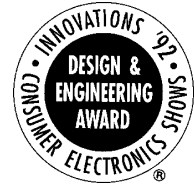


INSTALLATION INSTRUCTIONS

710-00 FONE LINK™



The Fone Link allows any cordless or wired telephone to function as a remote controller for IR controlled audio/video components. Used with cordless phones, it provides a control system not affected by sunlight or any other infrared interference. The Fone Link contains an infrared signal learning microprocessor and is connected between the cordless or wired phone and the phone line.

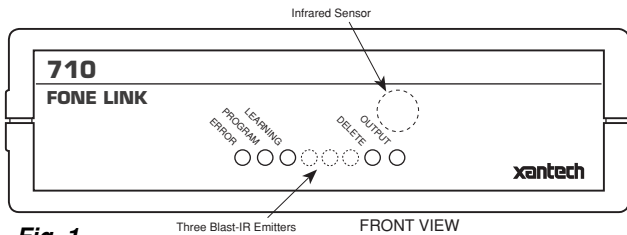


Fig. 1

FRONT PANEL

The front panel of the Fone Link is made of acrylic plastic. It should be cleaned with a soft cloth as it scratches easily. Behind the panel are five red LEDs (light emitting diodes), three powerful Blast IR emitters and an infrared sensor.

RED LED INDICATORS

PROGRAM - Lights when the PROGRAM button on the rear panel is pressed.

LEARNING - Lights when any key on the telephone is pressed.

ERROR - Lights when an error occurs or extended memory is required in the learning process or when trying to send an unprogrammed command.

DELETE - Blinks on and off when the DELETE button on the rear panel is pressed.

OUTPUT - Lights to indicate when infrared commands are being sent in response to pressing telephone keys.

BLAST IR EMITTERS

Three Blast IR Emitters, for direct IR transmission to the controlled equipment, are located between the LEARNING and the DELETE LEDs. See Fig.1.

INFRARED SENSOR

The Infrared Sensor is located about one-half inch above the OUTPUT LED. See Fig.1.

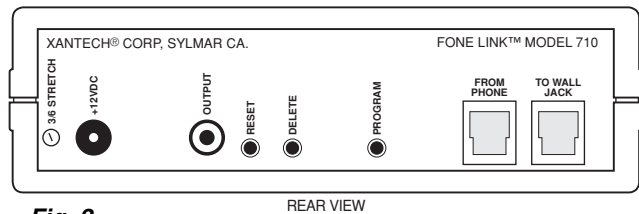


Fig. 2

REAR PANEL

The following connectors, push buttons and controls are located on the rear panel:

3/6 STRETCH control

Used to set the duration of the extended output pulses generated when the 3 or 6 keys on the telephone are pressed.

+12VDC jack

The power supply (included) plugs in here.

OUTPUT jack

External infrared emitters or Xantech connecting blocks can be plugged-in here. **NOTE:** When a mini jack is inserted into the OUTPUT jack for connection of these devices, the internal Blast IR emitters are automatically turned off.

BUTTONS (Use pencil point or toothpick)

RESET - erases all stored commands.

DELETE - erases only selected command.

PROGRAM - begins learning sequence.

TELEPHONE JACKS

FROM PHONE

The cordless (or wired) telephone plugs-in here.

TO WALL JACK

The cord from the telephone wall jack plugs-in here.

QUICK START

PREREQUISITES

A cordless (or wired) telephone and an active telephone line are required to use the Fone Link. The Fone Link is supplied with a plug-in power supply. Do not plug the power supply into the wall outlet until instructed to do so. In order to program the Fone Link, you will need the hand-held remote controllers for each of the devices you wish to control.

INFRARED

Infrared light used for remote control acts much the same as visible light, except that you can't see it. It will pass through some plastic windows which appear to be almost black to the eye. Infrared travels in straight lines and is reflected by most of the same surfaces that reflect visible light. If you use the Blast IR output from the front panel, treat the front of the Fone Link as you would a spot light. To illuminate an infrared window on a piece of audio/video equipment, the Fone Link must point towards it.

