# **ORO TPMS** Manual

To ensure correct operation and service please read these instructions before installing and operating the TPMS

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# NOTICE

# FCC & E-Mark Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the factoring measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

# System Scope of Use and Warnings

## Tire Pressure Monitoring System, TPMS

This system is a sensing device designed to measure and display tire operation and / or activate an alert to the driver when pressure and temperature irregularities are detected. It is the responsibility of the driver to react promptly and with discretion to alerts. Abnormal tire inflation pressure should be corrected at the earliest opportunity.

### System Installation and Usage

Use of the TPMS requires that qualified personnel according to the instructions here have properly installed it. This system is suitable for use on a passenger car, SUV and 4X4 tires, with up to maximum cold inflation pressure of 76 Psi (Guage) or 90psi (Absoulte), below instruction is Guage value mentioned.

### Reacting to Alerts

When an alert or warning is received, reduce vehicle's speed and proceed to a safe location to stop where the tire can be inspected and /or serviced.

The low-pressure alert indicates that the air pressure has dropped to a selected minimum and a high-temperature alert indicates that the temperature of the tire content has surpassed the threshold value set.

### Use of Chemicals

Temporary resealing or re-inflation products containing internal sealants or propellants in any tire assembly may adversely affect the operation of the sensor/transmitter.

Caution: the system is wireless RF product; therefore, it may not receive a signal due to the poor environment or incorrect operating either on incorrect installation. When the system continually cannot receive any signal from any tire sensor more than 10 minutes since the system has been switch on for monitoring, the system will shown " E2 " and turn on the RED abnormal LED light with alert sound. In this case, it may cause by a RF interference environment, a driver need to drive the vehicle and leave the place where are running. If the display still cannot receive any correct signal from tire sensor, then, a driver need to find a close qualified tire maintain service for checking or maintain. It may cause by a tire sensor damages or battery power consumption. (Battery in normal condition can be used more than 7 year, but in abnormal condition, the tire sensor will continually send warning signal to the driver, thus it wills consumption the battery quickly than normal prediction.)

# W401A Tire Pressure Monitoring System

ORO-W401A Tire Pressure Monitoring Systems (TPMS), can monitor and provide tire pressure, tire temperature and car battery information by real time to help the driver to control and keep the normal tire pressure in order to reduce the fuel consumption and extend the tire life, and also through the battery information, the driver can change the battery before happens any bug and reduce the % of vehicle breakdown on the road.

ORO-W401A Tire Pressure Monitoring System, includes 4 tire sensors and 1 receiver display, the TPMS can monitoring the pressure/temperature by snap-in installation into the tire, and transmit the tire information to the receiver by wireless. The TPMS display will alarm when any abnormal happens to the tire in order to prevent any possible accidents which may happen to the driver/vehicle.

1. Tire Sensor's Specification		
Battery life	3~5 years normally use.	
Battery Voltage	3.6 V	
Storage Temperature	-40°C to 125 °C	
Operation Temperature	-30 °C to 120 °C	
Operation Frequency	433.92MHz ±4.25MHz	
Transmission Frequency	Transmit 1 signal each 30 sec.	
Pressure Monitoring Range	0 ~ 800 kPa	
Pressure Reading Accuracy	±10kPa	
Temperature Monitoring Range	-30 °C to 100 °C	
Temperature Reading Accuracy	±4°C	

# W401A TPMS Specification

2. Receiver Specification		
Operation Voltage	9V ~ 15V	
Normal Operation Voltage	$\leq 200 \text{mA}$	

Storage Temperature Range	-40°C to 90 °C
Operation Temperature Range	-30°C to 85 °C
Tire Pressure Reading Range	0 ~ 800 kPa
Temperature Reading Range	-30 °C to 100 °C
Cold-Tire Std. Tire pressure setting range	$1.9 \sim 2.8$ bar (27 ~ 40 psi; 190 ~ 280 kPa) , the factory
	default is.3bar (32psi; 230kPa)
Tire Temperature Warning Range	$60^{\circ}$ C ~99 $^{\circ}$ C (140 $^{\circ}$ F ~212 $^{\circ}$ F) , the factory default is 80 $^{\circ}$ C
	(176°F)

