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Introduction

CallExtend is a two-port automated attendant that answers and routes your incoming phone calls without human intervention.

CallExtend can be connected to one or two analog extension ports on a PBX or hybrid key phone system with hook-flash call transfer capability. CallExtend answers a call and plays a user-recorded message, inviting the caller to dial an extension or a single digit to reach a particular department. CallExtend can process up to two incoming calls simultaneously.

While playing its message and for a period of time afterwards, CallExtend listens for any digits dialed by the caller. Calls are then routed to either a department or a direct extension. If no digits are dialed, or if "0" is dialed, the call is routed to the receptionist(s).

If desired, CallExtend can supervise call transfers, directing unanswered calls to a receptionist, or it can transfer the call to the appropriate extension and then immediately exit from the call. CallExtend is then free to handle the next incoming call.

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Connecting CallExtend to Your Phone System

Your CallExtend Unit

Your CallExtend package should contain a CallExtend unit, a power transformer, this manual, and a Programming Guide.

The CallExtend unit has ports labeled PORT 1 and PORT 2 that should be connected to one or two analog extension ports on your phone system. Connect a standard touch-tone phone to the ADMIN port to program CallExtend. The power transformer connects to the port labeled POWER and then to an A/C wall outlet.

This manual details the procedures you should follow to connect and program CallExtend. The **Programming Guide** provides a place to record your CallExtend programming.

Testing the Phone System Extension Ports

Before connecting CallExtend to your phone system, make sure the extension ports you are planning to connect CallExtend to are analog and are set up for call transfers.

To do this, first program your phone system to route incoming calls to the analog extension(s) CallExtend will be connected to, and connect a phone to one of these extensions. Next, make a test call from another phone that comes into the phone

system (obtain an outside phone line and call back into the phone system by dialing the number that an outside caller would use). This call should ring the phone you have connected. Answer the call and try to transfer it to an extension. If this test transfer works, then this extension port is set up properly, and you can connect CallExtend to the extension. If you plan to use a second extension port with CallExtend, test that extension also.

CallExtend will not work on an extension port that is not set up for call transfers.

Cabling CallExtend to Your Phone System

Once you have verified that call transfers work on the extension port(s) you plan to connect CallExtend to, you are ready to connect CallExtend to these extensions, using standard modular cords as shown in Figure 1.

NOTE: Make sure that your phone system has been set up to transfer incoming calls to the CallExtend extensions. Also, make sure that if both of the CallExtend ports are busy, additional incoming calls will "overflow" to an extension that is answered by the receptionist(s) or another CallExtend unit.

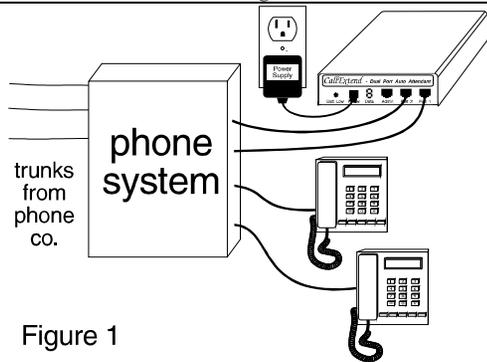
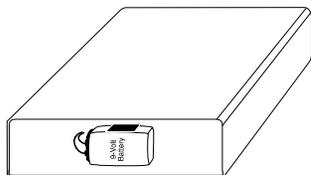


Figure 1

Inserting the Battery Backup

CallExtend stores all of its programmed settings, except the voice greeting, in non-volatile RAM, so these settings are not erased when there is a power failure. A 9-volt battery can be inserted on the back of the CallExtend unit to prevent loss of the voice greeting during power failures (see Figure 2).



Insert one (1) 9-volt battery into the battery holder on the back of CallExtend.

(Back view of CallExtend)

Figure 2

A slight power fluctuation may occur when a battery is inserted, and this can cause the greeting message to be lost. For this reason, always check that the greeting is still in place after inserting a new battery.

NOTE: If the battery runs out (or if no battery is inserted), CallExtend will lose the voice message when there is a power failure. In this case, it will resume

answering calls after power is restored, but it will not have a message to play. To avoid this, check the battery regularly (especially after power failures). The "Batt. Low" light will come on to indicate low battery levels.

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NOTES:*

Programming Your CallExtend Unit

After CallExtend has been connected to your phone system, it must be programmed. Programming CallExtend is done by connecting a standard touch-tone phone to the ADMIN port on the CallExtend unit and dialing on this phone.

