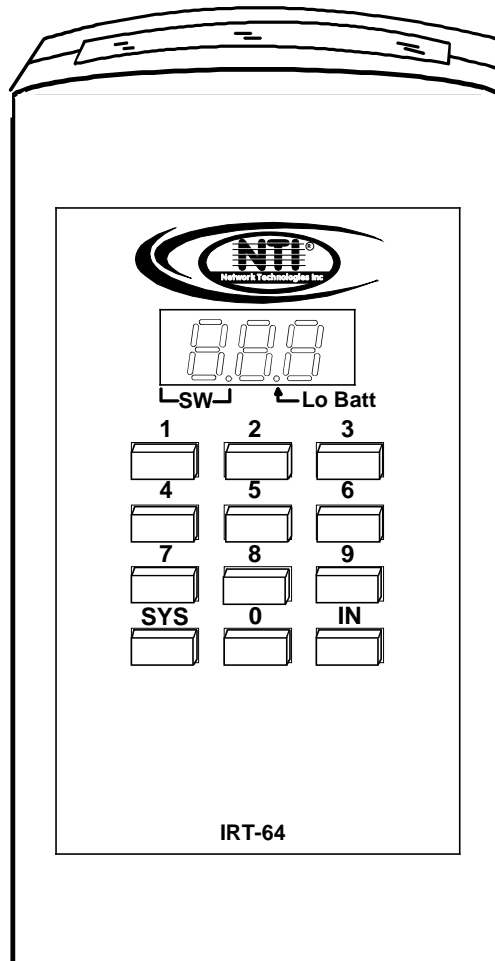
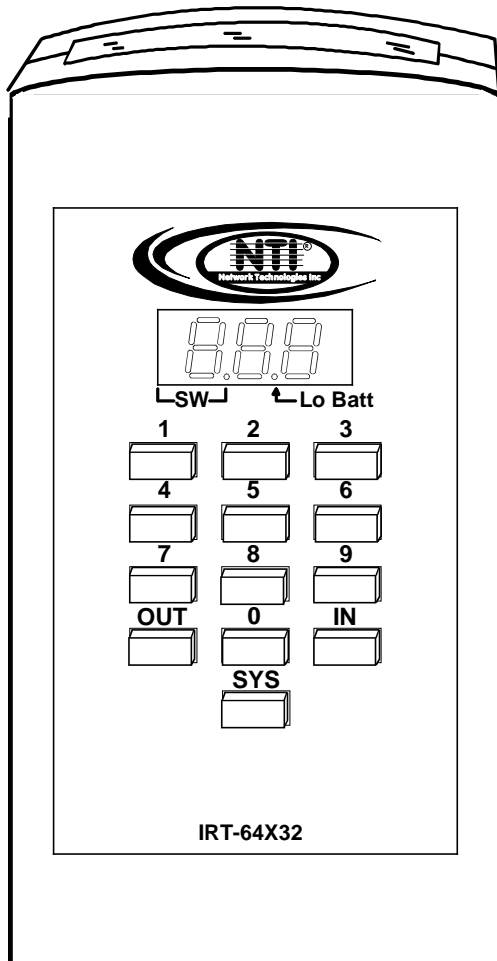




IRT-64X32

IRT-64

Infrared Remote Transmitters Operation Manual



Warranty Information

The warranty period on this product (parts and labor) is one (1) year from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at <http://www.nti1.com> for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

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CHANGES

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

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INTRODUCTION

The IRT-64X32 (or IRT) is an infrared remote transmitter that enables the user to control up to four (4) NTI VEEMUX Audio/Video Matrix switches via an infrared receiver from up to 50 feet away (with an unobstructed view). The IRT is battery-powered and always ready to use. The IRT will have a blank display unless an action is being selected by the user. The IRT enables the user to make connections between any input (video source) and any output (display device) on up to four (4) separate switches.

The IRT-64 (also an IRT) is used to control up to four (4) NTI VEEMUX single-output video switches.