# W401A TPMS Accessories

Accessories	Pictures	QTY	Accessories	Picture	QTY
Display	TPMS	1	Nylok Screw		5
Tire Sensor	Por Desterning	4	Magnetic Holder		1
Cigarette Power Cable		1	T-20 Screw Driver		1
Aluminum Valve		4	Manual		

# W401A TPMS INSTALLATION

# 1. Display Installation:

- a. Firm the magnetic holder in the suitable place. (Suggest place , as shows in the picture)
- b. Plug in the USB cigarette power cable on the back of display.
- c. Put the display on the magnetic holder.
- d. Plug in the power cable to the cigarette lighter power connection.





# 2. <u>Tire Sensor Installation:</u>

Step	Operation Process	Photograph
а	Take off the 4 tires and mark 1~4 for each tire position.	
	No.4 = Left Front Tire ; No.1 = Right Front Tire $\circ$	
	No.3 = Left Rear Tire ; No.2 = Right Rear Tire $\circ$	
	No.4 LF No.3 LR	

Ь	<ol> <li>Take off the tire and bleed the air, then should change to the ORO-TEK TPMS valve, and follow the steps:</li> <li>Snap in the valve from the internal edge side of the wheel.</li> <li>Adjust the valve's angle, and make the valve be vertical by the edge of the wheel.</li> <li>Put on the circle screw from the outside of the wheel.</li> <li>Tight up the valve with the nylok screw from the outside of the wheel.</li> <li>Use the 6 angle screwdriver to tight up.</li> </ol>	
b		

с	<ul> <li>Put the marked No. 1 tire sensor to the tire which market</li> <li>No. 1. as step a. photo and follow steps:</li> <li>1. Install the tire sensor to the valve.</li> <li>2. Use the nylok screw and tight up with the tire sensor. (Pls. use the screwdriver which is included to the accessories bag)</li> <li>3. Adjust the tire sensor's angle (paste on the surface of the wheel), then tight up the with the nylok screw.</li> <li>4. Put on the valve's cap, and finish the installation.</li> <li>When there is necessary to re-install the tire sensor, pls.</li> <li>use the new nylok screw in order to prevent to re-use the old ones.</li> </ul>	
d	Put on the No. 2 tire sensor to the tire which marked No.2, and set up the other 2 sensor in the same manner as shows in the step c.	
e	Make sure there is no other liquid or dust beside of the tire sensor.	
f	Follow the tire specification and inflate appropriate air to the tire after finished the installation.	
g	Balance the tires with the balance machine •	
h	Put back the tires to it's corresponding position as shows in the photograph on step a.	

Turn on the ignition after the TPMS installation and start to monitoring the tire pressure/temperature and car battery.

# W401A Systems Operation

## 1. Display Signals Description:



# 2. Display System Operation

ORO-W401A got 3 different mode for user, which are Tire Pressure Display Mode, Temperature Display Mode, Pressure-Temperature rotation mode, the display will show the pressure mode after turn on, for enter the temperature monde can press once and pressure-temperature by another once. The system will monitoring the tire pressure, tire temperature, battery voltage no matter what kind of information are showing in the display and be alarmed whenever abnormal happens. If the user does not modifying from the factory default, the system will return back to the tire pressure display, the 3 modes of display are as follow's:

- a. Pressure Display Mode: Displaying the 4 tires pressure and battery voltage unit only.
- b. Temperature Display Mode: Displaying 4 tires temperature and battery voltage unit only.
- c. Pressure-Temperature Rotation Display mode: Change the pressure and temperature unit by rotating, and display battery voltage immovable.

ORO-W401A includes bar, kPa, psi which are 3 kinds of pressure's unit and  $^{\circ}C \times ^{\circ}F$  for temperature unit for user, the factory default for pressure unit is bar, the user can change the pressure unit by pressing the **MODE button** for 2 sec., and the factory default for temperature is  $^{\circ}C$ , the user can change the temperature unit by press **MODE button** for 2 sec.

