

RX400 WIRELESS RECEIVER.

IMPORTANT

Please read instructions carefully before commencing installation.

FORWARD

The RX400 is a wireless receiver for use with the TX500 wireless passive infra red detectors.

The operating frequency is 173.225MHZ and the D.T.I. specification is MPT 1344.

The TX500 transmitters are D.T.I. approved, W.T. Licence Exempt and therefore may be used without the need to obtain a licence.

The RX400 has a built in decoder which interprets the codes transmitted by the TX500's.

There are two codes transmitted at the same time called the Site code and Unit code.

WHAT IS A SITE CODE?

A site code is like the key to a lock. The TX500s site code represents the key and the RX400 site code the lock. If both codes are selected to be the same then the TX500 transmission will be accepted by the RX400.

Any amount of TX500s can operate with one single RX400.

The site code is set with the five way switch allowing up to thirty two different combinations to be selected. Fig.1.

WHAT IS A UNIT CODE?

A unit code is a TX500s individual identifying code. A different code can be set on each TX500 so that they can be individually identified or made to do different jobs. (Multi zone).

SINGLE ZONE

In many situations only one zone is required and therefore the unit codes on the TX500s should be left in the OFF position.

A DX100 single zone control unit is connected to an RX400 receiver.

There is no limit to the amount of TX500 detectors that can be used with a single RX400 whether it be connected as a single zone or multi zone system.

EG A house has one RX400 receiver installed in the garage and it is connected to a Dx100 single zone control unit.

The DX100 operates a flood light which illuminates the front garden.

Two TX500s are employed, one is by the entrance to the driveway looking back at the house and the other one is mounted on the side fence looking across the garden.

Both TX500s have the same site code as the RX400 and their unit codes are left in the OFF position.

Whenever either of the TX500s detect movement and transmit the DX100 will operate the floodlight for the given period of time.

TWO ZONE

When different areas are required to be illuminated separately but only one RX400 receiver is employed then it is possible to use multi zone control units such as the DX102 two zone control unit by fitting a PC20 module to the RX400 receiver.

EG: A house has one RX400 receiver installed in the attic which is connected to a DX102 two zone control unit. This unit operates two flood lights, one at the rear of the house and one at the front.

Two TX500s are employed, one at the back and one at the front of the house.

Both have the same site codes as the RX400 and therefore will be recognised by it when they transmit, however both TX500s have different unit codes.

The DX102 two zone control unit is able to recognise these different unit codes and operate either the front or back light according to the code received.

BEGINNING THE INSTALLATION

The RX400 comes with a standard quarter wave aerial which is sufficient for most situations, however an external mount aerial is available as an optional extra if reception difficulties are experienced (RXA). This is connected to the RX400 with a length of 50 ohm coax cable (Not supplied with the aerial kit).

The TX500 transmission is limited to 1 milli watt and therefore it is always advisable to position the RX400 aerial in line of sight with the TX500s. Try to avoid obstructions such as steel girders, reinforced concrete, brick walls etc.

If TX500s are placed in various positions around the building try to site the aerial in a central location. Remember that the best signal strength is achieved when both the transmitter and receiver aerials are at the same height. One way to achieve good results is to place the receiver near the soffit of the roof and allow the aerial to hang down on the outside wall.

WIRING (SINGLE ZONE)

When connecting an RX400 receiver to a DX100 single zone control unit a four core cable is required to connect the two units together.

The RX400 has four terminals marked + - B and Y. These terminals connect to the DX100 terminals marked - (3) + (4) and T (5) in the following way.

RX400

+ connects to
- connects to
B connects to
Y connects to

DX100

No.4 Positive to Negative
No.3 Negative to Negative
No.3 B to Negative
No.5 Y to Trigger

ADDING GX200 HARD WIRED DETECTORS WITH WIRELESS SYSTEMS

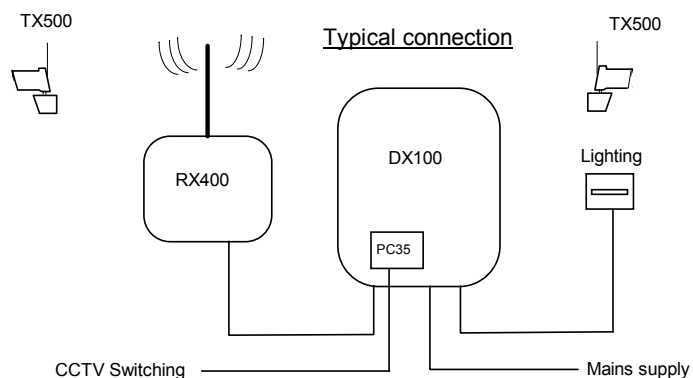
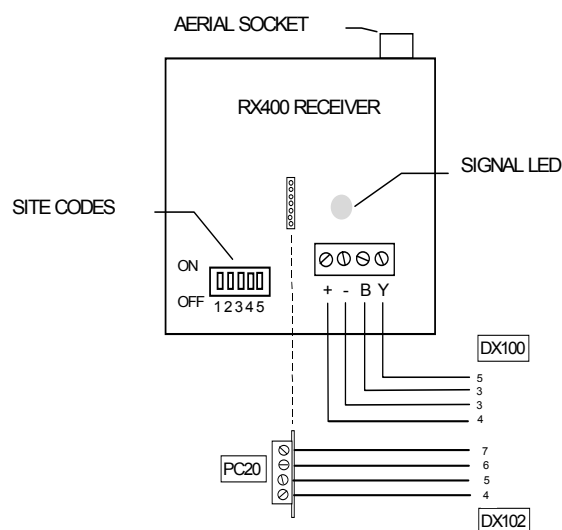
It is possible to mix hard wired GX200 detectors with wireless systems as single or multi zone installations.

To use TX500 and GX200 detectors with a single zone DX100 control unit an RX400 receiver must be connected.

The RX400 receivers have the same terminals as the GX200 detectors which are marked

+, -, B & Y,

The receiver is connected as if it were a detector following the GX200 wiring instructions.



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