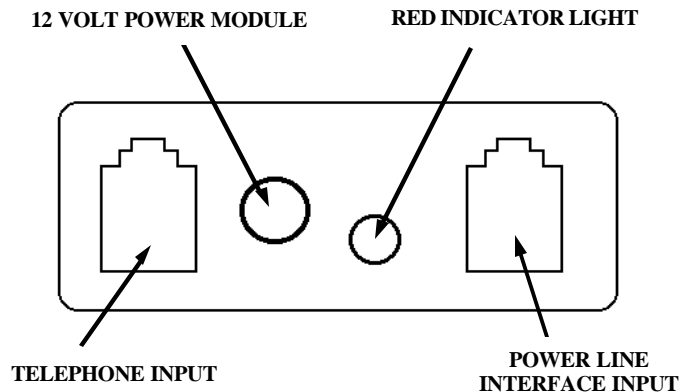


- 2 Connect the provided phone cord from any telephone RJ11 wall jack to the jack on the TELEMASTER marked "TELEPHONE LINE".
- 3 Plug the POWER LINE INTERFACE module into any functioning 120 volt AC outlet. Connect the provided cord from the module to the jack on the TELEMASTER marked "TO POWER LINE



The red indicator (LED) lights on both the POWER LINE INTERFACE and the TELEMASTER serve to show that power is present. When a valid X-10 signal is either being sent by the TELEMASTER or being received from another source, the red light on the POWER LINE INTERFACE will blink OFF.

When connected correctly to the telephone line and the telephone is off-hook, pressing a touch-tone button on the telephone will cause the red light on the TELEMASTER to blink OFF. If it does not, TELEMASTER is connected to either the wrong telephone line or a pair of "dead" wires. TELEMASTER is connected to the telephone line via the center two wires (colored red and green) of the 4-wire silver telephone cord.

#### CAUTION

Be careful when using your TELEMASTER to transmit X-10 codes to modules controlling appliances. If you use it to turn on an empty coffee pot, for example, you could burn up it's heating element, and even create a fire hazard. It would be even more dangerous if you used remote control to turn on an electric heater that had clothing draped upon it.

**USE YOUR TELEMASTER CAREFULLY**

# TELEMASTER

FOR TELEPHONE X-10 CODE TRANSMITTING

## Instruction Manual

#### FEATURES:

- **TRANSMITS UP TO 256 X-10 CODES**
- **REMOTE DIMMING**
- **HEARING IMPAIRED RING DETECTION**
- **CONVERTS TELEPHONE INTO AN INTERCOM SYSTEM (WITH ADAPTER KIT)**
- **SECURITY CODE PROTECTION**
- **ANSWERS THE PHONE IN FOUR DIFFERENT WAYS**



# TELEMASTER

**TELEMASTER** turns any telephone into an X-10 transmitter and/or intercom system (adapter kit needed for intercom system). Calling from outside one's home requires a four-digit security code entry for protection, but from inside the home no security code is required. TELEMASTER can transmit all 256 X-10 codes; but in smaller X-10 systems, the number of telephone buttons needed to be entered can be reduced by choosing one of three other methods of X-10 transmission (9, 90 or 160 code selection).

FEDERAL COMMUNICATIONS COMMISSION RADIO and TELEVISION INTERFERENCE STATEMENT FOR a CLASS 'B' DEVICE  
This equipment generates and uses radio frequency energy and if not installed and used properly, in accordance with the installation instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class 'B' computing device in accordance with the specifications in Subpart B of FCC Rules and Regulations (as outlined in the Code of Federal Regulation, Title 47), which are designed to provide reasonable protection against interference in residential installation.  
TO THE USER: if this equipment causes interference to radio or television reception, which can be determined by turning the equipment off and then on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into a different outlet so that the equipment and receiver are on different branch circuits.
- Consult an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible compliance could void the user's authority to operate the equipment.

