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VM320
VM320-2
Video Monitor



vttech® User's manual

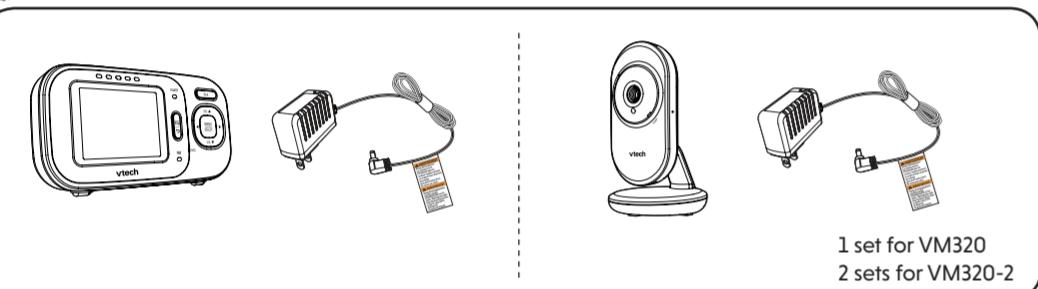
CONGRATULATIONS

on purchasing your new VTech product. Before using this product, please read **Important safety instructions**.

This manual has all the feature operations and troubleshooting necessary to install and operate your new VTech product. Please review this manual thoroughly to ensure proper installation and operation of this innovative and feature-rich VTech product.

For support, shopping, and everything new at VTech, visit our website at www.vtechphones.com.

WHAT'S IN THE BOX

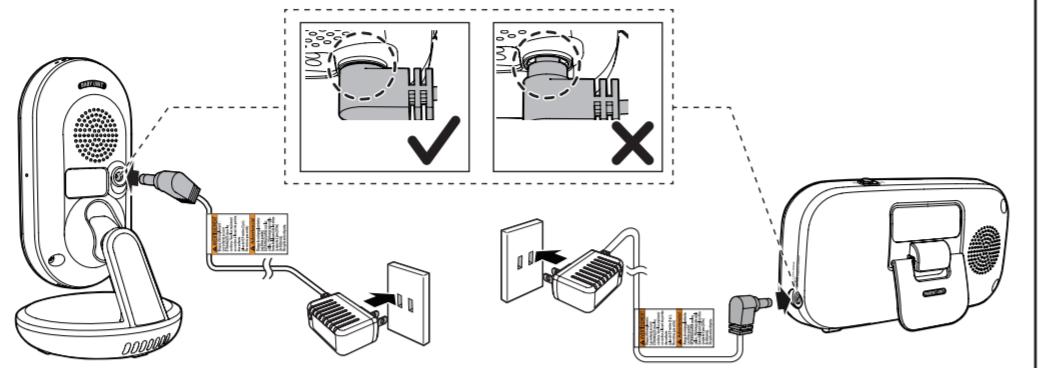


1 CONNECT AND CHARGE THE BATTERY

NOTES

- The rechargeable battery is pre-installed in your parent unit.
- Use only the power adapters supplied with this product.
- Make sure the baby monitor is not connected to a switch controlled electric outlet.
- Connect the power adapters in a vertical or floor mount position only. The adapters' prongs are not designed to hold the weight of baby monitor, so do not connect them to any ceiling, under-the-table, or cabinet outlets. Otherwise, the adapters may not properly connect to the outlets.
- Make sure the parent unit, the baby unit and the power adapter cords are out of reach of children.

Connect the baby monitor



Charge the parent unit battery

When you have connected and turned on the parent unit, the battery will be charged automatically. The battery icon indicates the battery status (see the following table).

NOTES

- The parent unit battery is fully charged after 11 hours of continuous charging.
- It takes longer to charge the battery when the parent unit is turned on. To shorten the charging time, turn the parent unit off while charging.
- The standby time varies depending on the volume level you set and your actual use.

BATTERY INDICATORS	BATTERY STATUS	ACTION
The screen displays Battery low at Parent Unit . The or light flashes.	The battery has very little charge and may be used for only a short time.	Charge without interruption (about 30 minutes).
The battery icon becomes solid .	The battery is fully charged.	To keep the battery charged, connect it to AC power when not in use.

