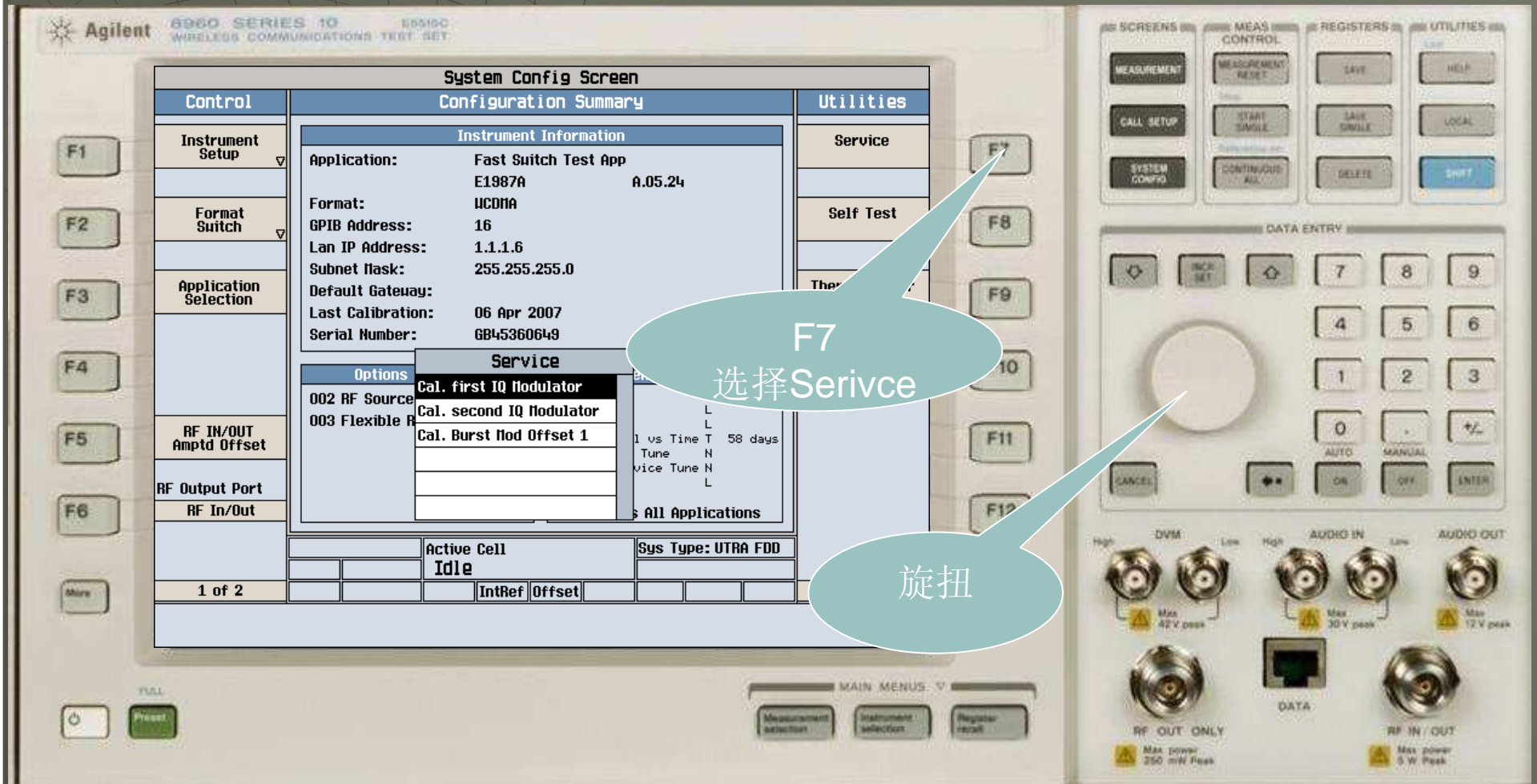
The image shows the front panel of an Agilent 8960 Series 10 Wireless Communications Test Set. The main display is the "System Config Screen" showing a "Configuration Summary". A callout bubble points to the "SYSTEM CONFIG" button on the right-hand keypad.

System Config Screen	
Control	Configuration Summary
<b>Instrument Information</b>	
Application:	Fast Switch Test App
Format:	E1987A A.05.24
Format:	UCDMA
GPiB Address:	16
Lan IP Address:	1.1.1.6
Subnet Mask:	255.255.255.0
Default Gateway:	
Last Calibration:	06 Apr 2007
Serial Number:	GB45360649
<b>Options Installed</b>	
002 RF Source 2	
003 Flexible Radio Link	
<b>License Status</b>	
GSM TA	L
GPRS TA	L
EGPRS TA	L
Phase & Amp1 vs Time T	58 days
Fast Device Tune	N
GSM Fast Device Tune	N
WCDMA TA	L
F10 Lists All Applications	
Active Cell: Idle Sys Type: UTRA FDD	
1 of 2	