## USING YOUR TELEPHONE AS AN INTERCOM

The intercom code is a reserved code (see table below) used to convert your telephone into an intercom system. When this code is entered, TELEMASTER disconnects your telephones from the telephone company's central office and allows conversation to take place without hearing a dial tone or operator messages.

An adapter kit to the TELEMASTER is needed and must be connected on the incoming telephone lines prior (upstream) to any telephones to be used as intercom telephones. See the installation manual that comes with the adapter kit for more details.

CODE SELECTION	RESERVED INTERCOM CODE
9	A9
90, 160, 256	J9

A 'ON' command activates the intercom system, while a 'OFF' command deactivates it (the appropriate X-10 codes are also sent).

Example: If the 90 CODE SELECTION is used, sending a 'J9 ON' code (pressing '\*09' on the touch tone buttons) will activate the intercom system.

## DISABLING THE TELEMASTER

- **DISABLING INCOMING CALLS:** When **Dip Switches 3 and 4** (located inside TELEMASTER) are in the OFF position, TELEMASTER will not answer any incoming calls. If another device answers the call, TELEMASTER will still monitor the line for any touch-tones and respond accordingly. TELEMASTER is **factory preset** to answer incoming calls in 50 seconds.
- **DISABLING X10 TRANSMISSIONS:** Pressing '###' disables the TELEMASTER from sending any X-10 codes; pressing '\*\*\*' or hanging up, enables it again. In both cases 5 confirmation beeps will be heard. This feature is useful when touch-tones are used to send information (such as in banking services) and X-10 code transmissions are not desired.

## INSTALLATION :

- 1 Plug the 12 volt power module into any functioning 120 volt AC outlet and it's cord end into the jack hole marked "POWER: 12V DC" on the TELEMASTER.

HOOK. This feature can be enabled or disabled by pressing ‘\*\*15’ or ‘##15’ respectively. This feature is initially disabled upon power-up.

**NOTE:** On rare occasions, the human voice will simulate touch-tones and even cause X-10 codes to be transmitted. If this is ever a problem, the problem can be reduced by switching to a higher CODE SELECTION or even disabling the TELEMMASTER by pressing ‘###’, see the section: **DISABLING THE TELEMMASTER**.

**TRANSMITTING X-10 CODES FROM OUTSIDE THE HOME**

TELEMMASTER can transmit X-10 codes within your home by calling from any telephone in the world. Transmitting X-10 codes from a telephone outside the home uses the same procedure as described above (from inside the home) except that a four-digit security code needs to be entered first before access is granted. The security code is printed on the underside label of the TELEMMASTER. TELEMMASTER requires this security code any time it receives a 'ring signal' on the telephone line.

**EXAMPLE:**

- 1 From any outside phone, call the telephone number that TELEMMASTER is connected to. If TELEMMASTER answers, it will respond with 5 confirmation beeps.
- 2 Then enter your four-digit security code. When the correct code is entered, TELEMMASTER will again respond with 5 confirmation beeps.
- 3 Now X-10 codes can be transmitted as you would from inside the home described in the section: **TRANSMITTING X-10 CODES FROM INSIDE THE HOME**.

**FOUR WAYS TO HAVE TELEMMASTER ANSWER THE PHONE:**

When your telephone receives an incoming call and no other device answers the telephone (see note below), TELEMMASTER will answer the telephone call according to the setting of **Dip Switches 3 and 4** in the following chart:

The “Call Twice” feature is used usually when a phone line is connected to an external Voice Mail service that answers the phone in four rings or so.

