



## Introduction

This instruction manual explains how to configure a Nox T3 sleep apnea testing device in KOEO for Sleep SMART.

**KOEO** Support Phone Number

404-480-5149 extension 4006

# **KOEO Support E-mail**

## sleepsmarttechsupport@noxhealth.com

# **KOEO** Login

## app.noxhealth.com (Please Use Google Chrome)

# Connecting the T3 Device to a Computer

To connect a T3 device to a computer you will need to access the USB connector on the device. The USB connector is located under the battery lid making it inaccessible and tamper proof for children.

To open the battery lid, press on the battery lid pin with the device provided in the kit, a pen, or a similar tool. Then slide the battery lid down and towards the bottom of the device. The T3 device connects to the computer with a mini USB cable. The battery does not need to be inserted while the device is connected to the computer.







When the T3 device is connected to the computer the device display lights up and shows a message indicating that the device is connected to the computer.

To configure a T3 device or to download a recording you will now need to start the KOEO Sleep SMART Process.

When you are done working with the T3 device, unplug the mini USB cable, insert the battery, and close the battery compartment by *gently pressing* the lid towards the device, and then sliding it back into position, towards the top of the device.

### Inserting a Battery into the T3 Device

Before you start a recording you should make sure that the device has a new, fully charged AA battery. To insert a new battery do the following:



- 1. Open the battery compartment by pressing down on the battery lid pin with the tool provided, a pen, or similar tool and then slide the lid toward the bottom of the device (left image).
- 2. Place one AA battery into the compartment aligning the battery poles as illustrated on the back of the device (the positive (+) pole is toward the battery lid).
- 3. Close the battery compartment by *gently pressing* the lid toward the device while sliding it up and back into position towards the top of the device. Make sure the lid is securely closed.



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# Starting a Nox T3 Sleep Apnea Test for in KOEO

### Step 1: Launch the SleepSMART Process

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	Operation	is : Home			SleepSMART
Operations	A Home	Patients	Chat Room	Appointments	SleepSMART
Tasks					

Step 2: Create a New Patient (New Subject)

create new ration.				
0				Acti
Patient Name	1		2	
Title	First	MI	Last	Suffix
	Sleep SMART		(Subject ID)	
1 / 1 / 1900		(Sut	r	
		Sut	oscriber 🗸	
Owner				

Do not enter the subject's name or Date of Birth. Instead enter the following fields:

First: Sleep SMART (Box #1)

Last: Subject ID Number (Box #2)

Date of Birth: 1/1/1900 (Box #3)

Identification: Subject ID Number pasted in from WebDCU (Box #4) - this is identical to Box 2 Click Save in the upper right hand corner (Box #5)

# **Fusion**Health

Sleep SMART

### Step 3: T3 Setup Task in KOEO

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Click on Tasks at the Left of the screen (Arrow #1) Click on T3 Setup Task in KOEO (Arrow #2)

- Click on underlined T3 Setup (Arrow #3)
- Click on Open KOEO Interactive Tool (Arrow #4)

The KOEO Interactive Tool (KIT) is an application to help with the management of the Nox T3 device, and to assist with uploading testing data, and must be already installed on the computer you use for the set-up.

The two main functions of KIT are as follows:

- Set up a T3 device
- Upload test data from a T3 device

KIT operations require unrestricted access to the local computer file system. Access cannot be obtained inside a browser-only application. That is why the KIT application is a stand-alone desktop application available for Apple OS X, MS Windows, and Linux.

### Installation of the KOEO Interactive Tool is described in a separate document



Sleep SMART

### Step 4: Login and Locate the T3 Setup Task in KIT

Kit	
KOEO USA	
<sup>Username *</sup> User2@gmail.com	
Password *	
	Login
T3 Device	Available Setup Tasks
T3 Setup	T3 Setup ( Available since Tuesday, February 19, 2019 11:19 AM ) MR043526
T3 Upload	

The T3 Device must be connected via a mini USB cable to the computer at this point. The next step configures the T3 Device.

