

PRODUCT OVERVIEW

ESI Bluetooth Voice Integration

ESI Cellular Management • ESI Bluetooth Headset Interface

Simplify your communications, using Bluetooth technology

Introduction

ESI has combined the mobility of Bluetooth® technology and the power of ESI Communications Servers to simplify communications and improve productivity. **ESI Bluetooth Voice Integration** products are hardware products integrated with ESI Communications Servers that link with Bluetooth devices, such as cell phones and headsets.

Two ESI Bluetooth Voice Integration products are available, offering unique capabilities to make companies more efficient: **ESI Cellular Management** lets employees manage cell phone calls along with their normal business calls, all from any ESI 48-Key Digital Feature Phone; and the **ESI Bluetooth Headset Interface** links a compatible Bluetooth headset with an ESI 48-Key Feature Phone (Digital or IP) so the user can seamlessly answer, originate, and terminate calls directly from the headset.

ESI Cellular Management

The ESI Cellular Management Access Device is a standalone device which connects to an ESI Communications Server via a dedicated digital port.

When a Bluetooth-enabled cell phone (one which previously has been “paired” to the Access Device) moves into range, the cell phone automatically links to the Access Device, allowing cell phone calls to be handled on the user’s 48-Key Feature Phone.

Outgoing calls are just as easy — just press a programmed Cellular Access key on the associated 48-Key Feature Phone to place a call using the cell phone, and either dial the phone number or use the cell phone’s voice-dialing¹ feature to complete the call.

ESI Bluetooth Headset Interface

The ESI Bluetooth Headset Interface is a small adapter which integrates with an ESI 48-Key Digital Feature Phone and allows the user to seamlessly answer, originate, and terminate calls directly from a “paired” Bluetooth-enabled headset.

Using a compatible Bluetooth headset **eliminates** the need for expensive mechanical handset lifting devices, and provides the flexibility to choose the headset style and color of the user’s preference. Many customers decide to use the Bluetooth headset they’re currently using with their cell phone.



Benefits summary

- **Reduce interruptions and improve call coverage** while in the office, by managing cell phone calls directly from an ESI digital phone.
- **Simplified voice mail management** lets users select where unanswered cell calls are routed — to ESI voice mail or cell phone voice mail.
- **Share cell phone minutes** (if desired) with others in the office. A feature key on any ESI digital phone can be programmed to access a “paired” cell phone for outbound calls.
- **Eliminate the need for expensive mechanical handset lifters** by using the ESI Bluetooth Headset Interface.

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¹ As supported by the cell phone manufacturer and cell phone service carrier.

Hardware description

ESI Cellular Management

The ESI Cellular Management Access Device is housed in a small ergonomic plastic case, which contains an internal Bluetooth antenna and connects to a digital station port on an ESI Communications Server.

Each Access Device is used in connection with a “host” 48-Key Digital Feature Phone and, although the Access Device is intended for desktop placement near the host phone, it can be attached to surfaces with the included Velcro® strips. The Access Device receives its power from the digital port to which it’s connected.

Once connected and programmed, the Access Device interfaces to the ESI Communications Server in a fashion similar to that of a CO circuit. Incoming calls from the connected cell phone will be presented to the Access Device and directed to the programmed station, department, or group mailbox.

Likewise, outgoing calls will be handled as if the cell phone were a trunk, with all associated outgoing trunk features. This capability is available through use of a programmed Cellular Access key on any ESI Feature Phone in the system.

The case has one blue LED which indicates pairing and cell phone connections status and may be used as an aid when verifying proper operation and/or performing troubleshooting. The following indicates the cell phone status:

Blue LED	Status
Off	Unpaired
Blinking	Searching for cell phone (Auto-Connect enabled)
Blinking (slowly)	Cell phone not connected (Auto-Connect disabled)
Fluttering	Handset in pairing mode, or pairing complete
Glowing solidly	Cell phone paired and connected



ESI Cellular Management Access Device back panel

Access Device connections

The back panel of the ESI Cellular Management Access Device (shown, above) has the following:

- **PAIRING button** — Used to initiate the pairing of a Bluetooth cell phone with the Access Device.
- **DIGITAL connector** — An RJ-11 jack to connect the Access Device to a digital station port.

The **PC** and **NETWORK** connectors are unused.

ESI Bluetooth Headset Interface

The ESI Bluetooth Headset Interface is a small adapter which is designed to fit underneath an ESI 48-Key Feature Phone. Housed within the adapter is a Bluetooth radio which provides the interface to customer-provided, commercially available Bluetooth headsets.