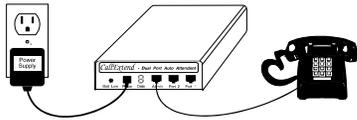


Figure 3

Recording the Voice Greeting

The user records a voice greeting up to 32 seconds in length into CallExtend. This greeting generally identifies their company and invites callers to dial certain digits to reach an individual or department.

Sample Voice Greeting:

"You've reached the ABC Company. If you are calling from a touch-tone phone and know the extension you wish to reach, you can dial that extension at any time. For sales, dial 1. For support, dial 3. For accounting, dial 4. If you are calling from a rotary phone or would like to speak to an operator, please stay on the line and someone will assist you shortly."

Single Message on Both Ports:

To have CallExtend play the same greeting on both Port 1 and Port 2, use the phone connected to the ADMIN port to record the greeting, as follows:

Dial * 8 and	Read your greeting into the phone. Hang up when done.
Dial * 4 and	Listen to the greeting.

When you lift the handset on the ADMIN phone, CallExtend's "Data" display will show **P** for Programming Mode. When you dial * the Data display will change to **S** for Speech Mode. The decimal point (period) after the **S** will begin blinking when there are only eight seconds left to record in the greeting.

Separate Message on Each Port:

To have CallExtend play a different greeting to callers who reach Port 1 than to callers who reach Port 2, use the phone connected to the ADMIN port to record the greetings, as follows:

Dial * 8 and	Read your greeting for <u>Port 2</u> into the phone. Hang up when done.
Dial * 4 and	Listen to the Port 2 greeting.
Dial * 1 and	Read your greeting for <u>Port 1</u> into the phone. Hang up when done.
Dial * 4 and	Listen to the Port 1 greeting.

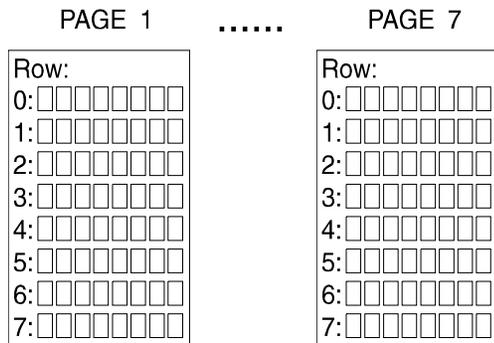
After the second message (Port 1) has been recorded, you will not be able to listen to the first message (Port 2) from the

ADMIN phone in CallExtend. If you want to listen to this message again, call into Port 2 of the CallExtend from an outside phone line.

To change the Port 1 voice message at a later time, you can dial * 1 and speak into the ADMIN phone. To change the Port 2 message, you must follow the complete process shown above and re-record both messages.

CallExtend's Programmable Memory

CallExtend's memory consists of seven PAGES of data storage. A PAGE in memory can be compared to a single page of paper with eight rows of data on the page. **The number of each PAGE of CallExtend's memory corresponds to the first digit dialed by a caller.**



The **Programming Guide** included with your CallExtend unit has a separate sheet for each PAGE of CallExtend's memory.

When a caller dials an extension or dials a single digit to be transferred to a department, CallExtend looks at the first digit

dialed and then consults that PAGE in its memory to determine how to handle the call.

The caller's first digit can be any number between 0 and 9. These digits can be programmed as summarized in the following chart:

Digit dialed by caller:	Result:
0	Transfers call to receptionist.
1-8	Transfers call to extensions that begin with the digit 1-8.
1-7	If not used for extensions, transfers call to a department.
9	Repeats voice greeting.

You only need to program the PAGES in CallExtend that correspond to the digits your extensions begin with and the digits you want to use for department lists.

Example: You might want callers to be able to dial "1" to reach the Sales Department, "2" to reach Technical Support, or directly dial any extension. If your extensions all begin with either the digit 5 or 6 (e.g., 52, 54, 61, 68, etc.), then you will need to program PAGES 1, 2, 5, and 6.

Programming Commands & Format

To program CallExtend, you will dial digits on a touch-tone phone connected to the ADMIN port. **CallExtend uses two basic programming commands: 5 for LOADING DATA and 7 for REVIEWING DATA.**

CallExtend's Data Display prompts you to enter commands in the following format:

P A C d

enter the Page number to be programmed enter the Row number (Address) to be programmed enter the Command (5=Load, 7=Review) enter the data, if using Load command

When using a 5 (Load) or 7 (Review) command, hold the key down until the Data display changes. With the Load command, the Data display will show "d," prompting you to load data; with the Review command, it will begin showing the data recorded earlier. You can load up to 8 digits of data with a Load command; if you load fewer than 8 digits, dial # (a pound sign) to indicate you are finished entering data.