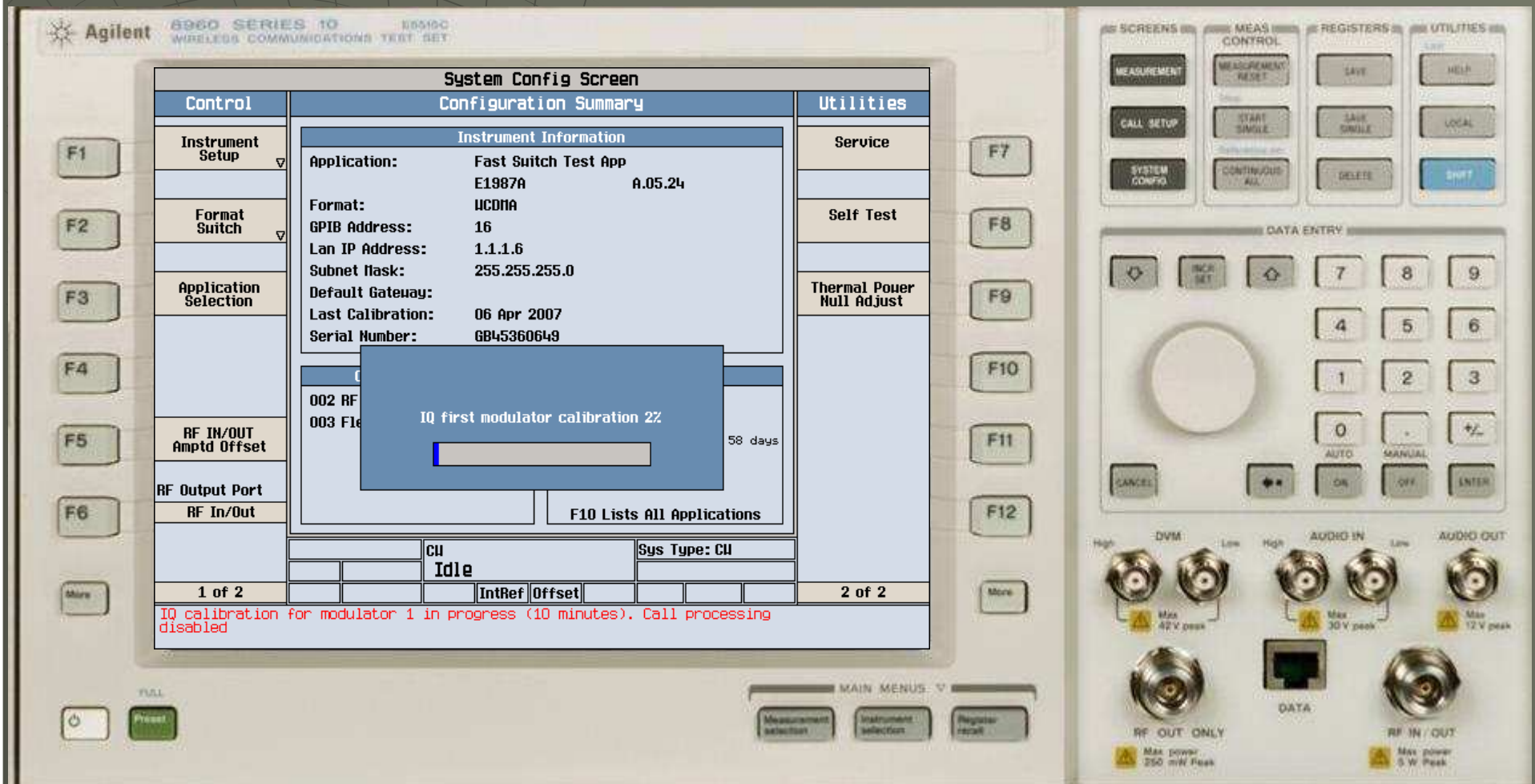
# ◆ 按下“More”按钮



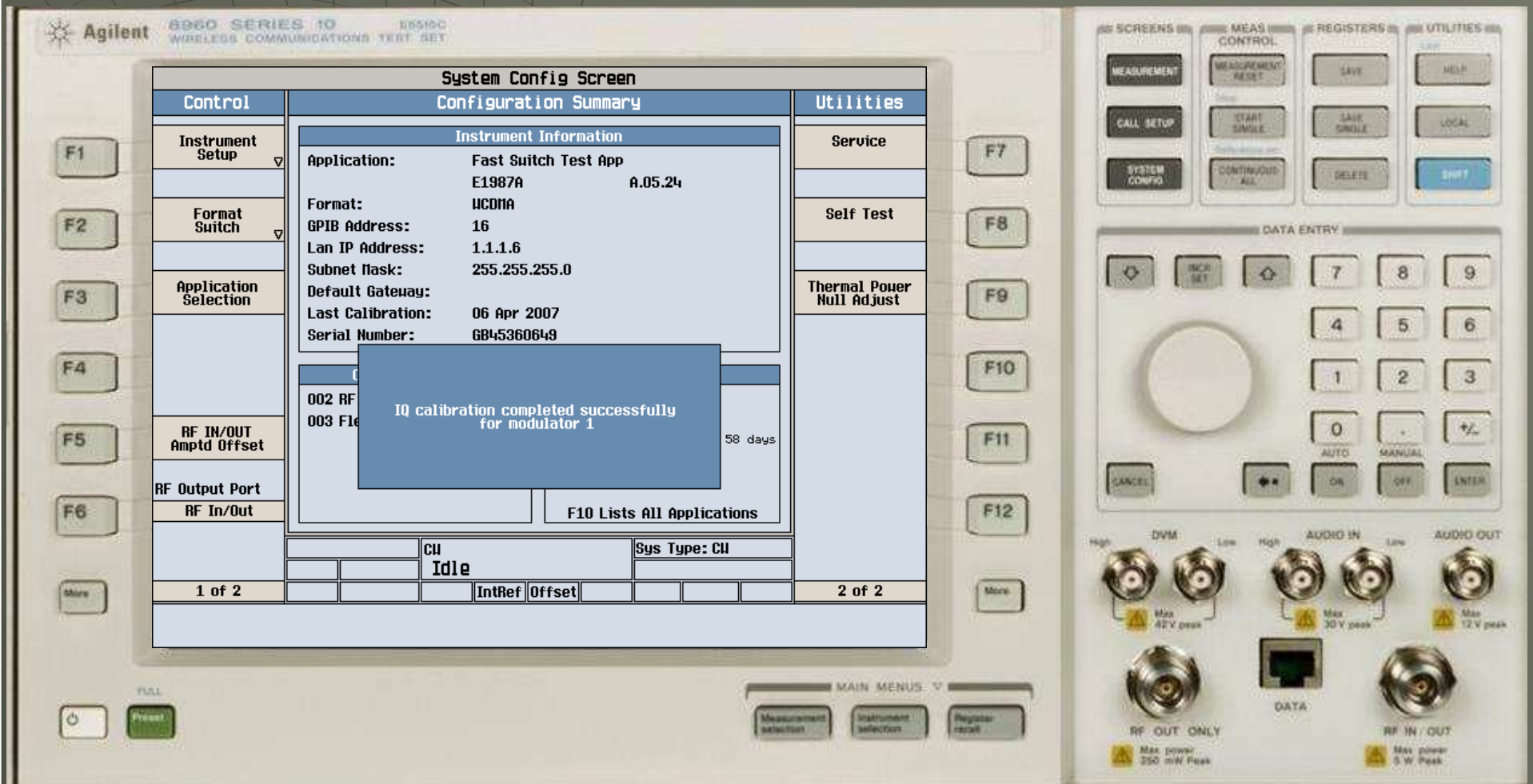
- ◆ 按下F7，选择“Cal.first IQ Modulator”，按下旋钮



- ◆ 仪器进行IQ1自校准，请等待大约5分钟



◆ 出现如图所示对话框，IQ1 自校准完成





- 再次按下F7， 并选择Cal.Burst Mod Offset1

Agilent 8960 SERIES 10 89510C WIRELESS COMMUNICATIONS TEST SET

### System Config Screen

Control	Configuration Summary	Utilities
F1 Instrument Setup	<b>Instrument Information</b> Application: Fast Switch Test App E1987A A.05.24 Format: UCDMA GPIB Address: 16 Lan IP Address: 1.1.1.6 Subnet Mask: 255.255.255.0 Default Gateway: Last Calibration: 06 Apr 2007 Serial Number: GB45360649	Service
F2 Format Switch	<b>Options</b> 002 RF Source 003 Flexible P	Self Test
F3 Application Selection	<b>Service</b> Cal. first IQ Modulator Cal. second IQ Modulator Cal. Burst Mod Offset 1 Sense Status 1 vs Time T 58 days Tune N Vice Tune N L All Applications	Thermal Power Null Adjust
F4	<b>Active Cell</b> Idle Sys Type: UTRA FDD	
F5 RF IN/OUT Amptd Offset		
F6 RF Output Port RF In/Out		
More	1 of 2 IntRef Offset 2 of 2	

MAIN MENU: v

MEASUREMENT selection Instrument selection Register reset

SCREENS MEAS CONTROL REGISTERS UTILITIES

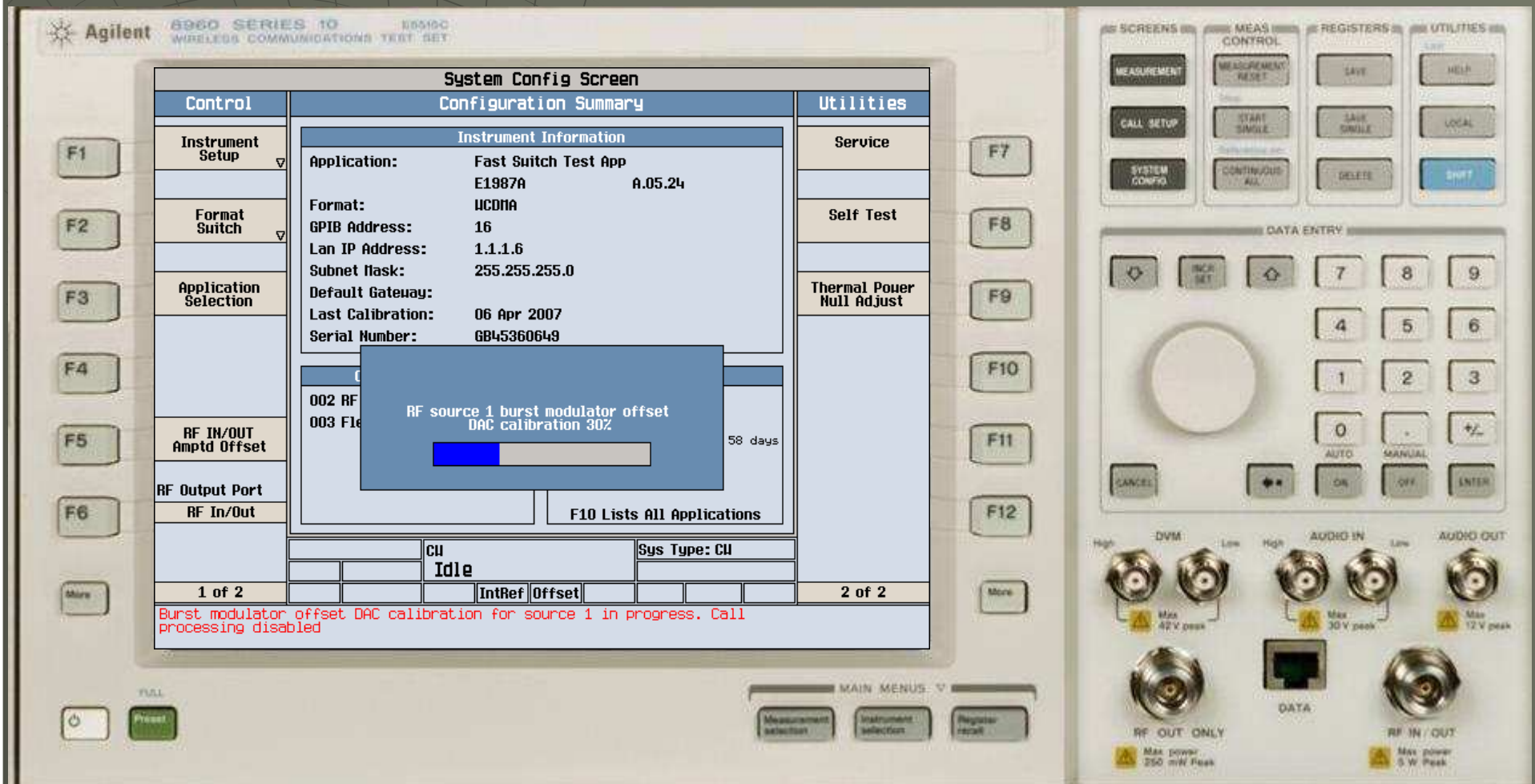
MEASUREMENT MEASUREMENT RESET SAVE HELP  
CALL SETUP START SINGLE SAVE SINGLE LOCAL  
SYSTEM CONFIG CONTINUOUS ALL DELETE Shift