Note: Multiple switches that are located close to each other and are to be individually controlled must be pre-configured (by NTI) to be identified by the IRT as switches #1, #2, #3, or #4. Please ask your salesperson to have switches configured accordingly at time of order. Unless otherwise specified, by default, all IRT-enabled switches will be configured as switch #1.

Subnote: Single-output switches with greater than 32 inputs must be configured to be identified by the IRT as switch #1 or #2.

Materials included:

- IRT-64X32 Infrared Remote Transmitter for audio/video matrix switches
-OR-
IRT-64 Infrared Remote Transmitter for single-output video switches
- (2) AA Cell Batteries- installed

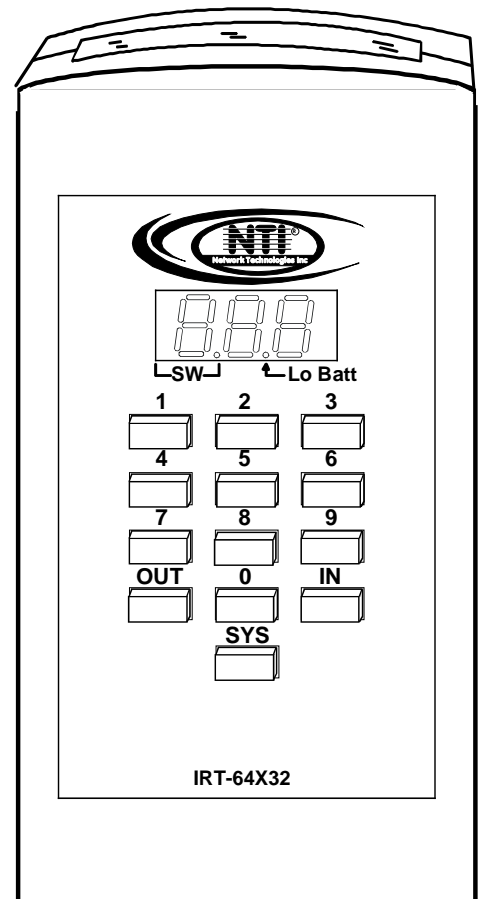
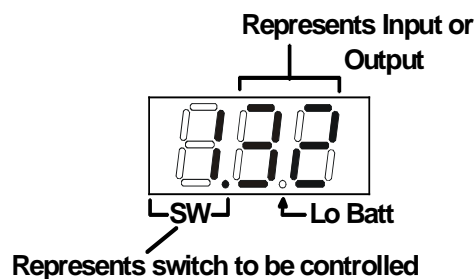
FEATURES AND FUNCTIONS

KEYPAD

- Buttons Numbered 0-9 – Used for port selection
- OUT – Pressed to validate and transmit the Output selection (IRT-64X32 only)
- IN – Pressed to validate and transmit the Input selection
- SYS – Pressed to choose the switch to be controlled or to configure the maximum number of inputs/outputs

LCD Display

- The first digit of the LCD will display the number of the switch to be controlled followed by the decimal point. This way the user will always know which switch will be effected by the IRT.
- The last two digits in the LCD represent 1) the desired input or output port to be connected or 2) the desired switch to be controlled when changing switches.
- The "Lo Batt" decimal point will illuminate when the user should change the batteries.
- The LCD will automatically power-down after 30 seconds of non-use and power-up with the press of any button.



