Installation and use instructions and warnings

Istruzioni ed avvertenze per l'installazione e l'uso

Instructions et avertissements pour l'installation et l'utilisation

Anweisungen und Hinweise für die Installation und die Bedienung

Instrucciones y advertencias para la instalación y el uso

Instrukcje i ostrzeżenia związane z instalowaniem i użytkowaniem

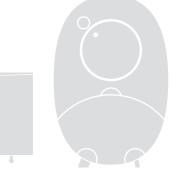
Aanwijzingen en aanbevelingen voor installering en gebruik



# NiceOne Receiver

OX... family







EN - Models with "SM" type connection

IT – Modelli con connessione a innesto "SM"

FR - Modèles avec connecteur embrochable «SM»

ES - Modelos con conexión con conector "SM"

DE - Modelle mit Steckverbindung "SM"

PL – Modele z połączeniem za pomocą złącza typu "SM"

NL - Modellen met steekconnector "SM"



**EN** – Models with universal type connection

IT – Modelli con connessione universale

FR - Modèles avec connecteur universel

ES – Modelos con conexión universal

DE – Modelle mit Universalverbindung

PL – Modele z połączeniem uniwersalnym

NL - Modellen met universele aansluiting



# **ENGLISH**

# 1 – PRODUCT DESCRIPTION AND INTENDED USE

This receiver is part of the series "NiceOne" produced by Nice spa. The receivers in this series are destined for use on the control units fitted on systems for the automation of gates, garage doors and road barriers. Any use other than as specified herein is to be considered improper and is strictly prohibited! The manufacturer denies all liability for damage deriving from improper use of the product and use other than as specified in this manual.

Various models are available, with the specifications as stated in the table below.

### 1.1 - The "NiceOpera" system

The receivers in the series **NiceOne** are part of the "**NiceOpera**" system. This system has been designed to simplify the programming phases, use and maintenance of the devices normally used in automation systems. The system

comprises various software and hardware devices capable of intercommunicating via radio, by means of the "O-Code" encoding system or a "physical" connection via cable.

The main devices that make up the NiceOpera system are:

- NiceOne transmitters:
- NiceOne receivers (family OXI...; family OX...);
- O-box programming unit;
- Control units and gearmotors with "T4 Bus";
- O-View programmer for devices with "T4 Bus".

IMPORTANT – For further details on all functions of the NiceOpera system and interdependency of the various devices in the system, refer to the general manual "NiceOpera System Book", also available on the Internet site www.niceforyou.com.

	Mod.	Frequency	Function	Connection
·O	OXI	433.92 MHz	Receiver	Connector type
	OXI8	868.95 MHz	Receiver	Connector type
	OXIT	433.92 MHz	Receiver-transmitter	Connector type
	OXI8T	868.95 MHz	Receiver-transmitter	Connector type
	OX2	433.92 MHz	Receiver	with 6-core cable
	OX28	868.95 MHz	Receiver	with 6-core cable
	OX2T	433.92 MHz	Receiver-transmitter	with 6-core cable
	OX28T	868.95 MHz	Receiver-transmitter	with 6-core cable

Notes to table: The letter "T" in the model name indicates a receiver with built-in transmitter. This receiver is called a "receiver-transmitter".



# 2 – FUNCTIONAL PRODUCT SPECIFICATIONS

#### For all models

The receiver manages "O-Code" radio encoding with variable code (rolling-code), which enables use of all the new functions in the NiceOpera system.

The receiver is compatible also with "FloR", "TTS", "Smilo" and "Flo" encoding systems. However, in this case some of the exclusive NiceOpera system functions described in this manual cannot be used.

- The receiver has a capacity of 1024 spaces in which to memorise transmitters. If the transmitter is memorised in "Mode I", all the relative keys will occupy 1 memory allocation; otherwise if memorised in "Mode II", each memorised key will occupy 1 memory allocation (for memorisation procedures, see below in this manual).
- Each receiver has its own <u>identification number</u> called a "Certificate".

This number enables access to a series of operations, such as: Memorisation of new transmitters without the need for direct intervention on the receiver and use of the O-View unit, by means of the "T4 Bus" connection.

The sealed coupon in the product pack contains the sheet with the certificate number of this receiver. Caution! – this coupon must be kept in a safe place as it enables access to data stored in the receiver, unless further protection measures are adopted, such as the use of a security password.