3 USING THE BABY MONITOR (Con't)

Lullaby

The baby monitor has two lullabies and two soothing sounds for you to comfort your baby. You can play the lullabies or soothing sounds on the baby unit using the parent unit.

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **SELECT** or **▲**.
- Press **▲** to choose , then press **SELECT** or **◀**.
- Press **▼** or **▲** to choose a lullaby or a soothing sound, or choose to stop playing.
- Press **SELECT** to confirm your selection.

NOTES

- The selected lullaby plays for 30 minutes and stops automatically.
- The lullaby playback on the baby unit will be paused when receiving talkback from the parent unit.

Screen off timer

You can set the screen off time for the parent unit when there is no key press for a specific time interval. When the screen is turned off, you can still hear sound from the baby unit.

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **SELECT** or **▲** to open the submenu.
- Press **▼** or **▲** to choose the desired time period to automatically turn off screen (**OFF** / - 5 min. / - 30 min. / - 60 min.), then press **SELECT** to confirm your selection.

Adjust the sound sensitivity of the baby unit

You can choose to hear sounds from the baby unit all the time, or to hear sounds that exceed a certain level. You can use the parent unit to adjust the microphone sensitivity of your baby unit. The higher the sensitivity level, the more sensitive the baby unit is in detecting sounds for transmitting to the parent unit. The VOX sensitivity level is preset to the highest level (**Level 5**).

VOX SENSITIVITY LEVEL	Level 5	Level 4	Level 3	Level 2	Level 1
Sensitivity	Highest VOX sensitivity level	High VOX sensitivity level	Medium VOX sensitivity level	Low VOX sensitivity level	Lowest VOX sensitivity level
Description	The parent unit speaker is constantly on, and you will hear all sounds (including background noises) from your baby's room.	The parent unit speaker turns on for soft babbling and louder sounds from your baby. It remains quiet when your baby sleeps soundly.	The parent unit speaker turns on for crying and louder sounds from your baby. It remains quiet when your baby makes soft sounds.	The parent unit speaker turns on for loud crying or screeching sounds from your baby. It remains quiet when your baby makes soft sounds.	The parent unit speaker turns on for loud crying or screeching sounds from your baby. It remains quiet when your baby makes soft sounds.

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **SELECT** or **▲** to open the submenu.
- Press **▼** or **▲** to choose the desired sensitivity level, then press **SELECT** to confirm your selection.

TECHNICAL SPECIFICATIONS

Power requirements	Parent unit power adapter: Output: 6V DC @ 400mA Baby unit power adapter: Output: 6V DC @ 400mA
Nominal effective range	Maximum power allowed by FCC and IC. Actual operating range may vary according to environmental conditions or use.
Frequency control	Crystal controlled PLL synthesizer
Channels	32
Transmit frequency	Baby unit: 2405 - 2475 MHz Parent unit: 2405 - 2475 MHz
LCD	2.4" Color LCD (QVGA 230x240 pixel)
Power requirements	Parent unit power adapter: Output: 6V DC @ 400mA Baby unit power adapter: Output: 6V DC @ 400mA

2 BEFORE USE

NOTE

- This baby monitor is intended as an aid. It is not a substitute for proper adult supervision, and should not be used as such.

Test your baby monitor

You may test the baby monitor before initial use, and at regular times thereafter.

CAUTION

- For hearing protection, make sure the parent unit is more than 3 feet (1 meter) away from both baby units. If you hear any high-pitched noise, move the parent unit further until the noise stops. You can also press **VOL+** on the parent unit to reduce the noise.

- Make sure your baby unit and parent unit are on.

- The parent unit displays images from the baby unit.

- If you have two baby units, view the image from one of them by switching cameras via menu. Then, repeat step 2.

NOTE

- When the parent unit displays **No link to Camera**, and the **POWER** LED light flashes, move the parent unit closer to the baby units (observe the minimum distance of 3 feet / 1 meter).

TIP

- Increase the speaker volume of the parent unit if you cannot hear the sounds transmitted from the baby units.