DATA ENTRY

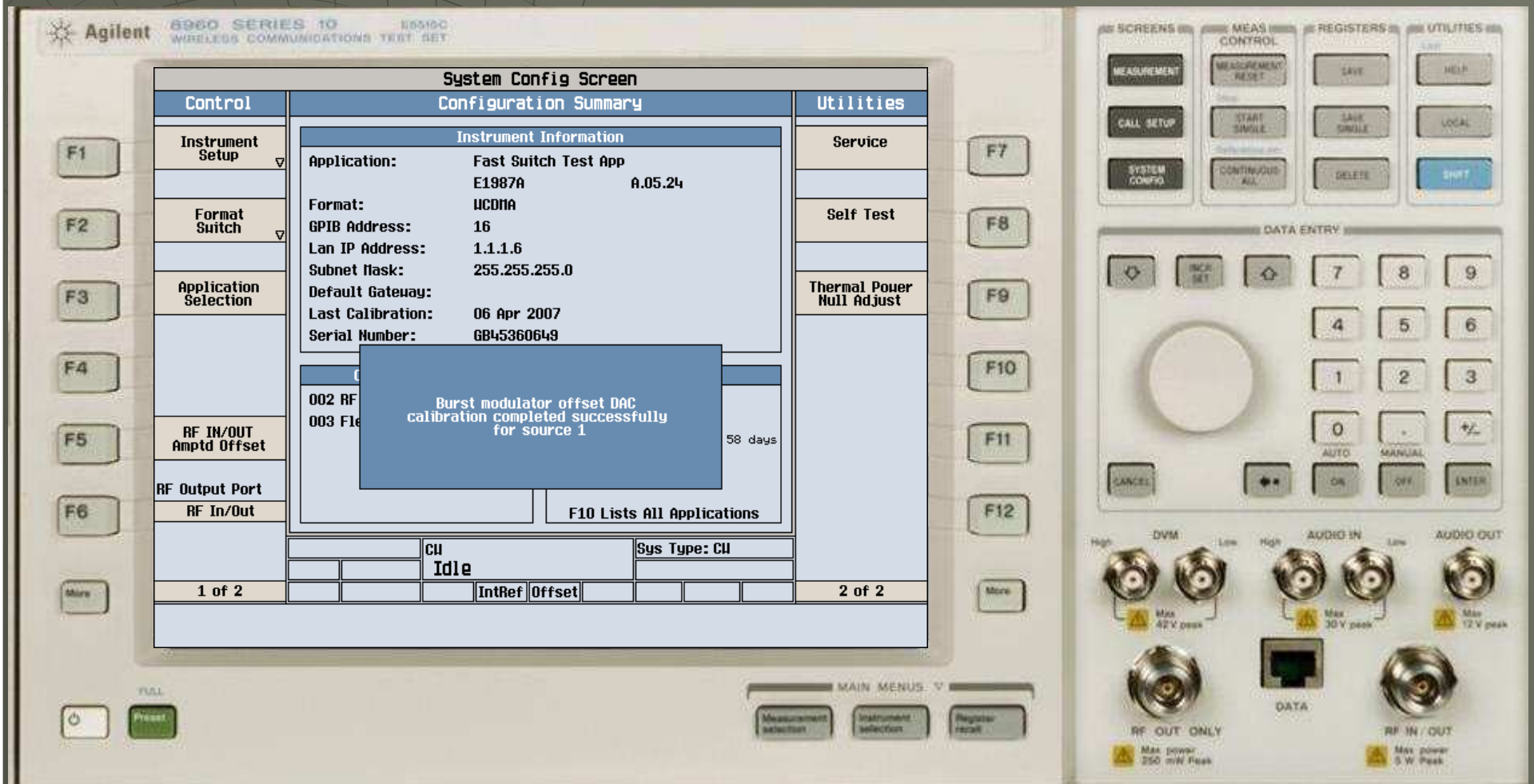
7 8 9  
4 5 6  
1 2 3  
0 +/-  
AUTO MANUAL  
CANCEL OK OFF ENTER

High DVM Low High AUDIO IN Low AUDIO OUT  
Max 42 V peak Max 30 V peak Max 12 V peak  
RF OUT ONLY DATA RF IN / OUT  
Max power 250 mW Peak Max power 5 W Peak

