icebox flipscreen

Installation Manual

Version 2

beyond™

Westinghouse™

Icebox, LLC
Seattle, WA

DOLBY DIGITAL

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Getting Started

The first question new iCEBOX owners need to ask is,"Where should I install my iCEBOX?"

The installer and home owner should discuss the question to come up with a mutually satisfactory solution. The choice of where to locate the iCEBOX is a very important one. The iCEBOX is designed for the kitchen environment. To get the maximum benefit from the product on a daily basis, consider the following details:

- Most kitchens have a "work triangle" as defined by the sink, the refrigerator and the stove. This is where people typically spend most of their time while in the kitchen. Consider how the unit will most easily be viewed, taking into account that the display can pivot 60 degrees to either side of center.
- How much light from sources such as windows will fall directly on the screen? Uncontrollable light flooding the screen can make it difficult to view content on the iCEBOX screen.
- Don't install the iCEBOX above a stove, a coffee maker, sink, dishwasher vent or any other location that will subject it to high heat and/or humidity.
- The installer will need to get the necessary wiring to the unit. Careful consideration needs to be given to how the installer plans to run and conceal the wires. Consideration should be given to suitable locations for the junction boxes where wires will terminate behind the unit.

Before beginning the installation of the iCEBOX the installer should:

- Read through all installation instructions.
- Make sure all peripheral connections are available at the installation location (TV cable, electrical power, connections to security locks, video monitor, phone line, or Broadband).
- Seek additional information from other sections of this document including *Internet Connection Information* and *Video Mode* sections.

Tool checklist

The following tools may be necessary for installing the iCEBOX:

- ❏ Drill and drill bits
- ❏ Standard and Phillips head screwdrivers
- ❏ Small standard screwdriver
- ❏ Wallboard saw or knife
- ❏ Center punch or awl
- ❏ RJ45/RJ11 crimping tool
- ❏ RG6 - f connector - stripping/crimping tool
- ❏ Masking tape
- ❏ Tape measure
- ❏ Pliers
- ❏ Zip ties

Note: Icebox, LLC does NOT include mounting screws with the iCEBOX. While we recommend the use of six 5/16" T-nuts and screws, it is impossible to predict the length of screws needed for a particular customer's installation.

WARNING: Installation of this device should be performed by a professional. Proper installation requires ensuring that the supporting unit can bear the weight of the device, that all mountings are secure and that electrical and telephone wiring meets local building codes, and that all mounting instructions are followed. IMPROPER INSTALLATION COULD LEAD TO PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH. Icebox, LLC disclaims any and all liability for damages and/or injury resulting from improper installation.

1. Route the Cables

The following is the full list of cables that may need to be run to the installation site. Each installation site will require different configurations depending on how the iCEBOX will be used.

- RG6 cabling with a coaxial cable connector (F-style) for the cable TV service.
- Telephone wire with the RJ11 connectors for Dial-Up Internet access.
- CAT 5 wire with an RJ45 connector for Ethernet connection.
- S-Video cable
- Analog signal cable, left and right channel with RCA connectors for audio input or output (these are separate from the connectors for the internal speakers).
- RCA Composite video cable
- AC power cables with a ground should be routed to within 3 ¾" of the top of the installation site to hide cables from view.

Note: If you are installing the iCEBOX in a site that has structured wiring, see *Internet Connection Information* for more information.

Also see *4. Connectivity Template* on page 3 for suggested termination layout.

2. Prepare the Site

The two most common installation configurations for the iCEBOX are shown in Figures 1 and 2. The minimum space required is also shown.

It is advisable that the iCEBOX installer consult with the kitchen cabinet installer to ensure that the site is properly prepared prior to the installing of the iCEBOX.

Selecting a suitable site for installation:

- Avoid areas where the iCEBOX would be exposed to extreme heat or moisture.
- Allow a full 11" of horizontal space (front to back), accounting for backsplash and trim if necessary.
- The mounting surface must be flat and level.
- The cabinet material must be at least ½" thick and able to support 30 lbs.
- When installing the unit, allow sufficient vertical space above the countertop to accommodate screen in lowered position. The minimum distance required is 13".
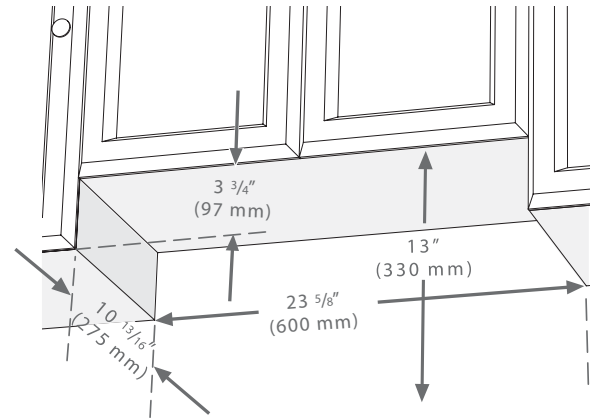
FIGURE 1. Shown in a custom built nook
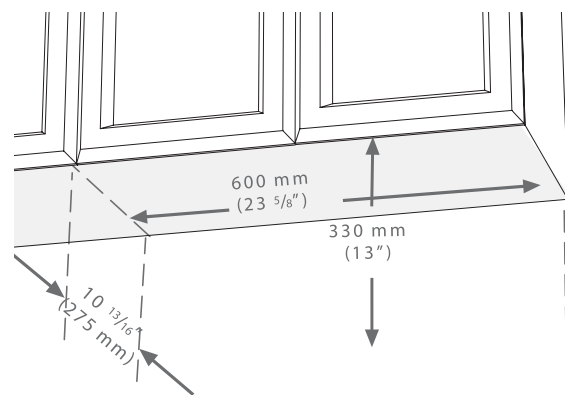
FIGURE 2. Shown under a standard flat cabinet surface