The Headset Interface connects to an ESI 48-Key Feature Phone (Digital or IP) via two connectors. The audio connector plugs directly into the Feature Phone’s built-in headset jack. Power is supplied via a second cord connected to the Feature Phone’s built-in RJ-11 Expansion Console port. Additionally, the Headset Interface has a blue LED to indicate status and a **PAIRING** button for manually pairing a Bluetooth headset to the Headset Interface.

Once a compatible Bluetooth headset is paired with an ESI 48-Key Feature Phone equipped with the ESI Bluetooth Headset Interface, the user may use the paired headset to answer, originate, and terminate calls on the equipped 48-Key Feature Phone.

A programmable feature key assigned as a headset key will offer a selection of headset interfaces:

- **Wired** — For standard wired headsets with modular connectors (current, or legacy operation).
- **Bluetooth** — For Bluetooth headsets when the ESI phone is equipped with the Headset Interface.

Benefits

ESI Cellular Management

When a cell phone is connected via Bluetooth and in range of the Access Device, calls to the cell phone are routed to the destination programmed at installation — any extension, department, or guest mailbox. The inbound cell call is then managed by the ESI Communications Server as if it were a CO trunk call.

ESI Cellular Management users will enjoy the following benefits:

- **Enhanced call coverage** — Leverage ESI Cellular Management's unique ability to deliver incoming cell calls directly to any extension or department in the system, allowing call coverage for cell calls in addition to normal office calls.
- **Access ESI features for inbound cell calls** — Cell calls are handled just like any other call, so users can access ESI system features such as call forwarding, call transfer, and conferencing.
- **Simplified voice mail management** — Users select where the system will route unanswered cell calls, either their ESI voice mailbox or cell phone voice mail.
- **Outgoing call savings** — ESI Cellular Management can allow any ESI Digital Feature Phone on the system to use a cellular line to make outgoing calls, realizing efficiencies by using the cellular service plan's low-cost or free long-distance minutes.
- **Possible reduction in number of required CO lines** — In some instances, companies may be able to avoid the expense of having additional CO lines installed, by using an existing cellular line as they would a regular CO line.
- **Access voice-dialing**¹ directly from an ESI 48-Key Digital Feature Phone.
- **Mobility** — When a user is on a cellular line call on an office phone and needs to leave the office, yet continue the call, ESI Cellular Management's cell call transfer feature allows the user to seamlessly continue the call, using the cell phone.
- **Individual station programming** — Users may customize each ESI Cellular Management Access Device to maximize their productivity via *VIP* or *ESI Personal Programmer*.

ESI Bluetooth Headset Interface

It's common for Bluetooth headsets to be used in conjunction with cell phones. With the ESI Bluetooth Headset Interface, an employee can use any compatible Bluetooth headset (such as the one used with their cell phone) with their ESI 48-Key Feature Phone and benefit from the following capabilities:

- **Answering, originating, and terminating calls** directly from the paired Bluetooth headset.
- **Flexibility** to use the compatible Bluetooth headset that best meets one's needs. Users are free to choose the style, color, *etc.* that suit them.
- **Mobility** to move away from the desk without missing any important calls.
- **Cost reduction** through the elimination of costly handset lifters.
- **Simple operation** and setup.
- **Full integration** with ESI 48-Key Feature Phones' headset key features and operation.

Pairing

ESI Bluetooth Voice Integration products require that a compatible Bluetooth device be "**paired**" with the associated ESI hardware in order to operate properly.

Pairing is the act of enabling communications between Bluetooth devices. Pairing occurs when two Bluetooth devices "agree" to communicate with each other, and establish a connection. In order to pair two Bluetooth wireless devices, a password (sometimes called *passkey*) must be exchanged between the devices.

Pairing information is stored in system configuration; so, when a paired cell phone or headset is taken out of range, and then brought back into range, of the ESI Bluetooth Voice Integration device, automatic reconnection occurs.

Note: To minimize the number of attempts required to successfully pair a Bluetooth device to any ESI Bluetooth Voice Integration hardware, please review the pairing instructions provided by the Bluetooth device's manufacturer.

¹ As supported by the cell phone manufacturer and cell service carrier.

ESI Cellular Management

Pairing a cell phone to the ESI Cellular Management Access Device may be accomplished in a variety of ways. The most straightforward method is by using the **PAIRING** button on the back panel of the Access Device.

To pair a cell phone which is in range of the Access Device but currently is neither paired nor connected:

1. Press and hold the **PAIRING** button until the Access Device's blue **HANDSET** LED "flutters"; then, release the button. The Access Device will remain in pairing mode for three minutes.
2. Place the Bluetooth-compatible cell phone into the mode where it searches for Bluetooth devices. (For details, refer to the cell phone's *User's Guide*.) The cell phone should begin to scan/search for Bluetooth devices.
When finished with the scan, the cell phone will display all Bluetooth devices in range. Depending on whether the ESI Communications Server's dial plan is three-digit or four-digit, the ESI Cellular Management Access Device will be shown as *ECM-xxx* or *ECM-xxxx* (where *xxx* or *xxxx* is the device's programmed extension).
3. Use your cell phone's user interface to accept the Access Device for pairing.
4. Enter the assigned PIN (personal identification number) — sometimes called a *passcode* or *passkey*. This is typically *0000*, or may have been individually assigned during programming.