◆ 请等待大约1分钟

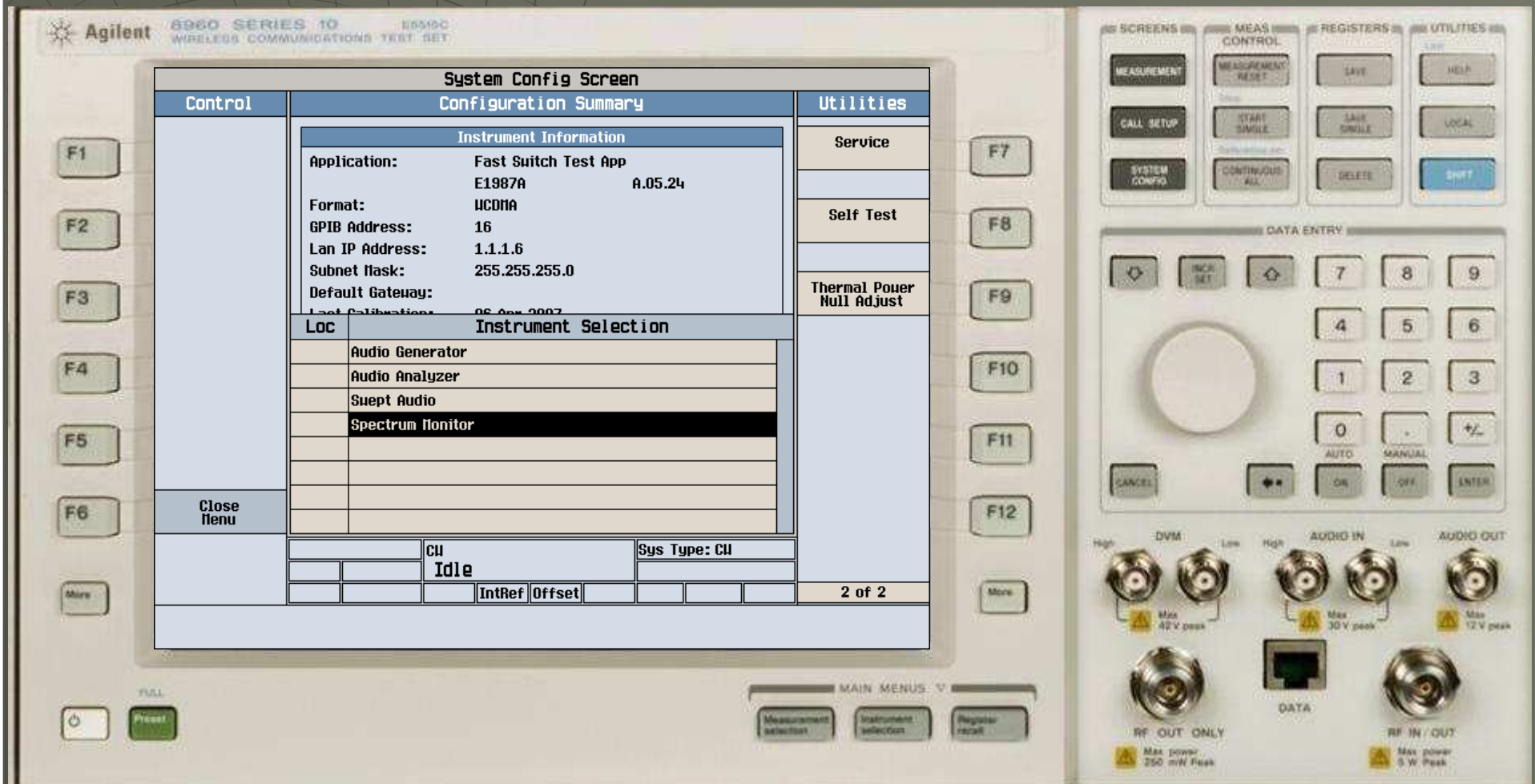


◆ 出现如图所示对话框，Burst自校准完成

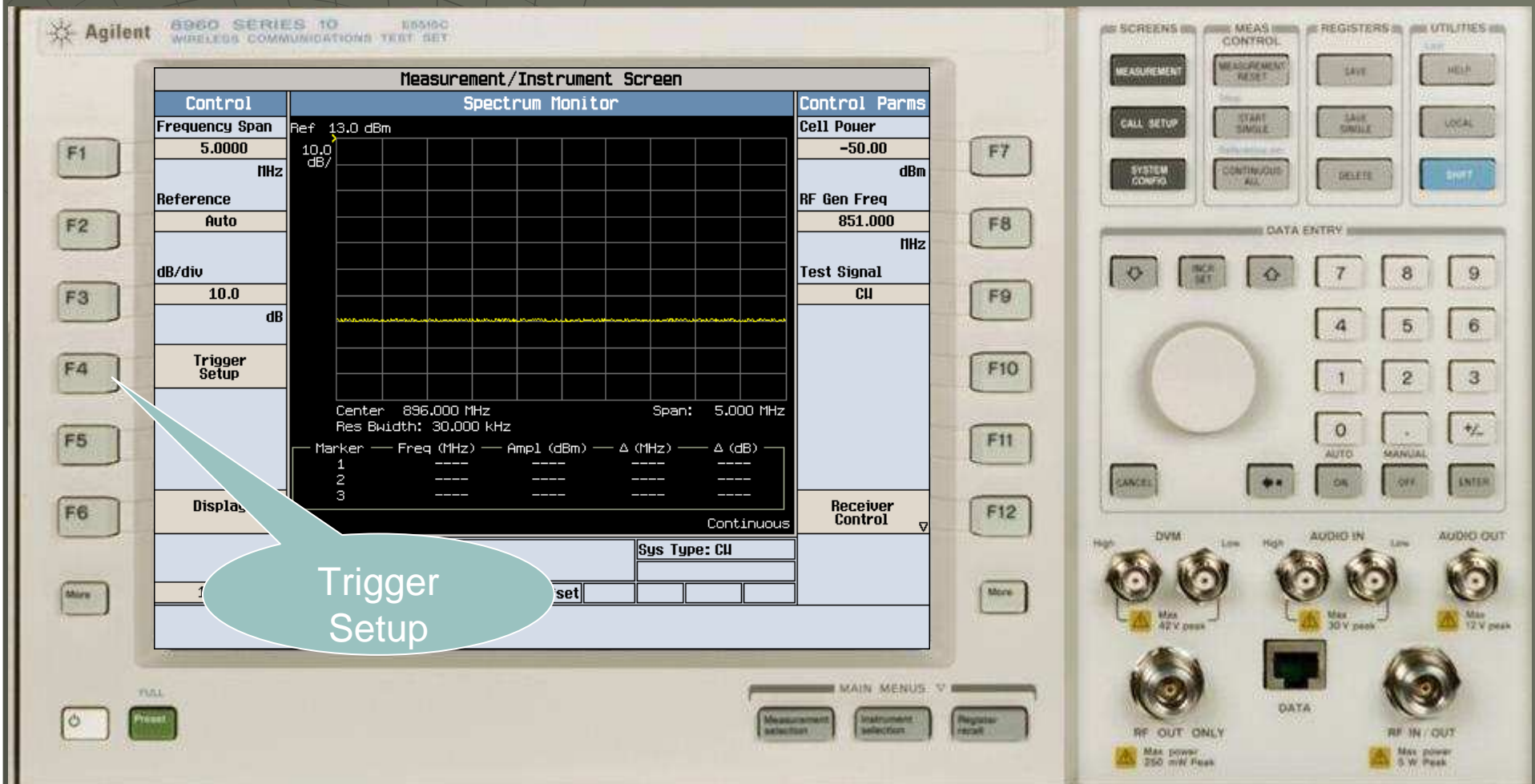




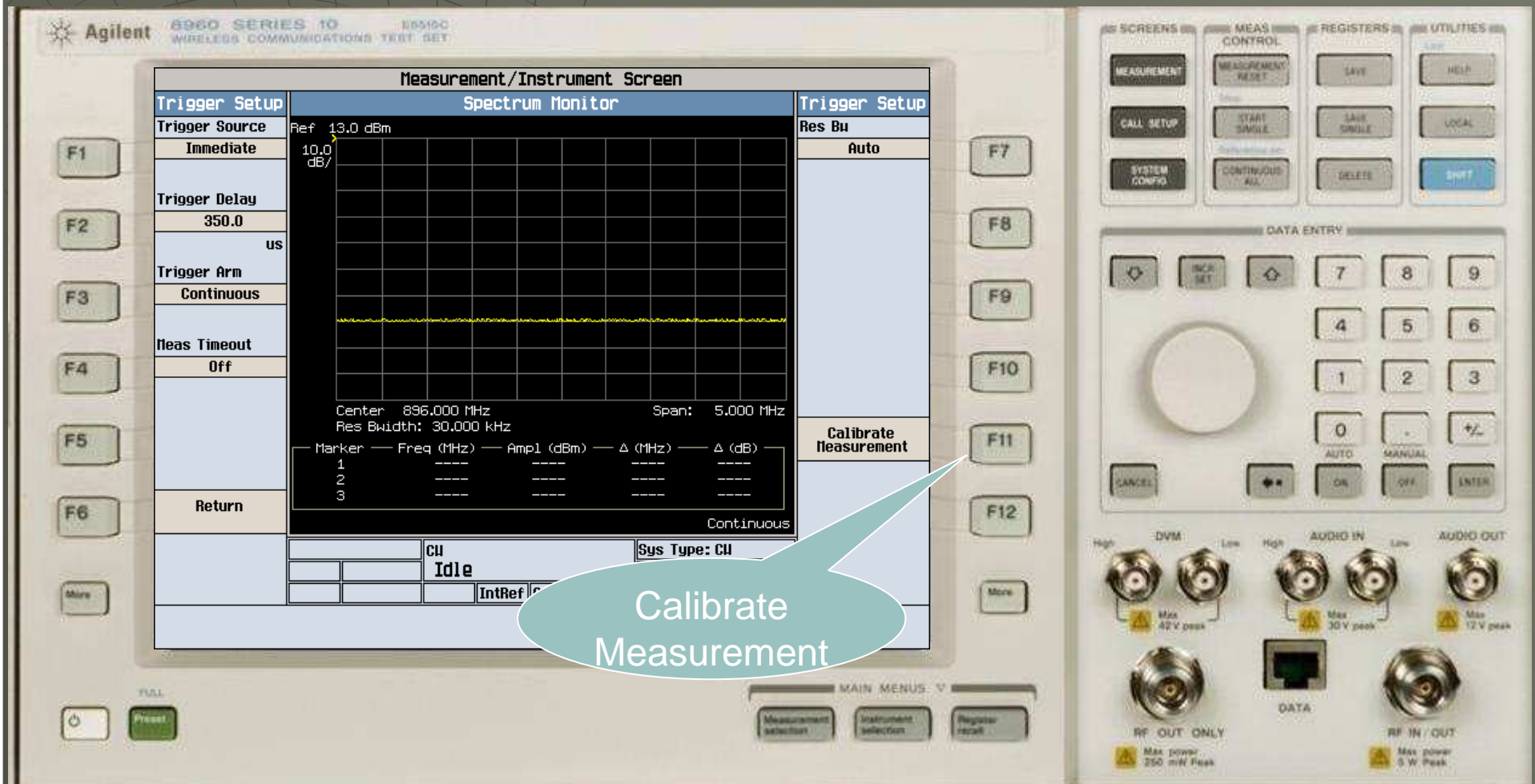
◆ 如图所示，选择Spectrum Monitor