PHONE

Test the cordless or wired phone that you intend to use with the Fone Link by plugging it into a telephone wall jack. Call someone and have them call you back to ensure that it is working correctly.

CONNECTIONS

If you have plugged the power supply into the wall, unplug it now! Unplug the cordless phone from the telephone wall jack and plug it into the jack on the rear panel of the Fone Link marked "FROM PHONE", as shown in Fig 3. Plug one end of the telephone cord supplied with the Fone Link into the jack on the rear panel marked "TO WALL JACK" and the other end of the cord into the telephone wall jack. Plug the cord connected to the power supply into the jack on the rear panel marked "+12VDC".

TURN IT ON

Hang-up the phone. Plug the power supply into a wall outlet. The five red LEDs (ERROR, PROGRAM, LEARNING, DELETE and OUTPUT) on the front of the Fone Link should be off. If any of them are on, unplug the power supply from the wall, count to ten, and plug it in again. Repeat this process until all of the LEDs are off.

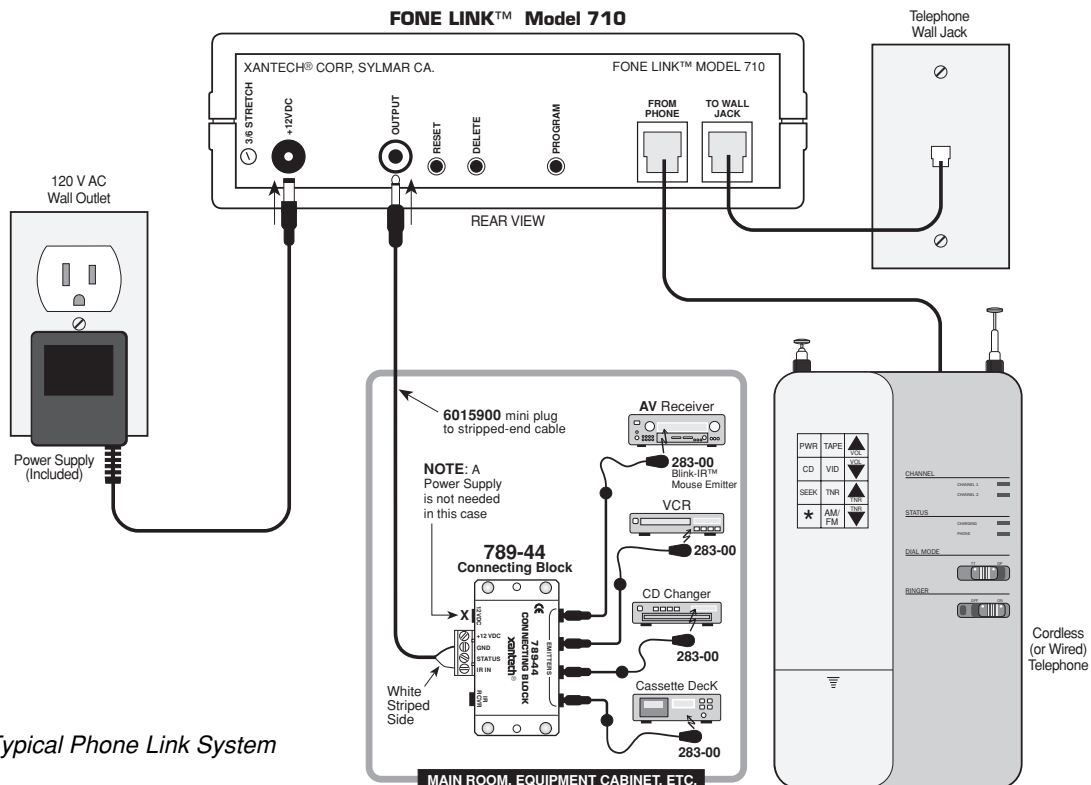


Fig. 3 A Typical Phone Link System

CALLING AND ANSWERING

To use the cordless telephone to make calls or to answer calls, do everything as you would do without the Fone Link -- except add the asterisk (*) key to the routine. When you are ready to dial, press the asterisk (*) key first -- this connects you to the telephone line and gives you a dial tone. When you answer the telephone, press the asterisk (*) key to connect to the calling party.

