SmartHome+ 1st Party Cameras
Digital Team Input Document

WIP Digital Assets

All digital teams to create final assets based on this input material

- Website draft
- DIY Doorbell Instructions.pdf
- lifestyle_shots
- Creative Digital Brief SmartHome+ MVE2

Notes

- This document is draft
- The doorbell is the most complex product and outdoor and indoor cameras UGS will broadly be a subset of this product. Doorbell will be done first and others added
- Final copy is decision of copywriter Adriana Harper
- Legal claims to be substantiated
- Allocate 2 weeks to translate and finalize French copy
- Allocate 3 weeks to review the launch with the Reliability team

Competitor Comparison

- Nest Doorbell Install: https://drive.google.com/drive/folders/1a7XpvBo6VZv828Vv2xomAir9VkUiT7vd?usp=drive_link
- Hardware: competitor_testing_results

Feature / Specification	TELUS	Others
• 1440p resolution • 30 FPS	Experience every detail outside your home	See vague dark shapes moving in a jerky motion
• High Dynamic Range (HDR) • WLED	Experience every detail outside your home	See black shadows against bright backgrounds
• WLED & Color night vision • IR LED & IR night vision	See clearly day and night with both white LED lighting and infrared (IR) night vision.	Miss skulking criminals in the dark
• 3:4 aspect ratio • wide-angle 160° field of view lens	See the whole picture with a head-to-toe view of people and packages on your doorstep	Only see a torso at your door, cut off picture misses packages
• People, pet, package, familiar face, vehicle, motion AI detection • Zoning	Recognize what matters most with sophisticated AI detection. Tailor your alerts so you're only notified when you want to be	Hundreds of alerts a day or miss recordings of events of interest

• IP65 water-resistant • -40°C to 50°C.	The TELUS Doorbell Camera works in every Canadian climate	Waterlogged in the rain, wont boot in winder and overheats in the sun
• Zero touch setup • App install walkthrough	Get up and running in minutes with simple, guided do-it-yourself installation.	Need a PhD, 3 hours and a sonic screwdriver to set up
• SD card up to 1TB	24/7 recording for 60 days on device You can turn off cloud storage, keeping your private footage even safer	No local storage means higher cloud costs, storage limited to 256GB and only a few days of footage
• Edge 📒	Lightning fast detection and notification what matters most	Slow notification speed
• Two way talk	Interact effortlessly with visitors, no matter where you are, with seamless two-way talk.	Just watch as the crims break into your house and do their dirty deeds (seriously what TP-Link said HA)

Device Images
- All images here: SHS-Image-Bank
- List other desired images for generation SmartHome 2.0 | Digital Program Management Tracker and Steve Humpstonwill have them created

FAQs
- How do I install my own equipment?
  - The TELUS Doorbell Camera is designed for straight-forward self-installation. Download the TELUS SmartHome+ app and select **Doorbell Camera Installation** to get started. The app will guide you through anything you need to do before you start the installation, and every step along the way.
- Will my doorbell work with my existing doorbell chime?
  - The TELUS Doorbell Camera is designed to work with all standard wired doorbell chimes. To identify if you have one of these:
    - 1. Push your existing doorbell to confirm you hear a chime noise from inside the house.
      2. Locate the source of the noise.
      Standard doorbell chimes are typically installed high on the wall in a central location. They will have a removable cover which reveals three screw terminals marked 'Rear', 'Trans' or 'Common', and 'Front'. 8-24v AC will be available across 'Trans' and 'Front' as well as 'Trans' and 'Rear'. Note that the TELUS Doorbell is only compatible with 10-24v AC 10VA.
  - The TELUS Doorbell Camera has been tested with the following standard mechanical chimes:

- - - Heath Zenith SL--2796-03
    - Heath Zenith SL-2735-02
    - Honeywell RCW110KB1008.
  - The TELUS Doorbell Camera has been specifically tested with the following standard digital chimes:
    - Hampton Bay CH-7612-03
    - Heath Zenith SL-7582
- Will my doorbell work with my existing wiring?
  - The TELUS Doorbell Camera is designed to work with all 10-24v AC 10VA standard doorbell wiring.
    - If you currently have a wired doorbell, it is most likely that the TELUS Doorbell will be a simple replacement.
    - If your home does not have standard doorbell and chime wiring, you may need to call a qualified electrician.
- Will my outdoor camera work with my existing wiring?
  - If you have existing wiring in place for an outdoor camera, a USB-C breakout cable can be ordered for connecting the TELUS Outdoor Camera to it.
  - The TELUS Outdoor Camera requires 20W USB-PD compliant power. The AC power supply included in the box provides this from 120-240v ±6% 50-60Hz AC input.
- How many videos can be stored on the cameras?
  - 60 days of event storage in the cloud provided as part of your TELUS SmartHome+ subscription. The TELUS Doorbell and Camera devices store footage locally to ensure that no events are missed if your internet connection goes down. They are also compatible with an SD card for up to 60 days of 24/7 recording.
- What Wi-Fi coverage do I need?
  - All TELUS Cameras, including the Doorbell Camera, require a minimum Wi-Fi coverage in the install location of 2.5 Mbps upload. You can easily test this by running a speed test on your phone while connected to your home Wi-Fi network and not connected to a cellular network (phone must be in airplane mode with WiFi on) and standing where you want to install your device. The TELUS SmartHome+ app will guide you though this process as part of your device setup.
- Will my doorbell camera and outdoor camera work outside all year round?
  - To guarantee year round operation, the TELUS Doorbell Camera and Camera have been designed to be weather resistant, rated as IP65, and to operate in temperatures ranging from -40 to 50*C (-40 to 122*F).

Product Features

- Smart alerts based on familiar face, people, pet, package, & vehicle detection
- Set detection and notification settings by zones for each camera
- Simple automatic set-up
- Two-way, full duplex audio and quick responses
- Audio and visual alarm functionality
- Smart issue diagnostics continuously monitoring device health & status
- Deeply configurable device behaviour and settings
- Developer mode facilitating repair and refurbishment
- 60 days of detected event clips cloud storage
- 60 days 24/7 local recording
- Recordings searchable by events of interest and time of recoding
- Optional 24/7 professional security monitoring
- Seamless integration with other smart home devices
- Control and monitor all TELUS and 3rd party smart home devices from a single app

- Manage multiple devices, accounts, and locations from a single app

Market Claims

- See Clearly - Experience every detail outside your home with 1440p resolution and High Dynamic Range (HDR) imaging. Our wide-angle 160° field of view lens and 3:4 aspect ratio ensures you see the whole picture with a head-to-toe view of people and packages on your doorstep. See clearly day and night with both white LED lighting and infrared (IR) night vision.
- Intelligent Detection - Recognize what matters most with sophisticated AI detection. Identify specific events such as people, pets, packages and vehicles, and tailor your alerts so you're only notified when you want to be. Interact effortlessly with visitors, no matter where you are, with seamless two-way talk.
- Recording & Playback - Capture and preserve every significant moment with 60 days of recorded event storage. Whether it's a friendly visitor, a package delivery or a playful pet, your footage is stored for you to review, play, pause, rewind or share as you see fit.
- Reliable Performance - The TELUS Doorbell Camera works in every Canadian climate, thanks to an IP65 water-resistant rating making it impervious to rain and snow, and an extreme operating temperature range from -40°C to 50°C.
- Easy Setup - Get up and running in minutes with simple, guided do-it-yourself installation.

Packaging Blurb

- See Clearly - Experience 1440p resolution, High Dynamic Range images with a 3:4 aspect ratio for a head-to-toe view and infrared night vision.
  - Voyez clairement : profitez d'une résolution de 1440p, d'images à plage dynamique élevée avec un rapport d'aspect de 3:4 pour une vue de la tête aux pieds et une vision nocturne infrarouge.
- Intelligent Detection - Sophisticated AI recognizes the people, pets, packages and vehicles that matter most.
  - Détection intelligente - une IA sophistiquée reconnaît les personnes, les animaux domestiques, les colis et les véhicules qui comptent le plus.
- Recording & Playback - Capture and preserve every significant moment with 60 days of recorded event storage.
  - Enregistrement et lecture - Capturez et préservez chaque moment important avec 60 jours de stockage d'événements enregistrés.
- Reliable & Robust - Works in every climate thanks to an IP65 water-resistant rating and extreme operating temperature range of -40°C to 50°C.
  - Fiable et robuste – Fonctionne dans tous les climats grâce à un indice de résistance à l'eau IP65 et une plage de températures de fonctionnement extrêmes de -40 °C à 50 °C.
- Easy Setup - Get up and running in minutes with simple, guided do-it-yourself installation and in-app support.
  - Installation facile - Soyez opérationnel en quelques minutes grâce à une installation simple et guidée par vous-même et à une assistance dans l'application.

Oct 31, 2023   Steve HumpstonJohnny Homsavath

Installation video

TBD after EVT samples arrive November 15th 2023
Telus Studios team engaged, nickschelle@icloud.com

LED Status

https://telusvideoservices.atlassian.net/wiki/spaces/SH20/pages/2146533502/Design+Document+-+1P+Doorbell+Status+LED

LED	Trigger and Conditions	Device state
Solid RED	1. Power up or hard reset and 2. Chime button not pressed & hold	Doorbell is booting up
Blinking RED (IR LED turns on)	1. Ambient temperature below operating temperature	Booting up
Solid GREEN	Wi-Fi credential not configured	Doorbell booted up and running
Solid Blue	1. Mobile App connected to doorbell using BLE 2. AZT operation in progress	Running UGS or AZT process
Solid Purple	Reach OTA update schedule date/time and burning image to Flash	Device operational (connected to platform)
Solid White	1. Doorbell connected to Wi-Fi AP 2. Doorbell connected to platform	Device fully online and idle
(play melody)	Wi-Fi connected	Doorbell connecting to Wi-Fi
Chase 5x around circle, white	Chime button pushed	Any states:

(play outdoor chime melody)		● except warming up
Breathing Yellow	Any error conditions	Device booted up and operational
Blinking Purple	see Boot Mode and Factory Reset Sequence	Factory Reset
Breathing White	Objects detected by AI	
Solid Yellow	1. Wi-Fi not connected 2. No Internet access 3. Not connected to SH2 platform	Operational (Wi-Fi credential configured)

Doorbell Camera Install

Introduction

This installation guide will help you set up your TELUS Doorbell Camera. The setup will take about 60 minutes to complete.

Get the app

Download the TELUS SmartHome+ app and select "Doorbell Camera Installation".

