

CONNECTING PHONES, FAXES & DEVICES TO TALKSWITCH

CT.TS005.504.EN - 03

CONNECTING PHONES, FAXES & DEVICES TO TALKSWITCH

WHAT WILL MY PHONE SYSTEM DO?

Default Equipment Settings:

Simply connect the Talkswitch to your phone system (as shown below).
Your phone system will do the following:

- An incoming call on any line will ring all local extensions.
- A receptionist can manually transfer calls to local extensions or voicemail.
- Every local extension gets a voicemail box.
- Extension 114 (E4) works during a power failure.

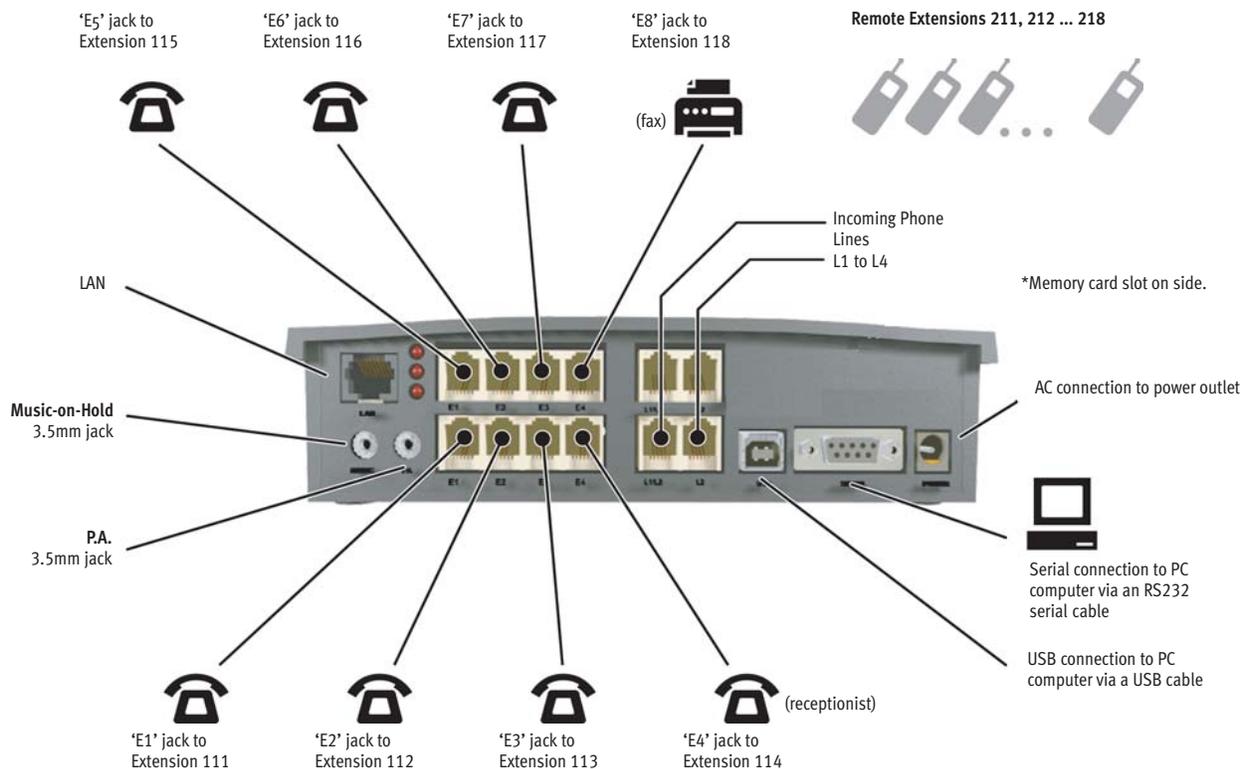
TalkSwitch Back Panel

TalkSwitch 48-CA/ 48-CVA shown here.
Model Differences:
TalkSwitch 24-CA
2 Lines In (L1/L2 and L2 only)
4 Local Extensions (E1 - E4 only)
No Lan Connection
TalkSwitch 48-CA and -CVA
4 Lines In (as shown)
8 Local Extensions (as shown)
LAN Connection

Additional Capabilities can be added by installing the TalkSwitch Software.

SUGGESTED CONFIGURATION

Connections from the TalkSwitch to all your telephone devices and computer. you need not add all of the phones. The fax machine should be put into local extension 'E8' for a TalkSwitch 48-CA and 48-CVA, or 'E3' for the TalkSwitch 24-CA.



CONNECTING DEVICES

Move the TalkSwitch to a location where it can be attached to incoming telephone lines and your telephone devices.

Connect phone devices as shown in the “Suggested Configuration” on the previous page; this corresponds to the TalkSwitch default settings. TalkSwitch does NOT need to remain connected to the computer - only when changing configuration settings.

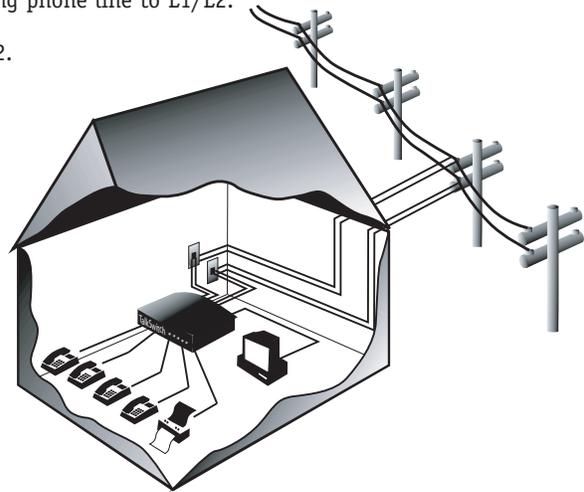
Here are a few things to consider when placing your TalkSwitch:

Incoming Phone Lines

Choose a convenient wall jack for you to attach to your TalkSwitch. Then connect your telephone lines in the following manner:

- Connect the first incoming phone line to L1/L2.
- Connect the second to L2.