### For models with "SM" type connection

- These models can be used exclusively with the control units fitted with an "SM" type connection (fig. 1). Note – to identify compatible control units, refer to the Nice product catalogue.
- These models automatically recognise the characteristics of the control unit to which they are connected and the receiver self-installs as follows.
- If the control unit manages the "T4 Bus", the receiver provides up to 15 different commands.
- If the control unit does not manage the "T4 Bus", the receiver provides up to 4 different command channels.
- Caution! In both cases the number and variety of the commands available depend on the type and model of control unit used. The "Table of commands" of each control unit is provided in the instruction manual of the relative control unit.

## • For models with universal type connection

 These models operate with 2 voltage-free contact relays and therefore can be used with any type of control unit.

#### • For models with "T" in the model name

 These models are equipped with a "Repeater" function (see below in this manual) which enables an increase in the transmission range of the transmitters. They also enable "wireless" communication with the O-Box programming unit.

#### 3 - PRODUCT INSTALLATION

#### • For models with "SM" type connection

These models are connected to the control unit by inserting the connector in the relative control unit connector (fig. 1). **Caution!** – Before connecting or removing the receiver, disconnect the control unit from the power supply.

The aerial supplied must also be installed, connecting it to the specific terminals on the control unit.

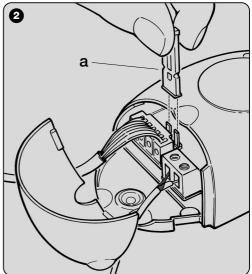
## • For models with universal type connection

--- Power supply selection ----

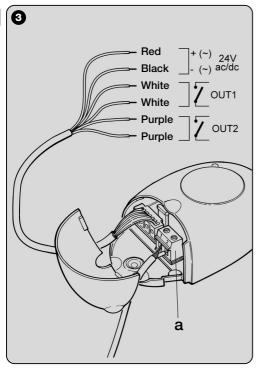
These models are connected to the control unit by means of a 6-core cable. Before connecting the cable, select the type of power supply required, leaving or removing the electric jumper as necessary (fig. 2-a) as follows:



- <u>Jumper NOT inserted</u> = 24 V ac/dc (voltage limits: 18 ÷ 28 V)
- <u>Jumper INSERTED</u> = **12** V ac/dc (voltage limits: 10 ÷ 18 V)







#### — Electrical connections ——

Connect the 6 wires of the receiver cable to the relative terminals of the control unit as follows (fig. 3):

- Red and Black = POWER SUPPLY (red = Positive, black = Negative. In AC this is not important).
- White and White = RELAY 1 OUTPUT (voltage-free contact of a normally open relay).
- Purple and Purple = RELAY 2 OUTPUT (voltage-free contact of a normally open relay).

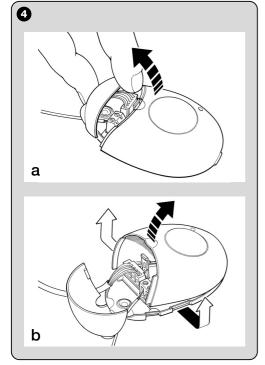
### -- How to obtain "NC" type contacts --

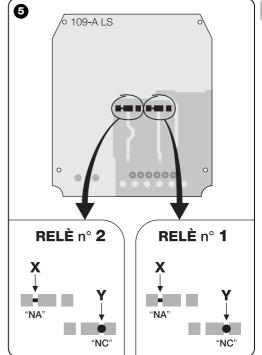
The outputs are controlled by 2 relays with NO (normally open) type contact. To change to NC (normally closed) type contact, proceed as follows:

- **01.** Disconnect the receiver from the power supply.
- Open the box of the receiver by first raising the smaller section of the cover (fig. 4-a) and then the larger section with the key (fig. 4-b).
- **03.** Carefully remove the board and turn it over: the side with the soldered elements must be facing the user.
- **04.** On the side with the soldered elements, proceed as follows (**fig. 5**):
  - Cut the traced section at point "X"
  - Join the contacts with a drop of tin at points "Y".

