

TX3200 Users Guide

Set-up: The TX3200 uses two AAA size batteries. Slide the battery door off and install the batteries, observing polarity as indicated in the battery compartment. For best performance, we recommend Alkaline, # LR03-AM4 type or equivalent.

There is no on/off switch, the TX3200 wakes up when a key is pressed (except the ALT key). When the Multiple Choice mode is used, the key pressed will wake up the TX3200 and send the answer. In all other modes pressing a key only wakes up the unit and does not enter that character in the display.

On initial battery install, the default mode is for multiple choice answers using the 10 data keys (1,2,3 thru 0) and the < and > arrow keys. Do an initial test by pressing any one of these keys, the red LED indicator should light with each key press and the display indicate the "NO COM" status. If you are within range of a H-ITT base unit, the LED will turn green and the display will show the key pressed. These confirmation indicators, called the Acknowledgment or ACK for short, let you know your response was received by the base receiver.





Each TX3200 has a unique serial number labeled on the back of the battery door, and also in the battery compartment. This serial number is used by the software to associate you with your TX3200 remote with a roster your instructor may use. H-ITT's software provides several ways your instructor can record this association so if your instructor asks you to provide your remote ID number, it is this number on the back.

General description, keys and display:

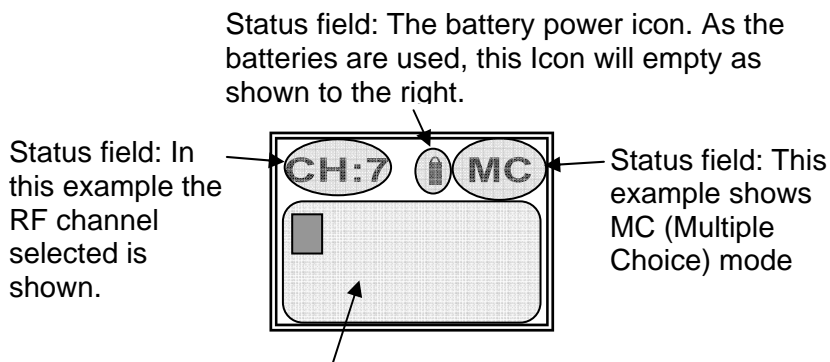
The primary function of a key is denoted on the key in black. The 10 data keys have both a number and a letter (A-J) in black. The Black letters (A, B, C etc) on the 10 data keys are provided for reference only when answering Multiple Choice type questions

The alternate key functions are in blue text. To select an alternate function, press and hold the ALT key then press the desired key, the alternate character selected will be shown in the display, release the ALT key. Where multiple alternate characters are on a key (i.e. the primary "2" key has D E F alternates), press that key again (while the ALT key still pressed) and the next character will be displayed. When the desired character is in the display, release the ALT key.

This manual denotes selecting an alternate key function with the + sign, example: ALT + (Pri fcn/Alt fcn).

And graphically shown as, for example:  + 

At the top of the TX3200's LCD display there are "status" fields that provides information on the mode or status of the TX3200. The three status fields will provide various information depending on which mode you have selected.



Battery power icon indicator



Fully charged batteries



Batteries with approximately 1/2 life remaining



Batteries are low, should be replaced

General operating information:

The TX3200 has four unique operating modes that set up how the TX3200 communicates with the H-ITT software running on the classroom computer. To properly have your answer recorded, the operating mode of the TX3200 must match the question type being asked by your instructor.

The following table shows question types that your instructor may ask (when using the H-ITT CRS software) and the Mode you should use when responding to that question type.

There are sub-categories of both these answer types that can be used by the computer software, these are shown, along with the compatible TX3200 mode to use:

Question/answer type	Mode to use
Multiple Choice, single question	Multiple Choice mode
Multiple Choice, Paper based testing	
Fill in the blank, single question	Multi-Digit mode
Fill in the blank, Paper based testing	Test mode
Home work collection	Homework mode

NOTES:

- If your instructor displays the “question type” text from the H-ITT CRS computer program, this will inform you of the correct mode the TX3200 should be in when answering questions.
- If you are not sure of the question type or mode, ask your instructor.
- If you are answering a question, and you do not get confirmation your answer has been received (the display shows No Com and the light stays red) you either have the wrong RF channel selected, or are not in the correct mode for the answer type needed.
- In the Multiple Choice mode the TX3200 will immediately wake up and send the key pressed (1,2,3 thru 0 or A thru J and <,> keys) then provide acknowledgment and immediately revert to the sleep mode.
- In all other modes, a low power sleep timeout starts after a key is pressed. If no other key is pressed after this time out (default at 20 seconds), the display will blank. Press any key to wake up the TX3200, and the display will restore the last mode and data you have entered and you can continue.
- You can adjust the sleep timeout with the Battery saver sleep timing setting.