TalkSwitch 48-CA and 48-CVA users can then connect remaining lines to L3/L4 and L4. If you have 2 lines out of 1 phone jack, you can plug it into the L1/L2, and L3/L4 jacks.



Local Extensions

Plug each internal telephone into lines E1 through E8 consecutively.

Make sure the fax line has been put into E8 or E3.

! It is a good idea to connect E4 to a phone, as this is the only extension that will work during a power failure.

Location

Check out the location of electrical wall outlets and telephone jacks in the room. Place TalkSwitch close enough to these items using your AC Adapter and telephone cords.

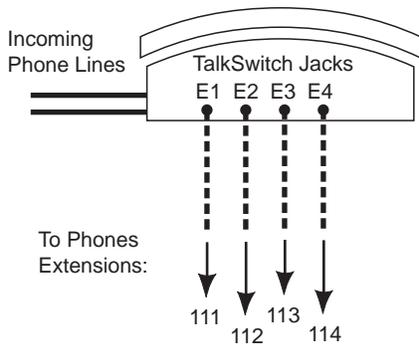
Music on Hold

Connect the 1/8" (3.5mm) phono connector from the music jack to an audio source such as CD player, radio, tape player, or computer sound card.

? Need Help Wiring?

Need help wiring your house or small office? Not sure where all the jacks are, or what colors of wires you should use? Need to do some rewiring?

Make the most out of your phone system with our “Home/Office Wiring” Quick Guide.



WIRING PHONES

Call Handling:

All incoming calls will be routed to the individual phones by TalkSwitch. All call handling such as call forwarding, transferring, voicemail etc., is done by TalkSwitch.

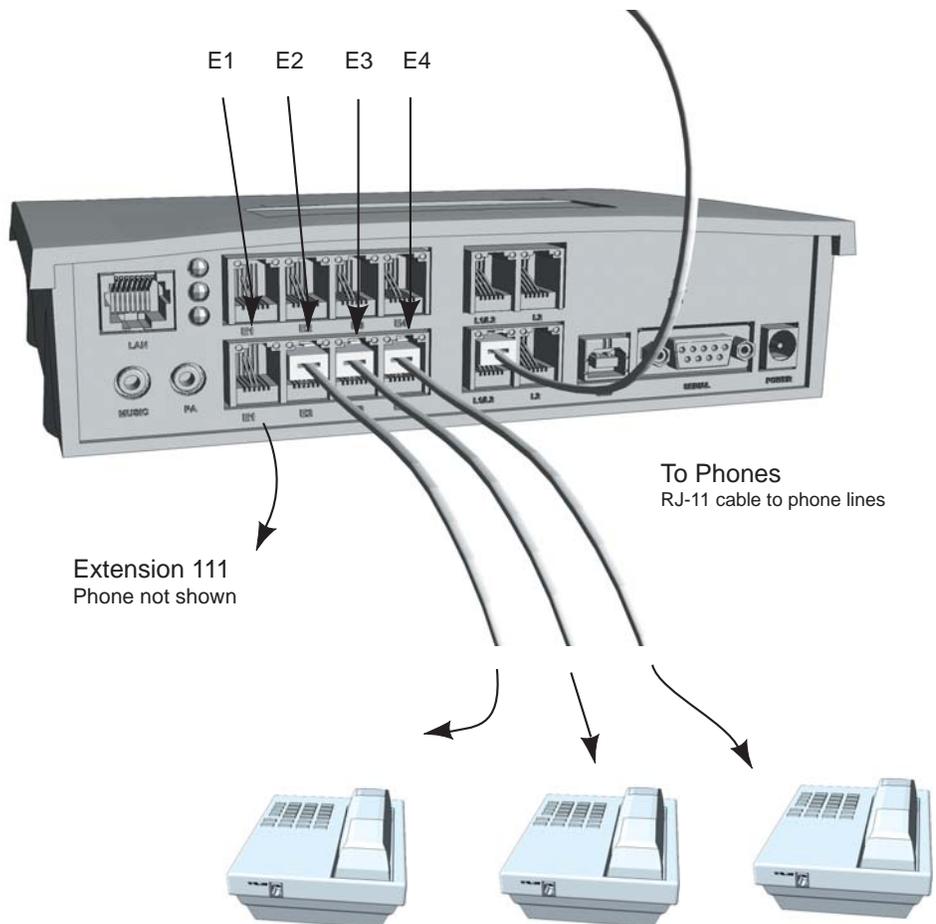
NOTE: Incoming lines are not directly connected to any of the local extensions, instead the software determines which incoming lines are routed to what local extensions.

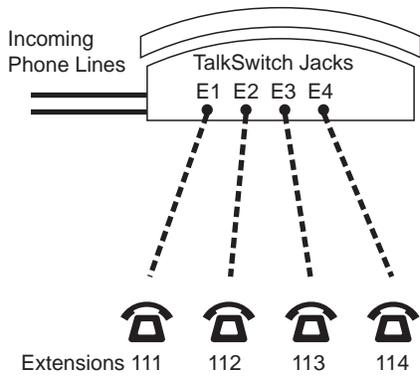
By default all incoming lines ring all local extensions. How you change the default software settings will depend upon the types of phones you use and how you decide to wire them.

TalkSwitch 48-CA and 48-CVA - Rear Panel

From Phone Lines
RJ-11 cable to incoming phone lines

Use the following pages to determine how to connect single line, two line, and multi-line phones.