3. Unpack Box

Remove all items from the shipping and accessories boxes. Items included with these instructions:

- iCEBOX unit
- Washable, wireless keyboard
- Two (2) AA batteries for keyboard
- Washable, wireless remote
- Two (2) AAA batteries for remote
- Two (2) Styli
- AC Power Cord
- Right Angle F connector.

- PCMCIA Ethernet Card
- Mounting Bracket
- Mounting Template
- Connectivity Template
- Installation Manual
- Owner's Manual (including Warranty)
- Quick Start Guide
- Remote and Keyboard Guide

4. Connectivity Template

The Connectivity Template that has been included with the iCEBOX suggests how the unit could be wired under ideal conditions. It enables the installer to determine ahead of time where to place the junction boxes and outlets.

Keep in mind, however that the existing wall contains structural studs. The location of these studs will dictate what kind of junction boxes you can use and where they can be placed. There is no guarantee that the layout suggested by the Connectivity Template will work "as is" for your particular situation.

The template goes on the wall area behind the location for the unit See Figure 3. It should be located such that the center line of the template (see marking on template) is aligned with the exact center line of the iCEBOX unit as noted on the Installation Template. Note that the images on the Connectivity Template include the outline of the iCEBOX unit itself.
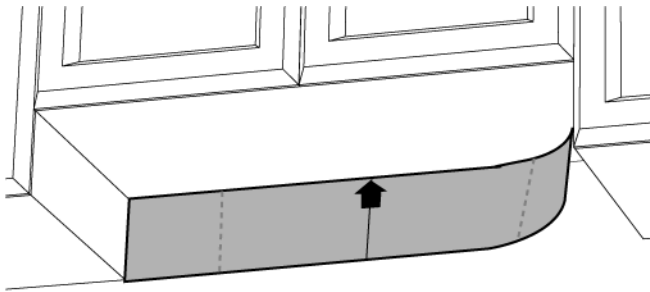

FIGURE 3. Positioning the connectivity template

The template can be held in place with masking tape. Make sure that the template is right side up on the wall (look for the Top arrow).

Option A

Based on the Connectivity Template the following items are recommended for the actual wiring of an iCEBOX unit:

Recommended Products
- Two Siemon Home Recessed Wall plates – From the Angled MaxTM Tool less line – Part number MX-TFP-S-06-25
- Five recessed RCA connectors for the audio and video connections - Siemon Home part number MX-RC-25
- One F connector – for radio and television reception - Siemon Home part number MX-FA-25
- One RJ45 connector for the Ethernet connection – Siemon Home part number MX5-F25
- One RJ11 connectors for a Dial Up connection – Siemon Home part number MX3-F25
- Grounded Clock hanger receptacle – Pass & Seymour part number S3713 or S3833

Option B

The installer may need to take an approach that is a variation on the approach shown on the Connectivity Template. In some circumstances it may be more desirable to use the following product:

- Leviton 80704W wall plate - fits to a single gang receptacle and has a 1 -3/8 inch diameter hole in the middle. (All terminal cables can be run directly out of the hole in the wall plate.)

5. Position the Bracket

1. Position the Mounting Template in the desired location (See Figure 4).
   - If the bottom surface of the kitchen cabinet (where the bracket is to be mounted) is recessed from the bottom of the kitchen cabinet frame, you will need to bring the bracket and the cabinet into alignment. This should be done using furring strips at the locations of the mounting screws.
   - For reasons of aesthetics, also note where the bottom of the iCEBOX unit itself will be when the unit gets installed into the bracket. In cases where the unit is installed into a custom nook, the bottom of the iCEBOX should align with the bottom surfaces of the adjacent kitchen cabinets.
   - Using the template, make sure that the bracket will be mounted such that the vertical face of the iCEBOX unit will be flush with or just slightly recessed back from the vertical face of the cabinets.
   - Verify that there is enough clearance in the rear for electrical/electronic connections.
2. Tape the Mounting Template in position then mark the locations of the 6 mounting holes. Use an awl or nail to create a center mark in each mounting hole. Remove the template.
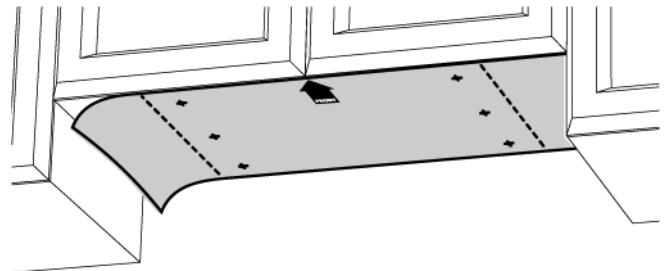

FIGURE 4. Positioning the mounting template

3. Remove the mounting bracket from the top of the Flip-Screen unit by loosening the two screws at the back of the unit using a screwdriver.

