ORNO®

CE

OR-PRE-428, OR-PRE-428(GS) schuko	
ORNO-LOGISTIC Sp. z o.o. ul. Katowicka 134 43-190 Mikołów tel. 32 43 43 110	**(ENG) Operating and instalation instructions**

(ENG) IMPORTANT!
Before using the device, read this Service Manual and keep it for future use. Any repair or modification carried out by yourselves results in loss of guarantee. The manufacturer is not responsible for any damage that can result from improper device installation or operation.
In view of the fact that the technical data are subject to continuous modifications, the manufacturer reserves a right to make changes to the product characteristics and to introduce different constructional solutions without deterioration of the product parameters or functional quality.
The latest version of the Manual can be downloaded from www.orno.pl. Any translation/interpretation rights and copyright are reserved in relation to this Manual.

1. *Do not use the device against its intended use.*
2. *Disconnect the power supply before any activities on the product.*
3. *Do not dip the device in water or another fluids.*
4. *Do not operate the device when its housing is damaged.*
5. *Do not open the device and do not repair it by yourselves.*
6. *The device is designed to be operated inside buildings.*
7. *The device is fit to be operated only in a dry environment.*
8. *The device is designed to operate with its maximum load ranges.*

Please read the following instructions carefully before connecting this timer to electrical appliances.
WARNING! DO NOT PLUG TWO OR MORE TIMERS TOGETHER!

Produced after 29th July 2005 Waste electrical products should not be disposed with household waste. Please recycle where facilities exist.
Check with Your Local Authority or retailer for recycling advice.

IMPORTANT
Don't plug in an appliance where the load exceeds 8Amp. Always ensure the plug of any appliance is fully inserted into the timer outlet. If cleaning of the timer is required, remove from mains power and wipe timer with a dry cloth.
DO NOT IMMERSE TIMER IN WATER OR ANY OTHER LIQUID.
Heaters and similar appliances should never be left unattended during operation. The manufacturer recommends such appliances not to be connected with timers.

KEYB0ARD DEFINITION
1. **R(RESET)**: Clear all data in memory including current time and all programs.
2. **UP**: Set current time combined with buttons **SET**, **DOWN**; Set programs combined with buttons **SET**, **DOWN** ; Set **CD** combined with buttons **SET**, **DOWN** ; Press **UP** and **DOWN** buttons simultaneously to enter **CLOCK** mode under **PROGRAM** setting mode or **CD** setting mode.
3. **SET**: Set current time combined with buttons **UP**, **DOWN**; Set programs combined with buttons **UP**, **DOWN** ; Set **CD** combined with buttons **UP**, **DOWN** ;
4. **DOWN**: Set current time combined with buttons **SET**, **UP**; Set programs combined with buttons **SET**, **UP**; Set **CD** combined with buttons **SET**, **UP** ;
5. **RND(RANDOM)**: Set or cancel **RND** function.
6. **CD(COUNT DOWN)**: Set or cancel **CD** function.
7. **MANUAL**: Select operating modes (**ON,AUTO,OFF**)of timer; Override programs or recall the overridden programs in setting programs.

GENERAL FEATURES
1. 10 ON/OFF programs with 1 minute step.
2. MANUAL ON/AUTO/MANUAL OFF selectable.
3. 12/24 hour mode selectable.
4. LCD display with second.
5. Summer time function available.
6. Random function with a randomly on 10-31minutes between 6:00 PM and 6:00 AM.
7. 16 combinations of day or blocks of days available as follows:
   MO
   TU

WE
TH
FR
SA
SU
MO, TU, WE, TH, FR, SA, SU
MO, TU, WE, TH, FR
SA, SU
MO, TU, WE, TH, FR, SA
MO, WE, FR
TU, TH, SA
MO, TU, WE
TH, FR, SA
MO, WE, FR, SU

8.   Maximum of 99 hours 59 minutes 59 seconds **CD(COUNT DOWN)** function.

INITIAL OPERATION

1. Plug the timer into a regular **230** Volts power outlet and turn the power on. Leave for approximately 14 hours to charge the Memory Back-up battery.
2. Clear all current information by pressing **R** button with a sharp object such as a pen or pencil after charging.
3. The timer is now ready to be set up for use.

SETTING CURRENT TIME

1. Press **UP** button or **DOWN** button until the **CLOCK** displays in LCD.
2. Press **SET** button 2 seconds at least,the"**WEEK DAY** will display in LCD,you can set the current time now.
3. Press **UP** button or **DOWN** button to set the "**WEEK DAY**".
4. Press **SET** button once and release, The "**HOUR**"will flash.
5. Press **UP** button or **DOWN** button to set the "**HOUR**".
6. Press **SET** button again and release,The "**MINUTE**"will flash.
7. Press **UP** button or **DOWN** button to set the "**MINUTE**".
8. Press **SET** button and release,the timer is in Clock model display.
9. To reset incorrect time, repeat above steps.

SETTING PROGRAMS

TIP: To be ensured that the settings do not overlap, especially when using the block option. If there are program settings overlapped, the timer **ON** or **OFF** will be executed according to program time, not by program number. Program **OFF** has the priority over program **ON**.Please verify the timer's operation mode,if you want to start the programs,the timer must be in **AUTO** mode,and the **RND** and **CD** function must be canceled.