If the PIN verification is successful, the cell phone will connect automatically to the ESI Cellular Management Access Device.

(If the PIN verification fails, the Access Device exits pairing mode and turns off the blue LED.)

Once the connection is complete, the Access Device's LED glows solid blue.

Alternative pairing methods

There are other methods whereby a cell phone may be paired with the ESI Cellular Management Access Device. For instructions on pairing by using a Cellular Access Key or via user programming, refer to the *ESI Cellular Management User's Guide* (ESI # 0450-1189). For instructions on pairing using either *VIP* or *ESI Personal Programmer*, see their respective *User's Guides* (for *VIP*, ESI # 0450-0513; for *ESI Personal Programmer*, ESI # 0450-1160).

ESI Bluetooth Headset Interface

Pairing a Bluetooth headset to an ESI Bluetooth Headset Interface is most simply done via use of a programmed headset key on the ESI 48-Key Feature Phone. (These instructions assume a headset key has already been programmed on the phone.) To pair a Bluetooth headset to an ESI Bluetooth Headset Interface installed on an ESI 48-Key Feature Phone:

1. Press the phone's programmed headset key.
2. Place the compatible Bluetooth headset in pairing mode as instructed by the phone prompt, and then press **#**.

The headset key will begin slowly blinking amber as the Headset Interface begins searching for the Bluetooth headset.

On finding the headset, the Headset Interface will automatically send the assigned PIN (or passcode) — typically *0000* (required for use with this ESI product; see "Other notes," page 6) — to the headset, completing pairing.

When pairing is complete, the headset key will stop blinking.

Requirements

ESI hardware and software requirements

Each ESI Cellular Management Access Device or ESI Bluetooth Headset Interface must be equipped with an ESI 48-Key Digital Feature Phone installed on an ESI Communications Server.

The **minimum operating software** for each ESI Communications Server model at the time this *Product Overview* was issued is:

System	System software
ESI-1000	18.4.10
ESI-600	16.4.10
ESI-200	14.4.10
ESI-100	12.4.10
ESI-50 / ESI-50L	11.4.10

Bluetooth requirements

ESI Bluetooth Voice Integration products support cell phones and headsets using Bluetooth 2.0 (or higher). Depending on the cell phone or headset manufacturer, most Bluetooth 1.2 devices also are compatible. Some Bluetooth 1.1 devices may be compatible. However, Bluetooth 1.0 devices are **not** supported.

To minimize compatibility issues, ESI recommends devices that use Bluetooth 2.0 (or higher) and support both headset and hands-free Bluetooth profiles.

Bluetooth realities

- Bluetooth is an industrial specification for low-powered, short-range wireless networking to connect, and exchange information between, devices. Bluetooth devices use a globally recognized, secure, unlicensed, short-range radio frequency.
- Bluetooth is used in many common devices, such as mobile phones, personal computers, printers, video game consoles, *etc.*
- Bluetooth devices (cell phones or headsets) aren't all alike. Different manufacturers may implement Bluetooth in slightly different manners. As a result, not all Bluetooth devices are compatible with each other; nor do all such devices work together well.
- Not all cell phones support all capabilities (one example is voice dialing).
- In general: the older the Bluetooth device — two years or more — the more likely that compatibility issues will arise.

Common Bluetooth issues

- Sometimes a cell phone will do one of the following:
 - Fail to pair with the ESI Cellular Management Access Device.
 - Always prompt the user to pair with the Access Device, even though the cell phone has been paired before or is set to Auto-Connect.
- Some cell phones deactivate Bluetooth capabilities automatically when a battery saver is active, when other devices interfere, or when the phone receives new firmware downloads from the cellular network. Bluetooth capabilities must be activated on the cell phone in order to function properly.
- Remember that Bluetooth is short-range technology. If a cell call is in progress, and the cell phone is moved more than 30 feet away from the Access Device (or encounters interference) the audio quality will degrade and the connection between the cell phone and the Access Device will drop. If either of these issues occurs, move the cell phone closer to the ESI Cellular Management Access Device.