What's in the Box

Before you begin, unbox your TELUS Doorbell Camera and identify all of the components.
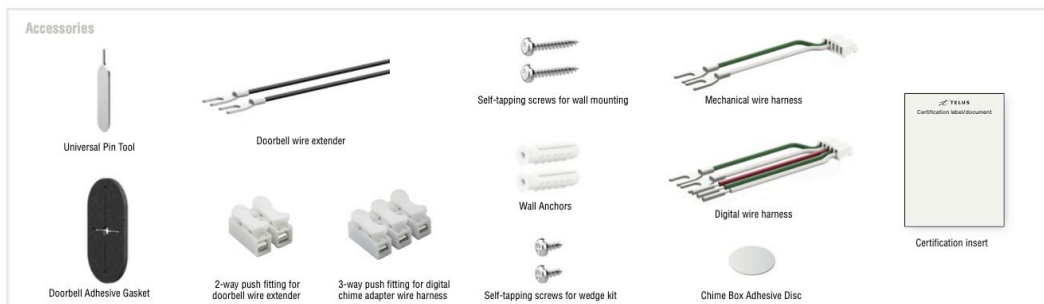
Product Overview

| Doorbell | Wall Mount Bracket | Wedge Bracket 15° | Chime Adapter |

Accessories

Universal Pin Tool

Doorbell wire extender

Self-tapping screws for wall mounting

Mechanical wire harness

Certification label/document

Certification insert

Doorbell Adhesive Gasket

2-way push fitting for doorbell wire extender

3-way push fitting for digital chime adapter wire harness

Wall Anchors

Digital wire harness

Self-tapping screws for wedge kit

Chime Box Adhesive Disc

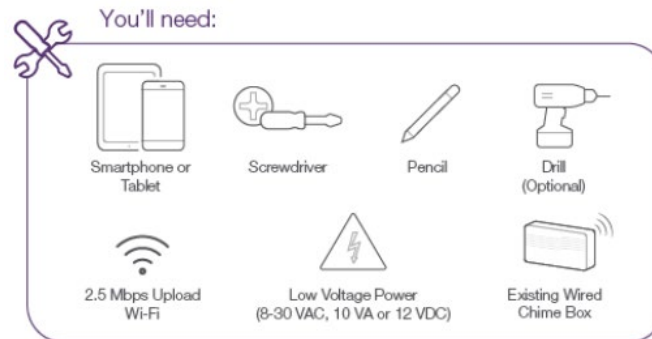whiteBOX   TELUS SHS - Doorbell - Design Intent DRAFT   October 30th 2023   This is used for an internal audience when the information is particularly sensitive and important to the conduct of business, its unauthorized disclosure would be an advantage to our competition   CONFIDENTIAL   2

TELUS Doorbell Camera	TELUS Outdoor Camera	TELUS Indoor Camera
1x Doorbell	1x Outdoor camera	1x Indoor camera device w/ integrated stand
1x Wall mount	1x Wall mount	1x Wall mount
4x Self-tapping screws	2x Self-tapping screws	1x 3M tape
2x Wall anchors	2x Wall anchors	1x Wall anchor
1x Wedge Kit		1x Self-tapping Screw
1x Unlocking Pin	1x USB-PD AC/DC Adaptor	1x USB-PD AC/DC Adaptor
	1x USB-C cable 3m	1x USB-C cable 1.5m
1x Chime Adaptor	1x USB-C break-out cable	1x Quick start guide printed on inside lid of the box
1x Digital chime adaptor wire harness	1x Adhesive gasket	1x Certification Insert
1x Mechanical chime adaptor wire harness	1x Quick start guide printed on inside lid of the box	
1x Doorbell wire extender	1x Certification insert	
1x Adhesive gasket		
1x 2-way push fitting for doorbell wire extender		
1x 3-way push fitting for digital chime adaptor wire harness		

| 1x Quick start guide printed on inside lid of the box		
1x Certification insert		

What you will need

- Smartphone or tablet with the TELUS SmartHome+ app installed and internet access
- Cross-head screwdriver
- Pencil
- Drill with 13mm bit for wall mounting
- 2.5 Mbps upload Wi-Fi coverage in the install location
- Low voltage AC power (10-24 VAC, 10 VA) in the place you want to install your doorbell
- A wired doorbell chime in your home

Installation Overview

1. User scans QR code on the inside face of the device's box lid, directing them to download the TELUS SmartHome+ app.
2. User logs into the app with their credentials.
3. User starts new device install.
4. App prompts user to turn on Bluetooth if it is not already on.
5. App prompts user to confirm their Wi-Fi credentials and then saves them to the Wi-Fi locker.
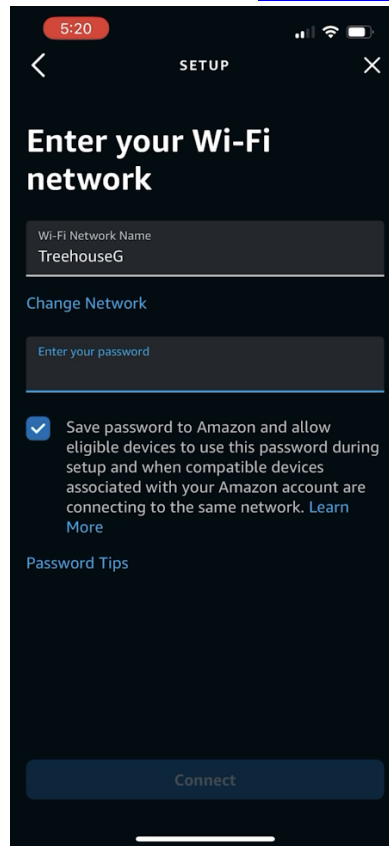
How to install your TELUS Doorbell Camera

1. Make sure your existing doorbell is in working order.
   - Press your doorbell and listen for your doorbell chime to ring
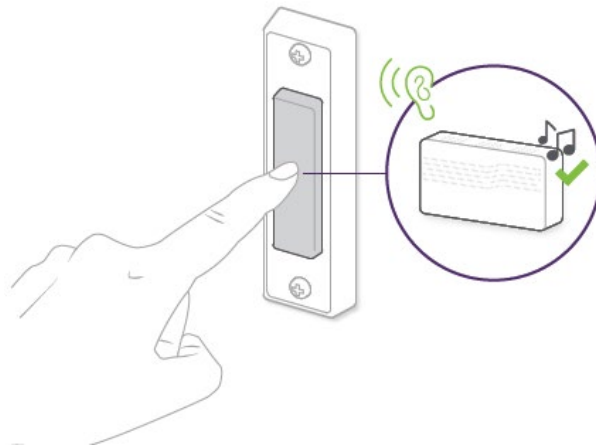

   - If the existing doorbell does not ring the indoor chime when the button is pressed, there may be a power issue. Consult an electrician before beginning the installation process.
2. The TELUS Doorbell Camera requires a minimum Wi-Fi signal of 2.5 Mbps upload speed to operate.

- ○ Use the link below or visit telus.com/SpeedTest in a browser to determine your Internet speed. Ensure the phone or device running the test is located where you intend to install the doorbell.
- ○ If your bandwidth is too slow, contact your internet service provider to find out how to increase your upload speed.

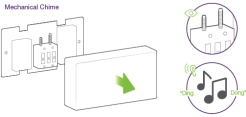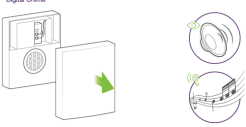3. Turn off the breaker that controls your doorbell circuit.
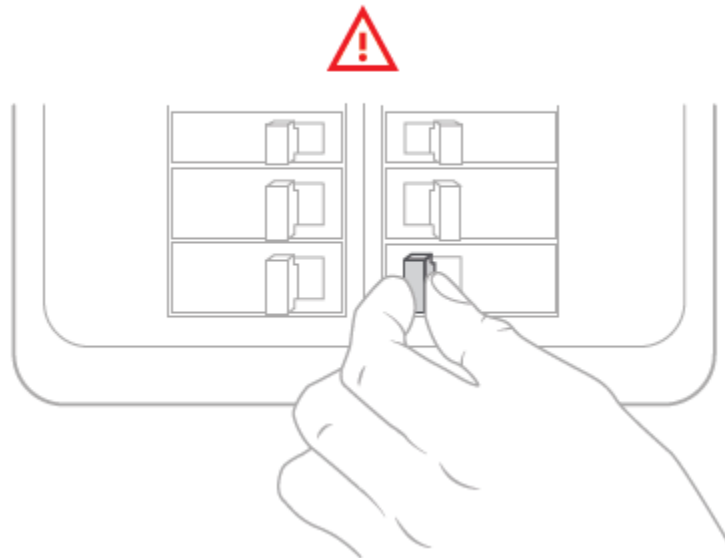
4. Test your existing doorbell to make sure the power is off and it does not ring.

Test Doorbell

5. Identify whether the chime is mechanical or digital by looking inside the chime box. If you don't have a mechanical or digital chime, or if you have an intercom system, your current doorbell setup is incompatible with the TELUS Doorbell Camera.
   - ○

Chime types	Characteristic	Diagram	Requirement
Mechanical	Metal bar and striker pin. Makes a "ding-dong" sound when the doorbell is pressed.	Mechanical Chime	Need to install the chime adaptor using method A
Digital		Digital Chime	Need to install the chime adaptor using method B

Mechanical   Go to Step 12

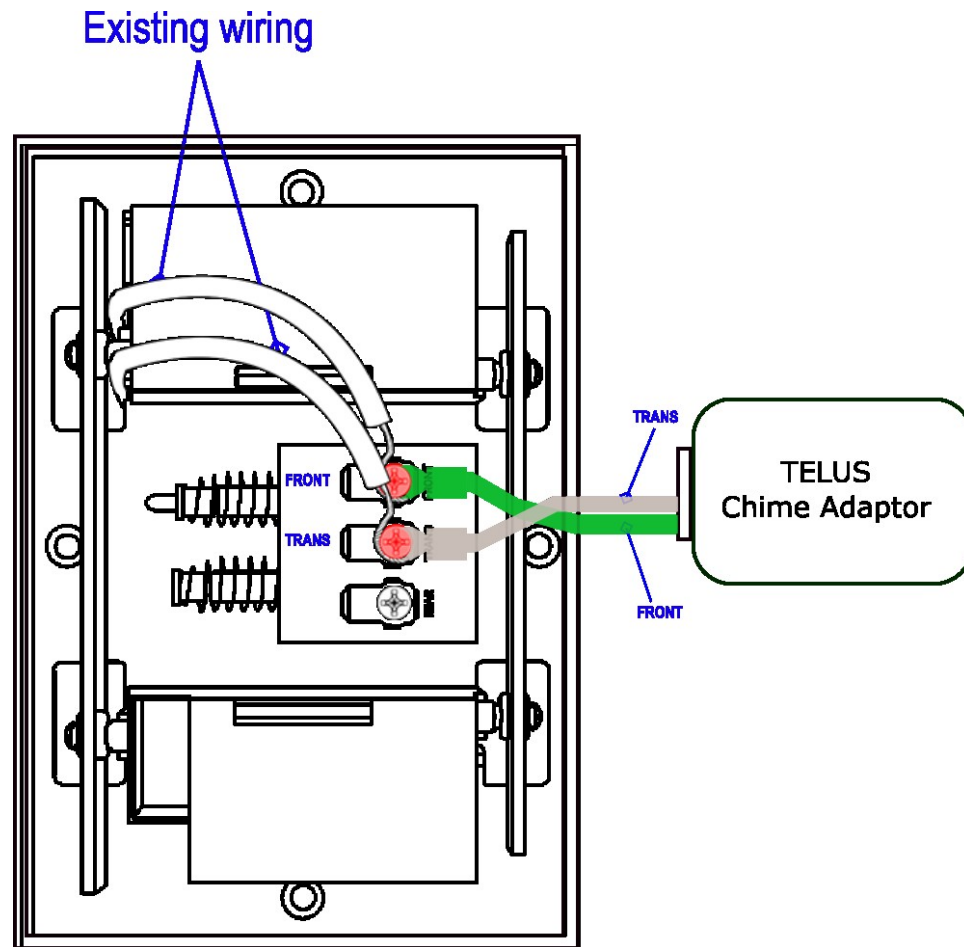To attach the chime adapter to a mechanical chime (method A):