1. Press **UP** button or **DOWN** button untill LCD shows ON_1. The first ON setting can be made now.
2. Press **SET** button once and release,the   "**WEEK DAY**"will display in LCD.and flash.
3. Press **UP** button or **DOWN** button to set the "**WEEK DAY**".
4. Press **SET** button once time and release, The "**HOUR**"will flash.
5. Press **UP** button or **DOWN** button to set the "**HOUR**".
6. Press **SET** button once time and release. The "**MINUTE**"will flash.
7. Press **UP** button or **DOWN** button to set the "**MINUTE**".

EXAMPLE: Timer ON at 17:15 and OFF at 22:30 everyday.

a. Press **UP** button or **DOWN** button untill LCD shows ON_1.
b. Press **SET** button once and release,the "**WEEK DAY**" will display in LCD.and flash.
c. Press **UP** button or **DOWN** button till the LCD displays "**MO, TU, WE, TH, FR, SA, SU**".
d. Press **SET** button once time and release, The "**HOUR**"will flash.the "**WEEK DAY**"will stop flashing and keep display.
e. Press **UP** button or **DOWN** button till LCD displays 5:00PM or 17:00.
f. Press **SET** button once time and release. The "**MINUTE**"will flash. the "**HOUR**"will stop flashing and keep display.
g. Press **UP** button or **DOWN** button till LCD displays 5:15PM or 17:15.
h. press the **SET** button to confirm the above program.
i. Press **UP** button once and release. The timer is in the OFF 1 setting.
j. Repeat the above b,c,d,e,f. g and H till LCD displays "MO,TU,WE,TH,FR,SA,SU",10:30PM or 22:30.
k. Press **MANUAL** button till LCD displays **AUTO.**

MANUAL ON/AUTO/MANUAL OFF SETTING

Operating modes can't be changed during program settings.
1. Press **MANUAL** button to revert the three modes in turn.
2. The programs can only be executed in AUTO mode. When AUTO is selected, the timer operates as the programs set. In **MANUAL ON** or **MANUAL OFF** mode all programs are ignored and the timer doesn't operate. When **MANUAL ON** mode is selected, power output is always **ON**. When **MANUAL OFF** mode is selected, power output is permanently off.
3. When the mode is turned from **MANUAL ON** to **AUTO**, the timer will keep the setting of **MANUAL ON** until to the following program.

RANDOM FUNCTION

1. Press **RND** button. LCD displays **R**(**RANDOM**). **RND** function is activated.
2. When Random is activated,the timer will be in On position randomly for 10-31 minutes during the time gap----from

6:00PM to 6:00AM.

3. Press the **RND** button once again to cancel this function. **RND** function can't be set during **PROGRAM** and **CD** setting.
4. The **RND** function can only be executed in **AUTO** mode between **6:00PM**and **6:00AM**.

CD(COUNT DOWN) FUNCTION

1. Press **UP** button or **DOWN** button untill LCD shows **CD,** you can set the **CD** time now.
2. Press **SET** button once and release,the "**ON**" or "**OFF**"will display in LCD.and flash.
3. Press **UP** button or **DOWN** button set "**ON**" or "**OFF**" mode which you want.
4. Press **SET** button once and release, The "**HOUR**"will flash.the "**ON**" or "**OFF**" will stop flashing and keep display.
5. Press **UP** button or **DOWN** button to set the "**HOUR**".
6. Press **SET** button once and release, The "**MINUTE**"will flash.the "**HOUR**"will stop flashing and keep display.
7. Press **UP** button or **DOWN** button to set the "**MINUTE**".
8. Press **SET** button once and release, The "**SECOND**"will flash.the "**MINUTE**"will stop flashing and keep display.
9. Press **UP** button or **DOWN** button to set the "**SECOND**". Press **SET** button, the "**SECOND**" will stop flashing and keep display.
10. Press **CD** button,the **COUNT DOWN** time will reduce with one second if the current operation mode is in **AUTO** mode.
11. Press **CD** button once again,the **COUNT DOWN** time will stop and comeback the primary **COUNT DOWN** time.
12. Maximum **COUNT DOWN** time is 99 hours 59 minutes 59 seconds .
13. The **CD** function can only be executed in **AUTO** mode.and the **RND** function must be canceled.
14. The **CD** will flash in **LCD** when press **CD** button in clock mode.it means the **CD** function is executed.

12/24 HOUR MODE

Under Clock status,press **CD** button and **SET** button simultaneously to turn the time display between 12 and 24 hour mode.

SUMMERTIME FUNCTION

1. Press **MANUAL** button and **SET** (or **RND**)button simultaneously. LCD shows **S**(Summer time). Clock advances 1 hour.
2. To revert to winter setting, press the two buttons again. Clock moves backward 1 hour. **S** disappears in LCD.

OPERATION GRADATION

Please notice the operation gradation when you set the timer,it will operate as follows gradation:
1.MANUAL ON OR MANUAL OFF ------▶2.RND------▶3.CD------▶4.PROGRAM.
It executes the **MANUAL ON OR MANUAL OFF** setting first, **RND**setting second, **CD** setting third,and **PROGRAM** setting last when the timer runs. Please set the right operation mode,

SPECIFICATIONS

Voltage	230VAC, 50Hz
Max Load	8(1)A, 1800W
Min Setting Time	1 Minute
Operating temperature	-10 °C to +40 °C
Accuracy	+/- 1 minute per month
Battery backup	NiMH 1.2V >100hours