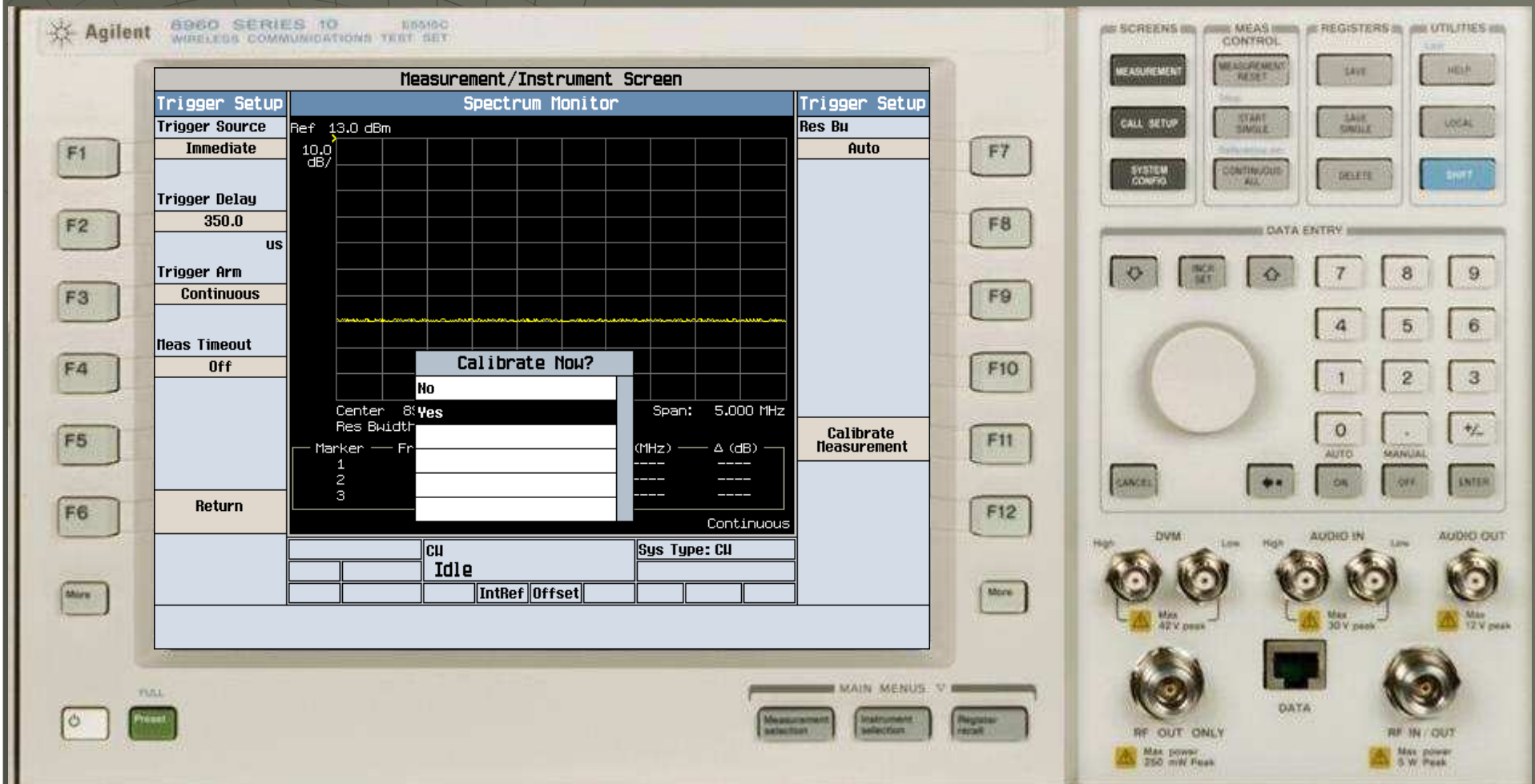
- ◆ 按下F4按钮，选择Trigger Setup



# ◆ 按下F11，选择Calibrate Measurement

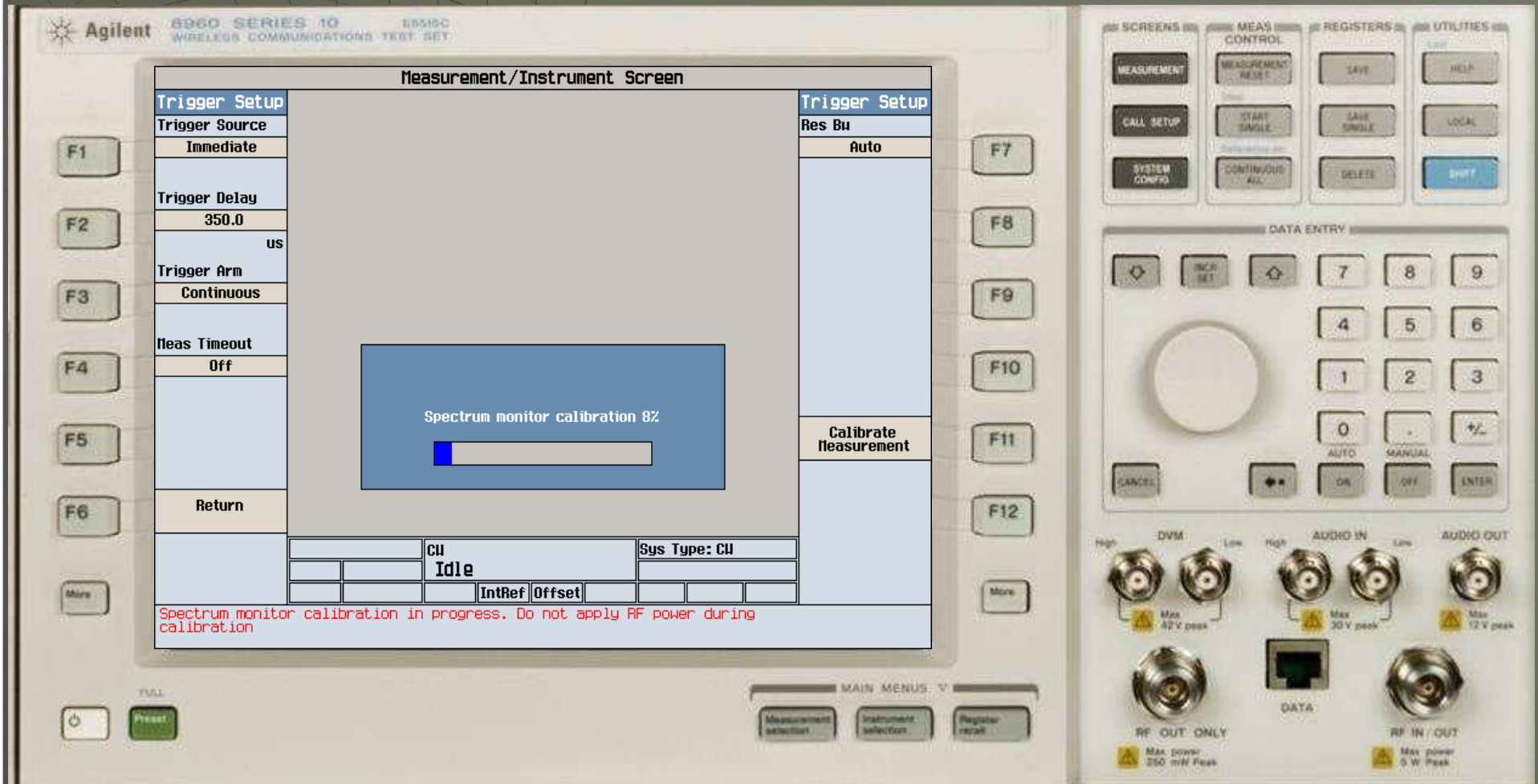


- ◆ 使用旋钮，选择Yes，并按下旋钮

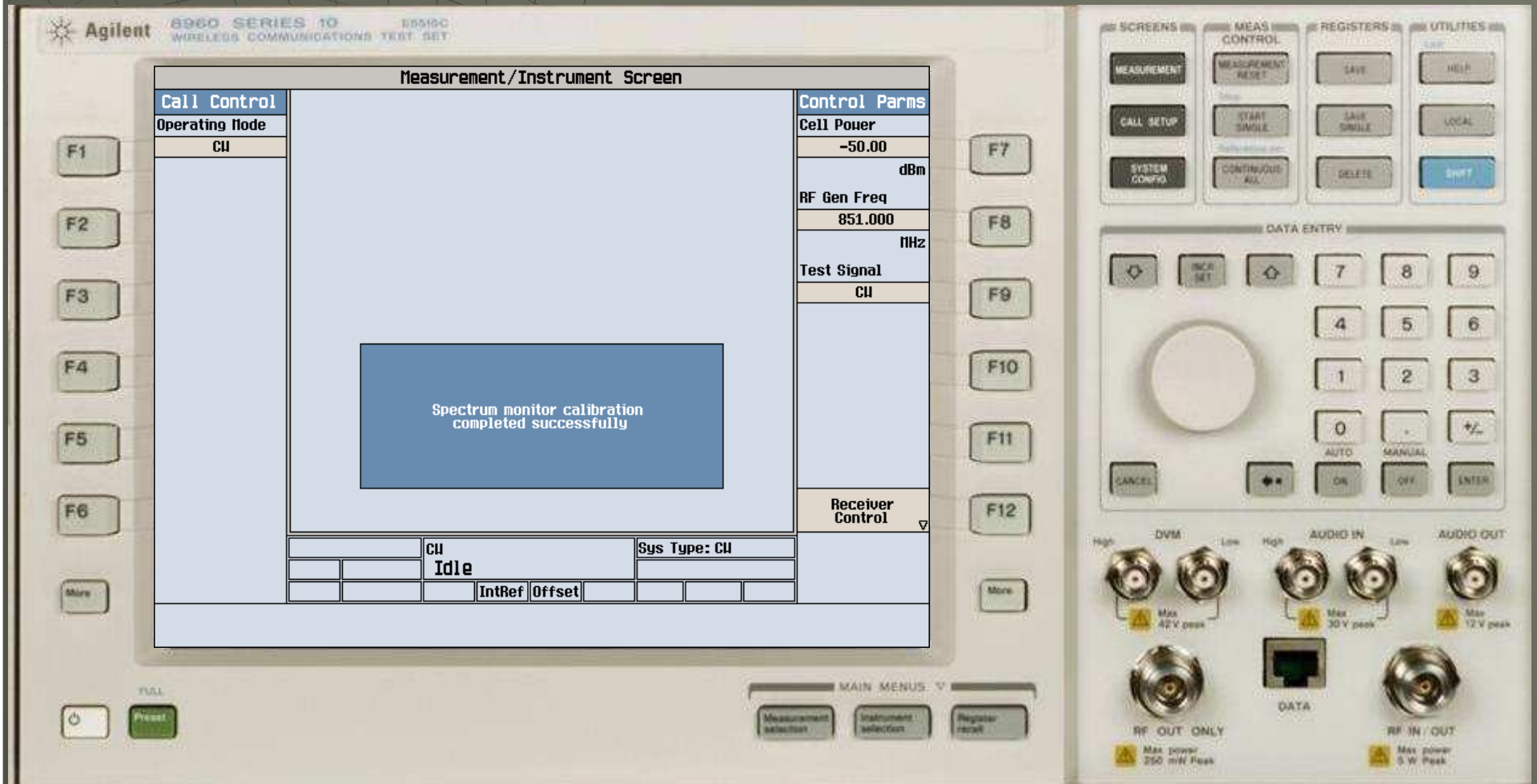