Positioning the baby monitor

CAUTION

- Keep the baby unit out of the reach of your baby. Never place or mount the baby unit inside the baby's crib or playpen.

NOTE

- To avoid interference from other electronic devices, place your baby monitor at least 3 feet (1 meter) away from devices such as wireless routers, microwaves, cell phones and computers.

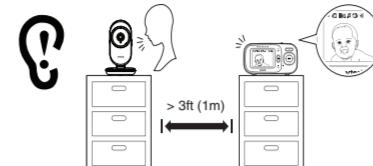
- Place the baby units more than 3 feet (1 meter) away from your baby.
- Adjust the angle of the baby unit camera to aim at your baby.
- Place the parent unit more than 3 feet (1 meter) away from the baby units to avoid screeching noise.

CAUTION

- The default volume of your parent unit is level 3, and the maximum volume is level 5. If you experience high-pitched screeching noise from your baby monitor while positioning:
 - Make sure your baby units and parent unit are more than 3 feet (1 meter) apart, OR
 - Turn down the volume of your parent unit.

Operating range

The operating range of the baby monitor is up to 1000 feet (300 meters) outdoors. The actual operating range may vary depending on the environmental conditions and other interferences such as walls, doors and other obstructions.



3 USING THE BABY MONITOR

Power on or off the baby unit

- Slide the **ON/OFF** switch to **ON** to turn on the baby unit. The **POWER** LED light turns on.
- Slide the **ON/OFF** switch to **OFF** to turn off the baby unit. The **POWER** LED light turns off.

Power on or off the parent unit

- Slide the **ON/OFF** switch to **ON** to turn on the parent unit. The screen and the **POWER** LED light turns on.
- Slide the **ON/OFF** switch to **OFF** to turn off the parent unit. The screen and the **POWER** LED light turns off.

Adjust speaker volume

For parent unit:

- Press **VOL+**/**VOL-** on the parent unit to adjust the speaker volume.

NOTE

- The parent unit will be muted automatically when the parent unit is talking to the baby unit. When it is muted, appears on the screen.

For baby unit:

The baby unit speaker volume determines the lullaby volume and talkback volume transmitted from parent unit. The volume can be adjusted in the parent unit.

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **MENU** or **▲**.
- Press **MENU** or **◀** to choose .
- Press **▼** or **▲** to choose the volume level of the baby unit, then press **MENU** to confirm.

Adjust LCD brightness

You can change the brightness of the parent unit screen from **Level 1** to **Level 5**. The LCD brightness is preset to **Level 3**.

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **MENU** or **▲**.
- Press **▼** or **▲** to choose the desired level of brightness, then press **MENU** to confirm your selection.

Monitoring mode * for VM320-2 only

Every time the parent unit is turned on, it displays a baby unit in **SINGLE-CAM** mode. If there are more two baby units in your system, you can also monitor your baby in **PATROL** mode.

SINGLE-CAM

The screen displays image of a single baby unit in full screen.

PATROL

A single cam view that transitions to a different baby unit every 10 seconds.

To switch from SINGLE-CAM to PATROL mode:

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **MENU** or **▲** to open the submenu.
- Press **▲** or **▼** to select to enter **PATROL** mode to alternately view the image from one baby unit to the next one in every 10 seconds.

To switch from PATROL to SINGLE-CAM mode:

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **MENU** or **▲** to open the submenu.
- Press **▲** or **▼** to select a camera number to enter **SINGLE-CAM** mode.

NOTE

- If one or more paired baby units are powered off or disconnected during patrolling, the parent unit will keep searching until its power has run out or a baby unit is connected once again.