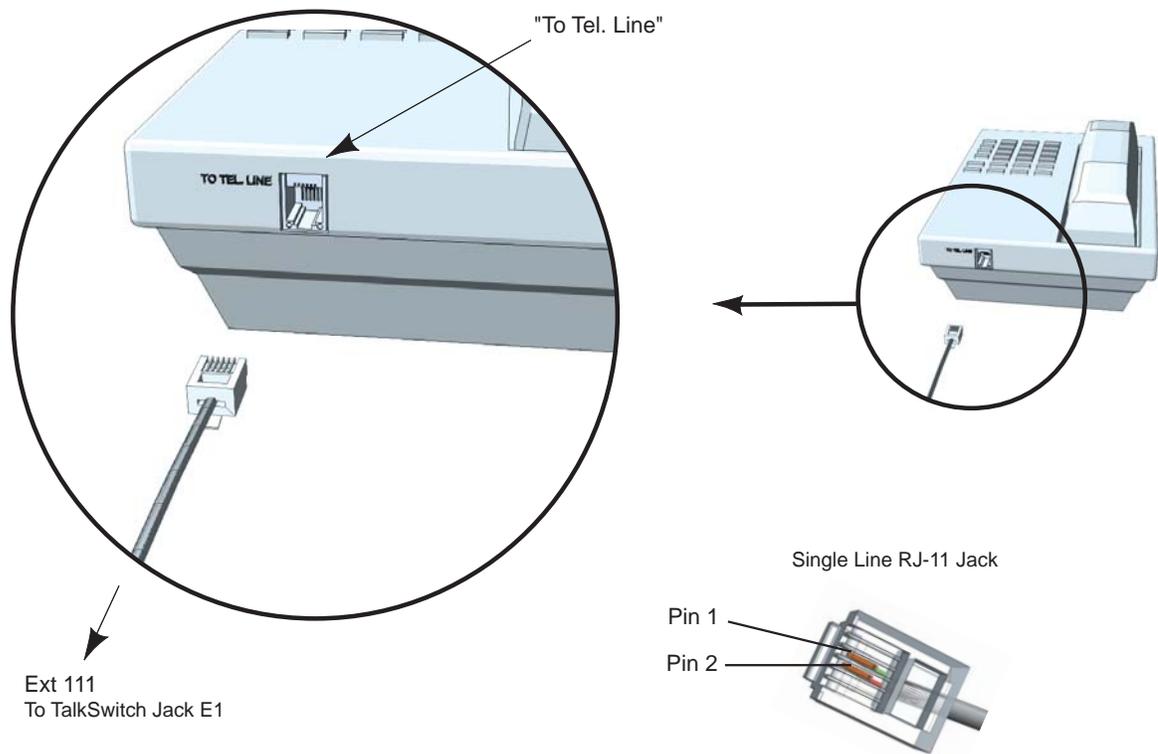


CONNECTING PHONES: SINGLE LINE PHONE

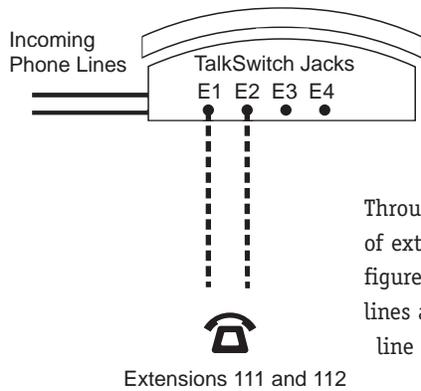
Call Handling:

This is the simplest set-up, where each phone is connected to a single extension. A call transferred to extension 111 will ring the phone connected on TalkSwitch jack E1; similarly a call transferred to extension 112 will ring the phone on jack E2, extension 113 will ring E3, etc.

All functionality including transferring calls, forwarding calls, and voice-mail, is handled by TalkSwitch. Even the most basic of phones therefore, once connected to TalkSwitch, will inherit the capabilities of TalkSwitch.



Each phone is connected to a single line RJ-11 cable. The jacks at the end of the cables should have two pins, although a 2 line/ 4 pin cable will also work.