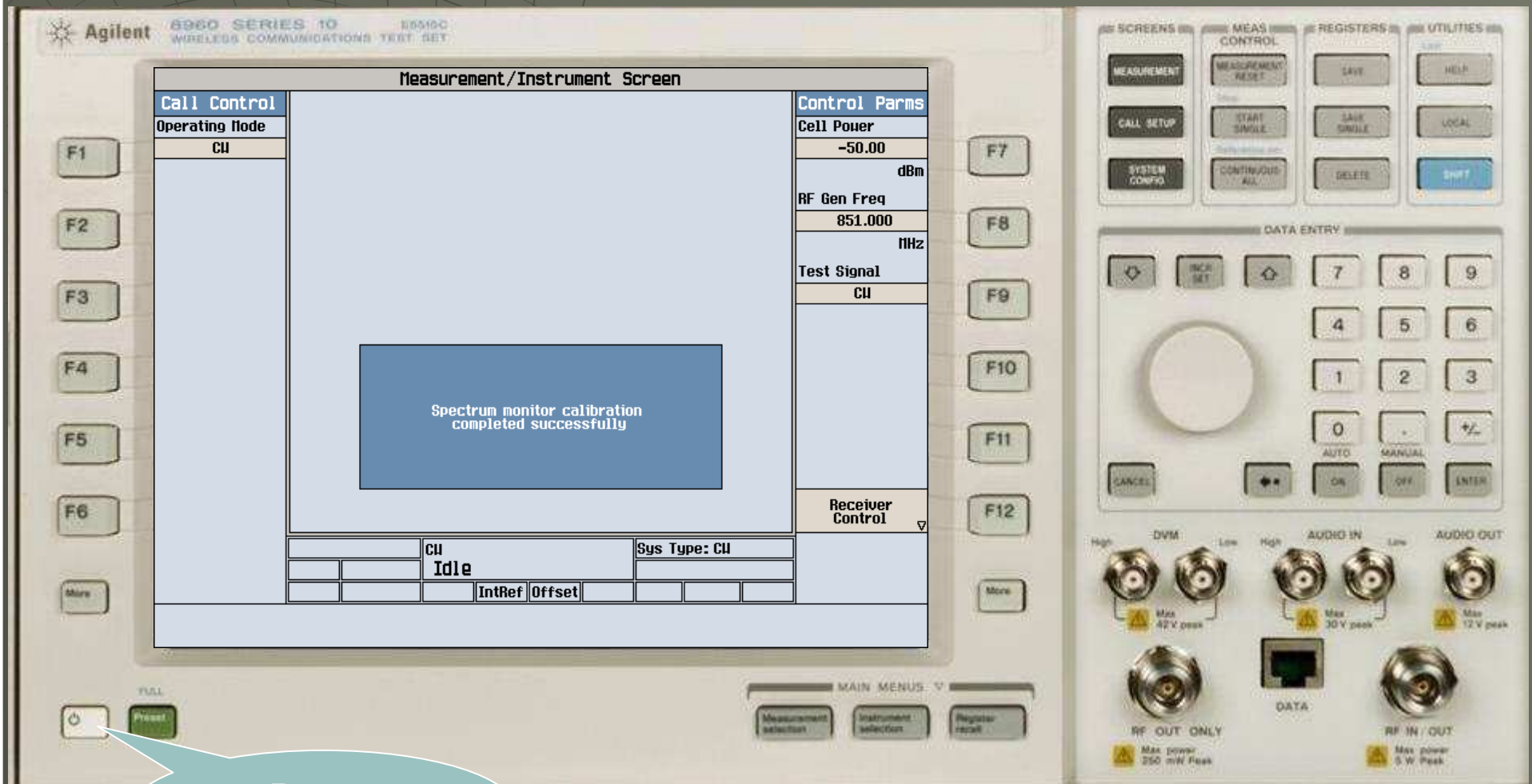
◆ 请等待2分钟



- ◆ 出现如图所示画面，Spectrum Monitor自校准完成

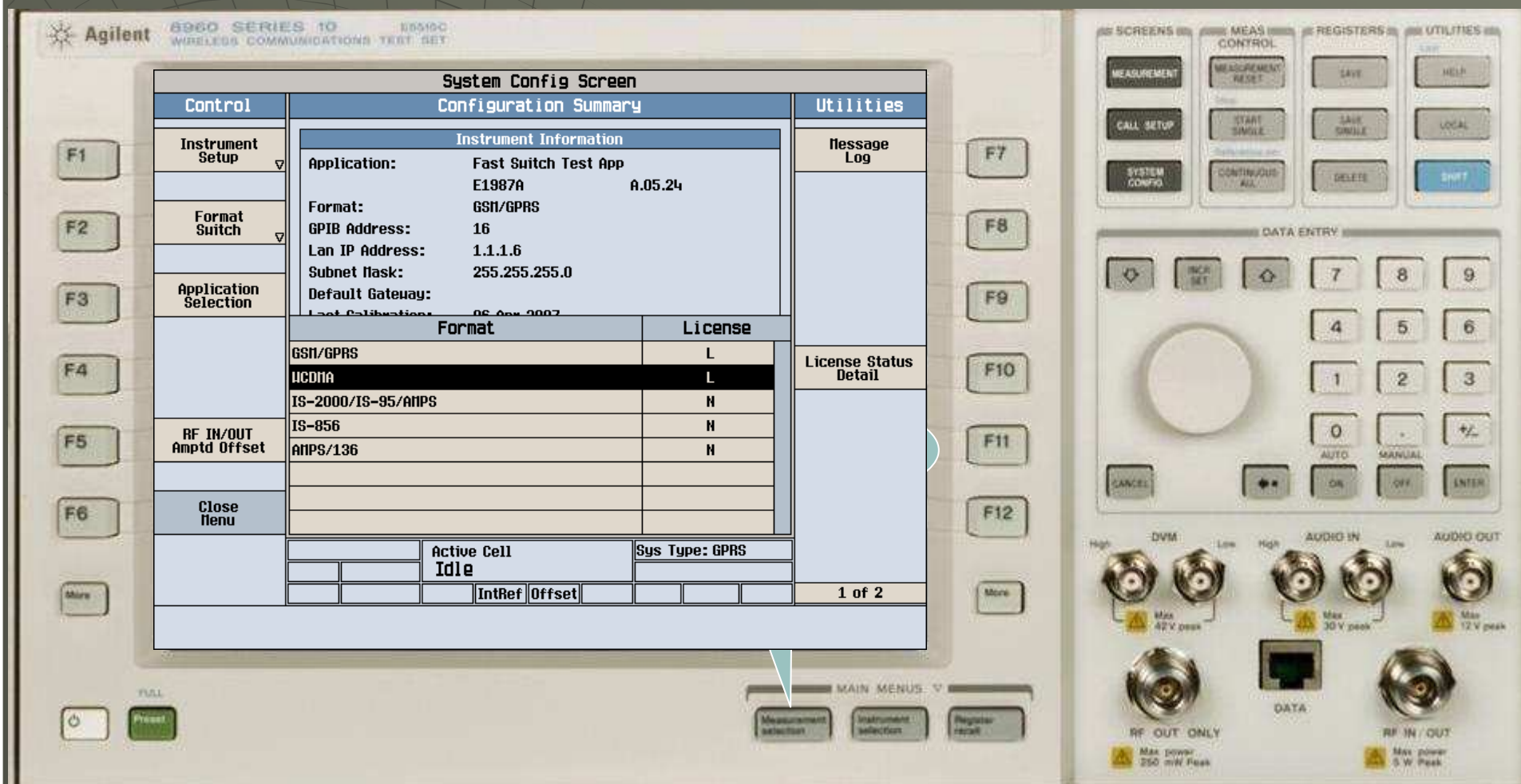


- ◆ 请使用电源开关按钮重新启动仪器

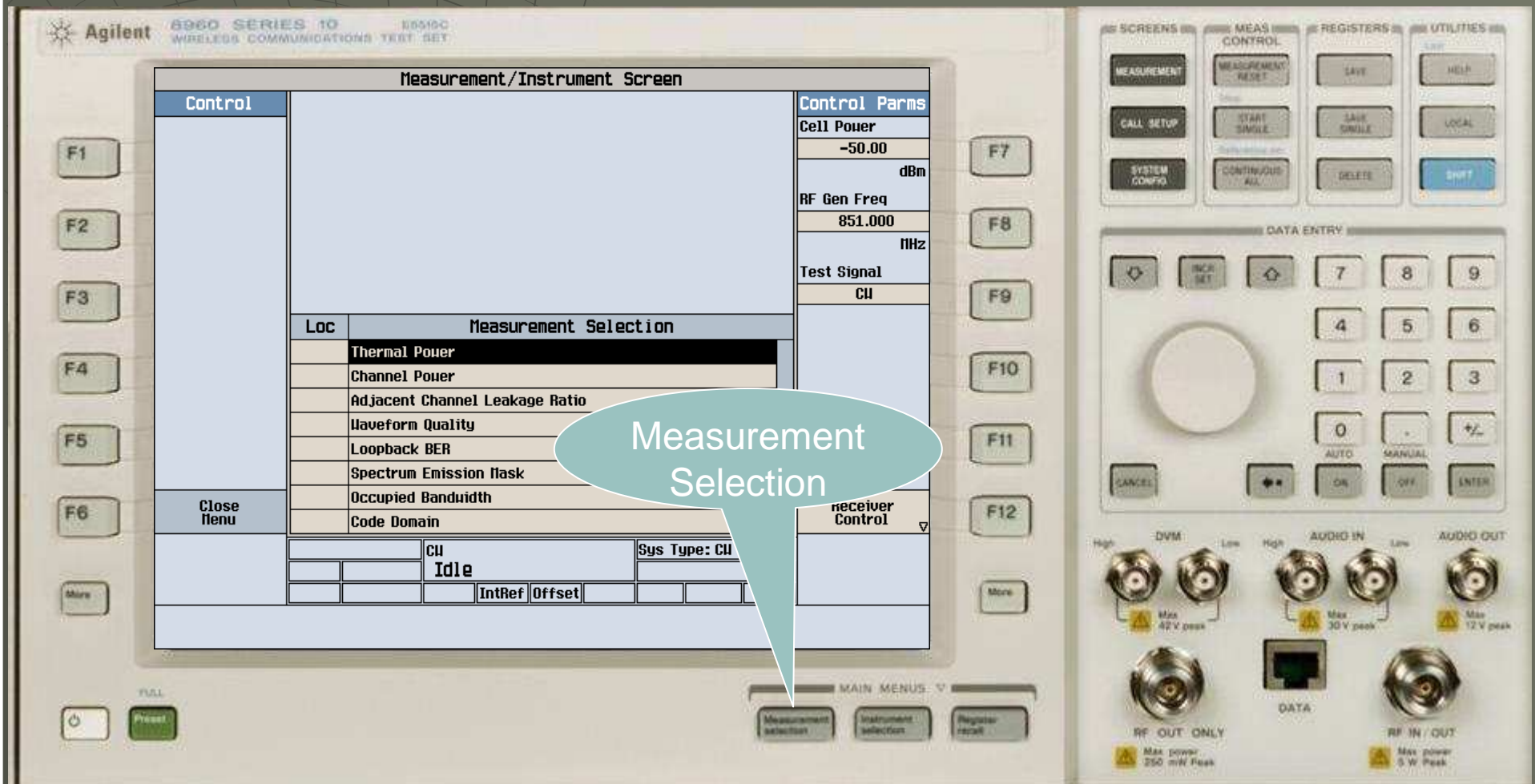


Power Button