**Note** – these modifications may be applied to one or both relays as required.









### • For all models: Installation of an external aerial

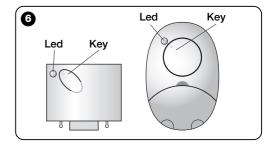
If the aerial supplied is in an unfavourable position and the radio signal is weak, an external aerial may be installed to improve reception (mod. ABF or ABFKIT). The new aerial must be positioned as high as possible and above any metal or reinforced concrete structures present in the area.

- Connection to the Control Unit: Use a coaxial cable with an impedance of 50 ohm (for example, a RG58 cable with low loss). Caution! – To reduce signal dispersion use a cable that is as short as possible (not exceeding 10 m).
- Connection to the receiver (only for models with universal type connection): Open the receiver by first raising the smaller section of the cover (fig. 4-a) and disconnect the aerial supplied; then connect the cable of the new aerial to terminal 1 and 2 as follows (fig. 3-a): Terminal 1 = sheath; Terminal 2 = core.

# PROGRAMMING THE MAIN FUNCTIONS

### **Programming warnings**

The settings described in this chapter (except for procedure 6) require use of the key and led on the receiver (fig. 6). To indicate the state of activity in progress, the led emits a set number of flashes with a specific duration and colour (green, red or orange). For the meaning of these signals, refer to Table A at the end of the manual.



## 4 - CAUTION! - READ THIS SECTION BEFORE MEMORISING THE TRANSMITTER

The receiver can only memorise transmitters belonging to one of the following 3 encoding families:

- family with "O-Code", "FloR" and "TTS" encoding;
- family with "Flo" encoding;
- $-% \frac{1}{2}\left( -\right) =-\left( -\right) \left( -\right) =-\left( -\right) \left( -\right)$

**Note** – Each code enables use <u>exclusively</u> of the standard associated functions on the receiver.

Caution! – The encoding family of the first transmitter memorised on the receiver also defines the relative encoding family for the subsequent transmitters to be memorised.

To change the <u>encoding family</u> set on the receiver, perform procedure 10 – Total receiver memory deletion.

To check on the receiver whether transmitters and the associated <u>encoding family</u> are already memorised, proceed as follows:

- **01.** Disconnect the receiver from the power supply.
- **02.** Re-connect the power to the receiver and count the number of **green** flashes emitted by the receiver led.
- **03.** Check the number of flashes emitted with the data in the table below:
  - 1 flash = Flo encoding
  - 2 flashes = O-Code / FloR / TTS encoding
  - 3 flashes = Smilo encoding
  - 5 flashes = no transmitter entered

**Caution!** – Before memorising a transmitter, carefully read all memorisation procedures described below to select the one most suited to your specific application.

## 5 – TRANSMITTER MEMORISATION PROCEDURE: "Mode I" AND "Mode II"

Each control unit has a set number of commands that can be activated according to the type of receiver: The models with "SM" connector provide 4 or 15 commands while models with the universal connection provide 2 outputs.

In general the commands can be associated with the transmitter keys in two ways:

- "Mode I". This mode enables memorisation on the receiver
  of all transmitter keys or a group of the latter at once (on transmitters with more than one identity code such as model ON9).
   The keys are automatically associated with the pre-set commands of the control unit or the receiver outputs, on models
  with universal connectotion.
- "Mode II". This mode enables memorisation on the receiver of a single transmitter key. The user has a free choice of which command, among those available on the control unit (maximum 4) or which output of the receiver to be associated with the selected key.
- "Extended Mode II" (only for models with "SM" connector). This mode can only be used with control units using the connection system "T4 Bus". The "Extended Mode II" is the same as "Mode II" with the additional option to choose the required command from those available in the "Table of commands" (maximum 15), as provided in the manual of the control unit connected to the receiver.

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#### 5.1 – Memorisation in "MODE I"

**Warning** – This procedure <u>simultaneously memorises all keys</u> of the transmitter or a group of the latter (on transmitters with more than one identity code).

- **01.** Press and hold the key on the receiver until the **green** led on the receiver illuminates. Then release the key.
- 02. (within 10 seconds) On the transmitter to be memorised, press and hold any key until the led on the receiver emits the first of 3 green flashes to confirm memorisation.