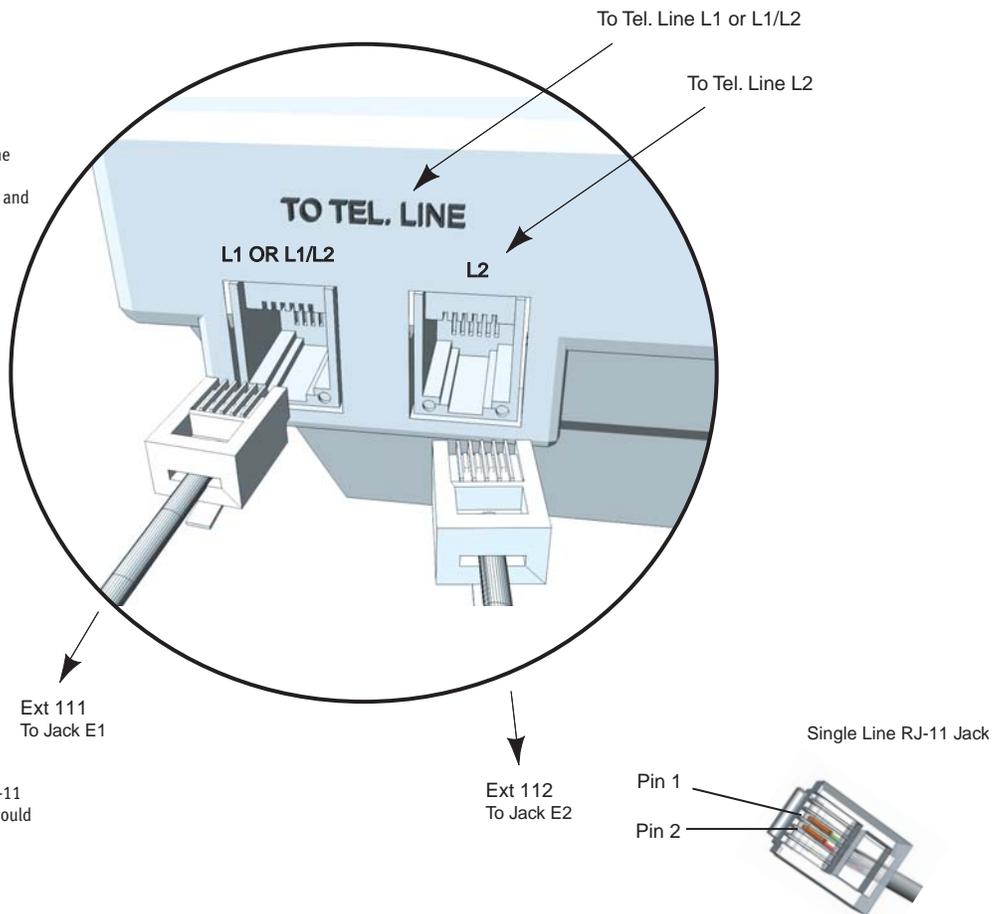
CONNECTING PHONES: TWO LINE PHONE - OPTION 1

Call Handling:

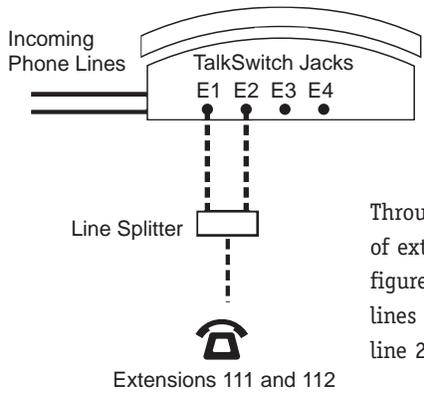
TalkSwitch extensions 111 and 112 are wired to a two line phone. When a call is transferred to extension 111, line 1 on the phone will show as active; similarly calls on extension 112 will show line 2 as active.

Through the software, you may configure each incoming line to ring any given number of extensions, including all extensions. However, be careful if incoming line 1 is configured to ring both extensions 111 and 112. An incoming call will ring both phone lines at the same time. Instead configure incoming line 1 to ring extension 111, and line 2 to ring extensions 112.

Two line phones must have these two phone jacks labeled "L1/L2" and "L2". The jack labeled "L1/L2" will have 4 pin connectors and the "L2" jack will have 2 pin connectors.



Each phone is connected to a single line RJ-11 cable. The jacks at the end of the cables should have two pins as shown below..

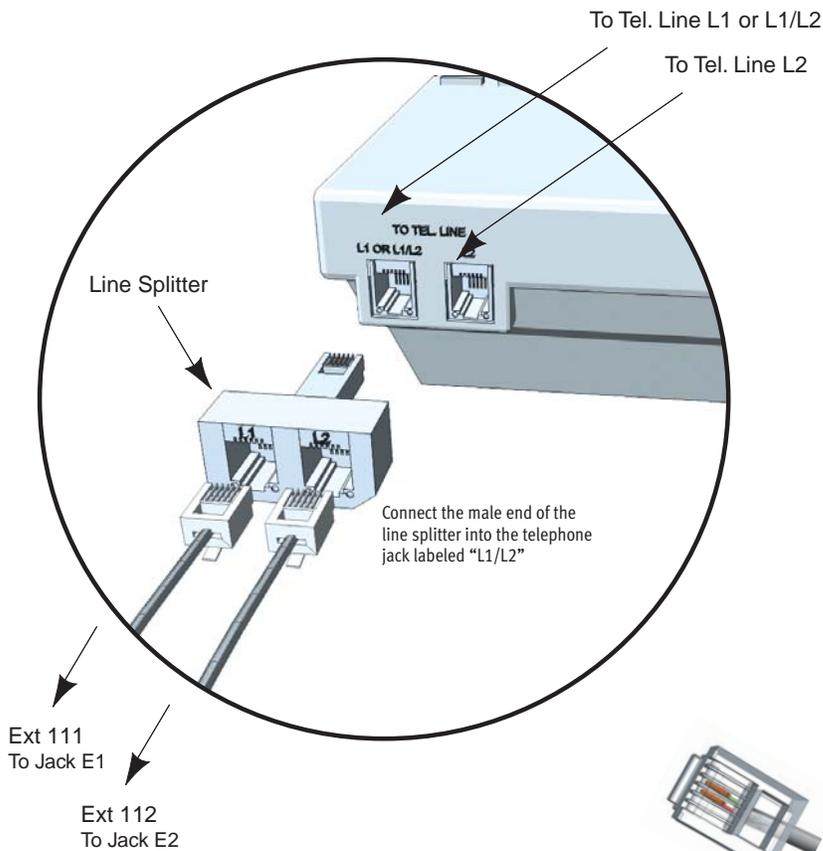


CONNECTING PHONES: TWO LINE PHONE - OPTION 2

Call Handling:

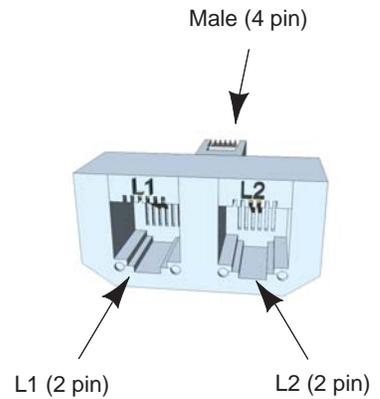
TalkSwitch extensions 111 and 112 are wired to a two line phone using a line splitter. When a call is transferred to extension 111, line 1 on the phone will show as active; similarly calls on extension 112 will show line 2 as active.

Through the software, you may configure each incoming line to ring any given number of extensions, including all extensions. However, be careful if incoming line 1 is configured to ring both extensions 111 and 112. An incoming call will ring both phone lines at the same time. Instead configure incoming line 1 to ring extension 111, and line 2 to ring extensions 112.