3. Modify the factory default operation:

ORO TEK W-401A exists 4 modes of factory default for user to choose, the parameter should be modified by formal procedure. Press the SET UP button continuously for 2 sec. to be entered the set up mode from Front tire-Std. tire pressure set up, Rear Tire-Std. tire pressure set up, Tire Temperature-Over Temperature Warning, Operating Mode and others parameters setting, and pls. refer below process:

NOTE: The user should change the suitable pressure unit for own vehicle before entered into the setting mode.

## FRONT TIRE-Low Tire Pressure Setting Mode

When the tire is under non-deflate condition, the pressure will increase and decrease simultaneously with the temperature, normally, there will be 1psi (7kPa) when the temperature got difference of  $10^{\circ}$ F (6°C), and this is normal physics phenomenon. ORO TEK suggest to the user , when is checking on tire pressure, it's important to keep the tire pressure under suitable pressure, the Low tire pressure unit will be recognized as warning unit, however, when the pressure is higher than 25% from the cold tire unit, the system will start the alarming.

Warning: Low Tire-Std. Tire Pressure setting unit, pls. check on each vehicle's user manual.

Step	Operating Process	Photograph
а	Pressing the <u>setup key</u> 🛠 for over 2	
	seconds can enter to the low pressure set up	
	mode.	
b	The wireless receiver and display unit will now	
	show the low tire pressure factory default value	MODE
	(2.3bar) shown in blue light and the yellow light	
	indicates the "bar". or pre-selected units ( kPa or	SET
	psi), if do not to modify anything, then press the	
	Set Up buton for enter next setting mode.	TPMS
	NOTE: If the pressure unit is kPa the display will	
	show 230 and 32 for Psi by flasing	
с	By pressing the <u>Mode key</u> 🌋 once, the low	
	tire pressure value will add 1 unit; and the unit	
	value will add 0.1 bar by each press, when it has	
	reached 2.8 bar the system unit will return to 19	
	bar.	
	NOTE: If the user is settee by kPa, will add 10	
	kPa by each pressing, the range for kPa is	
	190kPa~280kPa, and 27 psi ~ 40 psi for PSI	
	unit.	
d	Press the setup key 🛠 to exit the low tire	
	pressure warning value setup mode. The	

system will automatically enter the Rear tire Low	
pressure set up mode.	

# Rear Tire-Low Tire Pressure Setting Mode

Setp	Operating Process	Photograph
а	The system will enter the Rear Tire low pressure	
	set up mode automatically after set up the Front	
	Tire Low Pressure set up mode.	
b	The wireless receiver and display unit will now	
	show the low tire pressure factory default value	MODE
	(2.3bar) shown in blue light and the yellow light	
	indicates the "bar". or pre-selected units ( kPa or	SET
	psi), if do not to modify anything, then press the	
	Set Up buton for enter next setting mode.	
	NOTE: If the pressure unit is kPa the display will	
	show 230 and 32 for Psi by flasing	
с	By pressing the <u>Mode key</u> 🛠 once, the low	
	tire pressure value will add 1 unit; and the unit	
	value will add 0.1 bar by each press, when it has	
	reached 2.8 bar the system unit will return to 19	
	bar.	
	NOTE: If the user is settee by kPa, will add 10	
	kPa by each pressing, the range for kPa is	
	190kPa~280kPa, and 27 psi ~ 40 psi for PSI	
	unit.	
d	Press the <u>setup key</u> 🛠 to exit the low tire	
	pressure warning value setup mode. The	
	system will automatically enter the tire	
	temperature set up mode.	