**Note** – After the three flashes, a 10-second interval is available to memorise another transmitter as required.

### 5.2 – Memorisation in "MODE II" (valid also for "Extended Mode II")

#### **WARNINGS:**

- The "Extended Mode II" procedure can only be used with receivers with "SM" type connectors.
- This procedure enables memorisation of a <u>single trans</u>mitter key.
- **01.** In the control unit manual, look up the "Table of commands", select the command to assign to the transmitter key and note the **number** corresponding to the command.
- 02. (on the receiver) Press the key the same number of times as the previously noted number – the Led on the receiver emits the same number of flashes repeated at regular intervals
- 03. (on the transmitter within 10 seconds) Press and hold the selected key for memorisation until the led on the receiver emits the first of 3 flashes (= memorisation confirmed).

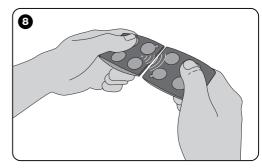
**Note** – After the three flashes, a 10-second interval is available to memorise the same command on other keys on the same transmitter or a new transmitter as required.

## 6 – MEMORISING A TRANSMITTER USING THE "ENABLE CODE" OF ANOTHER TRANSMITTER [already memorised]

This procedure can only be used if two transmitters with "O-Code" encoding are used.

The NiceOne transmitters have a <u>secret code</u> stored in the memory, known as the "ENABLE CODE". Thanks to this code, operation of NEW transmitter can be enabled by simply transferring the "enable code" of an OLD transmitter (previously memorised on the receiver) onto its memory (fig. 8). Note – For this procedure, refer to the transmitter manual.

Subsequently, when the NEW transmitter is used, it will transmit its own identity code to the receiver as well as the relative "enable code" (the first twenty times only). The receiver, after recognising the "enable code" of an OLD transmitter (previously memorised on the receiver) automatically memorises the identity code of the NEW transmitter sent to it.



#### • Preventing accidental use of this memorisation procedure

To prevent memorisation on the receiver of other transmitters not compatible with the system but with the "enable code" of a transmitter already memorised on the receiver, this procedure can be "locked" (or unlocked) by programming the function in paragraph 10.

As an alternative to locking memorisation of the entire receiver, transfer of the "enable code" can be disabled exclusively for some or all OLD transmitters already memorised. This operation can be performed using the O-Box programming unit.

# 7 - MEMORISATION OF A TRANSMITTER USING THE PROCEDURE IN THE VICINITY OF THE RECEIVER

[with a transmitter already memorised]

A NEW transmitter can be memorised in the receiver memory without acting directly on the key of the receiver, but by simply working within its reception range. To use this procedure, an OLD transmitter, previously memorised (in "Mode I" or in "Mode II") and operative, is required. The procedure enables the NEW transmitter to receive the settings of the OLD version.

#### WARNINGS:

- Use only <u>one</u> of the two procedures described below, according to requirements.
- The procedure must be performed within the reception range of the receiver (maximum 10-20 m from receiver).
- Repeat the same procedure for each transmitter to be memorised.

#### Standard Procedure (valid for all Nice receivers)

- **01.** On the NEW transmitter, press and hold the key.... for at least 5 seconds (see **note 1**) and then release.
- **02.** On the OLD transmitter, press key.... three times (see note 1) and then release.
- **03.** On the NEW transmitter, press the same key pressed in point 01 once and then release.

#### Alternative Procedure (valid for this receiver only)

- **01.** On the NEW transmitter, press and hold the key.... for at least 3 seconds (see **note 1**) and then release.
- **02.** On the OLD transmitter, press and hold the key.... for at least 3 seconds see *note 1*) and then release.

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- **03.** On the NEW transmitter, press the same key pressed in point 01 for at least 3 seconds and then release.
- **04.** On the OLD transmitter, press the same key pressed in point 02 for at least 3 seconds and then release.

#### Note 1:

If the OLD transmitter is memorised in "Mode I" the NEW transmitter will also be memorised in "Mode I". In this case, during the procedure press <u>any key</u> on either the OLD or NEW transmitter.

If the OLD transmitter is memorised in "Mode II" the NEW transmitter will also be memorised in "Mode II". In this case, during the procedure press the required command key on the OLD transmitter and the associated key to be memorised for this command on the NEW transmitter. This procedure must also be repeated for each key of the NEW transmitter to be memorised.