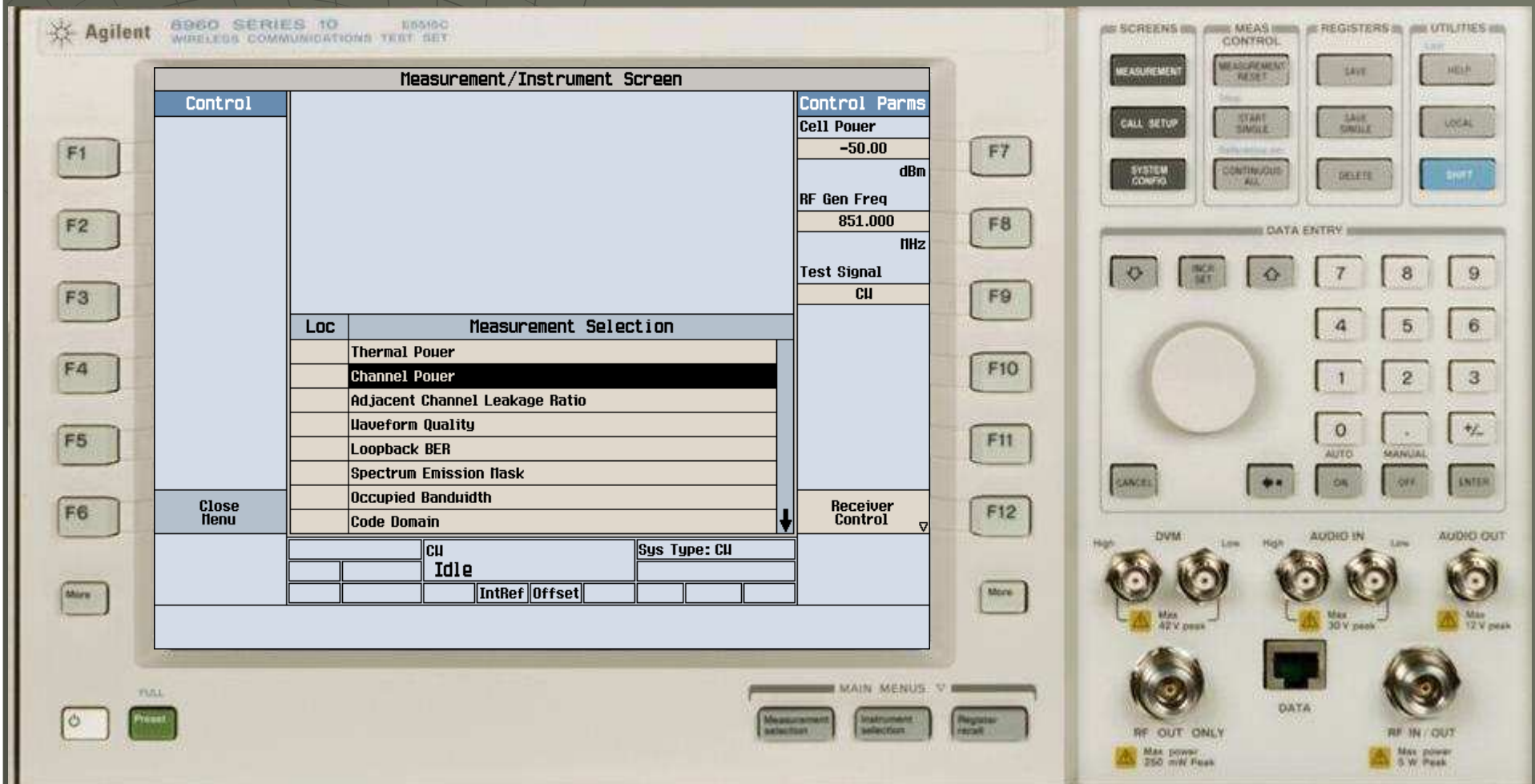
- 重新启动正常后，请再次使用Format Switch，切换到WCDMA模式



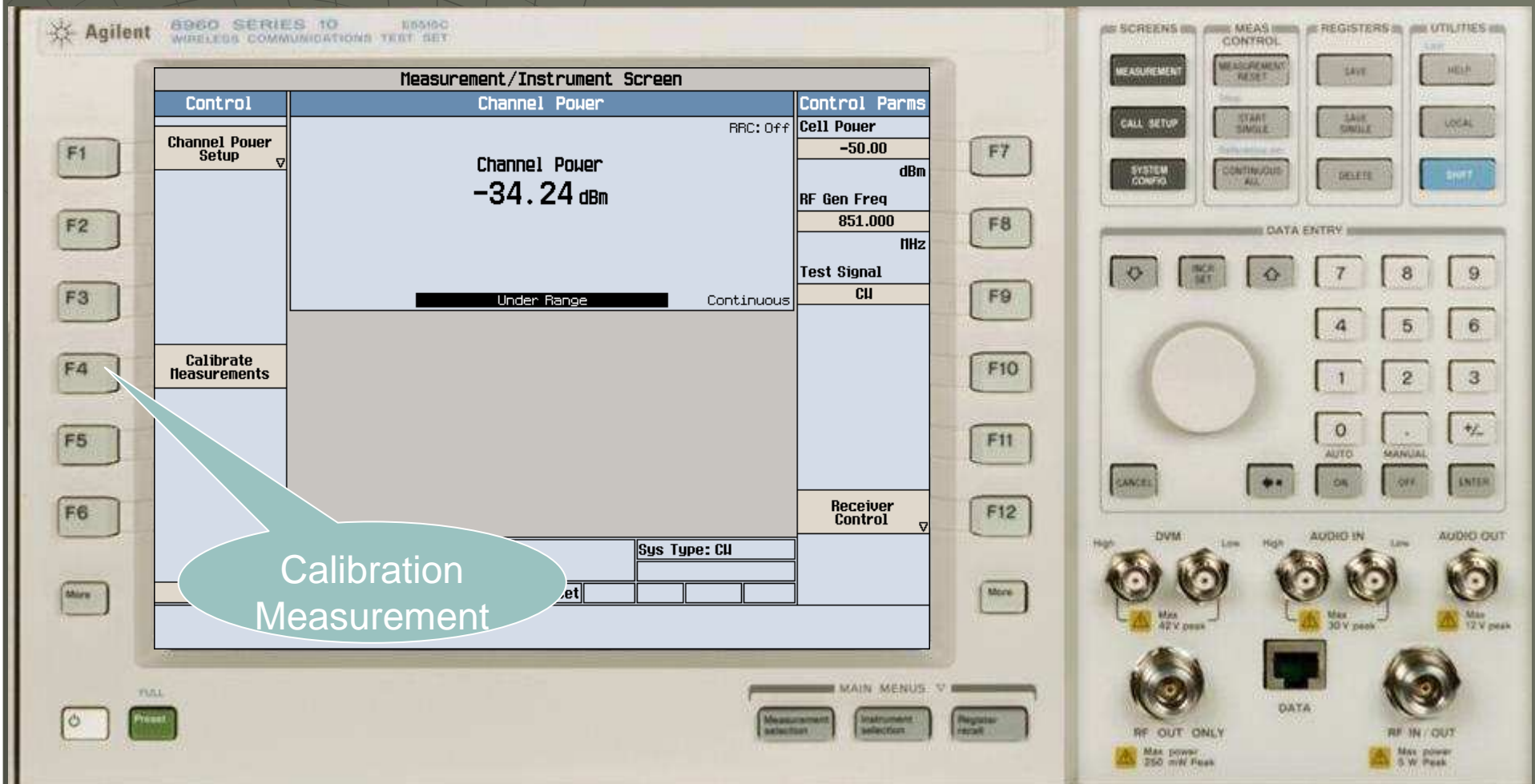
# ◆ 按下“Measurement Selection”按钮



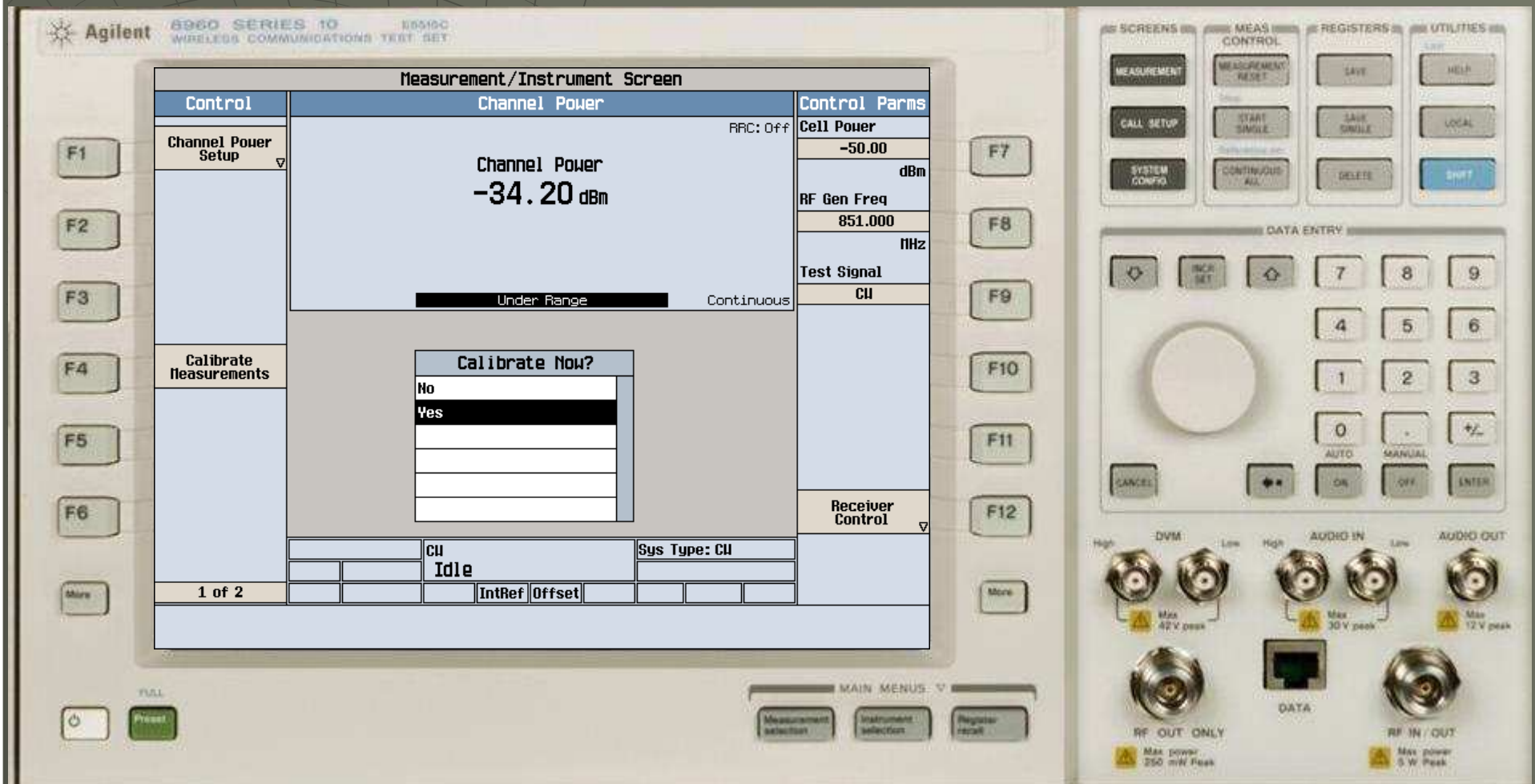
# ◆ 使用旋钮选择“Channel Power”