# Tire Temperature-Over Temperature Warning

Step	Operating Process	Photograhp
a	The system will enter the Over Tire Temperature	
	set up mode automatically after set up the Rear	
	Tire Low Pressure set up mode.	

b	The display shows on the figure is the tires	
	factory default high temperature value ( $80^\circ$ C) for	MODE
	the tires in blue. If there is no modification to the	
	user, then press the Set Up button to enter the	SET
	next set up mode.	
	NOTE: If the unit is $^{\circ}F$ the number will be	TPMS
	flashing in 176.	
с	Press the <u>function key</u> ito change the high	
	temperature figure, the unit will add $1~~{ m C}~~{ m by}$ each	
	pressing, the range for temperature set up are	
	between $60^{\circ}$ C ~99°C, the system will return back to	
	$60^{\circ}$ C after $99^{\circ}$ C.	
	NOTE: If the unit is $\ ^{\circ}F$ , will add $1\ ^{\circ}F$ on each	
	pressing, the range for $^\circ\mathrm{F}$ is from $140^\circ\mathrm{F}{\sim}212^\circ\mathrm{F}$	
d	Push the setup key 🛠 to complete the Over	
	Tire temperature setting operation and the	
	display will enter to the turn on mode.	

Power On Setting Mode

Step	Operating Process	Photograph
а	The system will enter the Power On set up mode	
	automatically after Over Tire Temperature set	
	up mode.	
b	The display shows on the figure is factory	
	default for tire pressure value is bar in yellow.	MODE
	NOTE: The system may use other unit for	
	pressure by psi, kPa or bar, depending the	SET
	system for different area of the world.	
		TPMS

$^{\circ}C$ . NOTE: The system may use other unit for pressure by $^{\circ}C \sim ^{\circ}F$ , depending the system for different area of the world.	SET ORCO
d Press the Mode button, will enter to the Tire Pressure~ temperature by rotation mode. And the battery voltage will display permanently.	
e Press the Set Up button, the system will	
complete the Power On mode the back to the	
pressure/temperature and battery voltage.	

# W401A System Alarm Mode Description

Mode	Warning Condition and Warning Method	Display Figure			
	Warning Situation: When the tire pressure > Low tire std. pressure * 1.25 or tire pressure < Low pressure std. pressure * 0.75 , the system will start warning. (Factory Default for low tire pressure is 2.3bar, so the systems will start warning when the tire pressure > 2.9bar or below 1.7bar. Warning Method: Will sound Been Been as	Compared Figure			

	warning when the tire figure displayed in RED.	
2	Warning Situation: When the temperature is higher than set up unit. (Factory default is 80°C and 176°F Warning Method: Will sound Beep Beep as warning when the tire figure displayed in RED.	H H H H H H H H H H H H H H H H H H H
3	Warning Situation: When the tire pressure is deflating rapidly. Warning Method: When the tire figure flashing in RED with deflating rapidly signal by Beep Beep warning sound.	C C C C C C C C C C C C C C C C C C C
		C.S. C.S. MODE (!) C.Y. Dar C. I Dar C. I TPMS
4	Warning Situation: When the battery voltage is below than set up unit. (Factory default for warning is 11.5V) Warning Method: The battery figure will show in RED.	2.5   2.5     2.4   bar     2.4   bar
5	Warning Situation: When the tire sensor is low battery. (Suggest to change the sensor as earlier as possible) Warning Method: The tire will flash in green, and the low battery figure will lighting.	2.5   2.5     2.4   2.4       TPMS

		2.5   2.5     2.4   bar     Dar   2.4
6	Warning Situation: When the Monitor run out of initial setting up by factory default. Warning Method: The four display unit will show by E1 and not lighting on four tires figures.	E I Dar E I SET E I Dar E I O
7	Warning Situation: When Monitor sensor can not receive one of the tire sensor, over than 9 min Warning Method: The failure tire sensor will show by E2 without light on tire figure.	2.5 2.5   Image: set of the
8	Warning Situation: When the tire sensor got failure on factory default. Warning Method: The monitor will show by E3 on the failure tire sensor without tire light figure.	

NOTE: The user can press the MODE button continuously for 3 sec. to stop the warning sound.