Use the **Programming Guide** supplied with CallExtend to record all data you program into the unit. The following is a sample from the **Programming Guide** that you would use when programming PAGE 2, Row 1.

Dial 2 1 5 (hold until Data display shows d), plus:		# (if shorter than 8 digits)
Dial 2 1 7 (hold until Data display changes) and verify the extension.		

Programming System Settings into PAGE 0

Use PAGE 0 of CallExtend's memory to set up system information and receptionist extensions. Row 0 of PAGE 0 contains **three fields that must be programmed** and five optional fields (described in Appendix C). To program the three basic fields, dial the following on the ADMIN phone:

Dial 0 0 5 (hold until Data display shows d), plus:	Length of phone system's hook-flash duration	Number of secs to wait after greeting before transfer	Transfer supervision mode desired	#
Dial 0 0 7 (hold until Data display changes) & verify the data is correct				

Hook-Flash Duration: Set this to match the hook-flash duration used by the phone system for call transfers. Enter a digit 0-6, where "0" equals no hook-flash, "1" is a 1/4 second flash duration, "2" is a 1/2 second duration, "3" is 3/4 of a second, "4" is 1 second, "5" is 1-1/4 seconds, and "6" is 1-1/2 seconds.

Pause Duration: After CallExtend plays the voice greeting, it will wait the number of seconds indicated in this field before transferring the call to the receptionist(s). This gives callers time to dial in response to the greeting. Enter the number of seconds (0-7) to wait (e.g., "4" waits 4 seconds).

Transfer Supervision Mode: This field controls how CallExtend supervises call transfers. CallExtend can operate in one of three modes:

⇒ **Full Supervision Mode:** Enter 2-9 in this field to have CallExtend fully supervise call transfers, looking for busy or no answer. This number tells CallExtend how many rings*

to wait for an extension to answer before transferring the call to the receptionist (e.g., "5" means wait 5 rings). Enter * for 12 rings or ## for 16 rings.

* To use Full Supervision Mode in phone systems that do not provide ringing sounds to CallExtend, see Appendix C.

A Note about Full Supervision Mode: CallExtend connects a call to an extension when it hears a voice answer. This connection takes a moment, so the first word said by the person answering the extension may not be heard by the caller.

⇒ **Busy Supervision Mode:** Enter 1 (one) in this field to have CallExtend look for busy tone only. If a busy tone is heard from the extension, CallExtend transfers the call to the receptionist(s). If ringing is heard from the extension, CallExtend exits the call immediately and connects the call to the extension. If the extension rings and is not answered, CallExtend will **NOT** retrieve the call and send it to the receptionist(s).

⇒ **Unsupervised Mode:** Enter 0 (zero) in this field to have CallExtend transfer calls without supervision. CallExtend will transfer the call to the desired extension and then immediately exit the call. CallExtend will **NOT** retrieve the call and send it to the receptionist(s) if the dialed extension is busy or does not answer.

Setting up Receptionist Extensions:

In Full Supervision Mode, callers will be transferred to the receptionist(s) if the extension dialed is busy or does not answer. In addition, if a caller dials "0" in response to the voice greeting, does not dial anything, or dials an invalid digit, the call will be connected to the receptionist(s).

At least one receptionist extension must be programmed, into PAGE 0, Row 1. Up to seven receptionist extensions can be programmed, into Rows 1-7 of PAGE 0. To program the receptionist extensions, dial the following on the ADMIN phone:

Dial PAGE # (0), Row # (1-7), 5 (hold until Data display shows d), plus:	a receptionist extension (up to 8 digits long)	# (if extension is shorter than 8 digits)
Dial PAGE # (0), Row # (1-7), 7 (hold until Data display changes) and:	Verify the extension is correct.	

Example: To load two receptionist extensions, you would dial the following:

Dial 0 1 5 (hold until Data display shows d), plus:	1st receptionist extension (up to 8 digits long)	# (if extension is shorter than 8 digits)
Dial 0 1 7 (hold until Data display changes) and:	Verify the extension is correct.	
Dial 0 2 5 (hold until Data display shows d), plus:	2nd receptionist extension (up to 8 digits long)	# (if extension is shorter than 8 digits)
Dial 0 2 7 (hold until Data display changes) and:	Verify the extension is correct.	