1. Insert the supplied wire harness labeled "mechanical" into the chime adaptor.

   Note: Ensure the harness is inserted in to the chime adaptor in the correct orientation - the notch of the cable harness connector should be facing up. See picture below:

2. Remove the cover from your chime

3. Loosen the screws on the chime terminals labelled "FRONT" (or "REAR" if connecting to rear doorbell) and "TRANS"; do not remove the existing wires

4. Connect mechanical wire harness wire labelled "TRANS" to chime terminal labelled "TRANS" by inserting the spade under the screw and tightening it

5. Connect mechanical wire harness wire labelled "FRONT" to chime terminal labelled "FRONT" (or "REAR" if connecting to rear doorbell) by inserting the spade under the screw and tightening it

6. Mount the chime adaptor using double-sided tape

7. Replace the cover on your chime

Existing wiring

Installation step for Mechanical Chime (New Design)

Wire extender

1. Loosen the Front (1) and trans (3) terminal screws
2. **Keep the original attached wires (1a & 3a) in place**
3. Insert the wire extender into connector
4. Connect wire extender to the Front (1) and trans (3) terminal
   (Refer to top-left picture)

Foxconn Confidential

To attach a chime adaptor to a digital chime (method B)

1. Insert the supplied wire harness labelled "digital" into the chime adaptor.

Note: Ensure the harness is inserted to the chime adaptor in the correct orientation - the

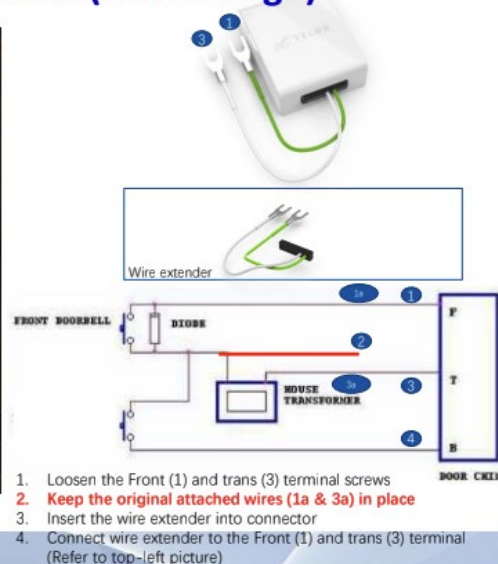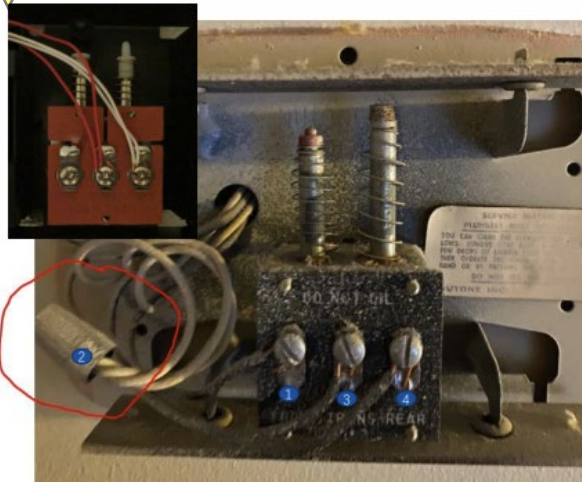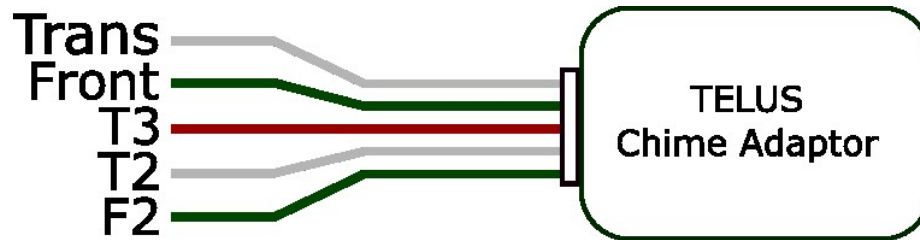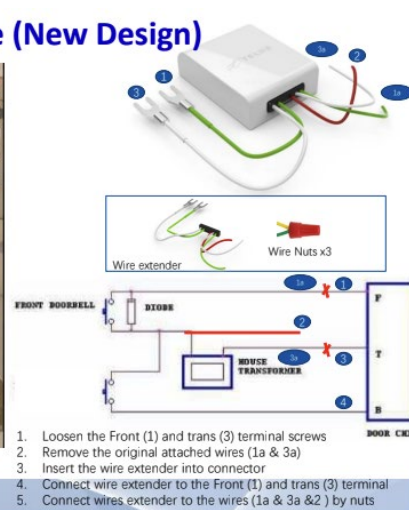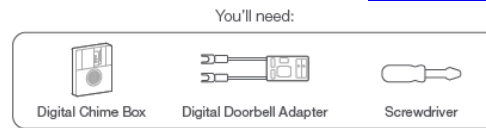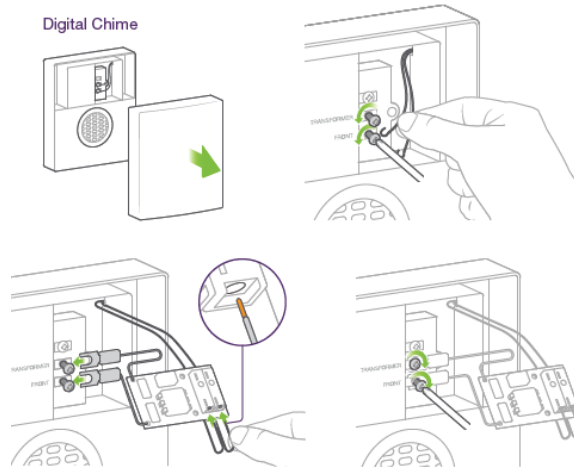notch of the cable harness connector should be facing up.

2. Remove the cover from your chime.

3. Loosen the screw on the chime terminal labelled "TRANS" and remove the wire from the chime terminal.

4. Connect the digital wire harness wire labelled "TRANS" to chime terminal labelled "TRANS" by inserting the spade under the screw and then tightening the screw.

5. Connect digital wire harness wire labelled "▨▨o the loose wire removed from the chime terminal labelled "TRANS" using the three-way push fitting provided with the kit.

6. Remove the wire from the chime terminal labelled "FRONT" by loosening screws and removing the wire.

7. Connect digital wire harness wire labelled "FRONT" to chime terminal labelled "Front" by inserting the spade under the screw and then tightening the screw.

8. Connect digital wire harness wire labelled "F2" to the loose wire removed from the chime terminal labelled "Front" wire using a wire nut.

9. ▨▨te an existing multi-wire connector, likely a wire nut, and add digital wire harness wire labelled "TC" to this bundle by unscrewing the wire nut, inserting the wire into the bundle and replacing the wire nut.

10. Mount the digital chime adaptor using double-sided tape to a face of the chime that has room for the cover to be replaced.

11. Replace the cover on your chime.

Installation step for Digital Chime (New Design)

1. Loosen the Front (1) and trans (3) terminal screws
2. Remove the original attached wires (1a & 3a)
3. Insert the wire extender into connector
4. Connect wire extender to the Front (1) and trans (3) terminal
5. Connect wires extender to the wires (1a & 3a &2) by nuts

You'll need:

Digital Chime Box   Digital Doorbell Adapter   Screwdriver

Digital Chime

6. Remove old doorbell
   a. Check to see if there are two wires attached to the doorbell. If the existing doorbell does not have wires, you will need to call an electrician.
   b. Remove the wires from the existing doorbell
      i. Bend the doorbell wires so they don't slip back into the wall.
      ii. Use the optional extension wires if the doorbell's wires are too short.

You'll need:

Screwdriver

TIP
Bend the doorbell
wires so they don't
slip back into the wall.
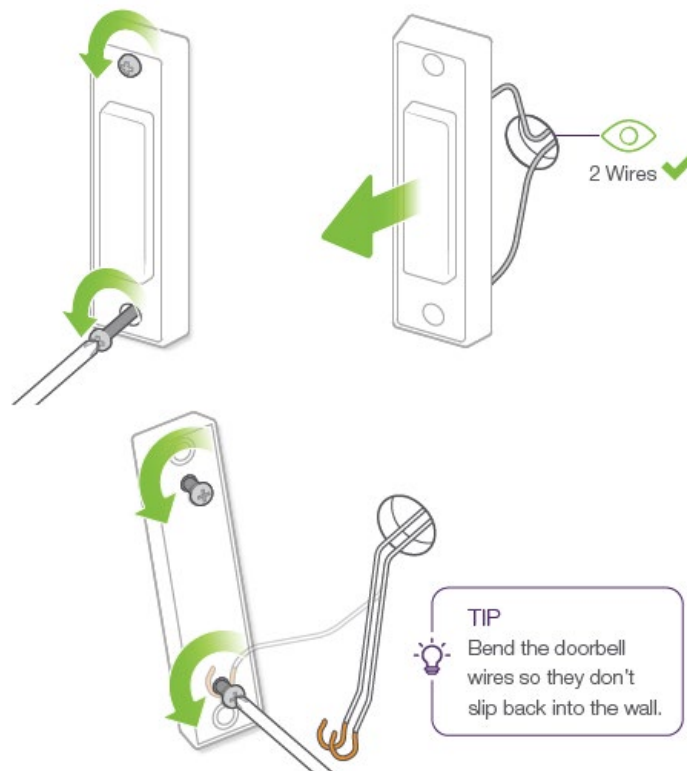
7. Decide if the location of your doorbell necessitates the use of the 15° wedge by considering the viewing angle of the doorbell. Ensure that your doorbell will be able to see people as they approach the door.
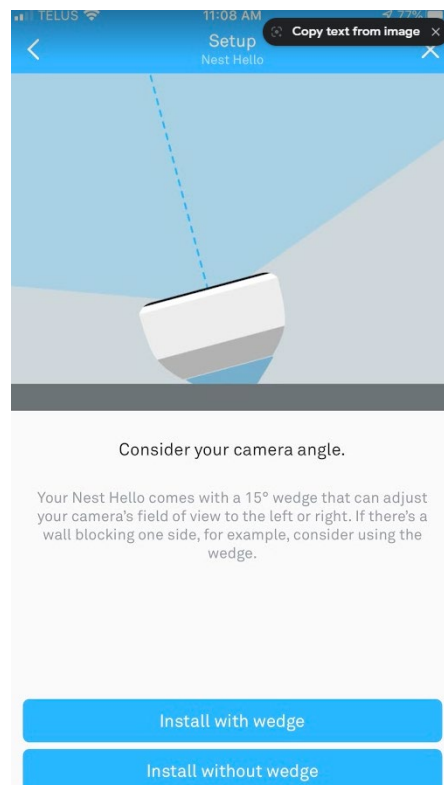
8. Hold the doorbell wall mount or wedge up to the desired mounting location on the wall, passing the existing doorbell wires through the large central hole.
9. Ensure the wall mount is straight and level on the wall.