4. We recommend installing the mounting bracket with six 5/16" T-nuts and screws (See Figure 5). Seat the screws firmly against the bracket, but do not overtighten.
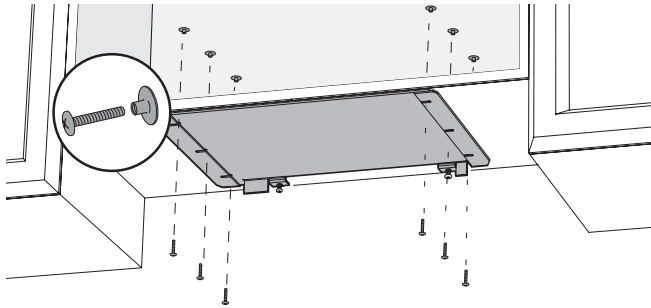

FIGURE 5. Installing the mounting bracket

6. Mount the iCEBOX

1. Install the iCEBOX onto the mounting bracket taking care to align the guide rails on the bracket with the rails on top of the iCEBOX (See Figure 6-A). Slide the unit about half way back on the rails.

2. Before securing the unit, plug the cables into the appropriate connectors as indicated (See Figure 8).

3. Loosen the two screws on the bracket in order to receive the two slotted tabs along the rear edge of the unit. Slide the iCEBOX unit into the bracket. The tabs should fully engage the pins (See Figure 6-B).

4. Using a screwdriver, tighten the screws on the mounting bracket, alternating between the two screws until the tabs are secure (See Figure 6-C).

5. When installation is complete, the face of the unit should be flush with, or slightly recessed from the face of the cabinets (See Figure 7).
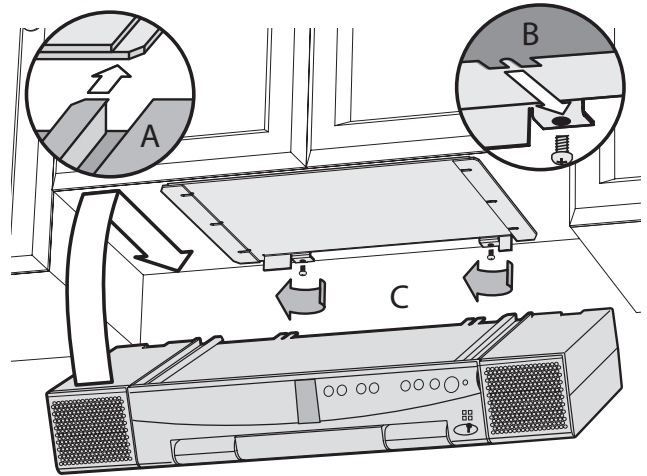

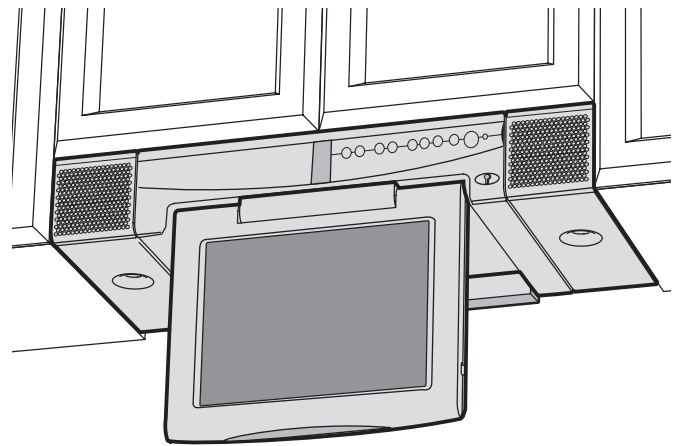FIGURE 6. Attaching the unit to the mounting bracket