PROGRAMMING

Before programming the Fone Link, press the RESET button on the rear panel. This will clear any data stored during factory testing. Do not push this button again unless you wish to erase ALL of the programming information which you have entered. There is no way to restore this information except by re-programming.

1. **Activate the cordless phone** (go "off-hook" with a wired phone).

Since cordless phones differ with brand and model, do what is necessary in order to make a call, but do not "dial". You should not hear a dial tone.

2. **Press the PROGRAM button** on the rear panel of the 710 Fone Link.

The **PROGRAM** LED on the front panel will light up.

3. **Place the hand-held remote controller three or four inches from the front of the Fone Link**, pointing directly at it.

The Fone Link must receive the infrared output from the hand-held remote controller in order to memorize its commands.

4. **Press and hold the button key on the phone that you wish to program** [any key except the asterisk (*)]. The **LEARNING** LED on the Fone Link will light up.

5. **Press and release the button on the remote controller that you wish to store.**

The **PROGRAM** LED on the Fone Link will flash while it is storing the information. When the information has been stored, the **LEARNING** LED will turn off.

6. **You can now release the phone button key.**

You have now programmed one function; one telephone button key has been programmed to send the same infrared command as the button which you had pressed on the hand-held remote controller. Steps 4 through 6 must be repeated for each command that you wish to store. Eleven (11) different functions may be stored in this manner.

NOTE: The asterisk (*) key cannot be programmed.

7. **After programming the last function, press the PROGRAM button again on the Fone Link.**

The **PROGRAM** LED will turn off. This takes the Phone Link out of the programming mode.

TESTING THE SYSTEM

- Activate the cordless phone.
- Press any of the telephone keys which you have programmed.
- The **OUTPUT** LED should flash and the audio/video equipment should execute the command.

GOING "ON HOOK" AND "OFF HOOK"

If a telephone call comes in while you are using the cordless telephone for remote control, the telephone cannot ring in the usual manner. Instead, the ring will be heard in the telephone earpiece.

- Answer the call by pressing the asterisk (*) key on the phone. You will hear the calling party. This is called "OFF-HOOK".
- When the call is completed, go "ON-HOOK" by pressing the asterisk (*) key again if you want to return to IR control operations. If you do not want to continue IR control of your system, simply turn off the cordless phone (or hang-up a wired phone).

ADVANCED FEATURES

THE ASTERISK (*) KEY

The asterisk (*) key cannot be programmed. Its only purpose is to access the telephone line. It may be pressed at any time, either before or after remote control commands are sent.

3/6 STRETCH CONTROL

Although most cordless telephones will continue to send dialing tones (DTMF pulses) as long as keys are pressed, some send only a very short burst. This short burst can be a nuisance when you are trying to send a **volume-up** or **volume-down** command. You would have to send many bursts by repeatedly pressing and releasing the key to make a significant change in the volume level. The Fone Link includes a feature which "stretches" the commands sent by the 3 and 6 keys.

- Adjust the stretch by inserting a very small screwdriver into the hole and slot marked "**3/6 STRETCH**" on the rear panel. Turn it until the command length is satisfactory.
- Do not force the control, it rotates less than one turn.
- We suggest that you program the 3-key for the volume-up command and the 6-key for the volume-down command to take advantage of this feature.

OUTPUT Jack

Often, it is either undesirable or impractical to use the Blast IR output from the front of the Fone Link to operate the audio/video equipment directly.