# W401 Reset for Tire Changing and Rotation

When the user are doing/finished the changing or rotating the tires, should also reset the monitors ID's position, however, ORO TEK TPMS provides 4 modes in order to make the user can reset rapidly and keep the tire position as same as shows by the monitor.

# Set Up Process for Enter the Tire Changing and Rotation

Press the Set Up and Mode button simultaneously for 3 sec., the system will enter set up mode 1, mode

2, mode 3, mode 4 and turn back to the normal monitoring display by pressing once a time.

### **Description for each set up process**

Mode 1: Front and Rear tire exchange



The monitor will show up as below photograph, the NO. 1 which shows in yellow means the mode 1, and the 4 red lights means the tire position before reset as shows in pic. 1, the 4 green lights means the mode 1 has been completed set up.

Press the Set Up button continuously for 2 sec. until sounds Beep which means has accomplished the set up for mode 1. (Front and Rear Tires Exchange)



Pic. 1



Mode 2: Tire Diagonal Exchanged.



The monitor will show up as below photograph (Pic. 1 and Pic 2), the No. 2 in yellow means in mode 2. and the 4 red lights means the tire position before reset as shows in pic. 1, the 4 green lights means the mode 2 has been completed set up.

Press the Set Up button continuously for 2 sec. until sounds Beep which means has accomplished the set up for mode 2. (Tire Diagonal Exchange), then the system will back to the normal operating display.



Pic. 1

Pic. 2

模式 3:Front Tire Diagonal exchange, Rear Tire parallel change to the front



The monitor will show up as below photograph (Pic. 1 and Pic 2), the No. 3 in yellow means in mode 3. and the 4 red lights means the tire position before reset as shows in pic. 1, the 4 green lights means the mode 3 has been completed set up.

Press the Set Up button continuously for 2 sec. until sounds Beep which means has accomplished the set up for mode 3. (Front Tire Diagonal Exchange, Rear Tire Parallel exchange to front), then the system will back to the normal operating display without any changing.





#### Mode 4 Random re-position tires

The user should install the tire to their random position before enter mode 4.

The monitor will display No. 4 in yellow which means Mode 4.

The user should reset from Right Front Tire -> Right Rear Tire -> Left Rear Tire -> Left Front Tire in order to complete the set up mode 3.

## **1. Set up for RF tire sensor:**

The display will flash green and red with No. 1 which means the RF tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for RF tire as shows on below pic. 2. If there is no need to set up the RF tire sensor, just press the Set Up mode button to jump over this process.









# 2. Set up for RR tire Sensor.

The display will flash green and red in tire figure and No. 2 which means the RR tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for RR tire as shows on below pic. 2. then the systems will enter to the LR tire sensor set up mode.



Pic 1



# 3. Set up for LR tire sensor.

The display will flash green and red in tire figure and No. 3 which means the LR tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for LR tire as shows on below pic. 2. then the systems will enter to the LF tire sensor set up mode.



Pic 1

Pic 2

# 4. Set up for LF tire sensor

The display will flash green and red in tire figure and No. 4 which means the LF tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for LF tire as shows on below pic. . then the systems will enter back to the normal operating display.



Pic 1

# Mode 5 Single sensor replaced

The monitor will display No. 3 in yellow which means Mode 5.

The user should reset from Right Front Tire -> Right Rear Tire -> Left Rear Tire -> Left Front Tire in order to complete the set up mode 5 and back to the normal operating mode.

# 1. Set up for Right Front Tire sensor:

The display will flash green and red with No. 1 which means the RF tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for RF tire as shows on below pic. 2. If there is no need to set up the RF tire sensor, just press the Set Up mode button to jump over this process.









# 2. Set up for RR tire sensor

The display will flash green and red in tire figure and No. 2 which means the RR tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for RR tire as shows on below pic. 2. then the systems will enter to the LR tire sensor set up mode.



Pic 1





### 3. Set up for LR tire sensor.

The display will flash green and red in tire figure and No. 3 which means the LR tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for LR tire as shows on below pic. 2. then the systems will enter to the LF tire sensor set up mode.