#### • Preventing accidental use of this memorisation procedure

To prevent the continuous reception of a signal transmitted at random by a transmitter not part of the system from accidentally activating the memorisation procedure, this procedure can be "locked" (or unlocked) by programming the function in paragraph 10.

## 8 – TOTAL RECEIVER MEMORY DELETION

All <u>transmitters memorised</u> can be deleted from the receiver memory, or <u>all data present</u> in the latter can be deleted as follows:

- **01.** Press and hold the receiver key and check the following changes in Led status:
  - (after approx. 4 seconds) the green led illuminates;
  - (after approx. 4 seconds) the green led turns off;
  - (after approx. 4 seconds) the **green** led starts flashing.
- **02.** At this point release the key **exactly**.....
  - on the 3rd flash, to delete all transmitters, or,
  - on the 5th flash, to delete the entire memory of the receiver, including configurations and encoding families of the transmitters.

Alternatively this function can be performed using the O-Box or O-View programming unit.

## 9 – DELETING A SINGLE TRANSMITTER FROM THE RECEIVER MEMORY

<u>A single transmitter</u> (in your possession) <u>memorised</u> can be deleted from the receiver memory as follows:

- **01.** Press and hold the receiver key.
- **02.** After approx. 4 seconds the **green** led illuminates (*keep the key pressed*).
- 03. On the transmitter to be deleted from the memory, press and hold any key (see note 1) until the led on the receiver emits 5 green flashes (= deletion confirmed).

#### Note 1:

If the transmitter is memorised in "Mode I" any key can be pressed.

If the transmitter is memorised in "Mode II" the entire procedure must be repeated for each memorised key to be deleted.

Alternatively this function can be performed using the O-Box or O-View programming unit.

## 10 – ENABLING (or disabling) THE RECEIVER FOR TRANSMITTER MEMORISATION

This function enables the user to prevent memorisation of new transmitters when the procedures "in the vicinity" (factory setting is **ON**) or with "enable code" (factory setting is **ON**) are used as described in this manual. To enable or disable this function, proceed as follows:

- **01.** Disconnect the receiver from the power supply and wait 5 seconds.
- 02. Reconnect the power and switch on by pressing the receiver key until the relative led has completed the signals indicating the type of code stored in the memory (see paragraph 5) and the procedure is activated, indicated by 2 short orange flashes. Then release the key.
- 03. (within 5 seconds) Press the receiver key repeatedly to select one of the following functions (Warning! – on each press of the key the Led changes colour to indicate the currently selected function):
  - Led OFF = No lock enabled
  - Led RED = Memorisation "in the vicinity" locked
  - Led GREEN = Memorisation with "enable code" locked

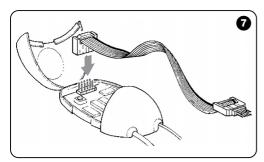
- Led **ORANGE** = Both memorisation modes locked ("in the vicinity" and with "enable code").
- 04. (within 5 seconds) Press any key of a transmitter already memorised on the receiver to save the selected function.

Alternatively the lock (or unlock) function can be applied using the O-Box or O-View programming unit.

## **OTHER FUNCTIONS**

WARNING – The settings described in this chapter require use of the O-Box or O-View programming unit. For operation of these devices, refer to the relative instruction manuals, also available on the internet site: www.niceforyou.com.

- <u>The models with "SM" connector</u> are connected to the O-Box unit by inserting the receiver in the relative connector.
- The models with universal connector are connected to the O-Box unit by means of a special cable (fig. 7-a) which must be connected to the connector on the receiver (see fig. 7-b).



# 11 – MEMORISATION OF A TRANSMITTER USING THE RECEIVER "CERTIFICATE NUMBER"

**[with O-Box]** – This procedure can only be used if a transmitter is used with "O-Code" encoding and when in possession of the receiver "Certificate Number".

The "CERTIFICATE" is a personal number (factory set) identifying the single receiver to distinguish it from all others.

Use of this "certificate" simplifies the procedure required to memorise the transmitter in the receiver, as it no longer obliges the installer to work within the receiver operating range. In fact the new procedure enables transmitter memorisation from any distance, even far from the installation site (for example from the installer's office – fig. 9).



Initially, the procedure consists in the installer entering, with the aid of the programming unit "O-Box", the required functions and the relative receiver "certificate" in the memory of the transmitter. The transmitter, ready to use, is then sent to the client.