Selecting modes and functions:

Pressing MNU/[SEL](#) will display the various modes or functions that you can select. Each MNU/[SEL](#) press displays another mode or function.

When the desired mode is displayed, press and hold [ALT](#) then MNU/[SEL](#) to enter that mode.

Selecting a function may differ, for example RF channel select, you simply type in the new RF channel number and SEND (do not use [ALT](#) + MNU/[SEL](#)). Selecting each mode or function is described in the table below.

	MENU DISPLAY	TO SELECT
MODES	Multiple Choice	Press and hold ALT then click MNU/ SEL then release the ALT key.
	Multi-Digit	
	Test Mode	
	Homework Mode	
Functions	RF Channel setting	Type in new RF channel and press SEND
	Roster Info	ALT + MNU/ SEL
	Contrast Adj	Use the < or > keys to adjust as desired
	Time out Adj	ALT + MNU/ SEL
	Ser#	Displays your remotes ID number



The 4 Operating Modes

1. The Multiple Choice Mode

This is the default mode when batteries are initially installed. In this mode the TX3200 is used to answer multiple choice questions. Only the 10 data keys (1,2,3 thru 0 also labeled A thru J) and the < and > keys operate. For single multiple choice questions, you simply respond to multiple choice questions by pressing one of the 10 data keys as your response.

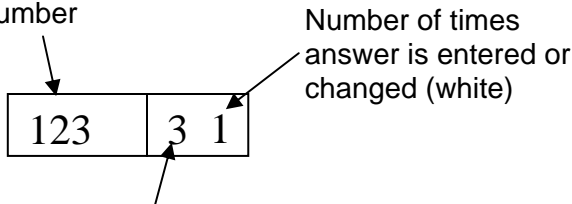


The H-ITT CRS classroom computer software provides for answering multiple choice questions from a paper based test that your instructor may use.

The Paper based test is a self paced test where you use the  and  keys to scroll through test questions as you answer them (Do not use the ALT key with MC mode).

The H-ITT CRS computer software program provides visual feedback via your ID box that tells you which question number you are answering and if you have answered the question as described below.

Standard ID box, shows the last 3 digits of your remote serial number



Example, ID435 is on question 2, and has answered it once



Example, ID507 is on question 1, and has answered it twice (changed their answer)



Example, ID474 is on question 3, and has not answered it yet.



Another feature of the computer software is the ability to collect your confidence in your answer when you respond to single multiple choice questions. If this feature is enabled in the H-ITT CRS software, you can enter your confidence factor; High, Medium, or Low with the < and > keys. Your ID box will show your confidence (High, Medium or Low) selection via an added box with **H**, **M** or **L** in yellow. Your instructor can use your confidence factor to weight the points awarded, or to get other types of information regarding answer confidence.

2. The Multi-digit mode

This mode allows you to enter a string of numbers and/or characters to send as your answer for single questions. All keys function, and you can enter up to 20 numbers, letters and character combinations as your answer. Once you have entered and reviewed your answer, press the SEND button. The data you send (numbers, characters, or letters) will be compared to an exact string of data with the computer software to determine if you have answered correctly or not.



Your instructor should inform you of particular formats that you should use when answering multiple digit questions.

Here are some common errors that can cause your answer to be graded incorrect:

Positive and negative decimal answers; the number of significant digits **must** match the correct answer.

Example: The instructor specifies 3 significant digits after the decimal and the "correct answer" is 12.520. A response of 12.52 is not an exact string match and will be graded as incorrect even though it may be argued numerically correct. The cause for rejection in this case is simply there are 7 ASCII characters in the "correct" answer, and only 6 in the student response.

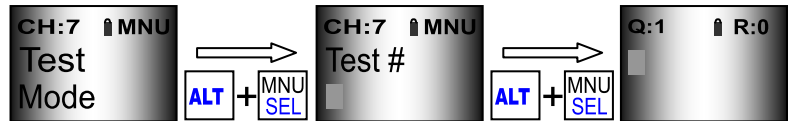
Technically 12.52 is not equal to 12.520 because of the accuracy the added decimal place implies.

Fractions; separate numerator and denominator with the / symbol, and for mixed numbers separate the whole number from the fraction with a space, example: 12 1/2 (twelve and one half). In this case, without the space the number would be 121/2 "one hundred twenty one halves".