Notes on Setting Up Receptionist Extensions:

- 1.) **CallExtend does not supervise calls it sends to the receptionist.** It is recommended that you: A) enter receptionist extensions that will always be answered; or B) make sure the phone system will place a call on hold if the receptionist extension is busy and will not try to send this call back to CallExtend; or C) specify a phone system hunt group as the receptionist.
- 2.) **CallExtend does not hunt through multiple receptionist extensions.** If more than one receptionist extension is programmed, CallExtend will transfer the first call to the first receptionist extension (the one in Row 1) and the next call to the second receptionist extension (Row 2), **even if the first receptionist is available.** CallExtend will not send another call to the first receptionist extension until it has sent a call to each extension on the receptionist list.
- 3.) **Enter each extension number exactly as CallExtend must dial it for the phone system to transfer the call.** If the phone system needs to see *70 at the beginning of a call transfer sequence, enter *70 at the beginning of each extension (e.g., enter *70212 for extension 212). You can enter a phone number, hunt group, or voice mailbox number by programming the exact digits to be dialed, including an initial "9" or "1." Note: To have CallExtend dial a # as part of a number, enter two # signs in a row, *without a significant pause.*
- 4.) **An extension or phone number up to 16 digits long can be entered into CallExtend as the only receptionist.** To program this, enter the first eight digits of the number into

Row 1 of PAGE 0; enter the remainder of the number into Row 2. Rows 3-7 of PAGE 0 will be ignored after this. When using receptionist extensions longer than 8 digits, you must also enter ## into Field 7 of PAGE 0, Row 0, as described in Appendix C.

- 5.) **To remove an extension from the receptionist list,** use a single # sign to erase the contents of the appropriate Row. For example, to erase the contents of PAGE 0, Row 3, dial **0 3 5 #**. CallExtend will still use the extensions before and after the empty Row on the list.

Calling Party Transfers

PAGES 1-7 of CallExtend's memory control CallExtend's response to what callers dial. Each PAGE of memory corresponds to the first digit dialed by the caller. Example: if a caller dials "214," CallExtend will examine PAGE 2 for instructions on how to handle the call.

Transferring Directly to an Extension:

To have callers dial extensions directly, you must program your extension length into the PAGE(S) that correspond to the first digit(s) of your extensions. For example, if your extensions are in the form 210, 221, 234, etc., you would program PAGE 2, Row 0 for a 3-digit extension format. CallExtend accepts extensions up to 8 digits long.

Only Row 0 needs to be programmed for each PAGE set up for direct-dialing to extensions. Rows 1-7 are left blank.

To program direct extension dialing, dial the following on the ADMIN phone for each PAGE that corresponds to the first digit of an extension (if your extensions begin with the digit 8, see Appendix C):

Dial PAGE # (1-7), 0 5 (hold until Data display shows d), plus:	the extension length (total number of digits in each extension)	#
Dial PAGE # (1-7), 0 7 (hold until Data display changes) and:	Verify the extension length is correct.	

Example: If your phone system uses 4-digit extensions that begin with either "5" or "6" (5300, 5750, 6105, etc.), program PAGES 5 and 6, as shown:

Dial 5 0 5 (hold until Data display shows d), plus:	4	#
Dial 5 0 7 (hold until Data display changes) and:	Verify the extension length is correct.	
Dial 6 0 5 (hold until Data display shows d), plus:	4	#
Dial 6 0 7 (hold until Data display changes) and:	Verify the extension length is correct.	

Rows 1-7 on the PAGE are left blank.

A Note on Direct-Dialing Extensions:

Some phone systems require that special digits be dialed in front of the extension number as part of a call transfer. In this case, you should enter the special digits after the extension length when programming Row 0 of the PAGE(S). (For the

extension length, enter the **total** of the special digits plus the length of the extension number.) CallExtend will then insert the digits in front of the extension a caller dials.

Example: The ABC Company uses extensions that begin with "4" and are three digits long (e.g., 403, 415, 435, etc.). They want callers to reach an extension if they dial it directly (e.g., by dialing "403"). However, in order to transfer a call on their phone system, the special digits *70 must be dialed before the extension number. In this case, CallExtend's PAGE 4 would be programmed as follows:

Dial 4 0 5 (hold until Data display shows d), plus:	6 * 70	#
Dial 4 0 7 (hold until Data display changes) and:	Verify the values just entered.	

Transferring to a Department:

PAGES that are not used for direct-dialing extensions can be used in a department menu, if desired. To program a PAGE as a department, you must program a * into Row 0 of that PAGE and then enter the extensions that you want calls transferred to into Rows 1-7 on the PAGE. For example, to have callers "dial 5 for Sales," you would enter a * in PAGE 5, Row 0 and up to seven extensions for the Sales department into Rows 1-7.

Each extension can be up to 8 digits long (to use a 16-digit extension, see the following Note 2). When an extension shorter than 8 digits is entered, press # to indicate that you are done entering the extension number. If you want to include a #

in the actual data (e.g., as part of an extension), dial two # signs in a row, without a significant pause.