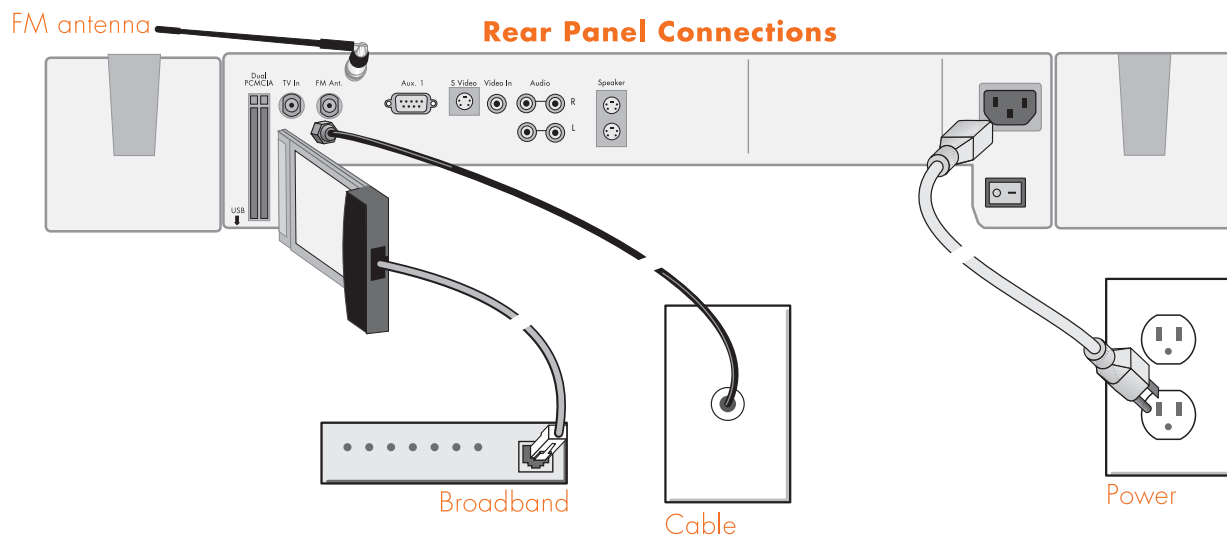FIGURE 7. Completed installation

FIGURE 8. Rear Panel Connections

7. Install the Batteries

Prior to turning on the unit, do the following:

Install Keyboard Batteries:

Using a Phillips screwdriver, remove the 2 large screws in the battery cover on the backside of the keyboard. Then remove the cover and gasket (See Figure 9).

Install two (2) AA batteries (supplied) into the keyboard.

Reinstall the gasket, battery cover, and screws. Install the screws so that the battery cover is firmly seated, but do not over tighten. Make sure that the small rubber washer associated with each screw is properly installed when reattaching the cover.

Install Remote Batteries:

Using a Phillips screwdriver, remove the small screw in the battery cover on the backside of the remote (See Figure 9).

Install two (2) AAA batteries (supplied) into the remote. Install the screws so that the battery cover is firmly seated, but do not over tighten. Make sure that the small rubber washer associated with the cover screw is properly installed when reattaching the cover.
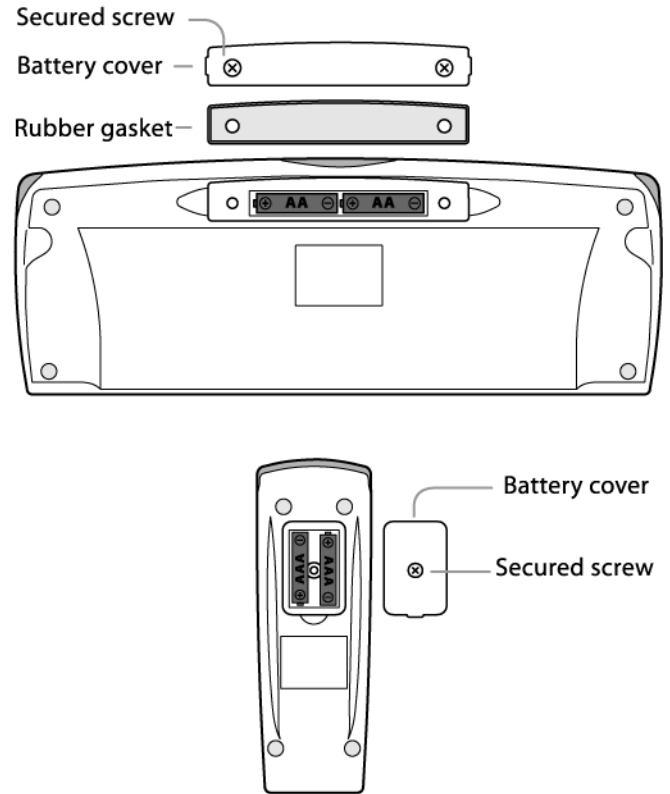
FIGURE 9. Installing the batteries

8. Power Up

The iCEBOX is initially powered on in two steps:

1. Locate the red rocker switch on the back of the unit near the AC power connection. Push this switch to the "on" position to power on the device. (This switch can also act as a "reset" by flipping it "off" then back to "on", but it is intended to always remain in the "on" position unless a reset is necessary.) The unit will boot up in approximately one minute. A steady red light indicates that the device is on and in a "sleep" state.

2. To bring the unit out of "sleep" state, use either the On/Off button on the keyboard or remote or on the front panel of the unit. The unit can be returned to "sleep" state by pushing one of these buttons.

⏻ **On/Off** Button
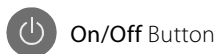
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Internet Connection Information

Making it Simple

The iCEBOX is engineered to take advantage of a Broadband connection and comes with an Ethernet Networking card which can be inserted into the PCMCIA slot on the rear of the device. If your home has a Broadband service installed (cable, satellite or DSL),
and
The Broadband service supports DHCP,
and
The modem is installed and configured,
and
The router (which is optional) is installed and configured,
then
Simply insert the included PCMCIA card, and plug the card into the modem (or router, if used) using an RJ45 network cable. Power up the iCEBOX and push the Internet button on the remote or keyboard. The iCEBOX will connect to your Broadband service using DHCP.

No additional software needs to be loaded onto the iCEBOX FlipScreen for it to work with a Broadband Internet connection.

Detailed Instructions

The iCEBOX supports three types of Internet connectivity using a PCMCIA network interface card (NIC). Depending upon which type of card is used, you can connect using:

- *Wired (Ethernet) Broadband.* Your broadband service may be provided over DSL or cable modem.
- *Wireless (802.11b) Broadband.*
- *Dial-Up Internet Access.* The dial-up Internet services must not require the installation of additional software.