3. The Test mode

This mode is used for multi-digit answers with self paced, paper based tests in class.

NOTE: This Test Mode (and the MC mode paper based test described above) work in conjunction with the H-ITT CRS computer program which will display the mode your remote should be in: If the computer display shows **Remote Mode: Multiple Choice** use the TX3200 in the MC mode and if the computer display shows **Remote Mode: Test Mode** use the Test Mode.



Selecting the Test mode brings up a screen where you can enter a TEST# assigned by your instructor; enter the test number (If no test number is provided leave this blank) then ALT+MNU/SEL again to start answering. The top left of the LCD display shows the Question number (Q:#) and the top right shows your Response counter (R;#).

Enter your answer for the question number and press the SEND key, the Response number (top right) will increment, and the TX3200 will automatically advance to the next question number. Your ID box, via the computer display, will appear exactly the same as the above described Multiple Choice paper based test mode. The difference is you do not need to scroll your ID box to a question number before answering it; the question number you are sending an answer for is shown on your LCD (the Q#), and when you send it, your ID box will automatically update with both the Question # and the number of times you've answered that Q#.

The answer you enter for any question number is saved (regardless of if you have sent it or not) so you can review your answer(s) before sending, or change and re-send if your instructor allows answer changes.

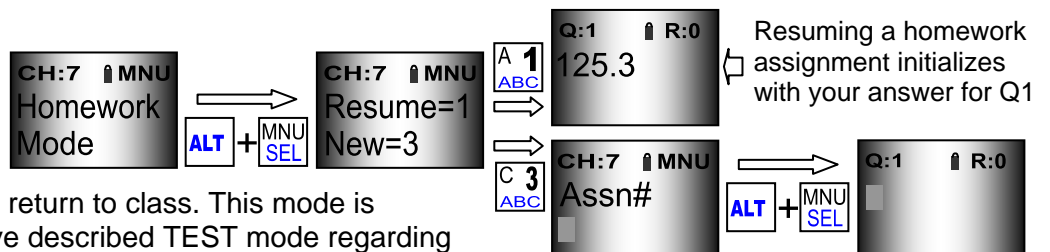
Skipping questions (to answer later) or reviewing/changing your answers: You can skip questions or review your answers by pressing the ALT+< OR ALT+> keys to scroll through questions.

Once you send the answer and it is received by the computer the Response counter increments which is your indicator that you have sent that answer (if R=0, then the answer has not been sent). If your instructor allows you to change your answer, scroll to the question number, and enter your replacement answer and send it, the Response counter will increment.

NOTE: Answers beyond the maximum allowed chances assigned by your instructor will not be recorded. Your "chances" ID box in the classroom computer display only increments when you change an answer, so sending the same answer multiple times will not increment your ID box "chances". This can be useful to confirm the computer program via your ID box has all your answers: Scroll to Q:1, then watching your ID Box, press SEND, (the Q# auto advances to Q2) press SEND (auto advance to Q3) press SEND, etc.

4. The Homework mode

This mode allows you to answer questions with your TX3200 at anytime and then send all the answers to the



classroom computer when you return to class. This mode is basically the same as the above described TEST mode regarding entering answers for specific question numbers, except you do not send your answers when you enter them. You will send all your homework answers to the classroom computer in class when your instructor asks you to.

The Homework mode has the option start a NEW, or RESUME a current assignment when selected. To start a NEW assignment press 3, you will be asked for an Assignment number, which is provided by your instructor (if no assignment number is provided leave this blank) then ALT + MNU/SEL.

Selecting Resume is only needed IF you have changed modes since last working on the Homework assignment. If you have not changed the Mode of the TX3200, your current homework assignment will be available when any key is pressed that wakes up the TX3200.

Your answers are stored in the TX3200 and you may complete the homework assignment over time at your choice. If you stop entering answers, the TX3200 will save the work you have done and revert to the low power mode after the sleep timeout. Press any key when you want to resume and you can continue completing the assignment.

Reporting your homework when you are in class; your instructor will ask you to send your homework assignment when the H-ITT computer software is started.

First enter the Homework Mode:

- If you have changed the mode since entering homework answers, select the Homework mode>RESUME option.
- If the Homework mode is the last mode used, press any key, to wake up the TX3200 in the Homework Mode.

When in the homework mode press the SEND key.

The Computer display will show the status via your ID box the same way the test modes do, except the question number in your ID box increments rapidly. Upon a successful send of all your homework answers you should see the last question number in your ID box, and get the Green light on your remote. If you do not see the last question number in your ID, or your LCD shows the No com and the indicator light remains red, press the send key again.