Example: The ABC Company wants callers to be able to dial 6 for Sales and wants those calls to be sent to extension 417. To program this, you would dial the following into the ADMIN phone:

Dial 6 0 5 (hold until Data display shows d), plus:	*	#
Dial 6 0 7 (hold until Data display changes) and:	Verify the value just entered.	

This enters a * (star) into PAGE 6, Row 0. Next, extension 417 is entered into PAGE 6, Row 1:

Dial 6 1 5 (hold until Data display shows d), plus:	417	#
Dial 6 1 7 (hold until Data display changes) and:	Verify the extension is correct.	

Notes on Department Lists:

1.) **Enter each extension number exactly as CallExtend must dial it for the phone system to transfer the call.** If the phone system needs to see *70 at the beginning of a call transfer sequence, enter *70 at the beginning of each extension (e.g., enter *70212 for extension 212). You can enter a phone number, hunt group, or voice mailbox number by programming the exact digits to be dialed, including an initial "9" or "1." (Note: To have CallExtend

dial a # as part of a number, enter two # signs in a row, *without a significant pause.*)

- 2.) **An extension or phone number up to 16 digits long can be entered into CallExtend as the *only* number on a department list.** To program this, enter the first eight digits of the number into Row 1 of the PAGE and enter the remainder of the number into Row 2. Rows 3-7 of the PAGE will be ignored after this. When using extensions longer than 8 digits, you must also enter ## (two pound signs) instead of the * (star) in Row 0 of the PAGE.
- 3.) **To remove an extension from a department list,** use a single # sign to erase the contents of the appropriate Row. For example, to erase the contents of PAGE 2, Row 3, dial **2 3 5 #**. CallExtend will still use the extensions before and after the empty Row on the list.
- 4.) **CallExtend does not hunt through multiple extensions on a department list.** If more than one extension is programmed, CallExtend will transfer the first call to the first extension (the one in Row 1) and the next call to the second extension (Row 2), ***even if the first extension is available.*** CallExtend will not send another call to the first extension until it has sent a call to each extension on the department list.

Appendix A: Data Display

To make programming easier, CallExtend uses its Data display to provide information to the user. Watch this display for help during programming, and to see the results of a Review command. The display works as follows:

- **P**: When the receiver of the ADMIN phone is picked up, the Data display will show "**P**" (to indicate that CallExtend is in **Programming Mode** and is waiting for a **PAGE** number to be entered).

- **A**: Once a PAGE number has been dialed, the Data display will show "**A**" (to indicate that a **Row Address** is needed next).

- **C**: Once a Row number has been dialed, the Data display will show "**C**" (to indicate that a **Command** should be entered next); remember that the Load (5) and Review (7) Command buttons on the phone must be pressed and held down until the Data display changes.

- **d**: When the 5 button (Load Command) has been held down long enough, the display changes to "**d**" (indicating that CallExtend is ready to receive **Data**).

After a Review command, the Data display shows the contents of the PAGE and Row specified. Each digit is shown for a

second, and then the next digit is displayed. Blanks are shown as small squares (□); an asterisk or star (★) is shown as "11" (since the display can't form the shape ★), a pound sign (#) is shown as "c" and a pause is shown as "-" (a hyphen).

The following chart summarizes the Data display:

<u>displayed</u>	<u>indicates</u>
S	Speech Mode: talk into the phone to record the voice greeting
. (blinking period)	less than 8 seconds remain to finish recording the voice greeting
P	waiting for a PAGE number or ★ to be entered
A	waiting for a Row number (Address) to be entered
C	waiting for a Command to be entered
d	waiting for Data to be entered
11	a ★ stored in memory
c	a # stored in memory
-	a pause stored in memory
□	a blank stored in memory
≡	a programming error has occurred

Appendix B: Sample Setup

The ABC Company uses CallExtend to answer the majority of its incoming phone calls, to help relieve the receptionist.

The CallExtend installer set up the company's phone system analog ports for call transfers, routed incoming calls to those extensions, and cabled CallExtend to the extension ports.

By dialing *** 8** on the ADMIN phone, the company recorded the following voice greeting into its CallExtend unit:

"You've reached the ABC Company. If you are calling from a touch-tone phone and know the extension you wish to reach, you can dial that extension at any time. For Sales, dial 1. For Support, dial 3. For Accounting, dial 4. If you are calling from a rotary phone or would like to speak to an operator, please stay on the line and someone will assist you shortly."