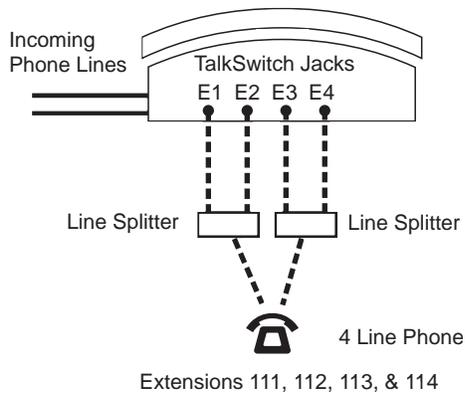
Line Splitter

L1 and L2 are single line (2 pin) female connectors that join to a two line (4 pin) male connector. A 4 pin female receptical will indicate that you have a duplexer and not a line splitter.



Each phone line is connected to the line splitter via a single line RJ-11 cable. The jacks at the end of the cables should have two pins.

Single Line RJ-11 Jack

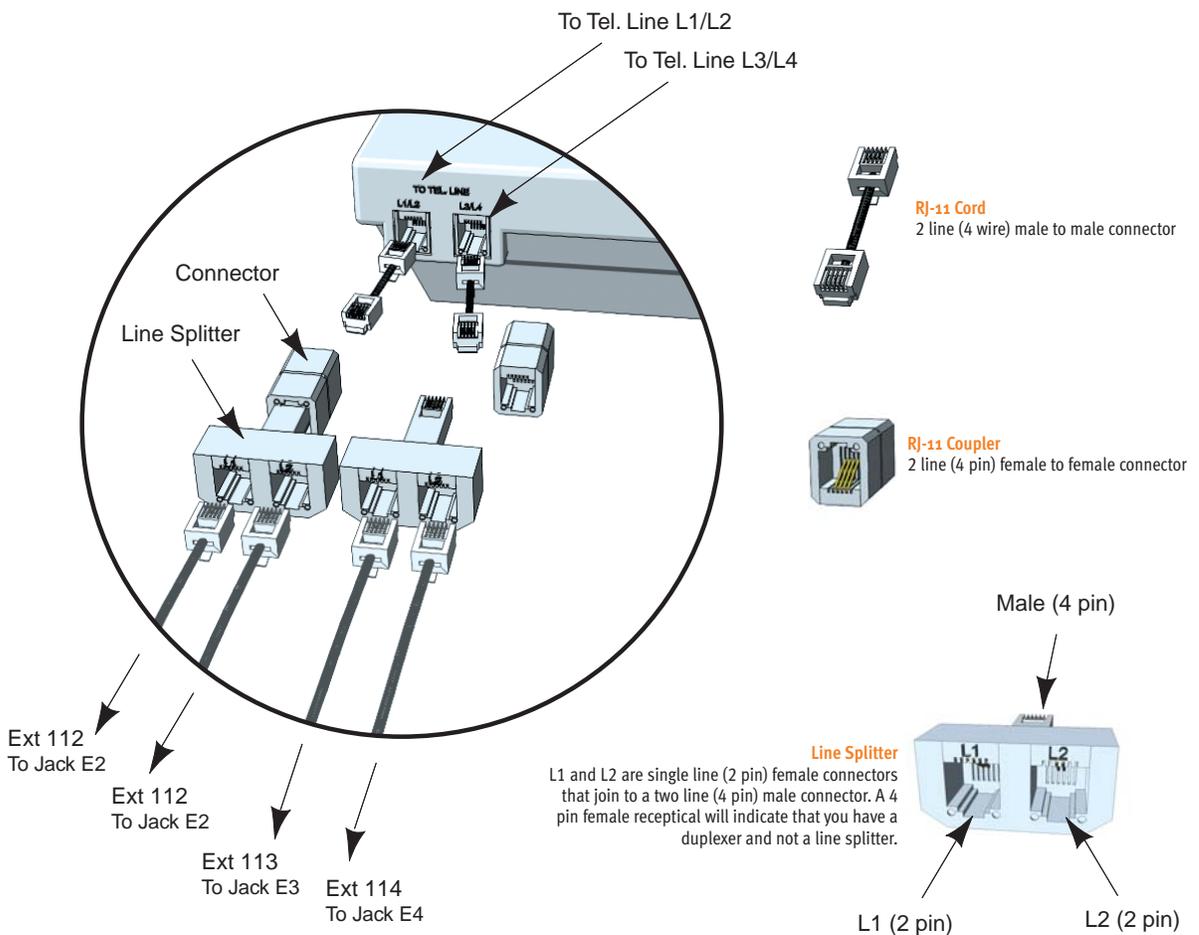


CONNECTING PHONES: MULTI-LINE PHONES

Call Handling:

TalkSwitch extensions 111, 112, 113, and 114 are all wired to the four line phone. When a call is transferred to extension 111, line 1 on the phone will show as active; similarly calls on extension 112 will show line 2 as active etc.

Through the software, you may configure each incoming line to ring any given number of extensions, including all the extensions. However, be careful if incoming line 1 is configured to ring extensions 111, 112, 113, and 114. An incoming call will ring all four phone lines (lines 1 through 4) at the same time. Instead configure incoming line 1 to ring extension 111, line 2 to ring extension 112, etc.



CONNECTING FAXES

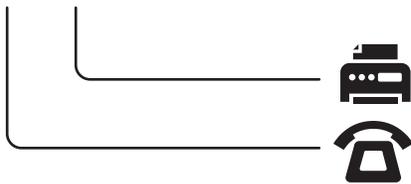
1. Choose a Method to Handle Incoming Faxes

Only you can decide how you want to configure your office. Some solutions will be suited to your needs, others won't. Take a look at each option to decide what is best for you.