HOW TO USE THE IRT

Infrared Remote Operation for Audio/Video Matrix Switches (IRT-64X32)

The IRT-64X32 enables the user to control the connections of up to 32 input ports and 16 output ports on up to four (4) separate NTI audio/video matrix switches. When any key is pressed, the IRT will power ON. A number key should always be pressed first unless a change to the configuration is desired (see "Set Configuration" on page 4). When a number key is pressed the LCD will display that number blinking. What to press next depends on what action is desired;

- change the switch to be controlled
- change the output port
- change the input port

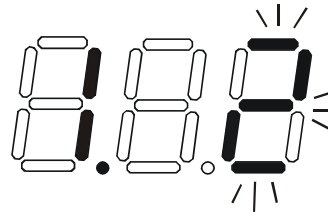
Note: The user must always change or confirm the output port first and the input port second

If the "SYS", "IN" or "OUT" key is pressed first, the LCD will display the current switch followed by the decimal point and an error signal "EE". The error signal will display because there is no number to be displayed. A number key must always be pressed before a "SYS", "IN" or "OUT" key is pressed.

Exception: The "SYS" key is pressed first when setting the configuration. (See page 4)



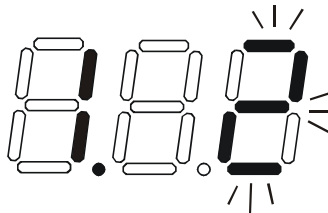
Power ON with SYS, IN or OUT keys



Power ON with "2" key

Change the Switch

Press the number of the switch to be controlled. The number selected will be blinking in the last digit.



FYI: If the user realizes that an invalid number has been introduced before pressing either the "SYS", "IN", or "OUT" buttons, a correction can be made by pressing the correct number. If the correct number is a single digit, it must be preceded by a "0" to make the correction.

Press the "SYS" key. The blinking number will become blank and the switch number will update.



Note: If the number entered is larger than 4, when the "SYS" key is pressed the LCD will display the current switch and the error signal "EE".

Change Output Port

Press the desired port number. If there is no change in the digits are selected, the last number entered will blink. The decimal point.

With the desired port number selected, point the IRT at the switch and make the change. The blinking number in the LCD will stop blinking.

FYI: If the switch did not receive the data the LED will not go OFF. The user can re-send the same data by pressing the "OUT" button again. The LED at the receiver will illuminate.

Note: If the number introduced is larger than the maximum number of outputs that the IRT is configured to control, then once the "OUT" key is pressed the LCD will display the current switch and the error signal "EE".

Change Input Port

Press the desired port number. As the digits are selected the last number entered will blink. The decimal point will be followed by the current switch number followed by the decimal point.



With the desired port number selected, point the IRT at the switch/receiver and press the "IN" button to transmit the selection and make the change. The blinking number in the LCD will stop blinking. The LED at the receiver will go OFF.

FYI: If the switch did not receive the data the LED will not go OFF. The user can re-send the same data by pressing the "IN" button again. The illuminated LED on the receiver will go OFF when the received data is complete.

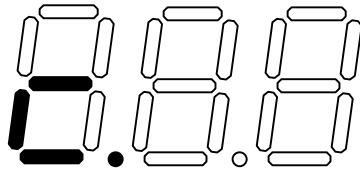
Note: If the number introduced is larger than the maximum number of inputs that the IRT is configured to control, then once the "IN" key is pressed the LCD will display the current switch and the error signal "EE".

Set Configuration

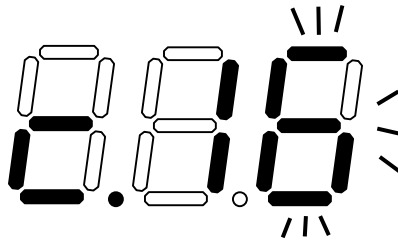
The IRT-64x32 factory default setting is 32 inputs and 16 outputs. When the batteries are changed the setting will return to the default value. At the default setting the IRT has the ability control any matrix switch with up to 32 inputs and 16 outputs without changing the configuration. However, when controlling smaller switches without changing the configuration it is up to the user to press valid number(s). To avoid confusion, it is recommended to configure the IRT to communicate with the largest switch to be controlled.

To change the maximum number of inputs or outputs:

1. From power-down state (blank LCD) press and hold the "SYS" button for at least 3 seconds. The LCD will first display an error message but after 3 seconds the letter "c" will display:



2. Enter the number of inputs or outputs. As the digits are entered, they will be displayed and the last one entered will blink.