The phone system's hook-flash duration is 250 milliseconds (1/4 of a second). The ABC Company wants to give callers 4 seconds to dial an extension or department, and it wants all call transfers to go to a receptionist if extensions are busy or do not answer within 5 rings. The receptionist is located at extension 200. The installer used the ADMIN phone to program these values into PAGE 0, as follows:

PAGE 0:

Dial **0 0 5** (hold until Data display shows d), plus: **1 4 5 #**

Dial **0 1 5** (hold until Data display shows d), plus: **200 #**

All the company's extensions begin with a "2" and are 3 digits in length. The installer programmed CallExtend's PAGE 2 for this extension format, as follows:

PAGE 2:

Dial **2 0 5** (hold until Data display shows d), plus: **3 #**

The ABC Company wants calls for Sales to go to extension 210, calls for Support to go to either extension 220 or 250, and calls for Accounting to go to extension 240. The installer used the ADMIN phone to program PAGES 1, 3, and 4 into CallExtend as follows:

PAGE 1:

Dial **1 0 5** (hold until Data display shows d), plus: *** #**

Dial **1 1 5** (hold until Data display shows d), plus: **210 #**

PAGE 3:

Dial **3 0 5** (hold until Data display shows d), plus: *** #**

Dial **3 1 5** (hold until Data display shows d), plus: **220 #**

Dial **3 2 5** (hold until Data display shows d), plus: **250 #**

PAGE 4:

Dial **4 0 5** (hold until Data display shows d), plus: *** #**

Dial **4 1 5** (hold until Data display shows d), plus: **240 #**

Appendix C: Optional Programming

Some phone systems require additional system settings beyond the basic ones detailed in the section, "Programming System Settings into PAGE 0." These optional settings can be programmed into the various fields of PAGE 0, Row 0.

NOTE: If you are programming any of the fields 1-8 of PAGE 0, Row 0, you must program all the fields prior to the desired field you are programming. For example, if you want to change the value of Field 6, you must first program Fields 1-5. Use the following chart to record the settings you program:

Page 0, Row 0:

Field Number:	1	2	3	4	5	6	7	8
<i>Dial 0 0 5 (hold until Data display shows d), plus:</i>								
Default Values:	1	0	0	0	0	0	0	0

<i>Dial 0 0 7 (hold until Data display changes) and:</i>	Verify the settings are correct.
--	----------------------------------

See the "Programming System Settings into PAGE 0" section to fill in Fields 1-3 (these fields **must** be filled in for CallExtend to work). Use the default values for Fields 4-8, unless one of the following cases applies to your installation:

Case A: Play the entire voice greeting to every caller, without allowing caller interruption. Field 2 (Pause

Duration) can be set to ✱ to have CallExtend ignore any digits that callers dial during the voice greeting. After the entire greeting has been played, CallExtend will wait five (5) seconds for the caller to dial digits; if no digits are dialed, the call will be transferred to the receptionist(s).

Case B: Fully supervise call transfers in phone systems that don't provide ringing or busy tones to CallExtend. Field 4 (Call Transfer Features) can be set to 0 (zero) to have CallExtend interpret the number 2-9 in Field 3 (Transfer Supervision Mode) to be a time period, rather than a number of rings. In this case, Field 3 represents the amount of time (in 4-second increments) CallExtend will wait before transferring an unanswered call to the receptionist(s). **Example:** if Field 4 is set to 0 (zero), a 3 in Field 3 would tell CallExtend to wait 12 (4 x 3) seconds.

Case C: Use CallExtend with phone systems that are programmed for conference calling. If the conference calling feature causes an extra hook-flash to be needed in regular call transfers, Field 4 (Call Transfer Features) should be set to 3 to have CallExtend do an extra hook-flash when transferring calls.

Case D: Allow callers to dial extensions that begin with 8. If you want callers to be able to dial an extension beginning with 8, set Field 5 (Accept an 8 Dialed by a Caller) to the extension length (1-8 digits).

Case E: Have CallExtend answer calls after x number of rings, instead of on the first ring. Program Field 6 (Delayed Answer Mode) to the number of times you want CallExtend to ring before it answers the call (e.g., "4" to answer on the fourth

ring). Set this field to 0 (zero) or 1 (one) to have CallExtend answer on the first ring.

Case F: Have calls on CallExtend's Port 1 be directed to a different receptionist than calls on Port 2. Program a 1 (one) into Field 7 (Special Receptionist Arrangements) and program the receptionist extensions as follows: In PAGE 0, Row 1, enter the extension you want to use as the receptionist for calls answered by CallExtend's Port 1. In PAGE 0, Row 2, enter the extension you want to use as the receptionist for calls answered by CallExtend's Port 2. Rows 3-7 of PAGE 0 will be ignored.