The following instructions cover three basic methods of access - Wired Broadband, Wireless Broadband or Dial-Up.

1. Wired Broadband Setup

If Internet access is provided through a Broadband service using the included Ethernet card, the instructions cover the following scenarios:

- Case #1 - An existing network is in place and an Internet connection is being shared among devices on the network, or;
- Case #2 - The local network is not yet in place.

Note: The Ethernet card can only be used for Internet browsing or access. File transfer, file sharing, print sharing, and other LAN/WAN functions are not supported.

Broadband Case # 1 Existing Network

The first configuration option is connecting your Flip-Screen to an existing network with a shared Broadband connection. These instructions assume you have a router/switch (with an available port) in place on your network that supports multiple internal network IP addresses.

A. Route and Connect Cables

Make sure that the router is connected to the Ethernet card inserted in the FlipScreen. If this is not already done, route a standard Ethernet (category 5) cable with RJ45 plugs between your router and FlipScreen. Take care to connect the iCEBOX FlipScreen to a free Ethernet jack in the back of the router and not to the WAN port. The WAN port is reserved for the Ethernet cable coming from the modem.

B. Configure Broadband Settings

To configure your Broadband Connection Settings:

1. Press the **Internet** button on the keyboard or remote, then press the **Options** button.
2. Choose **Connection Settings** from the Internet Options menu.
3. Select the **Broadband Settings** button. The iCEBOX will display the Broadband Settings screen.

4. If your router/switch (or the modem/router/switch combination) supports DHCP, select the **Use DHCP server** checkbox by pushing the **Go** or **Enter** buttons on the remote or keyboard, or tapping the checkbox on the touch screen.
   If DHCP is not supported, you will need detailed information from your ISP so that you can complete the required fields. This include the IP address, Subnet Mask Gateway Router and the DNS Primary and Secondary numbers that must be entered in the appropriate fields.

5. Choose **OK** to save the information, choose **OK** again.

6. Choose the **Refresh Connection** button, then choose **OK** to exit the Options menu. The iCEBOX should now have be connected to the Internet.

Broadband Case #2 No Existing Network

Assumptions

These instructions assume the following existing conditions:

- The site of the installation has a Broadband (cable, DSL or satellite) Internet connection installed. If this is not the case, please call your Broadband provider to have this service installed.
- The Broadband services provided to the home support DHCP (Dynamic Host Configuration Protocol). If you are not sure, contact the Broadband service provider. *If they do not support DHCP, ask your ISP to provide you with a static IP address and two DNS numbers.*
- It is assumed that the Broadband provider has supplied the owner with a cable or DSL modem. If the modem was not connected to the Broadband termination box, contact the provider to get the instructions for doing this.
- The modem the Broadband service provider has supplied supports DHCP. If you are not sure contact the service provider to verify that this modem will support DHCP. If it does not, you will need to manually configure the modem (see *C. Modem Configuration*).
- The router/switch being used (or the modem/router combination) will support DHCP. If a router needs to be purchased, Icebox, LLC recommends the following: **Linksys Router, Instant Broadband Series, Ethernet Cable/DSL Router model #BEFSR81.**

  You may need to use a router for one of two reasons. Either you want to connect to your Broadband connection with more then one device (e.g. a computer and a FlipScreen), or you are using a service provider that requires authentication information to connect to their service. If one of the above does apply, you will need to place a router or switch between the modem and the FlipScreen.

A. Is There a Broadband connection?

Yes: Go to step B.

No: Call Broadband provider to install.

B. Modem Connection

Once you have verified that there is a Broadband connection coming into your location, you may need to connect the provided equipment (most likely a cable modem or DSL router provided by the Broadband ISP) to the Broadband connection. Many times the Broadband line is installed to the location's demarcation or termination box. You will need to find this box to determine how the location is wired. This will give you the ability to connect the modem/router to the Broadband line as well as to the premise's wiring.

C. Modem Configuration

Note: This is typically done by the service provider.

Once you have the modem connected to a Broadband connection, you may have to configure it. Does your Broadband modem need configuring?

Yes: You will most likely not be able to configure a Broadband modem with a FlipScreen. Many modems have to be configured by connecting the modem to a PC and entering the information such as IP address or user name/work group/passwords. You will need to configure it with a PC or contact the provider for assistance.

No: Go to step D.

D. Router Configuration

If you are not using a router, simply make sure that the Ethernet cable from the modem is plugged into the Ethernet card in the back of the iCEBOX FlipScreen.

If you are using a router, plug the cable from your modem into your router's WAN port.

Next, run an Ethernet cable from the Ethernet card in the FlipScreen to a port in the router. Once you have done this, you can refer to the setup guide your router manufacturer provided regarding the details of router configuration.

Keep in mind that if your service provider supports DHCP, follow the router manufacturer's directions that are applicable for this situation.

Similarly, if your service provider does not support DHCP, follow the router manufacturer's directions that are applicable in this situation.

E. Broadband Settings

Follow the same directions described in *B. Configure Broadband Settings* on page 6.

2. Wireless Broadband Setup

There are two ways to connect the iCEBOX to your wireless network:

- Using a wireless bridge connected to the Ethernet card, which is essentially an Ethernet connection; or,
- Using an approved wireless PCMCIA card.