Temperature alert tone

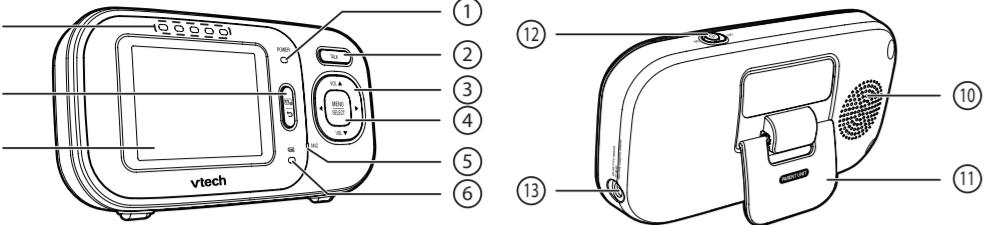
You can turn on the temperature alert tone so that the parent unit will emit an alert tone if the detected temperature is out of range.

- Press **MENU** when the parent unit is idle.
- Press **◀** or **▶** to choose , then press **MENU** or **▲**.
- Press **▼** or **▲** to choose , then press **MENU** or **◀**.
- Press **▼** or **▲** to choose or , then press **MENU** to confirm your selection.

Temperature format

You can choose to display the temperature

PARENT UNIT OVERVIEW



1 POWER LED light

- On in green when the parent unit is powered on and linked to the baby unit.
- Flashes when the link to the baby unit being viewed is lost.

2 TALK

- Press and hold to talk to the selected baby unit.

3 Arrow keys and VOLA / VOLV / ▲

- Press to increase the parent unit speaker volume.
- While in a menu, press to scroll up, or to enter an item's sub-menu.
- While zooming, press and hold to move the zoomed image upward.

VOLV / ▼

- Press to decrease the parent unit speaker volume.
- While in a submenu, press to scroll down.
- While zooming, press and hold to move the zoomed image downward.

◀

- While in a menu, press to choose the next item on the left.
- While zooming, press and hold to move the zoomed image leftward.

▶

- While in a menu, press to choose the next item on the right.
- While zooming, press and hold to move the zoomed image rightward.

13 Power jack

4 MENU/SELECT

- Press to enter or exit the menu.
- While in a sub-menu, press to choose an item, or save a setting.

5 Microphone

6 Battery indicator

- On in red when the battery is charging.
- Flashes when the battery is low.

7 Visual sound indicators

- The visual sound indicators can show the sound level detected by the baby unit.

Sound level detected by the baby unit

- One to three green lights indicate a moderate sound level detected by the baby unit.
- Additional red lights indicate a higher sound level detected by the baby unit (e.g. baby crying loudly).

8 LCD off/back

- Press to turn off LCD and keep the sound broadcast.
- Press to return to the previous screen.

9 LCD display

10 Speaker

11 Stand

12 ON/OFF switch

- Slide to turn on or off the parent unit.

13 Power jack

PARENT UNIT ICONS



F or E

- Real-time temperature**
- Displays the real-time temperature detected by the baby unit in Fahrenheit (°F) or Celsius (°C) (e.g. 57°F or 14°C).

Battery status

- Battery status**
- animates when the battery is charging.
- displays solid when the battery is fully charged.
- displays when the battery is low and needs charging.

Speaker volume

- Displays the parent unit speaker volume level while adjusting.

Main menu icons

- Monitoring mode**
- You can enter the monitoring mode to view the video from the baby unit.
- For VM320-2 only.

Patrol mode

- Displays when the parent unit is in PATROL mode.
- For VM320-2 only.

Zoom

- You can zoom in or out with 1x, 2x options while viewing image.

Lullaby

- You can select, play, or stop a lullaby.

Brightness

- You can change the brightness of the parent unit screen.

LCD screen off timer

- You can set a specific time to turn the screen off.

VOX sensitivity

- With this feature, you can choose to hear sounds from the baby unit all the time, or to hear sounds that exceed a certain level. You can use the parent unit to adjust the microphone sensitivity of your baby unit. The higher the sensitivity level, the more sensitive the baby unit is in detecting sounds for transmitting to the parent unit.

Mute alert

- Displays when the parent unit speaker is turned off.
- Displays when the parent unit is talking to the baby unit.

Sound-activated screen

- When the baby unit detects no sound, the parent unit screen stays off to save power. Once a sound is detected, the parent unit screen turns on automatically. It will then turn off again after 50 seconds of no sound detection.