Pic 2

# 4. Set up for LF tire sensor

The display will flash green and red in tire figure and No. 4 which means the LF tire can be proceed for the set up as below pic. 1, by the meantime the user should deflate the tire pressure rapidly over than 0.3bar/30kPa or 4 Psi in 15 sec. until sounds Beep, which means the user is completed the set up for LF tire as shows on below pic. . then the systems will enter back to the normal operating display, without any changing.



Pic 1

Warning

The user should be secure that the monitor should be plug in to the power, when is processing the tire changing/rotating mode, if the power is interrupt, just follow the reset process in order to proceed successfully. The user should confirm whether the display can monitor all the tire information correctly, if not, just follow the reset process.

The user should confirm whether the all sensors are manufactured by ORO TEK before do any changing or replacement,, if not, the user won't be able be succeed on set up neither make the system operating normally.

# **ORO-TEK Warranty Policy**

We warrant our products for one year (365 days) from the date of original purchase to be free from defects in materials and workmanship. If, during this period, the product fails under normal usage, because of a manufacturing defect, we will replace or repair the item. To obtain repair or replacement under the terms of this warranty, please return the product to the place of purchase. Proof of purchase and date of purchase are required to validate the warranty claim. If cannot proof the warranty will be just 2 months. For ex: (2009/1, the warranty period is until 2009/3)

All implied warranties, including the warranty of merchantability, are limited to this same ninety-day period from date of original purchase. We are not liable for any direct or consequential loss or property damage arising from any use of this product. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This does not affect your statutory rights.

The follow's situations are out of warranty policy even the product are remain in the warranty duration

1. Broken or damaged on appearance of the product.

2. The barcode label is not clear or broken/destroy the barcode label.

3. The user did not follow the user manual instruction on installation, incorrect installation, or bad

keeping to make the systems become failure or damaged.

4. The system has been installed by non-authorized distributor or technician from ORO-TEK.

5. When the user is not using the original manufacturer's accessories (ex: Power code) and make the system become failure, this are NOT included ORO-TEK warranty policy.

6. Any natural catastrophe/bad installation or any re-model process without authorization by the

manufacturer or any un-natural installation are NOT included ORO-TEK warranty policy.

7. Consumption parts which should be replaced on time.

Annexes										
	Annex 1									
	kPa , psi, bar Conversion Table									
<u>kPa</u>	<u>psi</u>	<u>bar</u>	<u>kPa</u>	psi	<u>bar</u>	<u>kPa</u>	<u>psi</u>	<u>bar</u>		
10	1	0.1	210	31	2.1	410	60	4.1		
20	3	0.2	220	32	2.2	420	61	4.2		
30	4	0.3	230	34	2.3	430	63	4.3		
40	6	0.4	240	35	2.4	440	64	4.4		

50	7	0.5	250	37	2.5	450	66	4.5
60	9	0.6	260	38	2.6	460	67	4.6
70	10	0.7	270	39	2.7	470	69	4.7
80	12	0.8	280	41	2.8	480	70	4.8
90	13	0.9	290	42	2.9	490	72	4.9
100	15	1.0	300	44	3.0	500	73	5.0
110	16	1.1	310	45	3.1			
120	18	1.2	320	47	3.2			
130	19	1.3	330	48	3.3			
140	20	1.4	340	50	3.4			
150	22	1.5	350	51	3.5			
160	23	1.6	360	53	3.6			
170	25	1.7	370	54	3.7			
180	26	<u>1.8</u>	380	55	3.8			
190	28	1.9	390	57	3.9			
200	29	2.0	400	58	4.0			

# <u>Annex II</u>

$^{\circ}\!\!C$ To $^{\circ}\!\!F$ and $^{\circ}\!\!F$ To $^{\circ}\!\!C$ Conversion Table									
°C	°F		°C	°F		°C	°F		
-40	-40		20	68		80	176		
-30	-22		30	86		90	194		
-20	-4		40	104		100	212		
-10	14		50	122		110	230		
0	32		60	140		120	248		
10	50		70	158		125	257		