Using a wireless bridge

1. Insert the included networking card into the PCMCIA slot on the back of the iCEBOX (See Figure 8).
2. Connect the wireless bridge to your home PC and configure it following the directions provided by the manufacturer of the bridge.
3. When the wireless bridge is properly configured for your wireless network, disconnect it from your home PC.
4. Insert one end of an Ethernet cable into the bridge, and one end into the Ethernet jack on the PCMCIA card.
   - In most cases, no further connection settings are required. If no connection is established when you first go to Internet Mode, see *B. Configure Broadband Settings* on page 6 for more information.

Using a wireless PCMCIA card

Because the ICEBOX uses the Windows CE .NET platform, we cannot ensure that all wireless network cards will work. Please contact customer support for a current list of supported wireless PCMCIA networking cards.

The first time you go to Internet Mode, you will need to enter any configuration settings required by your wireless network. This may include a WEP (Wired Equivalent Privacy) key and other security settings. This may also include additional IP information if you use a Static IP address.

To connect using a wireless PCMCIA card

1. Insert a wireless networking card into the PCMCIA slot on the back of the iCEBOX.
2. After turning on the iCEBOX, press the **Internet** button on the keyboard or remote, then press the **Options** button.
3. Choose **Connection Settings** from the Internet Options menu.
4. Select the **Wireless Settings** button.
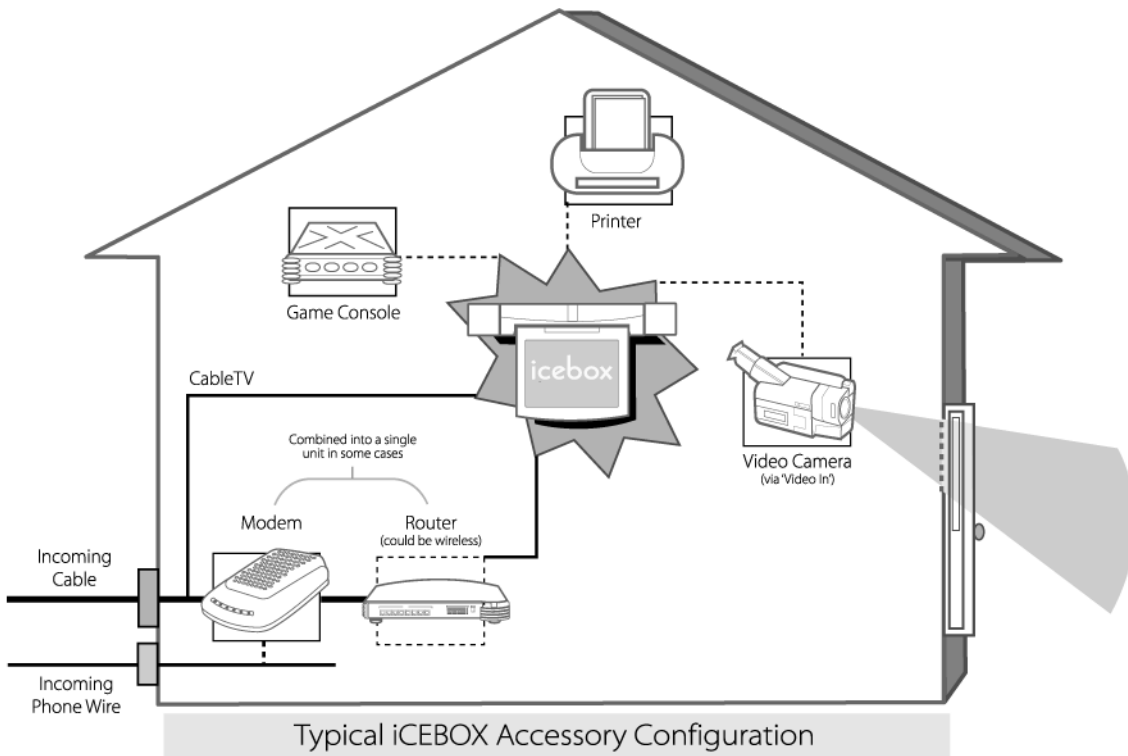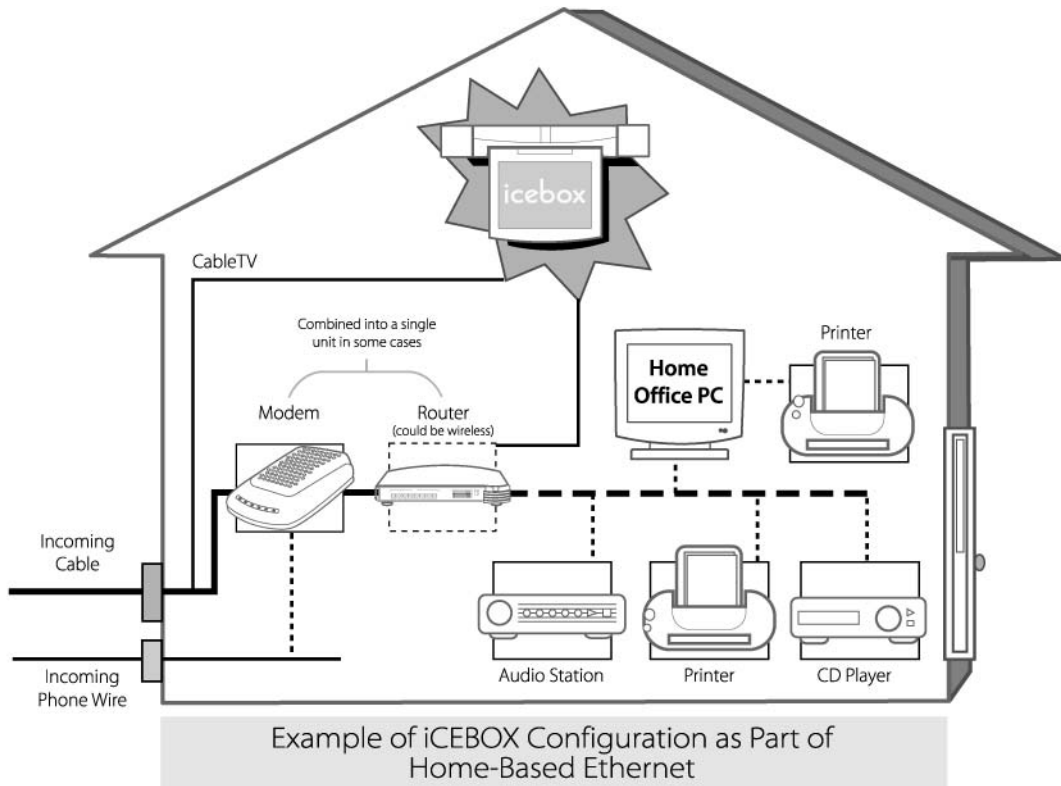5. Select your home network.