Temperature

- You can turn on the temperature alert tone so that the parent unit beeps whenever the room temperature detected by the baby unit falls outside of the desired temperature range. You can choose in Fahrenheit (°F) or Celsius (°C) as the temperature format displayed, or set the maximum/minimum temperature limit for alerts.

Warning icons and messages

1/No Link to Camera

- The selected baby unit is out of range or is turned off.

1/Battery low at Parent Unit

- The battery is empty and needs to be recharged.

1/Temperature too high or 2/Temperature too low

- The temperature detected by the baby unit is higher/lower than the desired temperature alert range.

1/Searching for Baby Units

- The parent unit is searching for baby units.

1/Connected to AC Power

- The parent unit is connected to AC power.

GENERAL PRODUCT CARE

To keep this product working well and looking good, follow these guidelines:

- Avoid putting it near heating appliances and devices that generate electrical noise (for example, motors or fluorescent lamps).
- DO NOT expose it to direct sunlight or moisture.
- Avoid dropping the product or treating it roughly.
- Clean with a soft cloth.
- DO NOT immerse the parent unit and the baby unit in water and do not clean them under the tap.
- DO NOT use cleaning spray or liquid cleaners.
- Make sure the baby unit and parent unit are dry before you connect them to the mains again.

STORAGE

When you are not going to use the baby monitor for some time, store the parent unit, the baby unit and the adapters in a cool and dry place.

FREQUENTLY ASKED QUESTIONS

Below are the questions most frequently asked about the baby monitor. If you cannot find the answer to your question, visit our website at www.vtechphones.com, or contact 1 (800) 595-9511 for customer service.

Why does the baby monitor not respond normally?

- Try the following (in the order listed) for common cure:
 - Disconnect the power to the baby units and the parent unit.
 - Wait a few seconds before connecting power back to the baby units and the parent unit.
 - Turn on the baby units and the parent unit.
 - Wait for the parent unit to synchronize with the baby units. Allow up to one minute for this to take place.

Why don't the power-on light of the parent unit and parent unit go on when I switch on the units?

- Perhaps the parent unit is not connected to the power. Insert the appliance plug into the parent unit and put the adapter in a wall socket. Then, slide the ON/OFF switch to ON to turn on the parent unit and the parent unit.

Why doesn't my parent unit charge while connected to AC power?

- Make sure the power is not controlled by a wall switch.

Why is my screen in black and white?

- The screen is in black and white during night-time or in a dark room when the night vision feature is activated. This is normal.

Why do I get glare or blurry display on my screen when viewing my parent unit screen at night?

- During night-time or in a dark room, the surroundings and other interfering factors, like lightings, objects, colors and backgrounds, the display resolution may vary. Adjust the baby unit's angle or place the baby unit at a higher level to prevent glare and blurry display.

Why does the baby monitor produce a high-pitched noise?

- The parent unit and baby units may be too close to each other.
 - Move the parent unit away from the baby units until the noise stops; OR
 - Turn down the volume of your parent unit.

Why does the parent unit beep?

- The parent unit may be out of range. Move the parent unit closer to the baby units (but not less than 3 feet).

The parent unit may not have enough charge for the parent unit to perform normally.

- Charge the battery in the parent unit for up to 11 hours.

The temperature of your baby's room may be too high or too low.

- The parent unit speaker volume may be too low. Press VOLA to increase the volume, or use the parent unit menu to change sound sensitivity level to the highest level (level 5).

Why can't I establish a connection? Why is the connection lost every now and then? Why are there sound interruptions?

- The baby units may be out of range. Move the parent unit closer to the baby units (but not less than 3 feet).

Other electronic and wireless products may cause interference with your baby monitor. Try installing your baby monitor as far away from these devices as possible.

- If you power on only one baby unit, your parent unit may display 1 and the POWER LED light flashes. Switch to the baby unit you have powered on via menu.

DIM MODE

The dim mode is to help you save the parent unit power. Your parent unit display will dim automatically after 10 minutes of inactivity, in which there is neither key pressed nor alert received from the baby unit.

Note

- While the screen is dimmed, any keypress or alert message will trigger the screen to return to the preset brightness level. After 10 minutes of inactivity, it will dim again.