Using the two screw holes on the wall mount as a template, mark the screw placement. If possible, reuse one or both of the existing doorbell screw holes. If none of the existing holes are reused, remember to fill those holes with a sealant.
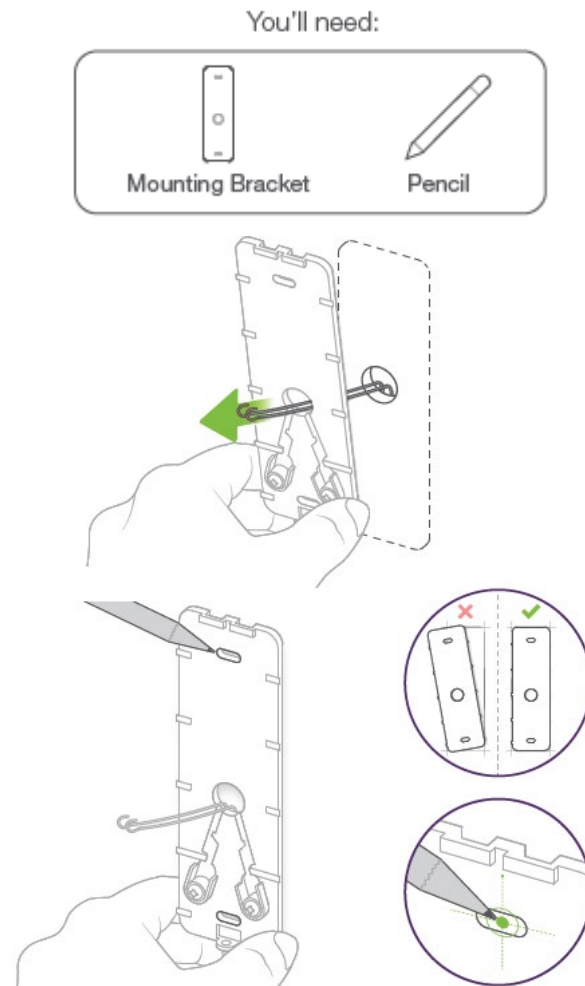
10. Determine the material you are attaching your doorbell to.
    ● If you have wood, vinyl or aluminium siding, go to Step 10
    ● If you have stucco, brick or stone, go to Step 9A

Wood   Vinyl   Aluminum

Go to Step 8

Stucco   Brick   Stone
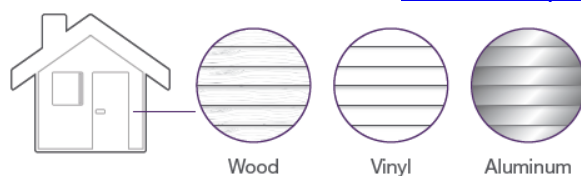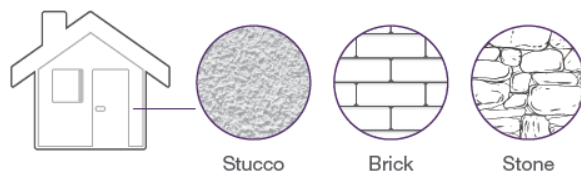
Go to Step 7

12A (optional) Masonry install (brick, stone, or similar material)
- ~~Using a 13mm (1/2 inch) masonry drill bit, drill hole for cable if required (outdoor camera only)~~
1. Using a 6mm (1/4 inch) masonry drill bit, drill pilot holes for the wall anchors.
2. Push or hammer the wall anchors into the pilot holes.

You'll need:

Wall Anchors   Masonry Drill Bit   Drill   Hammer (Optional)

x2

x2
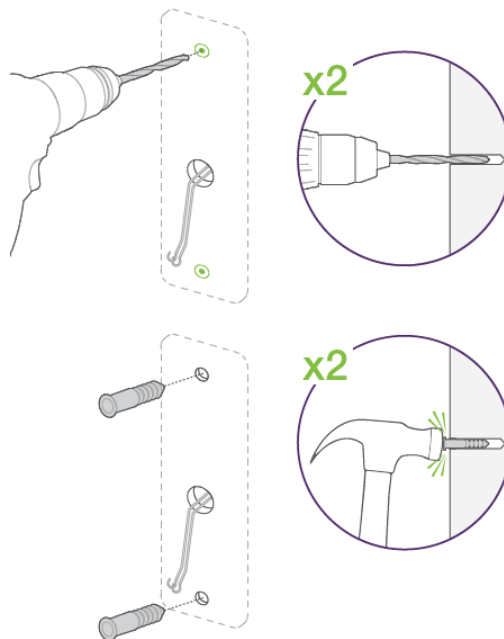
11. If the wedge is being used, screw the wedge into the wall, then screw the wall mount into the wedge.
    If the wedge is not being used, screw the wall mount into the wall.

     a. Pull the doorbell wires through the hole in the wall mount or wedge.

     b. Place the wall mount or wedge over the marked location for the screws.

     c. Screw the wall mount or wedge into the siding or wall.

You'll need:

Screwdriver   Mounting Bracket   Wall Screws
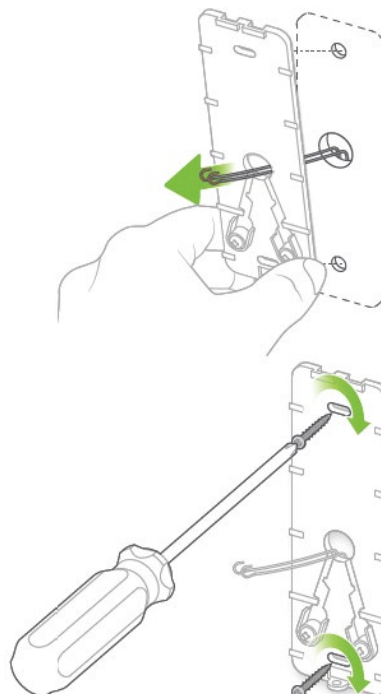
12. Connect power wires.
    a. Loosen the two terminal screws on the doorbell.
    b. Wrap the wires around the terminal screws. It doesn't matter which terminal you connect a wire to.
    c. The optional extension wires can be used if the doorbell's wires are too short.
    d. Tighten the terminal screws.
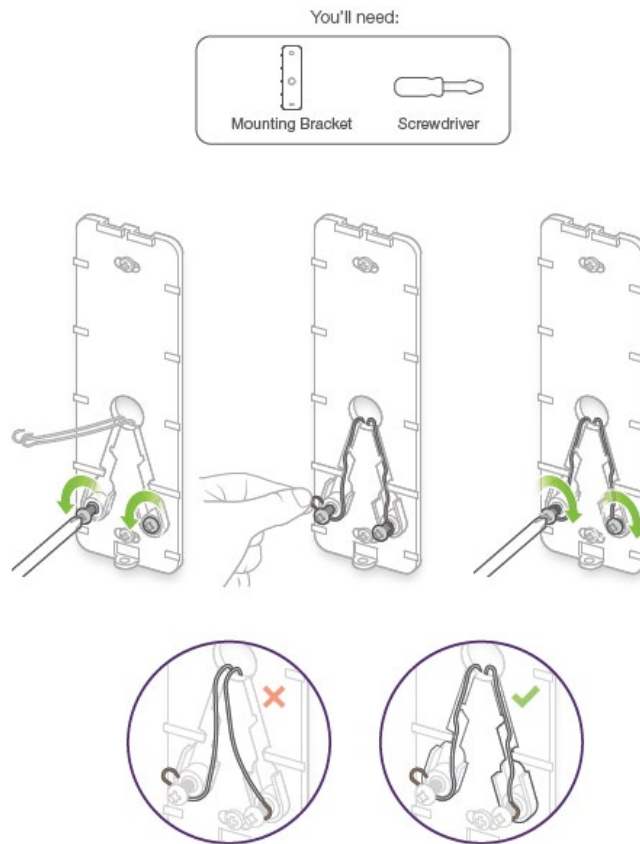
13. Attach the TELUS Doorbell Camera.
    a. Hook the tabs on the top of the doorbell into the notches on the top of the wall mount.
    b. Press the bottom face of the TELUS Doorbell Camera, making it flush with the wall mount. If the TELUS Doorbell Camera is not flush with the wall mount, make sure the wires are seated into the grooves of the wall mount.

If you need to remove the camera at any time, use the removal tool provided to unlock the camera from the bottom.
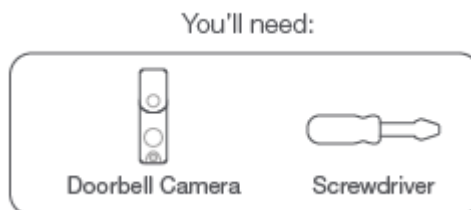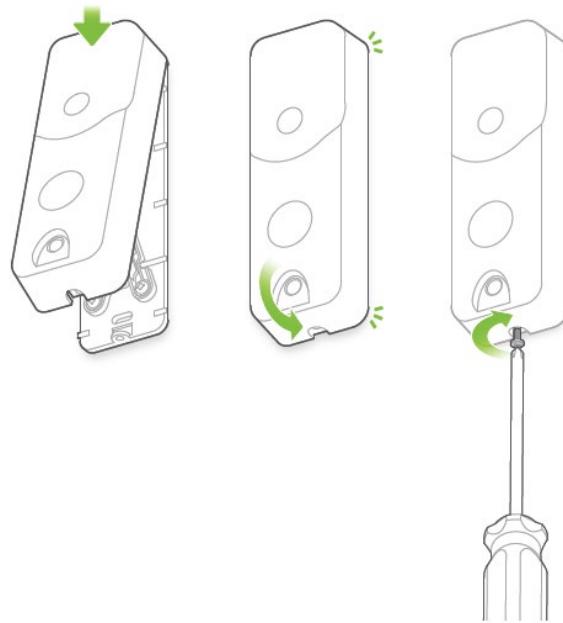
14. Restore power by turning on the breaker that controls your doorbell circuit.
15. Wait for the TELUS Doorbell Camera LED to turn solid green. This means it is ready to pair.