Subsequently, when the transmitter is used, it will transmit the command along with the "certificate" to the receiver (the first twenty times only). The receiver, after recognising the "certificate" as its own, automatically memorises the identity code of the transmitter that sent the certificate.

# 12 - REMOTE REPLACEMENT OF A TRANSMITTER USING "PRIORITY" MODE

**[with O-Box]** – The identity code of a transmitter in the NiceOne series is accompanied by a <u>number</u> (from 0 to 3), which enables the user to specify the transmitter's **priority level** on a receiver with respect to any other transmitters with the same code.

This "priority" serves to replace, and thus disable, use of a transmitter that has been lost or stolen, without the need to return to the client's system.

Use of priority mode requires knowledge of the code of the lost transmitter and enables maintenance of the same code and functions of the previous transmitter.

Therefore the lost transmitter can be disabled by simply **updating the priority level** of the new transmitter with the next highest value.

On first use of the transmitter, the receiver memorises the **new priority level** received and ignores any command sent by the lost or stolen transmitter if subsequently used.

This function can be enabled (or disabled) on the receiver (factory setting **ON**) and, when active, the receiver does not update the priority level sent by the transmitter.

# 13 - ENABLING (or disabling) RECEPTION OF NON-ORIGINAL "IDENTITY CODES"

[with O-Box / O-View] – The identity codes of transmitters with "FloR" and "O-Code" encoding can be modified as required, using the "O-Box" or "O-View" programming unit. The receiver can normally recognise whether a code is original (factory set) or modified.

When this function is enabled or disabled (factory setting **ON**) the receiver has the option to accept (or not) the command of a transmitter with a modified identity code.

# 14 – LOCKING (or unlocking) THE MOBILE SECTION (Rolling code) OF THE IDENTITY CODE

**[with O-Box / O-View]** – This function enables the user to lock (or unlock) management on the receiver of the <u>variable section</u> *(rolling code)* of an identity code sent by a transmitter. When the lock function is active *(factory setting OFF)*, the receiver treats a "rolling code" as if it were a "fixed" code, ignoring the variable section.

# 15 – ENABLING (or disabling) THE "REPEATER" FUNCTION

(Function available only on models OXIT, OXI8T, OX2T, OX28T, in combination with transmitters using O-Code encoding).

**[with O-Box]** – If an automation is to be controlled at a distance greater than that normally covered by the transmitter and receiver, a second receiver may be used (up to a maximum of five) serving to re-transmit, <u>via radio</u>, the command to the final receiver (in which the sending transmitter identity code is memorised), so that this can execute the command. To enable or disable this function (factory setting **OFF**) programming must be performed both on the additional receivers and transmitters.

# 16 – MANAGING RELEASE OF THE TRANSMITTER KEYS

(Function available only on transmitters using O-Code encoding)

**[with O-Box / O-View]** – Normally, after sending a command, on release of the key the manoeuvre is not stopped immediately but proceeds for a very short pre-set interval. If necessary, the manoeuvre can be interrupted at the exact time of key release (required for example during minimal adjustments) by enabling this function (factory setting **OFF**).

# 17 – ENABLING (or disabling) COMMAND DELIVERY ON THE "T4 BUS" NETWORK

**[with O- View]** – On systems in which connection is via the "T4 Bus", if more than one receiver is installed, and there is the need for control at a distance greater than that normally covered by the transmitter and receiver, this function can be enabled (on at least 2 receivers) to increase the receiver reception range.

This enables the receiver that receives a command "via radio" to re-transmit the command <u>via the Bus cable</u> to the final receiver (in which the sending transmitter identity code is memorised), so that this can execute the command.

To enable or disable the option to receiver and/or send radio codes on the "T4 Bus" in a receiver (factory setting **OFF**), the receivers concerned must be duly programmed, using the O-View programming unit.

# 18 – CREATING THE "FAMILY GROUPS" OF TRANSMITTERS

**[with O-Box]** – Each code memorised on the receiver can be associated with one or more "family groups", from the 4 available.

The formation of groups and their activation or deactivation (factory setting **OFF**) is managed by means of the O-Box programming unit while use of the groups, for example in a set timeband, is managed by means of the O-View programming unit.