NIGHT VISION

The baby unit has infrared LEDs that allow you to see your baby clearly at night or in a dark room. When the baby unit being viewed detects low light levels, the infrared LEDs are switched on automatically. The images from the baby unit are in black and white, and 1 appears on the screen.

Notes

- It is normal if you see a short white glare on your parent unit screen as the baby unit is adapting to the dark environment.
- When the infrared LEDs are on, the images are in black and white. This is normal.

Tips

- Depending on the surroundings and other interfering factors, like lightings, objects, colors and backgrounds, the display resolution may vary. Adjust the baby unit's angle or place the baby unit at a higher level to prevent glare and blurry display.

MOUNT THE BABY UNIT (OPTIONAL)

Your baby monitor comes ready for tabletop use. You can also choose to mount your baby monitor on the wall. See Mount the baby unit (optional) in the Quick Start Guide for the wall mounting instructions.

LIMITED WARRANTY

What does this limited warranty cover?

The manufacturer of this VTech Product warrants to the holder of a valid proof of purchase ("Consumer" or "you") that the Product and all accessories provided in the sales package ("Product") are free from defects in material and workmanship, pursuant to the following terms and conditions, when installed and used normally and in accordance with the Product operating instructions. This limited warranty extends only to the Consumer for Products purchased and used in the United States of America and Canada.

What will VTech do if the Product is not free from defects in materials and workmanship during the limited warranty period ("Materially Defective Product")?

During the limited warranty period, VTech's authorized service representative will repair or replace at VTech's option, without charge, a Materially Defective Product. If we repair the Product, we may use new or refurbished replacement parts; if we repair defective parts, modules, or equipment, Repair or replacement of the Product, at VTech's option, is your exclusive remedy. VTech will return the repaired or replacement Products to you in working condition. You should expect the repair or replacement to take approximately 30 days.

How long is the limited warranty period?

The limited warranty period for the Product extends for ONE (1) YEAR from the date of purchase. If VTech repairs or replaces a Materially Defective Product under the terms of this limited warranty, this limited warranty also applies to the repaired or replacement Product for a period of either (a) 90 days from the date the repaired or replacement Product is shipped to you or (b) the time remaining on the original one-year warranty, whichever is longer.

What is not covered by this limited warranty?

This limited warranty does not cover:

- Product that has been subjected to misuse, accident, shipping or other physical damage, improper installation, abnormal operation or handling, neglect, inundation, fire, water or other liquid intrusion; or
- Product that has been damaged due to repair, alteration or modification by anyone other than an authorized service representative of VTech; or
- Product that is not to the extent that the problem experienced is caused by signal conditions, network reliability, or cable or antenna system;
- Product to the extent that the problem is caused by use with non-VTech accessories; or
- Product whose warranty/sticker, product serial number plates or electronic serial numbers have been removed, altered or rendered illegible; or
- Product purchased, used, serviced, or shipped for repair from outside the United States of America or Canada, or used for commercial or institutional purposes (including but not limited to Products used for rental purposes); or
- Product returned without a valid proof of purchase (see item 2 on the following part); or
- Charges for installation or set up, adjustment of customer controls, and installation or repair of systems outside the unit.

How do you get warranty service?

To obtain warranty service in the USA, please visit our website at www.vtechphones.com or call 1 (800) 267-7377.

NOTE: Before calling for service, please review the user's manual - a check of the Product's controls and features may save you a service call.

Except as provided by applicable law, you assume the risk of loss or damage during transit and transportation and are responsible for delivery and handling charges incurred in the transport of the Product to the service location. VTech will return repaired or replaced Product under this limited warranty. Transportation, delivery or handling charges are prepaid. VTech assumes no risk for damage to the Product in transit. If the Product failure is not covered by this limited warranty, or if you purchase the Product after the expiration of the limited warranty, VTech will notify you and will request that you authorize the cost of repair prior to any further repair activity. You must pay for the cost of repair and return shipping costs for the repair of Products that are not covered by this limited warranty.

What must you return with the Product to get warranty service?

- Return the entire original package and contents including the Product to the VTech service location along with a description of the