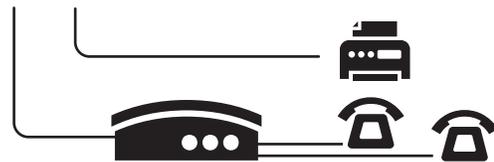
Option 1 : Dedicated Fax Line

You may already have an incoming dedicated fax line. Simply connect this line to your fax machine directly and the remaining incoming telephone lines to your TalkSwitch. Incoming telephone lines will be handled by the TalkSwitch and your fax will work the way it has always worked.

Before installing TalkSwitch, both phones and faxes are on dedicated lines.



After installing TalkSwitch the fax machine remains on its own dedicated line. All incoming telephone lines are shared by the remaining office phones.



Advantages: easy to set up, and you don't change the way your fax handles calls.

Disadvantages: The dedicated fax line can not be shared with the other phone devices, i.e. you can not make an outbound voice call on your fax line. The dedicated fax line costs money, and may not be used as often.

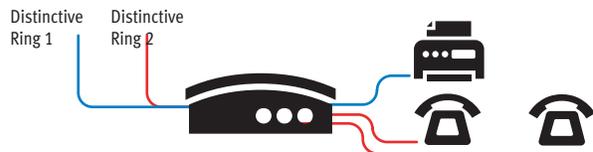
Option 2: Distinctive Ring

Distinctive ring is a service provided by your phone company where a second phone number is added to the same physical telephone line. i.e. you have two telephone numbers that ring on the same line - each telephone number produces a different style of ring on your phones. Here's how the TalkSwitch would handle incoming calls.

A single telephone line with two assigned numbers, each number has a different ring pattern. Based on the ring pattern you pick up the phone, or let the fax answer the call.



After installing TalkSwitch, the TalkSwitch automatically routes faxes to the fax machine, and callers to the phones.



Advantages: Does not require a 2nd physical line for faxes.

More telephone lines can be added as you grow, and you can keep the same fax arrangement.

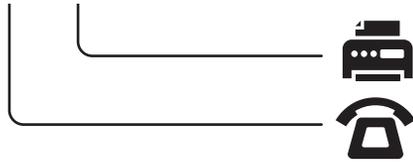
Disadvantages: You only have one line, and can therefore only handle one call at a time.

You may have to purchase distinctive ring from your phone company.

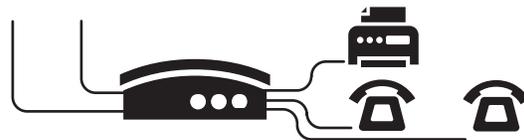
Option 3: Automatic Detection via the Auto Attendant

The Auto Attendant must answer all incoming calls with your pre-recorded message. It will listen for a CNG tone to see if the call is an incoming fax or a human. If the call is a fax, it is routed to the fax machine, otherwise the call is treated as though it were a human. You must create an Auto Attendant to use this method.

Before installing TalkSwitch, both phones and faxes are on dedicated lines.



After installing TalkSwitch, all incoming calls are answered by the auto attendant. The auto attendant then directs the call to the fax or local phone extensions.



Advantages: Calls are automatically handled for you, no distinctive ring, no listening to ring patterns.

Incoming phone lines are shared between all phones and faxes making better use of your resources.

Disadvantages: Older fax machines do not emit a CNG tone, therefore the auto attendant can not detect them as an incoming fax.

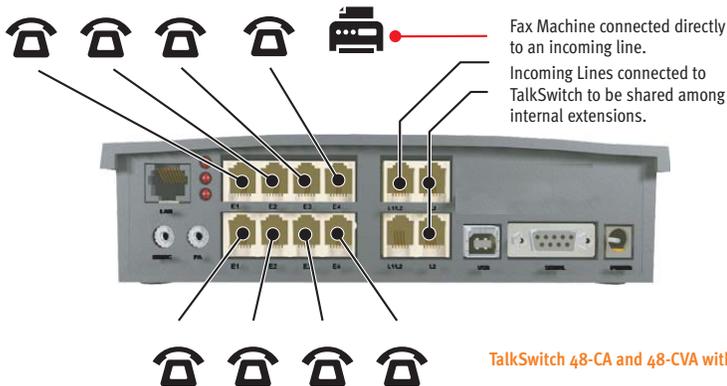
If your auto attendant volume is set too high, or if your telephone lines are noisy, the auto attendant may have difficulty detecting the incoming CNG tone, and therefore not route the call to the fax machine.

Which Option Do You Prefer?

?	Option	Complete This Step Only
	Option 1 : Dedicated Fax Line	Step 2
	Option 2 : Distinctive Ring	Step 3
	Option 3 : Detection via Auto Attendant	Step 4

2. DEDICATED FAX LINE

Connect the fax machine directly to the incoming fax line. The remaining incoming lines can be connected to TalkSwitch via jacks L1 to L4. The local phone extensions are connected to jacks E1 through E8.



Remember, TalkSwitch 24-CA units only have 2 incoming lines and 4 local extensions, so incoming lines are connected to jacks L1 and L2, and local phone extensions to E1 through E4.

3. DISTINCTIVE RING FAX DETECTION

3.1 Connect TalkSwitch to the PC, then Open the TalkSwitch Software

Connect TalkSwitch to your PC and open the TalkSwitch Configuration Software. For details refer to the "TalkSwitch Installation and User Guide".

3.2 Set Distinctive Ring Numbers

One of the incoming lines will have a distinctive ring number assigned to it. This number will need to be recognized by TalkSwitch as an incoming fax line. Follow the steps below.

Step A
Choose "System Information" and then "Telephone Lines" - See Arrows

Step B
Choose the Line number for the incoming fax.

Step C
Activate the Line

Step D
Enter the Line telephone number. This is the number people use to call your office.