Case G: Direct calls to a receptionist extension longer than 8 digits or to an outside phone number. First program ## (two pound signs) into Field 7 (Special Receptionist Arrangements). Then, program the receptionist extension as follows: In PAGE 0, Row 1, enter the first 8 digits of the extension or phone number. In PAGE 0, Row 2, enter the remainder of the number. After this, CallExtend will direct calls to the receptionist to the complete number entered into Rows 1 and 2 of PAGE 0. Rows 3-7 of PAGE 0 will be ignored.

NOTE: When using an outside phone number as the receptionist, you may need to modify Field 8 (Pause before Exiting from Call to the Receptionist). Program this field to the number of seconds (2-9) CallExtend should stay on the line after dialing the receptionist's number, before it exits the call and connects the caller through. If CallExtend dials an outside phone number and then immediately exits the call, most phone systems will not connect the caller to the outside phone line.

Case H: Have CallExtend PAUSE while dialing. CallExtend can be programmed to pause between digits when dialing extensions or outside phone numbers. Each "pause" is 2 seconds in length, and multiple pauses can be used. To program a pause into CallExtend, program the dialing string normally; at each spot you want CallExtend to pause while dialing, enter a pause character by dialing #* on the ADMIN phone. (The * must be dialed immediately after the # without a significant delay.) The pause counts as a single digit and uses a space in CallExtend's memory; when reviewing data, you will see a "-" (hyphen) for each pause.

NOTE: CallExtend automatically pauses 2 seconds after dialing the first digit of an extension or phone number that begins with 8, 9, 0, *, or #. If a #* pause is added after the initial 8, 9, 0, *, or #, CallExtend will pause a total of 4 seconds before dialing the next digit.

Appendix D: From a Caller's Point of View

When CallExtend answers a call, it plays a voice greeting to the caller, and in response to this greeting, the caller generally dials touch-tone digits. CallExtend then directs the call to the desired extension, in one of three supervision modes: Full Supervision Mode, Busy Supervision Mode, or Unsupervised Mode. (For more information on these modes, see the "Transfer Supervision Mode" field under "Programming System Settings into PAGE 0.")

What the caller hears while the call is being transferred depends on which mode CallExtend is programmed for, as described below:

- A. In Full Supervision Mode, CallExtend places the call on hold while it rings the desired extension and listens for ringing or busy tone. Since the caller is on hold during this time, he or she hears what the phone system puts out to calls on hold (music, a special message, or silence). CallExtend connects the call through upon hearing a voice answer the destination extension (the caller may not hear the first word spoken by the person who answers the extension telephone). If the extension telephone is not answered, the call is transferred to the receptionist(s).
- B. In Busy Supervision Mode, CallExtend places the call on hold and rings the desired extension. If the extension is busy, the call is immediately transferred to the

receptionist(s). If the extension phone begins to ring, CallExtend connects the call through to the extension, and the caller will then hear the extension ringing.

- C. In Unsupervised Mode, CallExtend connects the call to the desired extension without placing it on hold. This means that the caller will begin hearing ringing or busy tone immediately after dialing an extension or digit.

When Transferred to the Receptionist:

Whenever a call is transferred to a receptionist, CallExtend immediately connects the call through. This means that the caller will hear ringing or busy tone while waiting for the receptionist to answer the phone. The call is **not** put on hold while waiting for the receptionist.

Appendix E: Troubleshooting

If you experience problems when installing CallExtend, the following examples may assist you in troubleshooting:

CallExtend answers calls but does not play a message for the caller: The voice greeting may have been erased by a power failure and should be re-recorded. Also, check the "Batt. Low" light on CallExtend; if this light is on, a new battery should be inserted in the battery backup.

CallExtend seems to tie up a phone line for a long period of time without transferring a call: 1) Since CallExtend is on the station side of the phone system, if a caller hangs up, CallExtend does not disconnect the call -- the phone system should. Check that the phone system properly disconnects hang-up calls. 2) If CallExtend does not have a proper receptionist extension programmed into it, it will not be able to transfer callers who wait on the line to reach the receptionist (e.g., if they are calling from a rotary phone); thus, these callers may be kept on the line indefinitely. Verify that Rows 1-7 of PAGE 0 are programmed correctly. In particular, make sure that PAGE 0, Row 1 has a valid receptionist extension programmed into it.

The caller dials a digit but is not transferred to one of the extensions on that digit's list: Make sure that Row 0 on that digit's PAGE is set to * (star). Also, review the data in Rows

1-7 on the PAGE, to make sure that the desired extensions have been programmed.