Doorbell Light Patterns Guide
   - Powered off - No light
   - Ready to pair - Solid green
   - Setup in progress - Solid blue
   - Update in progress - Solid purple
   - Working normally - Solid white
   - Recording event - Breathing white
   - Button pushed - White circular chase
   - Error - Solid red
   - No internet connection - Blinking red
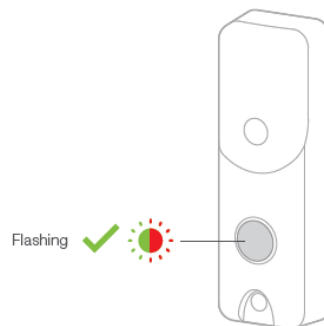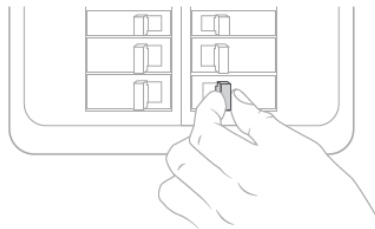
16. Pair the camera by selecting it in the TELUS SmartHome+ app. Allow it to push your Wi-Fi credentials to your new TELUS Doorbell Camera.
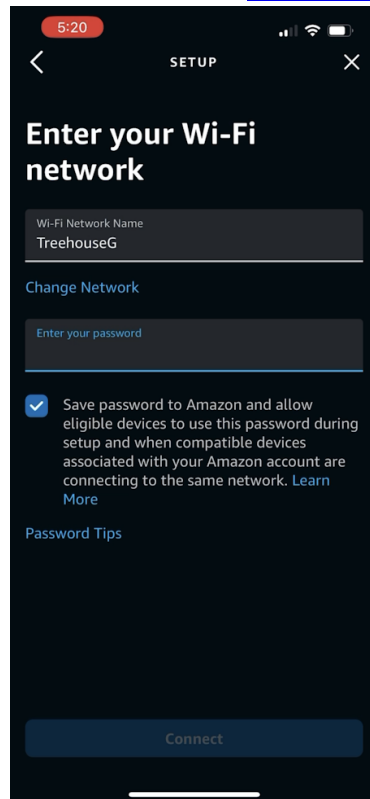
- The app will confirm when your TELUS Doorbell Camera is connected, showing you a thumbnail or live view from the camera and then moving you into the settings screen.
- The app will continue to guide you through additional setup steps, including notifications and zoning behavior.
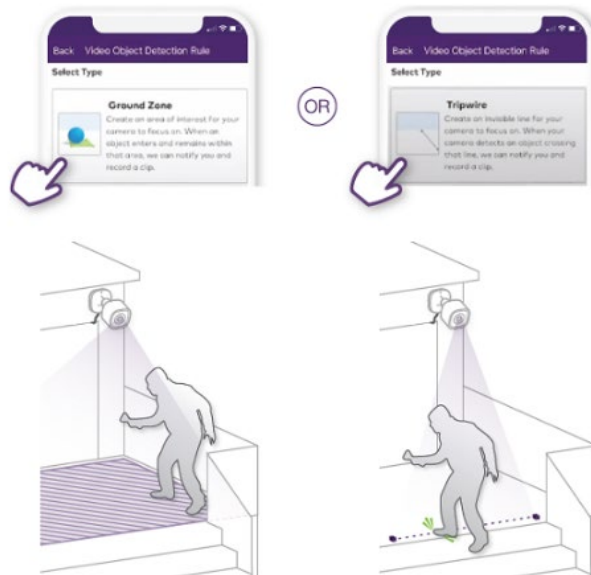
Warnings

Pressing the chime button without a chime in the AC power circuit can damage the doorbell

Normal Usage Instructions

- Push button to ring doorbell

- Insert SD card for additional storage
- The TELUS SmartHome+ app provides all other settings and functionality
- Device settings:
    - - disarmed state event recording pre and post roll length in 1s steps up to a maximum of 6s
    - - disarmed state global (overrides zone specific behaviours) event detection notification on/off for each event type (Familiar face, people, pet, package, vehicle, AI & PIR motion, chime button)
    - - disarmed state global (overrides zone specific behaviours) event detection recording behaviour on/off for each event type (Familiar face, people, pet, package, vehicle, AI & PIR motion, chime button)
    - - armed state notification cooldown time period selectable from 0m, 1m, 5m, 10m, 20m
    - - armed state event recording pre and post roll length in 1s steps up to a maximum of 6s - armed state global (overrides zone specific behaviours) event detection notification on/off for each event type (Familiar face, people, pet, package, vehicle, AI & PIR motion, chime button)
    - - armed state global (overrides zone specific behaviours) event detection recording behaviour on/off for each event type (Familiar face, people, pet, package, vehicle, AI & PIR motion, chime button)
    - - armed state notification cooldown time period selectable from 0m, 1m, 5m, 10m, 20m
    - - streamed video FPS (developer mode only) selectable from 10, 20, 30fps
    - - streamed video resolution (developer mode only) selectable from all modes available on device
    - - recorded video FPS (developer mode only) selectable from 10, 20, 30fps
    - - recorded video resolution (developer mode only) selectable from all modes available on device
    - - night vision IR mode on/off
    - - night vision IR mode on light level threshold, selectable in 10lx increments between 0 and 500lx
    - - image rotation in 180* steps
    - - spotlight brightness in PWM in 1% steps 0-100%
    - - status LED brightness in PWM in 1% steps 0-100%
    - - camera device speaker volume in 1% steps 0-100%
    - - cloud video storage on/off (developer mode only)
    - - privacy mode on/off
    - - armed state manual override on/off - automatic update on/off (developer mode only)
    - - 24/7 recording to SD card on/off
    - - Wi-Fi SSID entry
    - - Wi-Fi Password entry
    - - local timezone
    - - System language (English, French, Spanish) affecting which set of canned message MP3 clips are downloaded

Doorbell Technical Specifications

	Product Name	TELUS Doorbell Camera
	Model Number	DCF
	Part Number	2417248
	Hardware Version	1
	Device Dimensions	132mm Length x 44mm Width x 31mm Depth
	Packaged Dimentions	190mm Length x 100mm Width x 65mm Depth
	Packaged Weight	400g
	Primary Materials	Plastic, Aluminium
	Color	Off-white
	Description	A doorbell camera device designed for advanced edge AI functionality with market-leading image quality and ease of use. Designed by TELUS for CSP customers with deep branding and functionality customisation options.
Compute	**Edge AI Functions**	Familiar face, people, pet, package, vehicle, & motion detection
	Motion Detection	PIR & AI motion detection
	CPU	Arm Cortex A53 based microcontroller
	RAM	1GB
	Flash	1GB
	SD Card	Up to 1TB
	Security	End-to-end encryption
Software	**Firmware**	Smart alerts based on familiar face, people, pet, package, vehicle & motion detection
		Set detection and notification settings by zones for each camera
		Simple automatic set-up
		Two-way, full duplex audio and quick responses
		Audio and visual alarm functionality
		Smart issue diagnostics continuously monitoring device

		health & status
		Deeply configurable device behaviour and settings
		Developer mode facilitating repair and refurbishment
	Cloud Platform	60 days of detected event clips cloud storage
		60 days 24/7 local recording
		Recordings searchable by events of interest and time of recoding
		Optional 24/7 professional security monitoring
	App	Seamless integration with other smart home devices
		Control and monitor all TELUS and 3rd party smart home devices from a single app
		Manage multiple devices, accounts, and locations from a single app
Connectivity	Wi-Fi	Wi-Fi 6 (802.11ax) 5GHz & 2.4GHz with 2x2 MIMO radio
	Bluetooth	Bluetooth 5 Low Energy (BLE)
	USB	USB 2.0 via USB-C female port
Human Machine Interface	Chime Button	Push button
	Reset Button	Pinhole hard reset button
	Status LEDs	RGB LED ring light
	Microphones	Dual microphones
	Speaker	75 db speaker
	Chime Compatibility	Mechanical & Digital Chimes
	Installation	Straight and angled wall mounts
Optical	Resolution	1920x2560, 1440x1920, 960x1280, 480x640
	Aspect Ratio	3:4
	FoV	160* diagonal
	FPS	30 FPS
	Night Vision	Color & Greyscale
	High Dynamic Range	Yes

	IR Light	2x IR LED
	Spotlight	1x White LED
	Ambient Light Sensor	Yes
Electrical	**Camera Device Power Input**	10-24v AC 10VA
Environment	**IP rating**	IP65
	IK rating	IK05
	Temperature	-40 to 50*C
	Lifetime	>5 years MTBF
	Warranty	1 year
Accessories	**In the Box**	1x Doorbell
		1x Wall mount
		2x Self-tapping screws for wedge kit
		2x Self-tapping screws for wall mount
		2x Wall anchors
		1x Wedge
		1x Unlocking pin
		1x Chime adaptor for select digital and mechanical chimes
		1x Digital chime adaptor wire harness
		1x Mechanical chime adaptor wire harness
		2x Doorbell wire extender
		1x Adhesive gasket
		1x Chime adaptor adhesive pad
		1x 2-way push fitting for doorbell wire extender
		1x 3-way push fitting for digital chime adaptor wire harness
		1x Quick start guide printed on inside lid of the box
		1x Certification insert
	Optional Accessories	512GB SanDisk Ultra microSDXC Card
		Window Sticker
		120v ±6% 50-60Hz AC to 16v AC Transformer

Outdoor Camera Technical Specifications

	Product Name	TELUS Outdoor Camera
	Model Number	OCF
	Part Number	2417250
	Hardware Version	1
	Product Dimensions	72mm Length x 60mm Width x 55mm Depth
	Packaged Dimensions	157mm Length x 110mm Width x 110mm Depth
	Packaged Weight	400g
	Primary Materials	Plastic, Aluminium
	Color	Off-white
	Description	A outdoor camera device designed for advanced edge AI functionality with market-leading image quality and ease of use. Designed by TELUS for CSP customers with deep branding and functionality customisation options.
Compute	**Edge AI Functions**	Familiar face, people, pet, package, vehicle, & motion detection
	Motion Detection	PIR & AI motion detection
	CPU	Arm Cortex A53 based microcontroller
	RAM	1GB
	Flash	1GB
	SD Card	Up to 1TB
	Security	End-to-end encryption
Software	**Firmware**	Smart alerts based on people, pet, package, vehicle & motion detection
		Set detection and notification settings by zones for each camera
		Simple automatic set-up
		Two-way, full duplex audio and quick responses
		Audio and visual alarm functionality
		Smart issue diagnostics continuously monitoring device health & status
		Deeply configurable device behaviour and settings

		Developer mode facilitating repair and refurbishment
	Cloud Platform	60 days of detected event clips cloud storage
		60 days 24/7 local recording
		Recordings searchable by events of interest and time of recoding
		Optional 24/7 professional security monitoring
		Seamless Integration with other smart home devices
	App	Control and monitor all TELUS and 3rd party smart home devices from a single app
		Manage multiple devices, accounts, and locations from a single app
Connectivity	**Wi-Fi**	Wi-Fi 6 (802.11ax) 5GHz & 2.4GHz with 2x2 MIMO radio
	Bluetooth	Bluetooth 5 Low Energy (BLE)
	USB	USB 2.0 via USB-C female port
Human Machine Interface	**Reset Button**	Pinhole soft reset button
	Status LEDs	RGB status light
	Microphones	Stereo-microphones
	Speaker	75 db speaker
	Installation	Ball joint wall/ceiling mount
Optical	**Resolution**	2560x1440, 1920x1080, 1280x720
	Aspect Ratio	16:9
	FoV	160* diagonal
	FPS	30 FPS
	Night Vision	Colour & Greyscale
	High Dynamic Range	Yes
	IR Light	4x IR LED
	Spotlight	2x White LED
	Ambient Light Sensor	Yes
Electrical	**Power Adaptor**	120-240v ±6% 50-60Hz AC