Step E
Enter the distinctive ring number on this line. This is the number people will call to get your fax machine

3.3 Set Fax Detection on Distinctive Ring Number

Configure the fax detection as shown

Step A
Choose "System Information" and then "Fax Information" - See Arrows

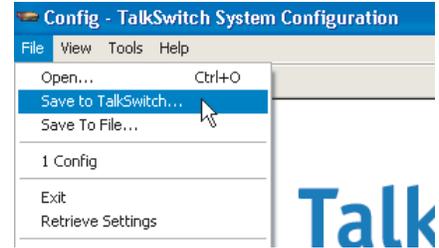
STEP B
Enter the Distinctive Ring number for the incoming fax. This is the number people will call to get your fax machine, and is the same as Step "E" above.

STEP C
Enter the local extension number for your fax. This is the extension you will plug your fax machine into.
For TalkSwitch 24-CA, we recommend that you put your fax into extension 113.
For TalkSwitch 48-CA and 48-CVA, we suggest you put the fax into extension 118.

3.4 Save Settings to TalkSwitch

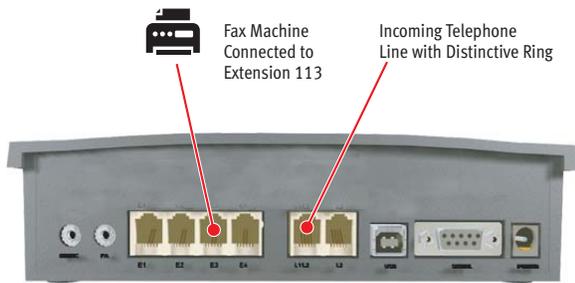
New settings must be saved to the TalkSwitch phone system for them to take effect.

Choose 'File' then 'Save to TalkSwitch'. A progress bar will show the data exchange to the TalkSwitch unit and should take only a few seconds to complete.

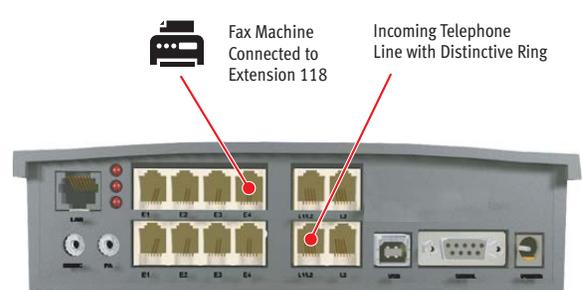


3.5 Connect Fax to TalkSwitch

Connect the fax machine to the back of the TalkSwitch unit, as shown below. The connections should correspond to the settings you have made in the software.



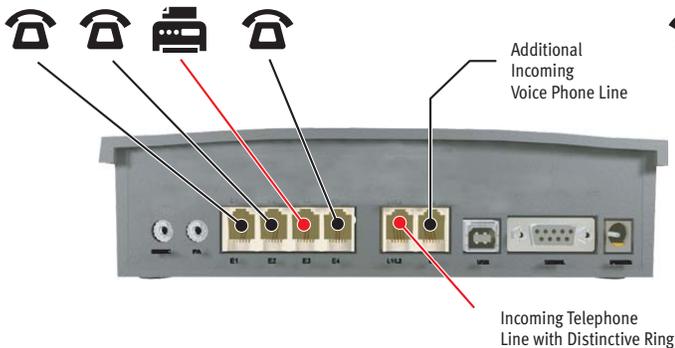
TalkSwitch 24-CA fax connections



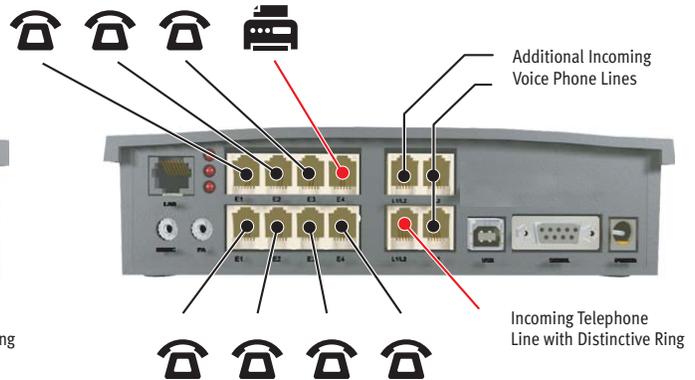
TalkSwitch 48-CA and 48-CVA fax connections

3.6 Reconnect Phones and other Devices to TalkSwitch

You may wish to add the following telephone equipment. It is not necessary to add all these devices or lines



TalkSwitch 24-CA office connections



TalkSwitch 48-CA and 48-CVA office connections

4. Automatic Detection via the Auto Attendant

This setting may change the way incoming calls are handled. All calls must be answered by the auto attendant. The auto attendant will then route calls to their destination.

4.1 Connect TalkSwitch to the PC, then Open the TalkSwitch Software

Connect TalkSwitch to your PC directly and open the TalkSwitch Configuration Software. For details refer to the "TalkSwitch Installation and User Guide".

4.2 Configure the Auto Attendant

If an auto attendant is already configured, add Step "D" only. If there is no auto attendant, we recommend starting with the Auto Attendant below. It will answer all incoming calls, play a recorded message, then allow callers to dial their party's extension or dial '0' for a receptionist. Follow these steps.

STEP A
Choose "Call Handling" and then "Auto Attendants".
See Arrows

STEP B
Choose Auto Attendant #1. Additional Auto Attendants can be configured later.

STEP C
Follow these settings as shown. Set up a human receptionist at extension 114. If you have other settings, enter the appropriate values for your office.

STEP D
Add automatic fax detection to route faxes to extension 118.

STEP E
Callers that don't have a touch tone phone can be routed to the receptionist. Again you may change the local extension of your receptionist, and the time it takes to 'fall through' to extension 114.