Calls are not being transferred: Check the "Hook-Flash Duration" field (PAGE 0, Row 0) to make sure the field is set correctly for the phone system. Make sure that the phone system ports connected to CallExtend are set up to allow manual call transfers and that CallExtend has been programmed to dial any prefix digits that are needed in front of extension numbers when transferring calls.

If a call is not answered by the extension it was transferred to, it is not being transferred to the receptionist: The "Transfer Supervision Mode" setting in PAGE 0, Row 0 may be set to zero or one. This causes CallExtend to transfer the call without answer supervision. See "Programming System Settings into PAGE 0" to change this value.

If this problem occurs when CallExtend is set to fully supervise call transfers, check the extensions entered into Rows 1-7 of PAGE 0, to make sure they are valid extensions. Make sure your telephone system does not place day/night restrictions on dialing certain extensions.

A call is transferred to an extension, but that extension only rings briefly before the call is transferred to the receptionist: Set the "Transfer Supervision Mode" field in PAGE 0, Row 0 to a higher number of rings (see "Programming System Settings into PAGE 0").

The greeting is played twice to callers: On some phone systems, if an extension does not answer a call transfer, the

call is automatically transferred back to the extension that originated the transfer. In this case, calls will be transferred back to CallExtend if they are not answered by the appropriate extension. When the call is transferred back to CallExtend, it looks like a new call, so CallExtend plays its greeting to the caller. Program the phone system to not transfer calls back to the ports used with CallExtend.

The greeting stops part-way through (always at the same place), and the caller is immediately transferred to an extension or the receptionist: Part of the voice greeting may sound like a touch-tone digit to CallExtend, causing the call to be transferred. If the digit is programmed, CallExtend will transfer the caller to the appropriate department; if it is not programmed, the caller will be transferred to the receptionist. Re-record the voice greeting.

The greeting stops part-way through at a random point, and there is a pause before the call is disconnected or is transferred to the receptionist: CallExtend may be located near a transformer or power supply that emits a strong magnetic field, causing CallExtend to lock up. Relocate the CallExtend unit.

The caller dials to select a department or extension and gets dial-tone, and the call is dropped: The hook-flash duration CallExtend is using when transferring calls may be too long for the phone system. Change the value programmed into the first Field of PAGE 0, Row 0 to a lower value that matches the hook-flash duration of the phone system.

How to Reach Customer Support

If you encounter problems you are not able to resolve with your CallExtend system, contact your CallExtend dealer or Call Management Products Inc., Broomfield, Colorado, at (303) 465-0651 or (800) 245-9933.

Returning a CallExtend for Repair

If you suspect that your CallExtend may need repair, contact our Customer Support Department from the site where CallExtend is connected. A technician will ask you some questions about the installation and will go through some tests over the phone.

If the Customer Support technician determines that the CallExtend needs to be returned for repair, he or she will issue you a **Return Merchandise Authorization (RMA) number**.

CallExtend comes with a 1-year warranty on parts and labor. If the manufacture date on the bottom of the CallExtend is over 12 months old, a photocopy of the actual sales receipt is required to prove the purchase date. Out-of-warranty repairs are available.

FCC Notice

- 1.) This equipment complies with Part 15 and Part 68 of the FCC rules. On the bottom of the CallExtend unit is a label that contains, among other information, the FCC registration number and the ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.
- 2.) This equipment uses the following USOC jacks: RJ11C.
- 3.) The Ringer Equivalence Number (REN) is used to determine the quantity of devices that may be connected to the telephone line at one time. The REN characterizes the load placed on the telephone company alerting (ringing) power source by this product, as a ratio to a standard mechanical bell-type ringer. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.
- 4.) If this equipment causes harm to the telephone network, the telephone company has the right to discontinue service temporarily on the line to which this product is connected. The telephone company will notify you in advance if temporary discontinuance of service is required. If advance notification isn't practical, the telephone company will notify you as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
- 5.) The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of this equipment and could make it incompatible or less compatible. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications to maintain uninterrupted service.
- 6.) If trouble is experienced with this equipment, please contact your local dealer or Call Management Products Inc. (CMP) for repair or warranty information. If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved. Under no condition is any equipment to be sent to CMP without contacting CMP in advance for return authorization.
- 7.) No repairs can be done by the customer.
- 8.) This equipment cannot be used on telephone company provided coin service. Connection to Party Line Service is subject to state tariffs.
- 9.) This equipment is hearing-aid compatible.

Call Management Products Inc. reserves the right to make improvements to the product described in this manual at any time and without notice.

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CallExtend

User's Manual

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