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	Input	
	Camera Device Power Input	20W USB-PD Compliant
	Power cable	White USB-C 3m
Environment	**IP rating**	IP65
	IK rating	IK05
	Temperature	-40 to 50*C (Included PSU -20*C to 50*C)
	Lifetime	>5 years MTBF
	Warranty	1 year
Accessories	**In the Box**	1x Outdoor camera
		1x Wall mount
		2x Self-tapping screws
		2x Wall anchors
		1x USB-PD AC/DC Adaptor
		1x USB-C cable 3m
		1x Adhesive gasket
		1x Quick start guide printed on inside lid of the box
		1x Certification insert
	Optional Accessories	512GB SanDisk Ultra microSDXC Card
		USB-C cable 1.5m

Indoor Camera Technical Specifications

Product Name	Indoor camera device
Model Number	ICF
Part Number	2417249
Hardware Version	1
Product Dimensions	72mm Length x 60mm Width x 55mm Depth
Packaged	135mm Length x 110mm Width x 100mm

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	Dimensions	Depth
	Packaged Weight	300g
	Primary Materials	Plastic
	Color	Off-white
	Description	An indoor camera device camera device designed for advanced edge AI functionality with market-leading image quality and ease of use. Designed by TELUS for CSP customers with deep branding and functionality customisation options.
Compute	**Edge AI Functions**	Familiar face, people, pet, package, vehicle, & motion detection
	Motion Detection	AI motion detection
	CPU	Arm Cortex A53 based microcontroller
	RAM	1GB
	Flash	1GB
	SD Card	Up to 1TB
	Security	End-to-end encryption
Software	**Firmware**	Smart alerts based on people, pet, & motion detection
		Set detection and notification settings by zones for each camera
		Simple automatic set-up
		Two-way, full duplex audio and quick responses
		Audio and visual alarm functionality
		Smart issue diagnostics continuously monitoring device health & status
		Deeply configurable device behaviour and settings
		Developer mode facilitating repair and refurbishment
		60 days of detected event clips cloud storage
	Cloud Platform	60 days 24/7 local recording
		Recordings searchable by events of interest and time of recoding
		Optional 24/7 professional security monitoring
		Seamless Integration with other smart home devices

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	App	Control and monitor all TELUS and 3rd party smart home devices from a single app
		Manage multiple devices, accounts, and locations from a single app
Connectivity	**Wi-Fi**	Wi-Fi 6 (802.11ax) 5GHz & 2.4GHz with 2x2 MIMO radio
	Bluetooth	Bluetooth 5 Low Energy (BLE)
	USB	USB 2.0 via USB-C female port
Human Machine Interface	**Reset Button**	Pinhole soft reset button
	Status LEDs	RGB status light
	Microphones	Stereo-microphones
	Speaker	75 db speaker
	Installation	Foot with silicone rubber base
Optical	**Resolution**	2560x1440, 1920x1080, 1280x720
	Aspect Ratio	16:9
	FoV	160* diagonal
	FPS	30 FPS
	Night Vision	Colour & Greyscale
	High Dynamic Range	Yes
	IR Light	4x IR LED
	Spotlight	No
	Ambient Light Sensor	Yes
Electrical	**Power Adaptor Input**	120-240v ±6% 50-60Hz AC
	Camera Device Power Input	20W USB-PD Compliant
	Power cable	White USB-C 1.5m
Environment	**IP Rating**	IP42
	IK Rating	IK05
	Temperature	0 to 40*C
	Lifetime	>5 years MTBF

Warranty	1 year
Accessories **In the Box**	1x Indoor camera device w/ integrated stand
	1x Wall mount disk
	1x Wall mount adhesive pad
	1x Wall anchor
	1x Self-tapping Screw
	1x USB-PD AC/DC Adaptor
	1x USB-C cable 1.5m
	1x Quick start guide printed on inside lid of the box

Troubleshooting Information

A portal front end will be defined and created by Colin Beckfor use by agents to support troubleshooting

Reported information: TELUS_1P_doorbell&camera_testplan

Architecture diagram: data_flow_architecture_diagram

Support Page Content

Reboot device: You can just push the reset button on the back, it reboots the doorbell the same as removing a wire and reinstalling would do

1. Customer does not like the sound of doorbell on device
   a. The doorbell chime sound inside your home is determined by your existing chime. Please refer to the instructions supplied with your doorbell chime. The TELUS Doorbell Camera chime sound played by the doorbell speaker outside the home is not configurable.
2. Customer is unable to see live video from doorbell
   a. Please refer to app and platform troubleshooting.
3. Customer is unable to see recorded video from doorbell
   a. Please refer to app and platform troubleshooting.
4. Customer video recording playback is slow/laggy
   a. The customer's internet connection to their device may be slow. Ask them to run a speedtest by visiting speedtest.net and confirm a minimum of 2.5Mbps upload.
5. Customer video recordings are missing audio
   a. Confirm that other audio is audible on the playback device. If it is, power cycle the doorbell by switching the relevant circuit breaker off and on or unscrew a terminal on the back of the doorbell and replace it. Wait for the doorbell to boot up and show a white LED. Record a new event with audio by standing in front of

the doorbell camera and speaking. Review the event recording in the cloud on the playback device. If no audio is present, RMA the device.

6. Customer is not notified of doorbell events quickly
    a. The customer's internet connection to their device may be slow. Ask them to run a speedtest by visiting speedtest.net and confirm a minimum of 2.5Mbps download.
    b. The device's internet connection may be poor. The TELUS Doorbell and Camera require a minimum Wi-Fi coverage in the install location of 2.5 Mbps upload. You can easily test this by running a speedtest on your phone while connected to your home Wi-Fi network (no cellular) and standing in the proposed install location.

7. Customer wants video recordings to be longer/shorter
    a. All device and platform settings are managed via the TELUS SmartHome+ app, please download, log in with your customer account and adjust the desired settings.

8. Customer wishes to adjust device settings
    a. All device and platform settings are managed via the TELUS Connect app, please download, log in with your customer account and adjust the desired settings.

9. Customer wishes to manage notifications
    a. All device and platform settings are managed via the TELUS Connect app, please download, log in with your customer account and adjust the desired settings.

10. Customer wishes to add additional users to receive notifications
    a. All device and platform settings are managed via the TELUS Connect app, please download, log in with your customer account and adjust the desired settings.

11. Customer wishes export or save video recordings
    a. All device and platform settings are managed via the TELUS Connect app, please download, log in with your customer account and adjust the desired settings.

12. Customer wishes to delete video recordings
    a. All device and platform settings are managed via the TELUS Connect app, please download, log in with your customer account and adjust the desired settings.

13. Customer wishes to search for specific events
    a. All device and platform settings are managed via the TELUS Connect app, please download, log in with your customer account and adjust the desired settings.

14. Doorbell camera is very hot or very cold and has stopped working
    a. To guarantee year-round operation, the TELUS Doorbell Camera and Outdoor Camera have been designed to be weather resistant, rated as IP65, and to operate in temperatures ranging from -40 to 50*C (-40 to 122*F) If your device is consistently getting hotter than this maximum temperature, consider installing it in the shade. If the device is near its minimum temperature and powered off, it may not turn on immediately when power is restored as it will take up to 6 minutes to warm up.

15. Doorbell camera does not have power (no lights)
    a. The TELUS Doorbell Camera is designed to work with all standard doorbell wiring providing 10-24v AC. If you have a wired doorbell today, it is most likely that the TELUS Doorbell Camera will be a simple replacement. If your home does not have standard doorbell and chime wiring, you may need to call a qualified electrician.
16. Doorbell chime is not loud enough
    a. The doorbell chime volume inside your home is determined by your existing chime, please refer to the instructions supplied with your doorbell chime. The TELUS Doorbell Camera chime volume played by the doorbell speaker outside the home is not configurable.
17. Doorbell two-way audio is not working
    a. Confirm that other audio is audible on the playback device. If it is, power cycle the doorbell by switching the relevant circuit breaker off and on or unscrew a terminal on the back of the doorbell and replace it. Wait for the doorbell to boot up and show a white LED. Record a new event with audio by standing in front of the doorbell camera and speaking. Review the event recording in the cloud on the playback device. If no audio is present, RMA the device.
18. Customer thinks someone hacked into cameras and can see video/audio
    a. Please refer to platform troubleshooting
19. Doorbell camera requires a new firmware version
    a. Please refer to OTA tenant portal instructions to manage firmware on devices

Customer RMA

Proceed as per typical serialized product

Firmware Error States

This is TBC, JIRA ticket

Certification Insert

Industry Canada Statement: This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Industry Canada Class B Emission Compliance Statement: This Class B digital apparatus complies with Canadian ICES-003.

Industry Canada Radiation Exposure Statement: This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with IC radiation exposure limits established for an uncontrolled environment. This equipment must be installed and operated with a minimum distance of 20 cm between the radiation source and your body.

Operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Product Name: TELUS Doorbell Camera
Model Number: DCF
Hardware Version: A
TELUS SKU Number: 2417248
CAN ICES-003(B)/NMB-003(B)
IC: 31809-2417248
Manufacturer: TELUS Communications Inc. 7th Floor, 510 West Georgia Street, Vancouver,BC,V6B0M3,Canada

Avis d'industrie Canada: Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et, and
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

Avis de conformite a la reglementation d'Industrie Canada: Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

Déclaration d'exposition aux radiations: Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec unminimum de 20 cm de distance entre la source de rayonnement et votre corps.

La bande 5150-5250 MHz est réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Nom du produit: La Caméra sonnette TELUS
Numéro de modèle: DCF
Version matérielle: A
Numéro UGS TELUS: 2417248
CAN ICES-003(B)/NMB-003(B)
IC: 31809-2417248
Fabricant : TELUS Communications Inc. 7e étage, 510 West Georgia Street, Vancouver, BC, V6B0M3, Canada

Oct 31, 2023

Steve HumpstonJohnny Homsavath

C UL **US**
LISTED
I.T.E.
E93839

Indoor Camera Installation

Introduction

This installation guide will help you set up your TELUS Doorbell Camera. The setup will take about 60 minutes to complete.

Get the app

Download the TELUS SmartHome+ app and select "Indoor Camera Installation".

What's in the Box

      Indoor Camera ADC-V523
      Mounting plate
      Power supply
      Wall anchors
      Wall screws

Camera & Stand

Adhesive Pad

Wall Mount
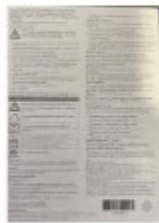
Cert Insert

Anchor & Screws

USB-C Power Supply

USB-C Cable 1.5m

Before you begin, unbox your TELUS Doorbell Camera and identify all of the components.