Config - TalkSwitch System Configuration

File View Tools Help

About TalkSwitch
System Information
Voicemail
Call Handling
Modes
Auto Attendant
Telephone Lines
VoIP Lines
Local Extensions
Remote Extensions
Extension Ring Groups
Call Back/ Call Bridge
Options

At the Auto Attendant, perform the following actions:

1	If the caller selects '0' then:	go to local ext.	114
2	If the caller selects '1' then:	perform no action	
3	If the caller selects '2' then:	perform no action	
4	If the caller selects '3' then:	perform no action	
5	If the caller selects '4' then:	perform no action	
6	If the caller selects '5' then:	perform no action	
7	If a fax call is detected then:	go to local ext.	118
8	After the Auto Attendant has finished playing and no selection has been made within 5 seconds, then	go to local ext.	114
9			

Utilities for Auto Attendant 1
Before an Auto Attendant can be fully functional, you need to record your Auto Attendant message using a telephone or load a pre-recorded Auto Attendant.

Record Instructions... Load Auto Attendant... Erase Instructions...

Step "D" above configures the incoming fax line. The default configuration assumes that the fax machine is attached to extension 118 (TalkSwitch 24-CA users should connect to extension 113). Adjust these values to match the extensions you will plug your fax into.

4.3 Configure Incoming Phone Lines

Each incoming telephone line has to be set to answer incoming calls using one of the auto attendants. Presently, only Auto Attendant #1 has been configured, so we will use Auto Attendant #1 to answer on all lines. Follow these steps.

Step A

Choose "Call Handling" and then "Telephone Lines" - See Arrows

Step B

Choose Line #1. Each line will be configured in succession.

Step C

Select "Mode 1". Different Mode Scheduling can be configured later.

Step D

Choose to Play Auto Attendant #1, immediately.

This will pick up all incoming calls on line 1 and play your recorded greeting

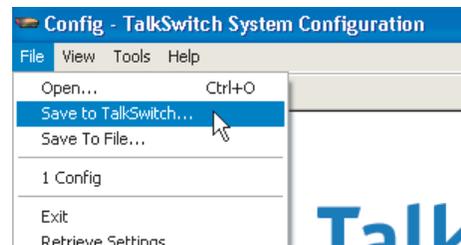
Step E

Repeat the same setting for each of your incoming lines. Start at Step 'B', and choose Line #2. Then set the same settings in Step C and Step D

4.4 Save Settings to TalkSwitch

New settings must be saved to the TalkSwitch phone system for them to take effect.

Choose 'File' then 'Save to TalkSwitch'. A progress bar will show the data exchange to the TalkSwitch unit and should take only a few seconds to complete.



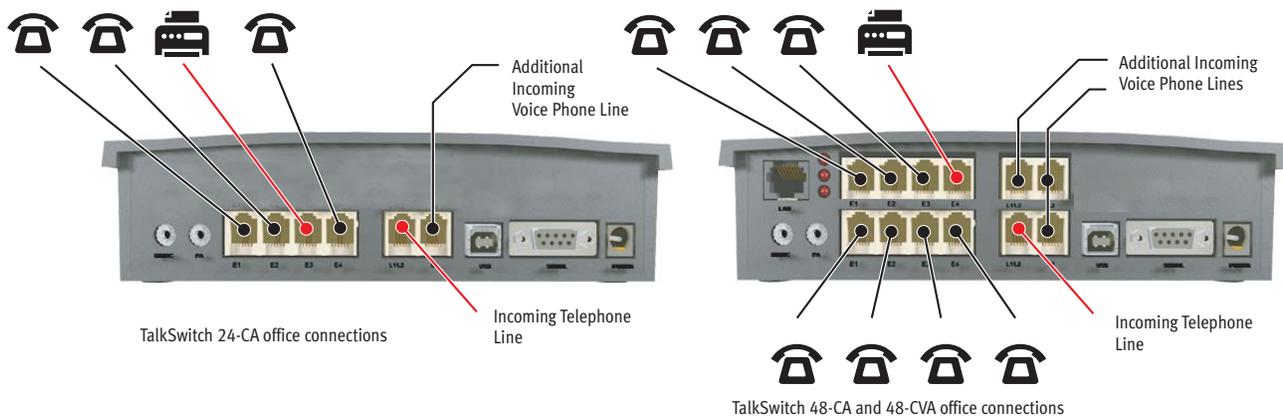
4.5 Connect Fax to TalkSwitch

Connect the fax machine to the back of the TalkSwitch unit, as shown below. The connections should correspond to the settings made in the software.



4.6 Reconnect Phones and other Devices to TalkSwitch

The following telephone equipment may be connected, however it is not necessary to add all of the suggested devices or lines.



4.7 RECORD AUTO ATTENDANT PROMPTS

For instructions on loading a professionally pre-recorded greeting, refer to the TalkSwitch Installation and User Guide.

Step A: Lift any internal extension and you should hear dial tone.

Step B: Press **#** to enter command mode. You may need to enter your password.

Step C: To begin recording your first prompt for auto attendant 1, press **4 1 #**. (This is called a DTMF command)

Step D: Record your auto attendant.

Step E: To listen to your auto attendant greeting press **5 1 #**.

Step F: You may follow additional instructions given by the prompts, and when you are done, hang up.

! Failure to Record an Auto Attendant will cause your office phone to answer with no message. The caller will hear 'dead air' and will assume that they are not connected, causing them the hang up the phone.

? **What Should an Auto Attendant Say?**
"Welcome to the ABC company. If you know your party's three digit extension you may dial it now. To reach our receptionist press "0" or stay on the line."

About TalkSwitch

TalkSwitch® is dedicated to providing small and multi-location businesses with innovative telecommunications solutions. Since 1990, TalkSwitch has delivered rich features, high functionality and unbeatable value. Ideal for businesses with up to 32 telephone users per office, TalkSwitch systems provide users with options to connect to both the traditional telephone network (PSTN) and Voice over IP (VoIP) networks. TalkSwitch is headquartered in Ottawa, Canada. For more information call (888) 332-9322 or visit our website at www.talkswitch.com

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