6. If your network requires a WEP key, select the **Security** button, then:
   a. Select the appropriate security options.
   b. Enter the WEP key.
   c. Choose **OK**.
7. If you use a static IP address, select the **IP** button, then:
   a. Clear the **Use DHCP (Auto)** checkbox.
   b. Enter static IP address, subnet mask, gateway router and DNS servers.
   c. Choose **OK**.
8. Choose the **Connect** button.

Some networks are set up to allow only specific devices to connect based on the device's MAC (Media Access Control) address. You can quickly find the MAC (Media Access Control) address (also known as the physical address) of your wireless card.

To find a card's MAC address

1. From the Internet Options menu, select **Connection Settings**.
2. Select the **Wireless Settings** button.
3. Select the **IP** button.
   - The MAC Address of the wireless card is displayed. Write it down so you can enter it when configuring your router for the iCEBOX.

Sample Configuration Diagrams

CableTV

Combined into a single
unit in some cases

Modem

Router
(could be wireless)

Home
Office PC

Printer

Incoming
Cable

Incoming
Phone Wire

Audio Station

Printer

CD Player

Example of iCEBOX Configuration as Part of Home-Based Ethernet

Printer

Game Console

CableTV

Combined into a single
unit in some cases

Modem

Router
(could be wireless)

Video Camera
(via 'Video In')

Incoming
Cable

Incoming
Phone Wire

Typical iCEBOX Accessory Configuration

3. Dial-Up Setup

The iCEBOX can also connect to a dial-up Internet provider, using a PCMCIA modem card equipped with an RJ-11 phone jack. The installer should run a twisted pair of wire from the master phone panel to a junction box located behind the iCEBOX.

In order to configure Dial-Up Settings you will need some information from your Internet Service Provider. If you don't have an ISP, you will need to obtain one prior to completing the Internet setup of your iCEBOX.

Note: The iCEBOX does not currently support any ISPs that require downloading or installing software. At the time of the printing of this manual, AOL is an example of an ISP that will not work with the iCEBOX because of their download requirements, although you can still retrieve AOL mail using the iCEBOX Internet browser.

You will need the following information:

- User name
- Password
- Dialing Prefix
- The access phone number the ISP has provided
- The Primary DNS (not always required)
- The Secondary DNS (not always required)

To connect using a Dial-Up connection

1. Insert the modem card into the PCMCIA slot on the back of the iCEBOX.
2. Plug the analog telephone line into RJ-11 jack on the modem card.

CAUTION: Do not connect the iCEBOX to a digital phone line. Severe damage can occur to the iCEBOX.

3. After turning on the iCEBOX, press the **Internet** button on the keyboard or remote, then press the **Options** button.
4. Choose **Connection Settings** from the Internet Options menu.
5. Select the **Modem Settings** button.
6. Enter the appropriate information in the **User Name**, **Password**, **Dialing Prefix** (if any), and **ISP Phone #** fields.
7. Choose **OK** to save the information, then choose **OK** twice more to exit the Options menu. You should now have access to the Internet.

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Video Mode

Introduction

The iCEBOX can be connected to a video camera which you can use to monitor another part of the house. For example, you can monitor the activity in a child's room or see who is at the front door. You can also use Video Mode to view video tapes on a VCR or play video games on a game system. Additionally, you may wish to take advantage of the higher quality of Satellite or Digital Cable by using the S-video connection, which can also be viewed in Video Mode.

Note: If you connect your Satellite or Digital Cable service to the iCEBOX using S-Video, the iCEBOX remote or keyboard cannot be used to change channels in Video Mode. Continue to use your existing remote control with the set-top box.