Depending on the number of questions, and how many students are simultaneously reporting homework, this may take a few seconds. In very heavy demand (i.e. many students sending at the same time) you may not get all your answers transmitted successfully. In this case, press SEND again.

The 5 user Functions

1. Changing RF channels

The default RF channel is 7 when batteries are initially installed. If the classroom operates on a different channel, your instructor will inform you of the channel number. Use the MNU key to display the RF channel change mode, and enter the desired channel number at the blinking cursor, and press SEND.



The TX3200 will search for a H-ITT receiver on the selected channel for a few seconds. If the channel is set properly (i.e. same as a local H-ITT base receiver) the LED will rapidly blink green, and the display will confirm Channel OK.

If the RF channel set is OK the TX3200 will revert back to the previous operating mode you were in.

If the selected channel is not within range of a H-ITT receiver operating on the selected RF channel, the indicator light will remain red, and the display will show Channel NOT OK, and remain in the RF channel set mode. You can enter another channel number and try (send) again, or:

- (1) You can wait the time out period and the TX3200 will revert to the previous Mode you were in.
- (2) You can press **ALT** + **MNU/SEL**, to revert to the previous mode you were in.
- (3) Use MNU to Select another mode.

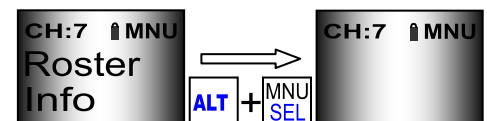
In any case, the TX3200 will remember the new channel setting you last entered regardless of having received Channel OK or Channel NOT OK.

Note that the current RF channel the TX3200 is set to is shown in the status area (top left) in the LCD display.

2. Roster Mode

Your instructor may request that you send information that can be included in the class roster. This information can be your name, or your school ID number, or a "screen name" you would like to see in your ID box.

Enter the information requested then press SEND.



3. Contrast adjust

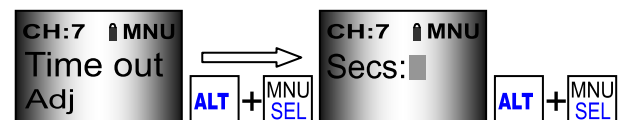
You can adjust the contrast of the screen for best viewing. Use the **Q#** AND **Q#** keys to adjust the LCD display for your preference.

When done, use **ALT**+**MNU/SEL** to exit, or wait for the timeout period. The TX3200 will remember this contrast setting.



4. Battery saver sleep timing

Your TX3200 battery life depends on how long it is active with data in the display. When the display is blank it is in a sleep



mode that uses minimal battery power. The default setting allows for 20 seconds after a key press before entering the sleep mode. You can change this time by entering a desired time in seconds from this option. Note that longer sleep times will reduce the battery life, shorter sleep times will extend it. The range of times is from 1 to 60 seconds.

5. Your unique serial number

This will display the unique serial number in your TX3200.

Key function details

The 10 Data keys (used in all modes)

Through Primary = Numeric (The alpha characters A-J top left are reference only)
Alternate = Alpha (except the "0", where the ALT is the equals symbol)

The Symbol keys (not used for multiple choice mode)

Primary = Negative sign
Alternate = Plus sign

Primary = Open brackets
Alternate = Close brackets

Primary = Decimal point
Alternate = Divide symbol

Primary = less than symbol
Alternate = greater than symbol

The edit keys

and Primary = In Multi-digit mode, back space and forward space keys
In multiple choice mode, scroll through test questions, or change confidence factor
Alternate = For Multi-digit only, used to scroll through question numbers in test and homework modes

Clears all characters in the display

The function keys

Primary = Displays Menu options, Modes and Functions.
Alternate = Select the displayed option.

Access alternate function

Primary = Send data in the display.
Alternate = Puts the TX3200 into a receive mode (special applications only)

GENERAL INFORMATION

Recommended batteries, 1.5V, AAA size Alkaline, type LR03-AM4-1.5V or equivalent. Batteries should last 1 year under typical use. The TX3200 operates in the 2.4Ghz ISM band and has 31 user selectable channels within this band, the default is channel# 7 when batteries are installed.

There is a 1 year warranty covering manufacturing defects. To obtain warranty service return the unit with your purchase receipt to a qualified H-ITT retailer for repair or replacement or contact H-ITT for return authorization information. Remember your TX3200 is an electronic device and should be treated delicately, kept dry, and kept free from static charge.



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