Note: Only the inputs OR the outputs may be configured each time the configuration function is used. To perform another configuration operation the user must start again at "Set Configuration" step 1.

3. Accept the choice by pressing the "IN" button for setting inputs, or the "OUT" button for setting the outputs. The LCD will not blink anymore and will display "i" (for inputs) or "o" (for outputs) and the number.



Notes:

- **The maximum number of inputs and outputs that can be entered is 32 and 16 respectively. If the user introduces a number larger, the display will show an error signal ("c.EE") and the maximum number will remain at the last valid value configured.**
- **If more than one switch is being controlled, the IRT should be configured for the largest switch. It is up to the user to introduce valid numbers to the smaller switches when making selections.**

Infrared Remote Operation for Single-Output Video Switches (IRT-64)

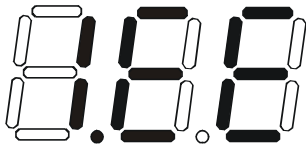
The IRT-64 enables the user to control connections to up to 64 input ports on two (2) single-output NTI video switches or up to 32 input ports on four (4) single-output NTI video switches. (See table on page 7 for examples of combinations.)

When any key is pressed, the IRT will power ON. A number key should always be pressed first unless a change to the configuration is desired (see "Set Configuration" on page 6). When a number key is pressed the LCD will display that number blinking. What to press next depends on what action is desired;

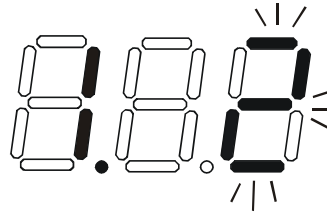
- change the switch to be controlled
- change the input port

If the "SYS" or "IN" key is pressed, the LCD will display the current switch followed by the decimal point and an error signal "EE". The error signal will display because there is no number to be displayed. A number key must always be pressed before a "SYS" or "IN" key is pressed.

Exception: The "SYS" key is pressed first when setting the configuration. (See page 6)



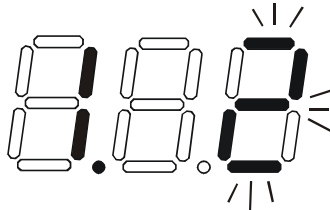
Power ON with SYS or IN keys



Power ON with "2" key

Change the Switch

Press the number of the switch to be controlled. The number selected will be blinking in the last digit.



FYI: If the user realizes that an invalid number has been introduced before pressing either the "SYS" or "IN" buttons, a correction can be made by pressing the correct number. If the correct number is a single digit, it must be preceded by a "0" to make the correction.

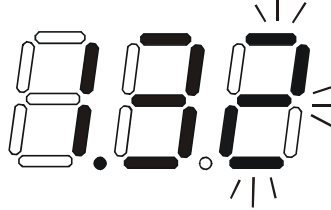
Press the "SYS" key. The blinking number will become blank and the switch number will update.



Note: If the number entered is larger than 4, when the "SYS" key is pressed the LCD will display the current switch and the error signal "EE".

Change Input Port

Press the desired port number. The IRT-64 will control up to 64 inputs. As the digits are selected, the last number entered will blink. The LCD will also display the current switch number followed by the decimal point.



With the desired port number selected, point the IRT at the switch/receiver and press the "IN" button to transmit the selection and make the change. The blinking number in the LCD will stop blinking.

