

The UPB572 transceiver receives all 256 X10 RF house & unit code addresses plus ON, OFF, BRT & DIM commands, then maps these signals to specified UPB addresses. This information is then presented to a UPB PIM power line interface unit for transmission over AC mains wiring to any UPB device capable of receiving them.

Mapping of the X10 address to UPB direct addresses to specified links is accomplished with downloaded software and a PC equipped with a RS232 or USB port.

Both **direct** control of individual UPB modules and **link** mode addressing are supported. Details below.

Verify contents of shipping box

1. UPB572 module
2. Antenna
3. Mounting bracket
4. Coax cable RG6
5. Rs232 cable DB9M – DB9F
6. 9-volt DC power supply

Not supplied but required for operation

A power line interface PIM (PCS PIM-R, Simply Automated UMC-DB9 or HAI 36A00-1)

Configure UPB572

You will need a PC with Windows 98 or later as your operating system, a serial port or USB port (with our optional USB adapter) and the supplied RS232 DB9M – DB9F cable.

1. Download configuration software at <http://www.wgl designs.com/downloads/upb572.zip>
2. Unzip and run software.
3. Using the furnished DB9 cable connect one end to a COM port or USB adapter on your PC. Connect the other end to the DB9 jack labeled "PC CONFIG" on the left.
4. It is not necessary to provide 9VDC power at this point as it is supplied over the RS232 link.
5. Select the serial port that the UPB572 is connected to and click "Apply". After a few seconds you should see a message box indicating that you are connected. Click on "OK".

Mapping **direct** addresses

The initial screen is used to map specific X10 addresses to desired UPB **direct mode** addresses.

To proceed further it is necessary to know what UPB direct DID addresses and network NID addresses your UPB devices are set for. It is beyond the scope of this instruction sheet to explain how to use "UPSTART" to identify this necessary information so for now we will assume you have this information on hand.

Example for purposes of illustrating mapping: You have a UPB lamp module with a DID of 16 and a NID of 80 which you want to turn on and off and dim as required with an X10 Palmpad set to HC "P" and assign button # 1 to this lamp module.

You do not have any other X10 RF products so only one HC (P) is needed.

Disable the unneeded X10 HC check boxes. Enter the desired NID (80) in the NID column at the "P" row. Enter the number 16 in the "1st DID" column.

What you have done is mapped **X10 P-1** to UPB **80-16** (NID-DID). Notice that the last unit code (16) in the "P" house code group is automatically mapped as DID 31. The table below shows the automatic mapping of the remaining unit codes for this example. You can now load the UPB572.

X10 HC	X10 UC	UPB NID	UPB DID
P	1	80	16
P	2	80	17
P	3	80	18
P	4	80	19
P	5	80	20
P	6	80	21
P	7	80	22
P	8	80	23
P	9	80	24
P	10	80	25
P	11	80	26
P	12	80	27
P	13	80	28
P	14	80	29
P	15	80	30
P	16	80	31

Mapping **link** addresses

Link addresses are a little different. Instead of turning on and off brighting and dimming and individual lamp(s) you control groups of devices. One way to help understand links is to think of lighting scenes. One button is pushed and some lights go to full on, some to 50% and others to full off. The relationship of the various lights and their levels is defined as a link. The links are originally set up the UPB software called "Upstart".

The UPB572 has provisions for mapping two separate X10 house codes to as many as 32 individual links each. The X10 Palmpad has capability of controlling all 32 links by using its bank switch at the bottom.

Each of the two link modes is assigned a X10 house code and a UPB NID. Any house code selected is automatically removed from the list of available house codes for direct mode mapping.