Cautions about incoming cell calls

- When a call is active on the ESI Cellular Management Access Device, cell plan minutes are being used. This includes when incoming cell calls are answered by the ESI Communications Server's voice mail and when incoming cell calls are directed to an ACD department and placed in ACD queue. Both incoming and outgoing calls via the Access Device consume cell plan minutes.
- Cell phones aren't designed to repeat received dialed digits in the forms of DTMF tones. (Dialing a digit **to** a cell phone isn't the same as dialing a digit **from** a cell phone.) For this reason, incoming cell calls managed by an ESI Cellular Management Access Device **can't** dial auto-attendant menu selections, **can't** dial out of a voice mailbox or music-on-hold, and **can't** use the dial-by-name feature. These are common limitations of cellular networks, **not** of ESI systems or the ESI Cellular Management Access Device.
- Incoming cell calls that are call-waiting on the cell line can't be answered using a 48-Key Feature Phone, because there's no corresponding Bluetooth "message" to alert the phone to the second call. (The cell phone itself, however, **can** be used to answer a call-waiting cell call.)
- When ESI Cellular Management is in use, avoid answering incoming cell calls with the cellular handset; instead, use the ESI Feature Phone to answer these calls.

Cautions about enabling Auto-Connect

- When programmed with the Auto-Connect option enabled, the ESI Cellular Management Access Device may switch an active cell call automatically to the Access Device. Therefore, use caution when moving into range of a paired Access Device while on an active cell call; if the call is switched, the user will notice one or more of the following:
 - Loss of audio to/from the distant party.
 - The sense that the call has been disconnected.
 - The appearance that the cell phone is still connected to the distant party even though one or both of the other two events is occurring.

If this happens, move the cell phone away from the Access Device until the call automatically reconnects.

- Take these precautions to avoid accidental automatic connections to the ESI Cellular Management Access Device:
 - Complete active calls before entering the Access Device's coverage area.
 - Change the cell phone's Bluetooth access setting to "Always ask to connect."... **or** disable the Auto-Connect feature.

Note about ESI Cellular Management voice mail settings

- ESI Cellular Management voice mail settings will be overridden, and unanswered calls will be routed to the **ESI system** voice mail, under the following conditions:
 - Access Device cell call routing is set to voice mail or an ACD department.
 - Access Device cell call routing is set to an extension which is call-forwarded to voice mail or an ACD department.
 - Access Device cell call routing is set to a ring-all, in-order, or UCD department . . .
and
. . . the department call forwarding is set to a branch ID, voice mailbox, or ACD department . . .
and
. . . all department members are busy or in DND.

ESI Cellular Management voice mail settings will be overridden, and unanswered calls will be routed to the **cell phone** voice mail, under the following conditions:

- An incoming call to the cell phone goes to call waiting and remains unanswered.
- An incoming call is made to the cell phone while it's originating an outgoing call.
- The cell phone isn't connected or linked to the Access Device.

Other notes

- Call quality on the ESI Cellular Management Access Device will, of course, be "cell phone quality."
- Use caution when pressing the Cellular Access key for an ESI Cellular Management Access Device. If the paired cell phone has an active call and is in range of the Access Device, pressing the Cellular Access Key will disconnect the call.
- Use the Voice Dial key only if the cell phone and cellular network support voice commands. Otherwise, pressing the Voice Dial key will cause the phone system to automatically "cut through" to the cell phone, and digits dialed will be ignored. If this happens, hang up the ESI Feature Phone (or press **RELEASE**), press the Cellular Access key, and re-dial the number.
- For most Bluetooth headsets, the default Bluetooth PIN — sometimes called a *passcode* or *passkey* — is either *0000* or *8888*, depending on the model. The ESI Bluetooth Headset Interface works with **only** a *0000* PIN, and therefore is **incompatible** with a headset with any **other** PIN. Here are some examples of such headsets:
 - The PIN for all i.Tech Bluetooth stereo headsets is *8888*.
 - The passkey for BlueAnt Wireless X3 micro and X5 stereo Bluetooth headsets is *1234*.
- Some headsets turn off while charging, causing the **HEADSET** LED to glow solidly. To reconnect the headset after charging, just turn the headset back on.
- ESI Cellular Management Access Device firmware may be upgraded using *Esi-Address* (downloadable from the software page on the password-protected ESI Resellers' Web site). When using *Esi-Address*, you must have the Access Device connected to a digital station port on the system.

About ESI

ESI (Estech Systems, Inc.) is a privately held corporation based in Plano, Texas. Founded in 1987, ESI specializes in business communications systems. ESI pioneered the all-in-one telephone and voice mail system. The original IVX, introduced in 1996, represented a radical breakthrough in system design: the inclusion of a full suite of features within a single integrated system.

Since its days as a small start-up, ESI has enjoyed exceptional stability and growth while maintaining its dedication to small-company values — including the need to take care of the most important part of the equation: your business.



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