TELUS Doorbell Camera	TELUS Outdoor Camera	TELUS Indoor Camera
1x Doorbell	1x Outdoor camera	1x Indoor camera device w/ integrated stand
1x Wall Mount	1x Wall mount	1x Wall mount
4x Self-tapping screws	2x Self-tapping screws	1x 3M tape
2x Wall anchors	2x Wall anchors	1x Wall anchor
1x Wedge Kit		1x Self-tapping Screw
1x Unlocking Pin	1x USB-PD AC/DC Adaptor	1x USB-PD AC/DC Adaptor
	1x USB-C cable 3m	1x USB-C cable 1.5m
1x Chime Adaptor	1x USB-C break-out cable	1x Quick start guide printed on inside lid of the box
1x Digital chime adaptor wire harness	1x Adhesive gasket	1x Certification Insert

1x Mechanical chime adaptor wire harness	1x Quick start guide printed on inside lid of the box	
1x Doorbell wire extender	1x Certification insert	
1x Adhesive gasket		
1x 2-way push fitting for doorbell wire extender		
1x 3-way push fitting for digital chime adaptor wire harness		
1x Quick start guide printed on inside lid of the box		
1x Certification insert		

What you will need

A smartphone or tablet
2.5 Mbps upload Wi-Fi
Optional: Screwdriver, drill, pencil, 6mm (1/4 inch) drill bit
Micro SD memory card for 24/7 continuous recording

Smartphone or Tablet   2.5 Mbps Upload Wi-Fi

Optional
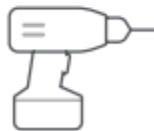
Screwdriver   Drill   Pencil   6mm (1/4 inch) Drill Bit

Installation Overview

6. User scans QR code on the inside face of the device's box lid, directing them to download the TELUS SmartHome+ app.
7. User logs into the app with their credentials.
8. User starts new device install.
9. App prompts user to turn on Bluetooth if it is not already on.
10. App prompts user to confirm their Wi-Fi credentials and then saves them to the Wi-Fi locker.
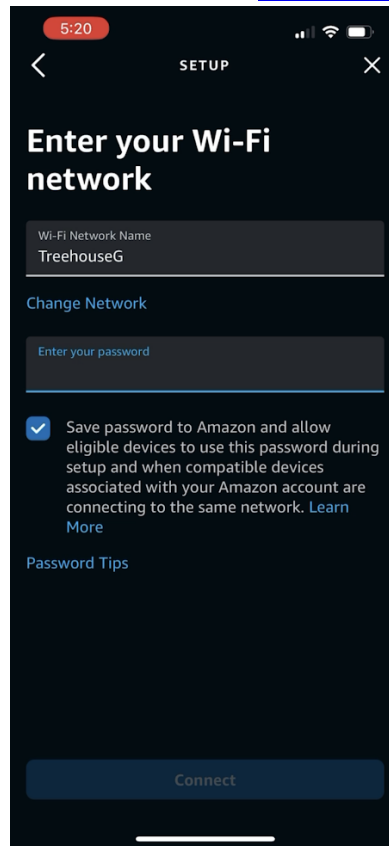
How to install your TELUS Indoor Camera

16. Check your Wi-Fi speed at the install location. The TELUS Indoor Camera requires a minimum Wi-Fi signal of 2.5 Mbps upload speed to operate.
    ○ To check your Wi-Fi signal: Use your smartphone's browser to visit ⬚s.com/SpeedTest to determine the internet speed while at the intended doorbell installation locatio.
    ○ If your bandwidth is too slow, contact your internet service provider to find out how to increase your upload speed.
17. Plug in the PSU to the camera using the USB-C cable & power on
18. Open the app and follow the wizard
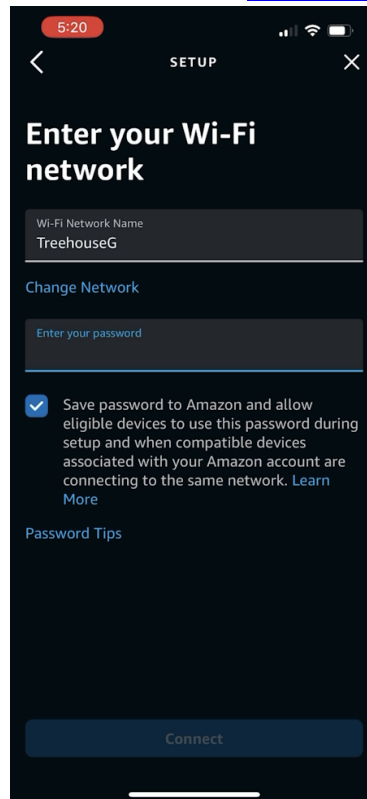
- The app will confirm when your TELUS Doorbell Camera is connected, showing you a thumbnail or live view from the camera and then moving you into the settings screen.
- The app will continue to guide you through additional setup steps, including notifications and zoning behavior.
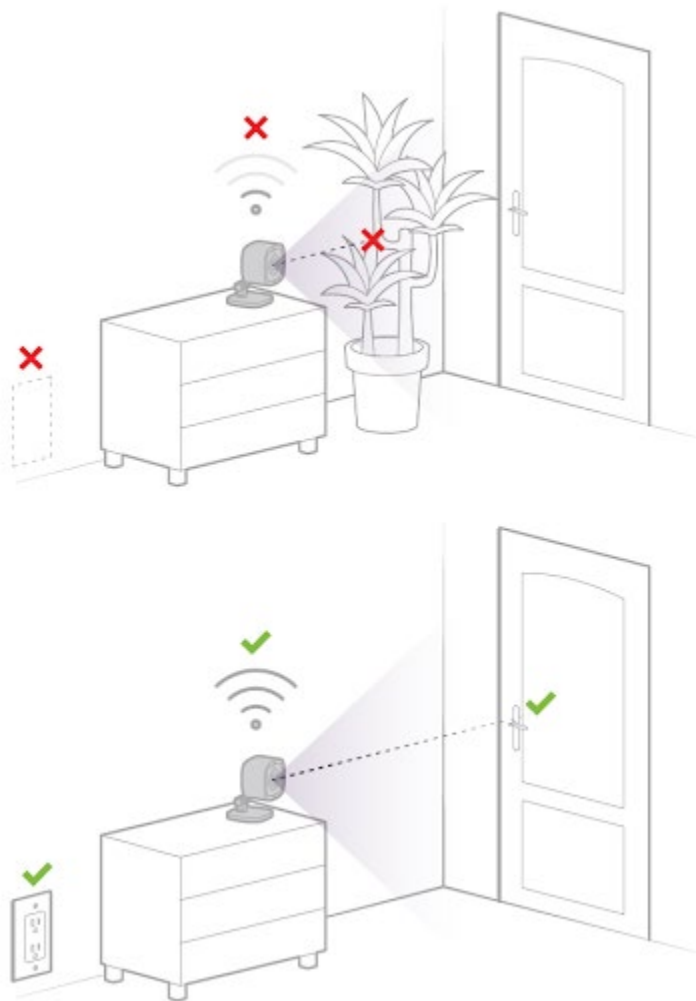

Step 1: Find an outlet near chosen location and plug in camera

Optional: Install the micro SD card (not included) for 24/7 continuous recording.
Choose a location with the following:

       Indoor power outlet nearby
       Good Wi-Fi signal strength
       Clear view of the area

Note: For wall mounting installation, please see steps 8 to 10.

Step 2: Check your Wi-Fi speed at location

The Indoor Camera requires a minimum of 2.5 Mbps upload speed to operate. In a browser on your smartphone (Safari on Apple iPhones or Google Chrome on Android phones), visit telus.com/SpeedTest to determine the internet speed at your chosen location.
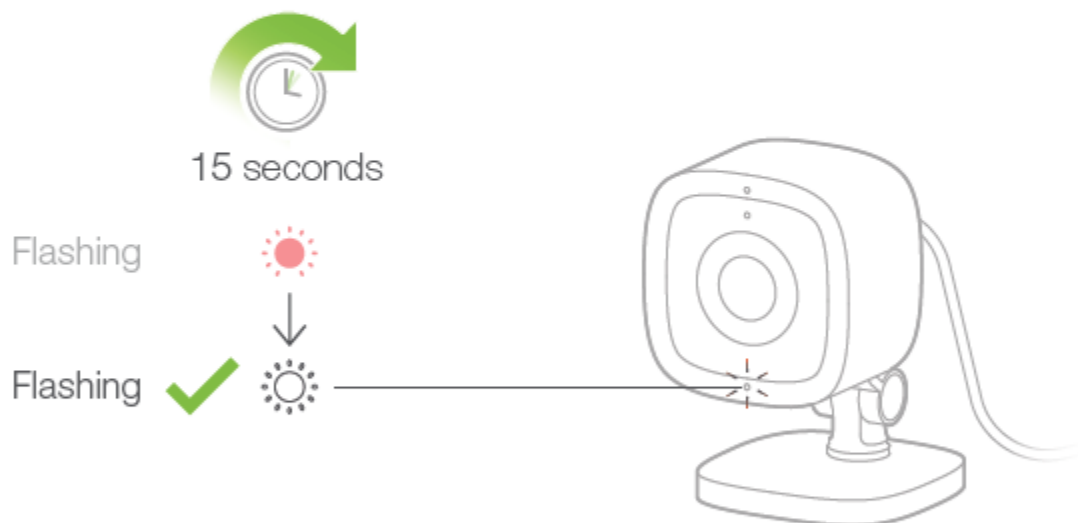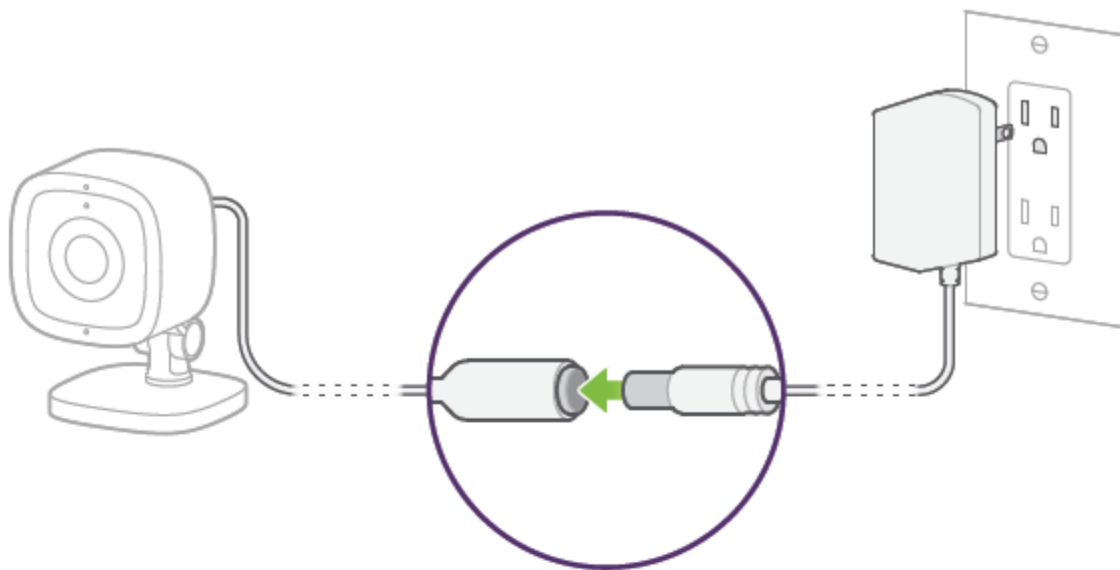
If you are unable to find a location with adequate Wi-Fi coverage, please contact us at 1-855-255-8828 for assistance.
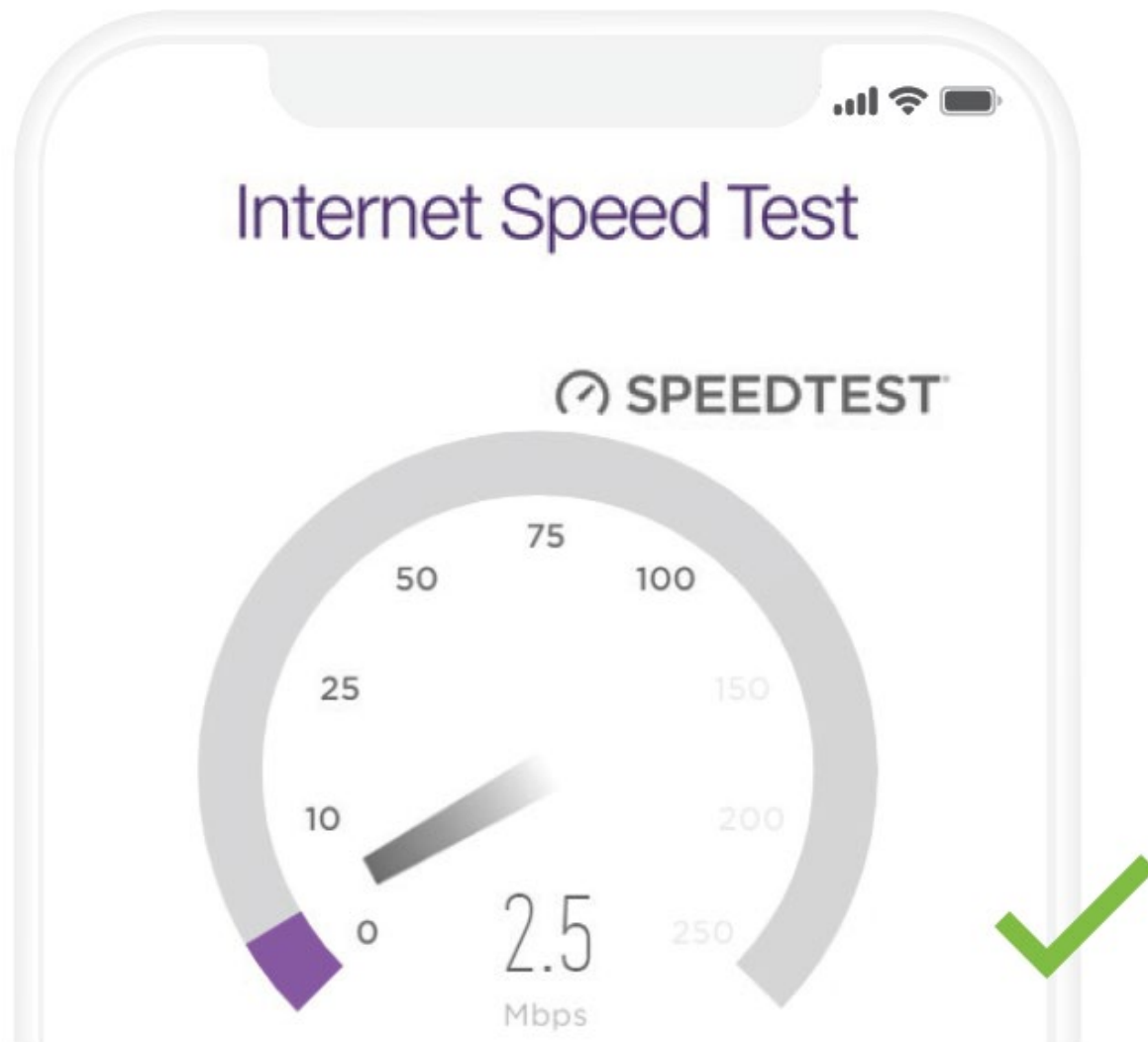
Step 3: Turn on the camera