If you've connected both an S-Video and RCA signal, both are accessible from Video mode. RCA is displayed as Video A. S-Video is displayed as Video B.

At this time, Video Mode supports only one Audio source which will continue to play when you toggle between Video signals.
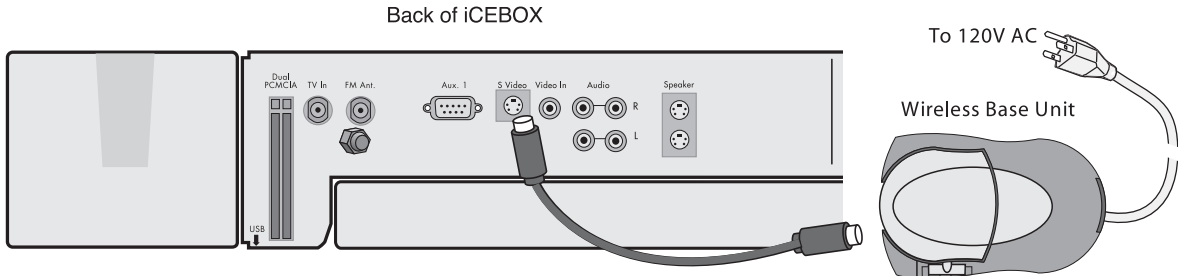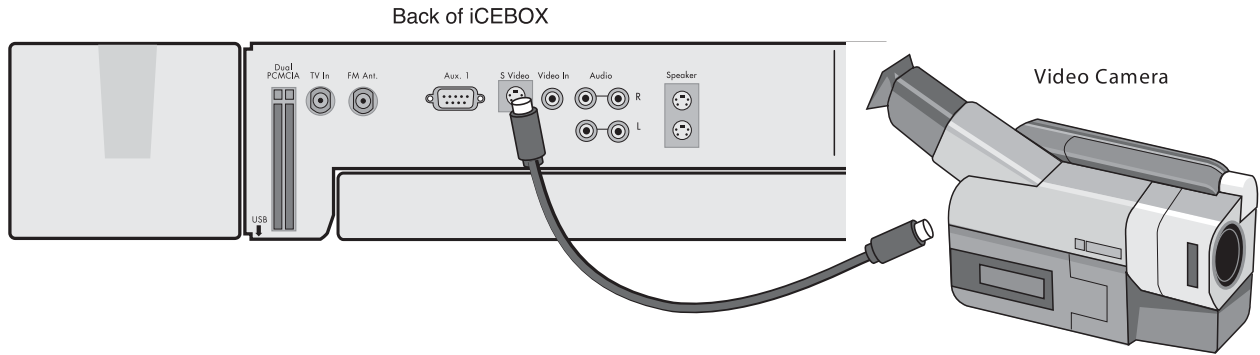
To connect an S-Video source
- Plug an S-Video cable from the camera, VCR, game machine or satellite/cable receiver into the S-Video connection on the back of the iCEBOX. See page 12 for sample wiring diagrams for a wired or wireless camera.
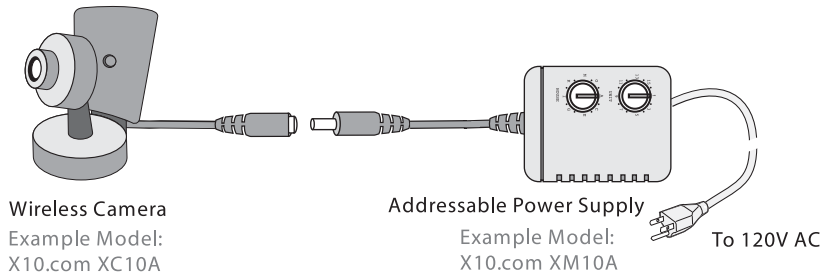
To view video sources
1. Press the Video mode button.
   The RCA signal (if any) appears.
2. Press the Video mode button again.
   The S-Video signal (if any) appears.

Wiring Diagrams

We have provided basic wiring diagrams for a wired or wireless camera.

Back of iCEBOX

Dual
PCMCIA   TV In   FM Ant.   Aux. 1   S Video Video In   Audio   Speaker

R

L

USB

Video Camera

Back of iCEBOX

Dual
PCMCIA   TV In   FM Ant.   Aux. 1   S Video Video In   Audio   Speaker

R

L

USB

To 120V AC

Wireless Base Unit

Example Model:
X10.com VR31A

Wireless Camera
Example Model:
X10.com XC10A

Addressable Power Supply
Example Model:
X10.com XM10A

To 120V AC

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Support and Registration

Registering a New iCEBOX

IMPORTANT: This section assumes that the iCEBOX unit has been fully configured by the installer for either Broadband or for Dial-Up connectivity. If this is not the case, the installer should refer to the appropriate section in this manual for configuration details.

Before the user goes online with the iCEBOX for the first time, they are given the opportunity to register their unit. Registration ensures the end user receives future software updates and that the warranty is activated.

There are two options regarding registration:

- The user can register immediately.
- The user can register at a later time.

IMPORTANT: In order to receive future software updates, the user must register the unit.

Contacting Customer Care

For more assistance with installation or registration, please contact us. We will be happy to assist you.

Phone: 1-877-463-7637

Website: www.icebox.tv

Email: customercare@iceboxllc.com

icebox