#### Step 5: T3 Setup Task in KIT

Setup				
Select Timezone Eastern Standard Time	,	Device Time 20190219T112301		
Patient				
Prefix	First Name	Last Na	ame	
EMPTY	Sleep SMART	202		
MR#	Date Of Birth		Gender	

- Select the appropriate Time Zone from the drop down menu for the T3 test.
- Click on "Prepare" in the upper right hand corner.





The T3 device is now configured for recording and the device and sensors may be applied to the subject. Next:

- Remove the USB Cable from the T3 device
- Insert a new AA battery into the T3 device
- Close the battery lid
- Follow the instructions on "How to apply the sensors and the T3 device to the subject"

Following the acquisition of testing data using the T3 device, you will now proceed to **Upload T3 Data (Step 6)**. This task is to be completed only after the T3 test is complete.

Upon completion of the T3 test in Sleep SMART, the data must be uploaded to the scoring teams for analysis. To do this:

- Open the battery door of the T3 Device
- Remove the AA battery and discard appropriately
- Connect the mini USB cable to the T3 device

Tasks													
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### Step 6: Upload T3 Task in KOEO

Click on Tasks at the Left of the screen (Arrow #1) Click on Upload T3 Data task in KOEO (Arrow #2)

- Click on underlined **Upload T3 Data** (Arrow #3)
- Click on Open KOEO Interactive Tool (KIT) (Arrow #4)



Sleep SMART

### Step 7: Login and Locate T3 Upload Task in KIT

Kit		Kit		
	Upload T3 Data - dev.k	oeo.com	C Refr	esh 🛕 Upload
KOEO USA Itemana * User2@gmail.com Passed * 	Patient Prefix EMPTY MR#	First Name Sleep SMART Date Of Birth	Last Name 202 Gender	Upload Sleep Study Now
T3 Device	MR043526	1900-01-01	Unknown	•
T3 Setup	Device			
T3 Upload	Serial Number 904005522			
Will automatically load correct subject data from plugged in T3.	Digital Board <sub>Version</sub> 1.0	Firmware	BIOS 112	

KOEO will recognize the Subject ID and the serial number of the T3 device and automatically load correct subject data.

• Click on Upload in the upper right hand corner

## **Potential Next Tasks in KOEO**

The Sleep SMART Protocol has provisions for repeated attempts, under appropriate circumstances, to collect data from the subject using the Nox T3 device. A number of different task options may appear based upon the analysis of the study data. Some options may appear only after an interval of several hours, during which FusionHealth staff inspect or oversee scoring of the Nox T3 data that has been uploaded.

0	~	Task Name	¢	Patie 🖨	Patient Name	;	Substatus	•	Best Time To Call 🌲	Crea	ted On	¢	Tenant	\$
	۲	Redo Upload T3 Data		MR043526	202, Sleep SMART					2019-	02-19		SleepSMART	
0	~	Task Name	\$	Patie 🖨	Patient Name	:	Substatus	•	Best Time To Call 🌲	Crea	ted On	\$	Tenant	\$
	۲	Repeat T3 Setup		MR070783	012, Sleep SMART					2019	-04-24		SleepSMART	
0	✓	Task Name	\$	Patient 🖨	Patient Name	:	Substatus	•	Best Time To Call	Creat	ed On	\$	Tenant	\$
	۲	T3 Test Inadequate		MR070764	011, Sleep SMART					2019-	04-23		SleepSMART	
										1				
0	~	Task Name	\$	Patie 🖨	Patient Name	:	Substatus	•	Best Time To Call	Crea	ated On	\$	Tenant	\$
	۲	Subject Eligible		MR070763	010, Sleep SMART					2019	-04-23		SleepSMART	
0	~	Task Name	\$	Patie 🖨	Patient Name	:	Substatus	•	Best Time To Call	Crea	ted On	\$	Tenant	\$
	۲	Excluded - Print Report		MR070763	010, Sleep SMART					2019	-04-23		SleepSMART	





- **Redo Upload T3 Data**: A systems issue has arisen with the data transfer, and testing data need to be uploaded with another attempt.
- **Repeat T3 Setup**: This is a "repeat testing task", indicating that a scorer has invalidated the test due to signal quality issues, and the test will need to be repeated, if possible.
- **T3 Test Inadequate**: This task appears after there have been three (3) attempts to render a valid T3 Test result. The Sleep SMART protocol allows for up to 3 T3 tests. If none render a valid outcome, the subject is to be excluded from further participation.
- Subject Eligible: The test is scored and the subject IS eligible for the Run-In Night.
- **Excluded Print Report:** The test is scored and the subject IS NOT eligible for the Run-In Night. If there are extenuating circumstances that by protocol allow you to repeat the study, you may do so by starting from page 1 instructions "Connecting the T3 device to the computer".