**NOTE:** If another device such as an answering machine is connected to the same line

ANSWERING METHODS	DIP SWITCHES:	1	2	3	4
Telemaster will <b>not</b> answer at all.		N/A	N/A	<b>OFF</b>	<b>OFF</b>
Telemaster will answer in 10 seconds.		N/A	N/A	<b>OFF</b>	<b>ON</b>
Telemaster will answer in 50 seconds ( <b>Factory Pre-set</b> ).		N/A	N/A	<b>ON</b>	<b>OFF</b>
<u>Call Twice</u> : call once and hang up after <b>one</b> ring; wait at least 6 seconds but no more than 25 seconds and then call again. Telemaster will then answer after one ring.		N/A	N/A	<b>ON</b>	<b>ON</b>

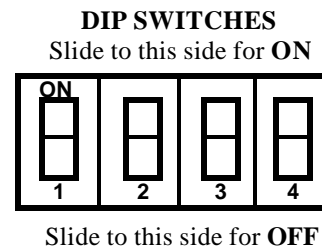
as the TELEMMASTER and answers an incoming call prior to TELEMMASTER, TELEMMASTER will still monitor the telephone line for touch-tones. After the answering machine’s message is through, enter in the four-digit security code before using the telephone to transmit X-10 codes. Once the correct security code is entered, TELEMMASTER will respond with 5 confirmation beeps and then ‘hold’ the telephone line; and will continue to ‘hold’ it even if the answering device has already ‘released’ the line. TELEMMASTER will ‘hang up’ the telephone line 20 seconds after the last touch-tone is detected.

# CONTENTS

TRANSMITTING X-10 CODES FROM INSIDE THE HOME	3
TRANSMITTING DIM, BRIGHT AND MACRO CODES	5
OTHER FEATURES	5
TRANSMITTING X-10 CODES FROM OUTSIDE THE HOME	6
FOUR WAYS TO HAVE TELEMMASTER ANSWER THE TELEPHONE	6
CONVERTING YOUR TELEPHONE TO AN INTERCOM	7
DISABLING THE TELEMMASTER	7
INSTALLATION	7

**TRANSMITTING X-10 CODES WITHIN THE HOME:**

Up to 256 X-10 codes can transmitted by TELEMMASTER; but the higher the number of codes available, the more telephone buttons need to be pressed. Four methods of X-10 transmission are available depending on the size of your X-10 system. The position of **Dip Switches 1 and 2** located inside TELEMMASTER determine which code selection (9, 90, 160 or 256) is operational. To change these dip-switches, disconnect the power cord , then lift off the cover by removing the 2 screws underneath.



CODE SELECTION	DIP SWITCHES			
	1	2	3	4
9 CODES	<b>OFF</b>	<b>OFF</b>	N/A	N/A
<b>90 CODES</b> (Factory Pre-set)	<b>OFF</b>	<b>ON</b>	N/A	N/A
160 CODES	<b>ON</b>	<b>OFF</b>	N/A	N/A
256 CODES	<b>ON</b>	<b>ON</b>	N/A	N/A

## 9 CODE SELECTION:

By pressing **2** buttons on any touch-tone telephone, up to **9** X-10 devices can be controlled. In this selection, all X-10 codes are transmitted on **house code A**.

- 1 First press either the '\*' button for 'ON' or the '#' button for 'OFF'.
- 2 Then press any number 1 to 9 for each **number code** respectively.

Example: if an 'A3 ON' code is to be sent, press '\*3'.

Pressing '\*0' sends an 'ALL LIGHTS ON' signal.

Pressing '#0' sends an 'ALL UNITS OFF' signal.

## 90 CODE SELECTION (Factory Pre-set Position):

By pressing **3** buttons on any touch-tone telephone, up to **90** X-10 devices can be controlled, on **house codes A-J** and **number codes 1-9**.

- 1 First press either the '\*' button for 'ON' or the '#' button for 'OFF'
- 2 Then press any number 1 through 0 for **house codes A-J** respectively.
- 3 Then press any number 1 through 9 for each **number code**.

Example: if an 'B3 ON' code is to be sent, press '\*23'.

Pressing '\*20' sends an 'ALL LIGHTS ON' code on **house code B**.

Pressing '#20' sends an 'ALL UNITS OFF' code on **house code B**.

## 160 CODE SELECTION:

By pressing **4** buttons on any touch-tone telephone, up to **160** X-10 devices can be controlled, on **house codes A-J** and **number codes 1-16**.