# 19 – PROTECTION OF PROGRAMMED FUNCTION SETTINGS

**[with O-Box / O-View]** – This function enables the user to protect all programmed functions on the receiver, also disabling functionality of the key and relative led. The function is enabled by entering a *password* on the receiver, i.e. a maximum of 10 digits. as set by the installer.

When the function is enabled, before programming and maintenance of the receiver, the special *password* must be entered on the programming unit to unlock the receiver.

#### **DISPOSAL OF THE PRODUCT**

This product constitutes an integral part of the automation system, therefore it must be disposed of along with it. As in installation, also at the end of product lifetime, the disasembly and scrapping operations must be performed by qualified personnel.

This product is made up of different types of material, some of which can be recycled while others must be disposed of. Seek information on the recycling and disposal systems envisaged by the local regulations in your area for this product category.

Caution! – some parts of the product may contain pollutant or hazardous substances which, if disposed of into the environment, may cause serious damage to the environment or physical health.

As indicated by the symbol on the left, disposal of this product in domestic waste is strictly prohibited. Separate the waste into categories for disposal, according to the methods envisaged by current legislation in your area, or return the product to the retailer when purchasing a new version.



**Caution!** – Local legislation may envisage serious fines in the event of abusive disposal of this product.

# PRODUCT TECHNICAL SPECIFICATIONS

	OXI	OXIT	OXI8	OXI8T		
Decoding	"O-Code" / "FloR" / "TTS"; or "Flo"; or "Smilo"					
Maximum absorption	30 mA					
Reception frequency	433.9	433.92 MHz		868.95 MHz		
Transmission frequency		433.92 MHz		868.95 MHz		
Sensitivity	Above 0.5μV					
Operating temperature	−20° C ÷ +55° C					
Outputs	4 (on "SM" connector)					
Dimensions and weight	L. 50; H. 45; P. 19 mm; weight 20					
Radiated power	_	+1 dBm		+1 dBm		
Input impedance	52 ohm					
	OX2	OX2T	OX28	OX28T		
Decoding	"O-Code" / "FloR" / "TTS"; or "Flo"; or "Smilo"					
Power supply	Without electric jumper = 24 V standard. Limits from 18 to 28 V direct or alternating With electric jumper = 12 V standard. Limits from 10 to 18 V direct or alternating					
Absorption on standby	10 mA at 24 Vac					
Absorption with 2 relays activ	80 mA at 24 Vac.					
Reception frequency	433.92 MHz		868.95 MHz			
Transmission frequency		433.92 MHz		868.95 MHz		
Sensitivity	Above 0.5µV					
N° relays	2					
Relay contact	Normally open max 0,5 A and 50 V					
Operating temperature	−20° C ÷ +55° C					
Protection rating	IP 30					
Dimensions and weight	58 x 86; H. 22 mm; weight 55 g					
Radiated power		+2 dBm		+2 dBm		

### **GENERAL NOTES**

As well as the functions and settings described in this manual, the receiver offers many other features to enhance performance, safety and ease of use.

All these settings require use of the O-Box (or in some cases O-View) programming unit.

For further information on the settings available, refer to the general system manual "NiceOpera System Book", or the O-Box/ O-View programming unit manual.

#### Notes on Product Technical specifications

- The range of the transmitters and reception capacity of the receivers is strongly influenced by other devices (for example: alarms, radio headphones etc.) operating in the zone at the same frequency. In these cases, Nice cannot guarantee the effective capacity of its devices.
- All technical specifications stated in this section refer to an ambient temperature of 20°C (± 5°C).
- Nice reserves the right to apply modifications to the product at any time when deemed necessary, while maintaining the same functionalities and intended use.