If the "**Repeat T3 Setup**" task appears in KOEO, the study has been deemed invalid, but the subject is eligible for a repeat study. The same steps are required to retest the subject, outlined above in **Steps 3-6**. You do NOT need to relaunch the Sleep SMART Process. You will NOT need to create a new subject again in KOEO.

If the "**T3 Test Inadequate**" task appears, the subject is NOT eligible to continue in Sleep SMART. There is an acknowledgement task that follows:

Click on the T3 Test Inadequate task in KOEO, and the following appears:

)   🧮 እ 🕍 🎍 🏻   🥰   🌄 🎮 Task: T3 Test Inadequate	Actions: 🗸
nstructions The test was attempted 3 times and the subject is disqualified due to no usable results.	3
atient Contact 1 Yes No	
ote	
2	
2	

- Click on Patient Contact. Select "Yes" (Arrow #1)
- Type Note, "Subject was Excluded due to..." [enter reason for exclusion] (Arrow #2)
- Click on the check mark in the upper right hand corner (Arrow #3) This will end the Sleep SMART Process for this subject in KOEO.





If the **"Excluded - Print Report"** task appears, this means the T3 test data is valid and the subject is NOT eligible for the Run-In Night in Sleep SMART.

0	~	Task Name	Patie 🖨	Patient Name	Substatus	Best Time To Call 🜲	Created On	Tenant 🖨
	۲	Excluded - Print Report	MR070763	010, Sleep SMART			2019-04-23	SleepSMART