Connect the power cable to the camera and USB C power supply

Plug the power supply into the power outlet and wait about 15 seconds for the LED to start flashing white

15 seconds

Flashing

Flashing ✓

LED not flashing white?
Press and hold the WPS/RESET button on the bottom of the
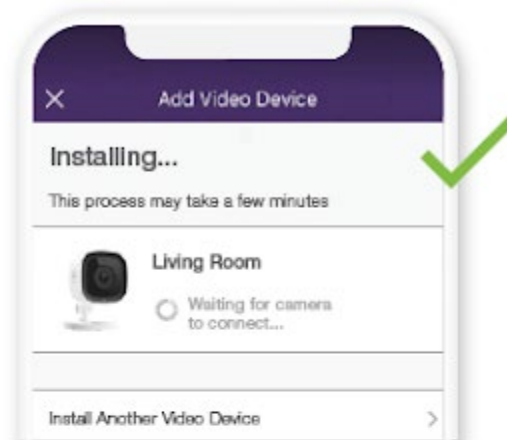device until the light starts flashing white.

6 seconds

Select + Add Device

Step 6: Connect camera to customer account

App will find the camera via bluetooth and push home network settings to camera

Camera will show a solid white LED when configuration is complete

Step 8: Mount wall plate (optional)

The camera can be mounted to a wall using the screw.

Tip: You can also attach the wall mount by drilling holes and using the drywall anchor provided. You'll need a 6mm (¼ inch) drill bit.
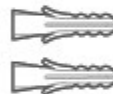
Steve HumpstonJohnny Homsavath

Mark Holes

TIP
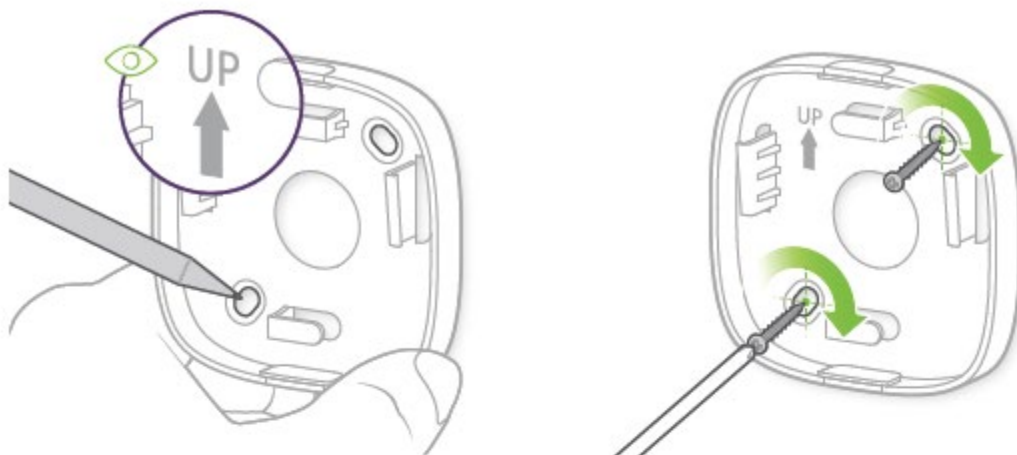
You can also attach the mounting bracket by drilling holes and using the drywall anchors provided.
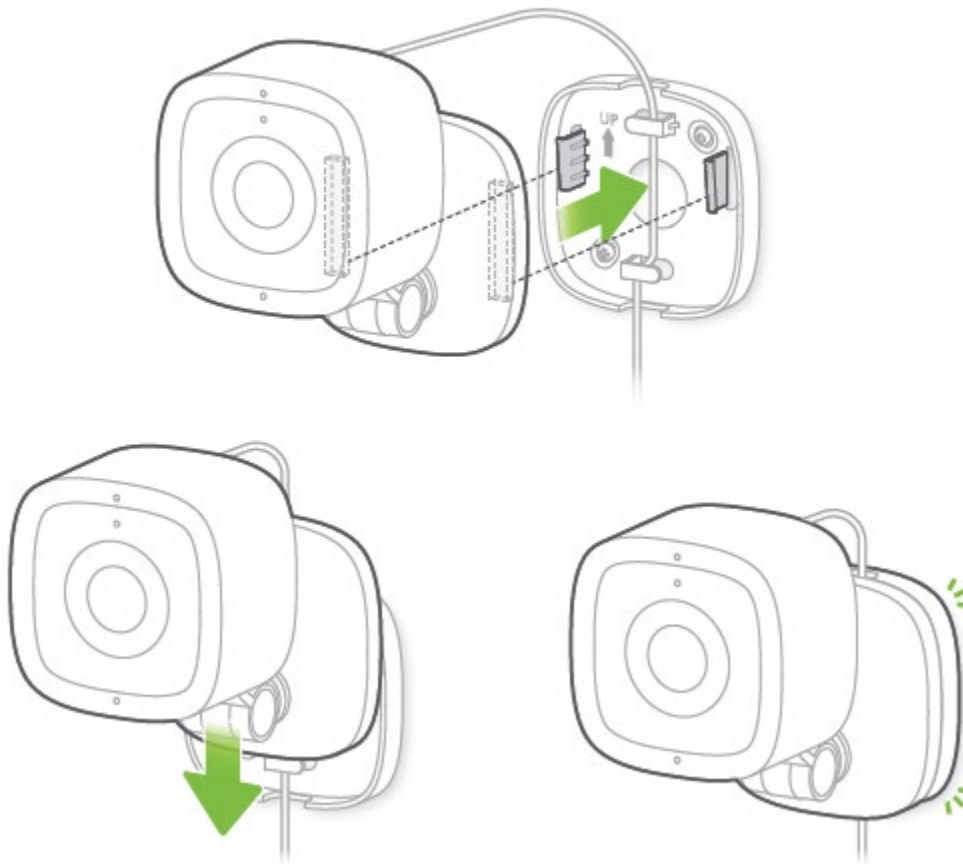

6mm (1/4 inch) Drill Bit   Drywall Anchors

Adjust Camera

Attach Camera

Your setup is complete
Nice work. You're all done.

Show the user the camera view

Steve HumpstonJohnny Homsavath

Outdoor Camera Installation

Introduction

This installation guide will help you set up your TELUS Doorbell Camera. The setup will take about 60 minutes to complete.

Get the app

Download the TELUS SmartHome+ app and select "Indoor Camera Installation".

What's in the Box

Before you begin, unbox your TELUS Doorbell Camera and identify all of the components.

Camera & Wall Mount with Bracket and Pigtail USB-C Cable

Adhesive Gasket

Self-Install Instruction Link & Cert Insert

2x Anchors & 2x Screws

TELUS Proprietary

USB-C Power Supply

USB-C Cable 3m

TELUS Doorbell Camera	TELUS Outdoor Camera	TELUS Indoor Camera
1x Doorbell	1x Outdoor camera	1x Indoor camera device w/ integrated stand
1x Wall Mount	1x Wall mount	1x Wall mount
4x Self-tapping screws	2x Self-tapping screws	1x 3M tape
2x Wall anchors	2x Wall anchors	1x Wall anchor
1x Wedge Kit		1x Self-tapping Screw
1x Unlocking Pin	1x USB-PD AC/DC Adaptor	1x USB-PD AC/DC Adaptor
	1x USB-C cable 3m	1x USB-C cable 1.5m
1x Chime Adaptor		1x Quick start guide printed on inside lid of the box
1x Digital chime adaptor wire harness	1x Adhesive gasket	1x Certification Insert
1x Mechanical chime adaptor wire	1x Quick start guide printed on	

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harness	inside lid of the box	
1x Doorbell wire extender	1x Certification insert	
1x Adhesive gasket		
1x 2-way push fitting for doorbell wire extender		
1x 3-way push fitting for digital chime adaptor wire harness		
1x Quick start guide printed on inside lid of the box		
1x Certification insert		