- The 3.5mm mono mini OUTPUT jack on the rear panel permits the use of single or dual Xantech external infrared emitters (i.e., Models 282-00, 283-00, 284-00 and 286-00 Mini-Emitters).
- The 3.5mm mono mini plug on the single or dual mini-emitter is plugged directly into the OUTPUT jack.
- The mini-emitters are attached directly over the infrared window on the controlled audio/video device in accord with the installation instructions that come with the emitters.
- The OUTPUT jack has the same electrical characteristics as the infrared receivers in Xantech's broad line of remote control extension systems.
- The OUTPUT jack also allows the connection of Xantech Connecting Blocks for larger numbers of emitters or devices, as shown in Fig 3.

NOTE: When a mini plug is inserted into the OUTPUT jack for connection of these devices, the internal Blast IR emitters are automatically turned off.

ERROR LIGHT AND EXTENDED MEMORY

Some remote control codes require more memory than is normally allocated by the Fone Link. When you try to program one of these codes, the **PROGRAM LED** will blink in the normal manner but it will be followed by a very short flash of the **ERROR LED**. The flash of the error LED is so short that you may not notice it the first time it occurs. If this happens, no command will be stored in memory.

- To store these commands, you must go through steps 4 through 6 (under PROGRAMMING, previous page) twice, when programming.
- The Fone Link will allocate four-times as much memory on the second pass as it did on the first.
- If one command from a hand-held remote controller requires extended memory, the other commands from that controller will usually require it also.

DELETE BUTTON

The **DELETE** button on the rear panel can be used to erase a learned command from any individual key. Proceed as follows:

1. The **PROGRAM LED** on the front panel must not be lit. If it is, press the **PROGRAM** button.
The **PROGRAM LED** will turn off.

2. Press the **DELETE** button.
The **DELETE** LED will blink continuously.
3. Activate the cordless phone (pick-up a wired phone, if used).
4. Press the key on the phone which has been programmed with the command that you wish to erase.
The command is erased and the **DELETE** LED turns off.

You may now re-program the key.

SHORT COMMANDS

Some commands, such as Channel Up and Channel Down, may skip channels or cause other multiple actions if memorized at full length. If a button on the original hand-held remote controller requires only a short tap for its command to be properly executed, and results in multiple actions if the button is pressed too long, only a short burst of it should be stored in the Fone Link. Step 5, under PROGRAMMING, should be modified as follows:

5. **Press the button on the remote controller that you wish to store and hold it only as long as you usually press it when controlling the audio/video equipment directly.**

The **PROGRAM** LED on the Fone Link will flash while it is storing the information. When the information has been stored, the **LEARNING** LED will turn off.

NOTE: It may be necessary to experiment with the length of time you press the remote controller button to obtain the desired result.

TEMPLATE AND LABELS

Adhesive backed templates and a sheet of adhesive backed labels are provided with the Fone Link to remind you of what the telephone keys do as remote control buttons.

- Apply the template as illustrated in Fig. 4.
- Cut out the word and icon labels and stick them in their proper positions on the template

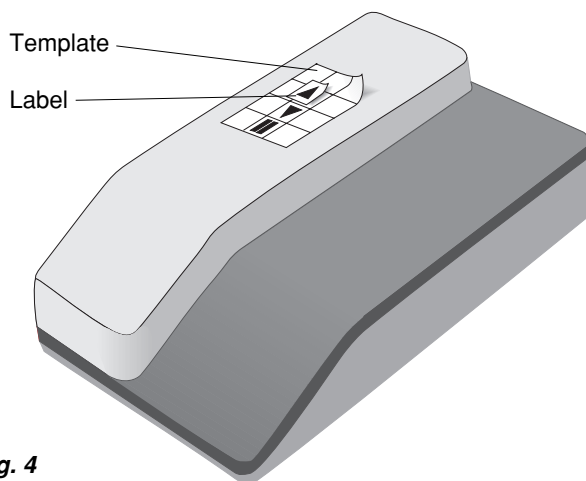


Fig. 4

TROUBLESHOOTING

If the Fone Link is used with an old, telephone company supplied, wired telephone set, and you experience trouble with the keypad, call us. We will send you a cable which will solve the problem.