FYI: *If for some reason, the switch did not receive the data, the user can send the same data again by pressing the "IN" button again.*

Note: *If the number introduced is larger than the maximum number of inputs the switch has, then once the "IN" key is pressed the LCD will display the current switch and the error signal "EE".*

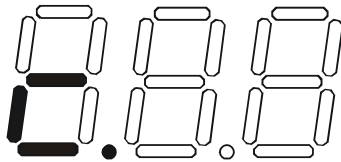


Set Configuration

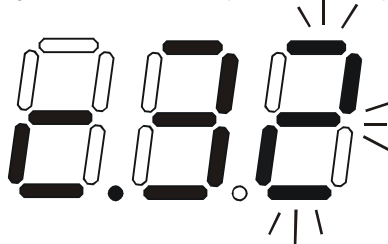
The IRT-64 factory default setting is 32 inputs with a maximum setting of up to 64 inputs.. When the batteries are changed the setting will return to the default value. At the default setting the IRT is able to control any single-output switch with up to 32 inputs without changing the configuration. However, when controlling smaller switches without changing the configuration it is up to the user to press valid number(s). To avoid confusion, it is recommended to configure the IRT for the largest switch to be controlled.

To change the maximum number of inputs:

1. From power-down state (blank LCD) press and hold the "SYS" button for at least 3 seconds. The LCD will first display an error message but after 3 seconds the letter "c" will display:



2. Enter the number of inputs. As the digits are entered, they will be displayed and the last one entered will blink.



NTI INFRARED REMOTE TRANSMITTERS

Notes:

- *The maximum number of inputs that can be entered is 64. If the user introduces a number larger than 64, the display will show an error signal ("c.EE") and the maximum numbers of inputs will remain at the last valid value configured.*
- *If more than one switch is being controlled, the IRT should be configured for the largest switch. It is up to the user to introduce valid numbers to the smaller switches when making selections.*
- *If the configuration is set for greater than 32 inputs, then the IRT will control a maximum of 2 switches.*

Reminder: Switches with more than 32 inputs must be configured by NTI to be identified by the IRT as switch #1 or #2. Otherwise the IRT will not control connections to inputs 33-64 on the larger switches.

3. Press the "IN" button to accept the selection. The display will not blink anymore but will display an "I" and the port number to indicate the new maximum number of input ports in the switch.

SUGGESTED IRT CONFIGURATION	EXAMPLES OF SWITCH COMBINATIONS TO BE CONTROLLED BY ONE IRT-64			
	Switch #1	Switch #2	Switch #3	Switch #4
Max. 32 inputs	32 port	32 port	32 port	32 port
Max. 24 inputs	24 port	16 port	8 port	8 port
Max. 64 inputs	64 port	64 port	Not used	Not used

BATTERY REPLACEMENT

The IRT has a low-battery indicator to let the user know when it is time to change the batteries. The right-hand decimal point in the LCD display will illuminate (see illustration below). The .16el to deTT sta4

SPECIFICATIONS

- 50 feet maximum operating range between the transmitter and the front of the NTI switch / infrared receiver.

Note: Line of sight between IRT and receiver must be unobstructed.

- Select up to 16 outputs (for IRT-64X32)
- Select up to 32 inputs (for IRT-64X32) OR up to 64 inputs (for IRT-64)
- Operates with (2) "AA" batteries.
- "Lo Batt" decimal point in LCD will illuminate to indicate a low battery when the battery voltage drops to approximately 2.25 volts.

TROUBLESHOOTING

IRT-64X32

PROBLEM	SOLUTION
IRT is not selecting output	<ul style="list-style-type: none"> • Check battery • Make sure you are using the correct IRT for the switch. (Check model number on the front of the IRT.) • The IRT may be configured to control the wrong switch or the wrong size of switch (see "Set Configuration" on page 4)
IRT is not selecting input	<ul style="list-style-type: none"> • Check battery • The IRT may be configured to control the wrong switch or the wrong size of switch (see "Set Configuration" on page 4)

IRT-64

PROBLEM	SOLUTION
IRT is not selecting input	<ul style="list-style-type: none"> • Check battery • The IRT may be configured to control the wrong switch or the wrong size of switch (see "Set Configuration" on page 6)

MODEL NO: IRT-64X32
 IRT-64

SERIAL NO: _____

DATE: _____

INSPECTED BY: _____