- ◆ 按下F4，选择“Calibration Measurement”

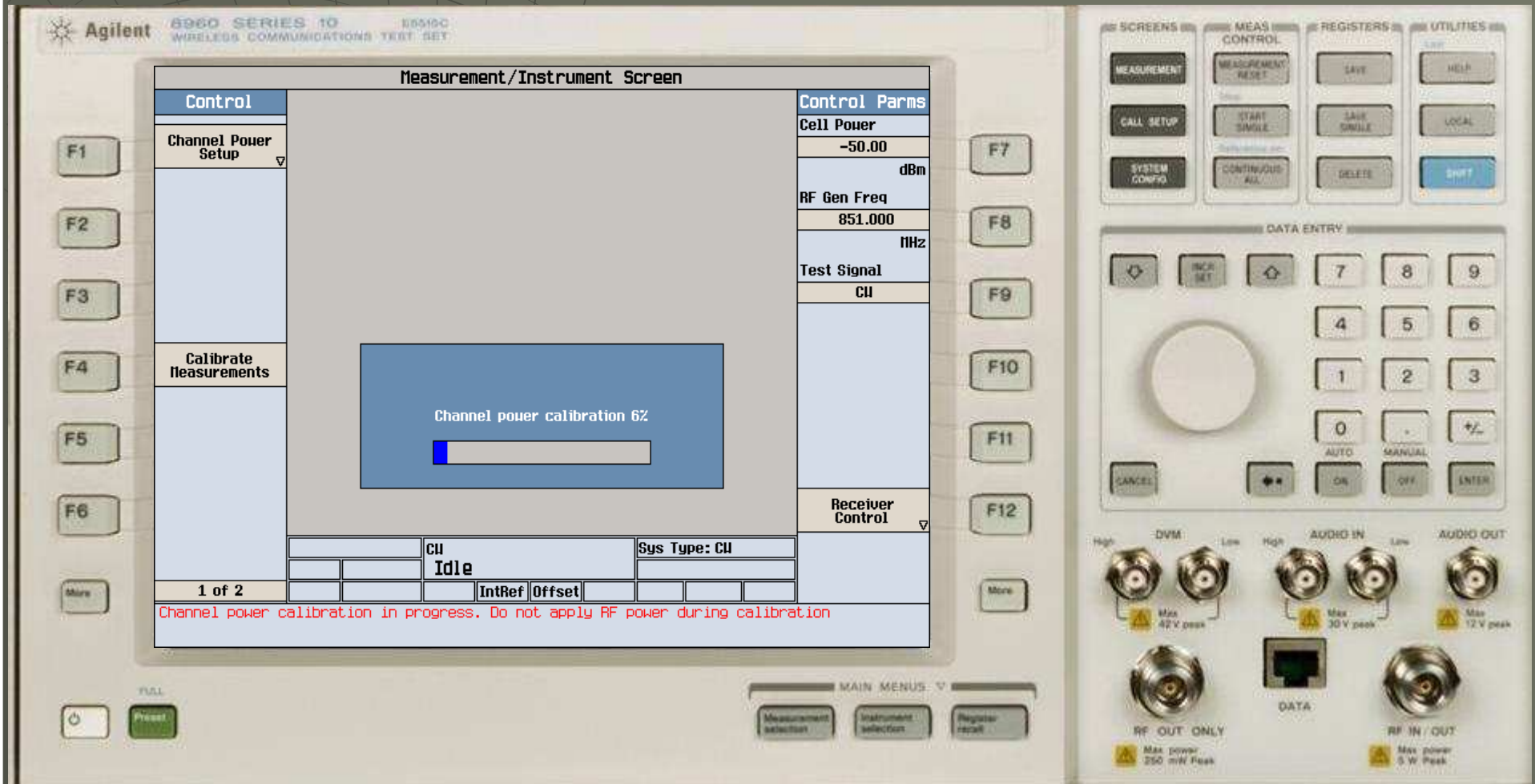


# ◆ 使用旋钮选择Yes

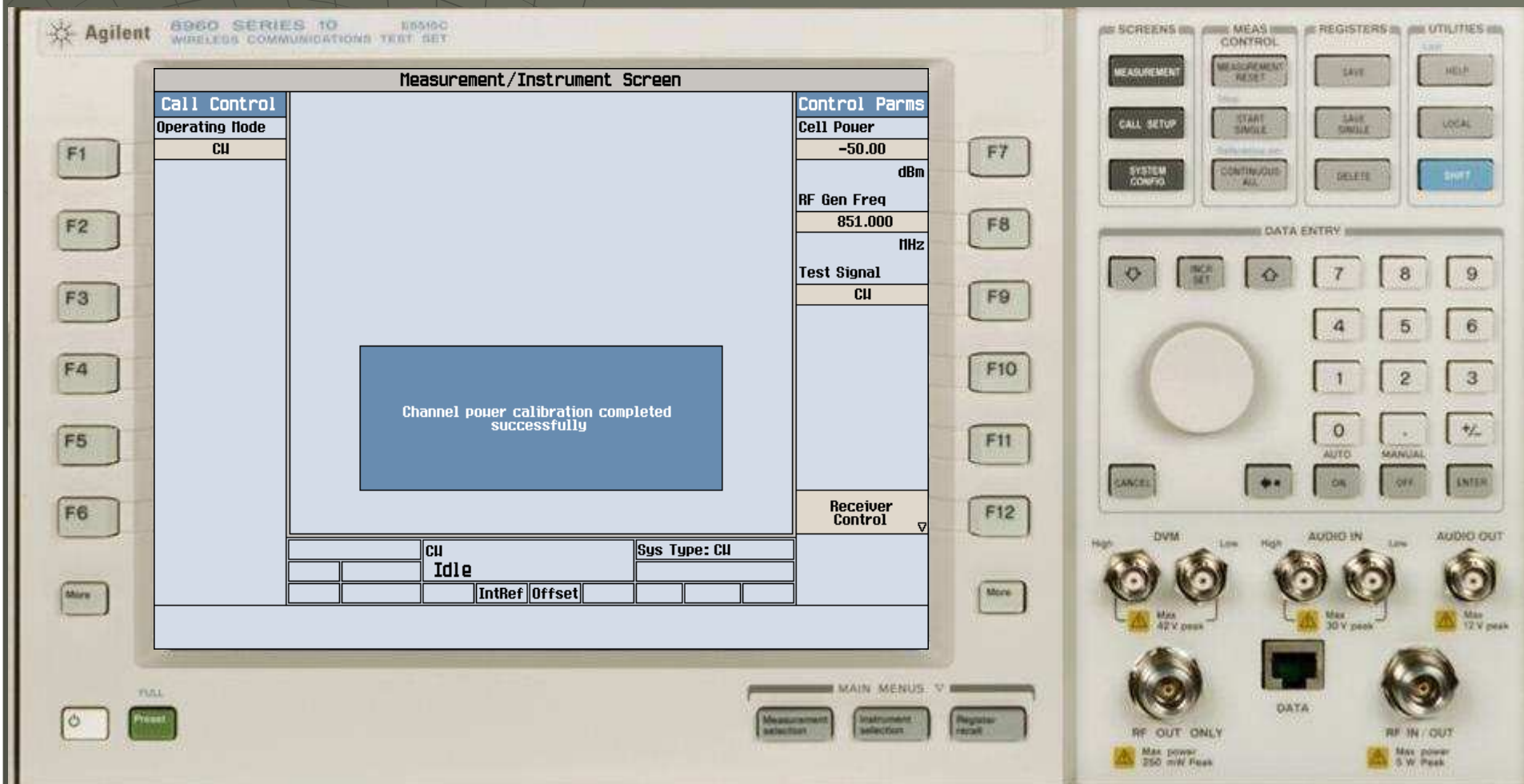




◆ 请等待2分钟



- ◆ 出现如图画面，Channel Power自校准完成



- ◆ 所有选择操作，请使用旋钮，按下旋钮即为确认。
- ◆ 如果有任何一项自校准出现“Fail”字样，请记录所进行的自校准名称，并报修。
- ◆ 所有自校准需要热机30分钟后再进行操作，否则可能不准，或者无效。
- ◆ 在自校准过程中请去除连接RF2口的电缆。
- ◆ 在自校准过程中不要运行任何测量程序。