### Click on the Excluded - Print Report task in KOEO, and the following appears:

Subject Information         Subject ID         Sleep SMART site name         Recording Information         Recording Start Date         State Coding Start Date         Recording Start Date         And the coding Time         Total Recording Time         This sleep apnea test was performed with a Nox T3 ™ Sleep Ma         abdominal respiratory effort by inductance plethysmography, nat         Results Overview	004 Site1 20/2014 47 PM 34m		Height Weight BMI Bed Time Starts Bed Time Ends Time in Bed	ART Sleep Apnea 66.0 in 233.0 lbs 37.6 10:00 PM 2:00 AM 3h 58m (238.8m	
Subject Information Subject ID Sleep SMART site name Recording Information Recording Start Date 5/2 Recording Start Time 9:4 Total Recording Time 4h Recording End Time This sleep apnea test was performed with a Nox T3 <sup>TM</sup> Sleep Ma abdominal respiratory effort by inductance plethysmography, nat	004 Site1 20/2014 47 PM 34m	(	Sleep SM/ Height Weight BMI Bed Time Starts Bed Time Ends Time in Bed	ART Sleep Apnea 66.0 in 233.0 lbs 37.6 10:00 PM 2:00 AM 3h 58m (238.8m	
Subject Information Subject ID Sleep SMART site name Recording Information Recording Start Date 5/2 Recording Start Time 9:2 Fotal Recording End Time 4h Recording End Time 3h This sleep apnea test was performed with a Nox T3 <sup>TM</sup> Sleep Md bidominal respiratory effort by inductance plethysmography, name Results Overview	004 Site1 20/2014 47 PM 34m		Height Weight BMI Bed Time Starts Bed Time Ends Time in Bed	66.0 in 233.0 lbs 37.6 10:00 PM 2:00 AM 3h 58m (238.8m	)
Subject ID Sleep SMART site name Recording Information Recording Start Date 5/2 Recording Start Time 9:4 Total Recording Time 4h Recording End Time This sleep apnea test was performed with a Nox T3 ™ Sleep Ma bidominal respiratory effort by inductance plethysmography, nat Results Overview	004 Site1 20/2014 47 PM 34m		Height Weight BMI Bed Time Starts Bed Time Ends Time in Bed	66.0 in 233.0 lbs 37.6 10:00 PM 2:00 AM 3h 58m (238.8m	)
Sleep SMART site name  Recording Information Recording Start Date 5/2 Recording Start Time 9:4 Total Recording Time 4h Recording End Time  This sleep apnea test was performed with a Nox T3 ™ Sleep Ma bdominal respiratory effort by inductance plethysmography, name  Results Overview	Site1 20/2014 17 PM 34m		Weight BMI Bed Time Starts Bed Time Ends Time in Bed	233.0 lbs 37.6 10:00 PM 2:00 AM 3h 58m (238.8m	)
Recording Information         Recording Start Date       5/2         Recording Start Time       9:2         Total Recording Time       4h         Recording End Time       1h         This sleep apnea test was performed with a Nox T3 ™ Sleep Mabdominal respiratory effort by inductance plethysmography, nat         Results Overview	20/2014 17 PM 34m		Bed Time Starts Bed Time Ends Time in Bed	10:00 PM 2:00 AM 3h 58m (238.8m	)
Recording Start Date     5/2       Recording Start Time     9:2       Total Recording Time     4h       Recording End Time     4h       This sleep apnea test was performed with a Nox T3 ™ Sleep Mo abdominal respiratory effort by inductance plethysmography, nat       Results Overview	20/2014 17 PM 34m		Bed Time Starts Bed Time Ends Time in Bed	10:00 PM 2:00 AM 3h 58m (238.8m	)
Recording Start Time 9: Total Recording Time 4h Recording End Time This sleep apnea test was performed with a Nox T3 ™ Sleep M ubdominal respiratory effort by inductance plethysmography, nas Results Overview	47 PM 34m		Bed Time Ends Time in Bed	2:00 AM 3h 58m (238.8m	)
Results Overview	34m		Time in Bed	30 58m (238.8m	)
This sleep apnea test was performed with a Nox T3 ™ Sleep Mo abdominal respiratory effort by inductance plethysmography, nas <b>Results Overview</b>					
Results Overview	onitor. The follow	ving parameters	were monitored: ECG, snoring	ig, oxyhemoglobin saturation by pulse	oximetry, thoracic and
Results Overview	ai pressurerann	ow, and three-u	inensional body position.		
Total Monitoring Time	3h 58m	(238.8m)	REI	89.0 CAI	0.5
Monitoring time (MT) = Total analysis time indicated by analysis y actigraphy and body position sensor. Total Recording Time in dypoprea Index with Monitoring Time rather than Sleep Time us number of Central Apneas per hour of Monitoring Time. Snore Ir	start/stop events cludes wake and ed as a denominated as the percented as the percented as a start of	s, entered by sco d artifact as well nator, and hypop entage of time sp	oring technologist, minus perio as periods of data that fall ou pneas defined by 3% oxygen pent snoring divided by Monito	ods of artifact and time the patient wa Itside of Analysis period. REI is an app desaturation (AASM Scoring Manual oring Time.	s awake as determined proximation of the Apne Criteria). CAI is the
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		supine	Apneas		30

There are two options available (see red arrows at the top right of the above image):

- Click on the printer icon in the upper right hand corner to print out a physical copy of the Sleep SMART Sleep Apnea Test Report
- When printing is complete or if printing is not necessary (e.g. subject is deceased), click the check mark and this will close out the task.

If the "**Subject Eligible**" task appears, this means the subject IS eligible for the Run-In Night in Sleep SMART. The **Subject Eligible** task is the first step in the Sleep SMART KOEO Process that applies to the Run-In Night.

0	~	Task Name	Patie 🖨	Patient Name	Substatus	Best Time To Call	Created On 🜲	Tenant 🖨
	۲	Subject Eligible	MR070763	010, Sleep SMART			2019-04-23	SleepSMART

Please see instructions for Run-In Night in a separate document.