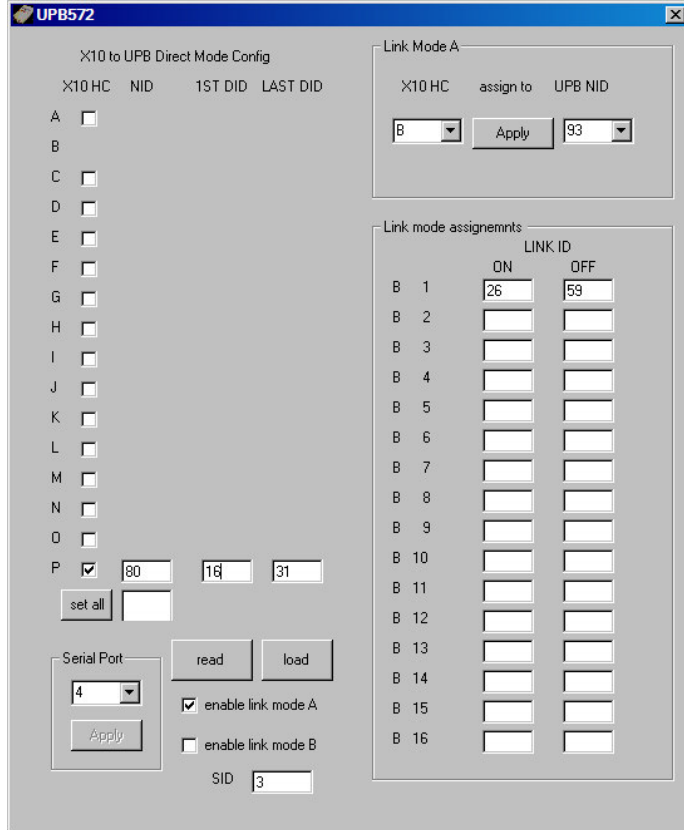
Like before, we will have to make some assumptions to effectively demonstrate the configuration procedure. The following example has only two links and they are as follows;

Name	LID (link ID)
Morning	26
Evening	59

House code "B" is to be used and NID 93 is the location of LID 26 & LID 59.

Only the top two buttons on the Palmpad are to be used. (1 ON & 1 OFF). Pressing any remaining buttons will not do anything.

Link mode mapping example



Assign SID

One more detail is to assign a unique SID number that may be anything between 1 and 250 and is a means of other UPB devices identifying where these commands are coming from.

Done with configuration, now load UPB572

All that is left to do is to load the just completed configuration into your 572. Click on "load" and you are done. You can confirm the load by clicking on "read" and verifying the data. Disconnect the RS232 cable from PC and 572.

Installation

The most important factor in determining an optimum physical location for the 572 is the placement of the antenna. Avoid mounting antenna near metallic items like heating equipment or RF equipment.

The 9VDC supply and the UPB PIM each require an outlet.

- Connect the PIM and UPB572's PIM DB9 connector (the right hand one) together with the supplied cable
- Connect the power supply to the 572 module by means of the small jack identified as "9 VDC".

- Connect antenna and 572 using the furnished coax cable.
- Plug both the power supply and the PIM into a pair of 110v, 60 Hz power outlets.

What happens at power up is the green LED on the 572 starts flashing while it is looking for a PIM. When it finds one, it then sends a command forcing the PIM into the "message" mode.

When the LED remains on steady you have confirmed that a PIM is attached and in the proper mode.

Verify operation

Verify proper operation by transmitting an X10 RF B1 ON and observing UPB link 26 be activated (using the above example).

Troubleshooting with the Status LED

The UPB572 features a status LED visible from the bottom on the module just the right of the antenna jack.

No LED (configuration mode)

This is normal during the set up.

No LED (operational mode)

The UPB572 is not running. Verify power supply is the correct type (9VDC, 3.5MM tip positive) and connected.

Steady LED

Everything is working okay. No incoming RF.

Regular flashing LED

No PIM detected. Verify RS232 DB9 cable connected between 572's PIM DB9M jack and a PIM. Verify PIM is functional.

Single LED blink, 1 – 2 seconds OFF

Normal operation.

Incoming RF detected with a house code and unit code that is enabled and mapped to a UPB function.

A UPB signal is transmitted over the power line.

LED blinks OFF 3 – 6 times very fast

Incoming RF detected but no mapped UPB address match. No signals will be sent out over power line.