#### Table A

# SIGNALS EMITTED BY THE RECEIVER LED

#### - Long flashes / GREEN -

#### On start-up:

1 \* = Code in use: "Flo"

2 \* = Code in use: "O-Code"/"FloR"

3 \* = Code in use: "Smilo"

5 \* = No remote control memorised

#### During operation:

1 \* = Indicates that the code received is not stored in the memory

1 \* = During programming, indicates that the code is already stored in the memory

3 \* = Saving code in memory

5 \* = Memory deleted

**6** \* = During programming, indicates that the code is not authorised for memorisation

8 \* = Memory full

#### - Short flashes / GREEN -

1 \* = "Certificate" not valid for memorisation

2 \* = Code cannot be memorised as is transmitting "certificate"

3 \* = During programming, indicates that the code has

been re-synchronised

4 \* = Output in "Mode II" not managed on control unit

5 \* = During deletion procedure, indicates that the code has been deleted

5 \* = "Certificate" with higher priority that the admissible value

6 **\*** = Code synchronisation failure

6 \* = Code cannot be memorised due to "incorrect key"

#### - Long flashes / RED -

1 \* = Non-original code block

2 \* = Code with lower priority than the authorised value

#### - Short flashes / RED -

1 \* = "In vicinity" programming mode block

1 \* = Memorisation by means of "certificate" block

2 \* = Memory block (PIN entry)

#### - Long flashes / ORANGE -

1 \* = Indicates that the code is in the memory but outside the group currently enabled

#### — Short flashes / ORANGE —

2 \* = Indicates activation of block programming (on start-up)

#### EC DECLARATION OF CONFORMITY

EC Declaration of conformity with Directive 1999/5/EC

Note: The contents of this declaration correspond to those of the official document, deposited at the registered offices of Nice S.p.a., and in particular to the last revision available before printing of this manual. The text herein has been drawn up for editorial purposes.

Number: 256/OXI - Revision: 0

The undersigned, Lauro Buoro, in the role of Managing Director of the company

NICE s.p.a., via Pezza Alta, nº 13

Z.I. Rustignè 31046 - Oderzo (TV) Italy,

declares under his sole responsibility, that the product **OXI** (receiver) and **OXIT** (receiver-transmitter), operating at 433 92MHz, for remote control of automations for doors

OXI (receiver) and OXII (receiver-transmitter), operating at 433,92MHz, for remote control of automations for doors, gates, shutters, awnings, rolling shutters and similar applications, comply with the requirements of the following EC directive:

 1999/5/EC; DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND COUNCIL of 9 March 1999 regarding radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

According to the following harmonised standards: EN 300220-3 V1.1.1:2000

The product also complies with the requirements of the following EC directives, as amended by Directive 93/68/EEC of the European Council of 22 July 1993:

• 73/23/EEC; DIRECTIVE 73/23/EEC OF THE EURO-PEAN COUNCIL of 19 February 1973 regarding theapproximation of member state legislation related to electrical material destined for use within specific voltage limits.

According to the following harmonised standards: EN 50371:2002, EN 60950-1:2001

• 89/336/EEC; DIRECTIVE 89/336/EEC OF THE EURO-PEAN COUNCIL of 3 May 1989, regarding the approximation of member state legislation related to electromagnetic compatibility.

According to the following standards: EN 301 489-3:2002

Oderzo, 23 February 2007

Fauro Buoro

(Managing director)

#### **EC DECLARATION OF CONFORMITY**

EC Declaration of conformity with Directive 1999/5/EC

Note: The contents of this declaration correspond to those of the official document, deposited at the registered offices of Nice S.p.a., and in particular to the last revision available before printing of this manual. The text herein has been drawn up for editorial purposes.

Number: 259/OX2 - Revision: 0

The undersigned, Lauro Buoro, in the role of Managing Director of the company

NICE s.p.a., via Pezza Alta, nº 13

Z.I. Rustignè 31046 - Oderzo (TV) Italy,

declares under his sole responsibility, that the product **OX2** (receiver) and **OX2T** (receiver-transmitter), operating at 433,92MHz, for remote control of automations for doors, gates, shutters, awnings, rolling shutters and similar applications, comply with the requirements of the following FC directive:

 1999/5/EC; DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND COUNCIL of 9 March 1999 regarding radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

According to the following harmonised standards: EN 300220-3 V1.1.1:2000

The product also complies with the requirements of the following EC directives, as amended by Directive 93/68/EEC of the European Council of 22 July 1993:

• 73/23/EEC; DIRECTIVE 73/23/EEC OF THE EUROPEAN COUNCIL of 19 February 1973 regarding the approxima-

tion of member state legislation related to electrical material destined for use within specific voltage limits.

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According to the following standards: EN 301 489-3:2002

Oderzo, 23 February 2007

Lauro Buoro (Managing director)