- 1 First press either the '\*' button for 'ON' or the '#' button for 'OFF'.
- 2 Then press any number 1 through 0 for **house codes A-J** respectively.
- 3 Then press **two** numbers: 01 through 16 representing **number codes 1-16** respectively.

Example: if a 'B3 ON' code is to be sent, press '\*203'.

if a 'B12 OFF' code is to be sent, press '#212'.

Pressing '\*200' sends an 'ALL LIGHTS ON' code on **house code B**.

Pressing '#200' sends an 'ALL UNITS OFF' code on **house code B**.

## 256 CODE SELECTION:

By pressing **5** buttons on any touch-tone telephone, up to **256** X-10 devices can be controlled, on **house codes A-P** and **number codes 1-16**.

- 1 First press either the '\*' button for 'ON' or the '#' button for 'OFF'.
- 2 Then press **two** numbers representing **house codes A-P**: On your telephone, the alphabet is split into 3-letter groups on 8 touch-tone buttons. The first of the two numbers pressed represents a particular 3-letter group while the second represents which letter of that group is chosen. For example, press 2-3 for house code 'C'.
- 3 Then press **two** numbers: 01 through 16 representing **number codes 1-16** respectively.

Example: if a 'C3 ON' code is to be sent, press '\*2303'.

if a 'M12 OFF' code is to be sent, press '#6112'.

Pressing '\*2200' sends an 'ALL LIGHTS ON' code on **house code B**. Pressing '#3200' sends an 'ALL UNITS OFF' code on **house code E**.

## TRANSMITTING DIM, BRIGHT AND MACRO CODES

If a light is connected to or powered by a X-10 LAMP MODULE, the telephone can be used to dim or brighten the lamp (**your telephone must be able to produce a continuous tone as long as the button is pressed**). This is accomplished by first sending an 'ON' code to the lamp module but not releasing the last button pressed. This will cause the lamp to dim until the button is released. To brighten (using the 9/90 Code Selection), press the same button again within one second; the lamp will brighten while the button is pressed. You may switch between bright and dim modes as many times as you wish by pressing and releasing.

**For example** (using the 90 Code Selection), to dim a lamp module set to A6, simply press '\*16' and continue to press the '6' key until the desired dimness level is achieved. To brighten, release and within one second press the '6' key again, hold until the desired brightness level is achieved. Note: in the 160 and 256 code selection, the last two buttons have to be pressed again to switch from dim to bright; then hold down the last of these two until the desired dimness or brightness level is achieved.

## **OTHER FEATURES:**

When controlling several unit codes on the same X-10 house code, you may use the following short cut: Press '\*' or '#' (for ON or OFF), the house code, **then each unit code in succession**. For example, to turn on X-10 codes B5, B6, B8 & B9 (in the 90 CODE SELECTION), simply press '\*2 5689'. In the 160 and 256 code selection, the last two numbers have to be pressed for each unit code. For example, to turn on X-10 codes B5, B6, B12 and B14 (in the 160 CODE SELECTION), press '\*22 05 06 12 14'.

If your telephone has a speed dialing memory, a number of X-10 codes can be sent rapidly by storing multiple codes in the telephone's memory and then pressing the telephone's memory button. This procedure is known as sending a **macro**. Since most telephones can dial touch-tone codes faster than X-10 codes can be transmitted, TELEMASTER stores these excess incoming codes in its own memory until the appropriate time to be transmitted. TELEMASTER can store in its memory up to eight codes at a time.

For the **hearing impaired**, P16 ON and OFF X-10 codes are sent each time the telephone rings. Lights connected to X-10 lamp modules set to P16 can provide a visual indication that the telephone is ringing. This feature can be disabled by pressing '##16' or enabled by pressing '\*\*16'. Upon power-up, this feature is initially enabled.

ON/OFF HOOK DETECTION: A P15 ON X-10 code is sent each time the telephone goes ON-HOOK; similarly, a P15 OFF X-10 code is sent each time the telephone goes OFF-