

Applicability This technical note applies to all current Tait mobile radios in the T2000 product range.

1. Introduction

This document is designed to provide support for servicing and fault diagnosis of Tait mobile radio (T2000) product.

Tait radios have an inbuilt software diagnostic tool that will indicate error codes if there is a failure in the software or hardware platforms.

When a system error occurs, normal operation of the radio ceases and the software then enters an error mode to display the error number on the front panel.

Error codes can also be viewed in Terminal application format (via serial interface) if appropriate.

It should be noted that system errors are reported out of the serial port as C \underline{nn} for software errors, and X \underline{nn} for hardware errors. (Where \underline{nn} = error number).

(Refer to TN -1011 Terminal Application operation for more information).

Outlined below is code numbering and description for system errors.

Applicable model numbers are given in the left-hand column for code variants.

It should also be noted that error codes can occur for any number of reasons, therefore no suggestions are provided as to what the specific cause of any given error may be.

2. Code Definitions

	HEAP_OVERLAP_ERROR:	ERROR 1
	HEAP_EXHAUSTED_ERROR:	ERROR 2
	INVALID_HEAP_ADDRESS_ERROR	ERROR 3
	INVALID_TASK_NUMBER_ERROR:	ERROR 4
	INVALID_TIMER_NUMBER_ERROR:	ERROR 5
(T2020)	INVALID_TIME_ERROR:	ERROR 6
(T2040)	TASK_QUEUE_ERROR :	ERROR 6
	INVALID_MESSAGE_CATEGORY_ERROR:	ERROR 7
	INVALID_MESSAGE_PATH_ERROR:	ERROR 7
	INVALID_MESSAGE_CODE_ERROR:	ERROR 8
	INVALID_MESSAGE_TYPE_ERROR:	ERROR 8
	SOFTWARE_INTERRUPT_ERROR	ERROR 9
	INVALID_QUEUE_NUMBER_ERROR:	ERROR 10
(T2020)	INVALID_USER_CHAR_ERROR:	ERROR 11
(T2040)	INVALID_TASK_SUSPENSION:	ERROR 11
	INAPPROPRIATE_TASK_TYPE_ERROR:	ERROR 12
	ILLEGAL_OPCODE_ERROR:	ERROR 13
	XIRQ_INTERRUPT_ERROR:	ERROR 14
	CANT_CREATE_ANY_MORE_TIMERS_ERROR:	ERROR 15
	CANT_CREATE_ANY_TIMERS_ERROR:	ERROR 16
	TIMER_DOES_NOT_EXIST_ERROR:	ERROR 17
	TIMER_ALREADY_EXISTS_ERROR:	ERROR 18
	INVALID_TIMER_VECTOR_ERROR:	ERROR 19
	INVALID_PARAMETER_ERROR:	ERROR 20
	INVALID_PROGRAMMING_ERROR:	ERROR 21

(T2020)	TASK_QUEUE_ERROR:	ERROR 22
(T2040)	TRANSMISSION_TIMEOUT:	ERROR 22
	RAM_EXCEEDED_ERROR:	ERROR 23
(T2020)	TEST_MODE_RESET_VECTOR_INCORRECT:	ERROR 24
(T2040)	INVALID_CALL_RERREST	ERROR 24
	TASK_SUSPENSION_CALL_ERROR:	ERROR 25
	FLASH_DATA_CORRUPTION_ERROR:	ERROR 26

Signalling System Errors (30-39)

(T2020)	INVALID_DTMF_TONE_NUMBER_ERROR:	ERROR 30
(T2040)	RECEIVED_CODEWORD_CRC_NOT_COMPLETE:	ERROR 30
(T2040)	FFSK_TRANSMIT_TIMING_ERROR:	ERROR 31
(T2040)	INVALID_FFSK_TX_INTERRUPT:	ERROR 32
(T2040)	TRANSMIT_CODEWORD_CRC_NOT_COMPLETE:	ERROR 33
(T2040)	SYNTHESIZER_NOT_LOCKED:	ERROR 34

Personality Module errors (40-49)

(T2020)	STRING_BUFFER_OVERFLOW_ERROR:	ERROR 40
(T2040)	INVALID_MESSAGE:	ERROR 40
(T2020)	TX_COMM_BUFFER_ERROR:	ERROR 41
(T2040)	INVALID_PERSONALITY	ERROR 41
	INVALID_DATA_ERROR:	ERROR 42
	INVALID_DISPLAY_CHARACTER_ERROR:	ERROR 43
	INVALID_LOGON_STATUS:	ERROR 44

Functionality Module Errors (50-59)

(T2020)	FUNCTION_NOT_SUPPORTED_ERROR:	ERROR 50
(T2040)	INVALID_TIMER_NUMBER:	ERROR 50
	INVALID_MESSAGE_DATA:	ERROR 51
	INPUT_STRING_STORE_OVERFLOW:	ERROR 53
	INVALID_DISPLAY_MODE:	ERROR 56
	INVALID_DATA	ERROR 59

Unused (60-67)

(T2040)	INVALID_TRUNKING_PERSONALITY_MODE:	ERROR 60
(T2020)	FLASH_PERSONALITY_INVALID_ERROR:	ERROR 63

Input Output module errors

(T2020)	INVALID_CHANNEL_NUMBER_ERROR:	ERROR 68
(T2040)	INVALID_CHANNEL_BARRING:	ERROR 68
(T2020)	CHANNEL_BLOCK_CALCULATION_ERROR:	ERROR 69

Interface System Errors (70-79)

(T2020)	SYNTH_FREQ_NUM_TOO_BIG_ERROR:	ERROR 70
(T2040)	INVALID_CHANNEL_NUMBER:	ERROR 70
(T2020)	ILLEGAL_TRANSMITTER_POWER_LEVEL_ERROR:	ERROR 71
(T2040)	CHANNEL_BLOCK_CALCULATION_ERROR:	ERROR 71
(T2040)	IN_OUT_DATA_ERROR:	ERROR 73
(T2040)	UNPROGRAMMED_DYNAMIC_DATABASE_ITEM:	ERROR 75
(T2040)	NON-EXISTANT_GROUP_ADDRESS:	ERROR 76
(T2040)	INVALID_PRESET_CALL_STRING:	ERROR 77

Interface System Errors (80-89)

RX_OVERRUN_ERROR:	ERROR 80
AUDIO_TONE_FUNCTION_ERROR:	ERROR 81
INVALID_AUDIO_TONE_NUMBER_ERROR:	ERROR 82
CCI_RX_BUFFER_OVERFLOW_ERROR:	ERROR 83

Hardware Errors (90-99)

HARDWARE_ERRORNUM_BASE:	ERROR 90
INVALID_AUDIO_TONE_PARAMETER:	ERROR 92
SERIAL_FLASH_DETECT_ERROR:	HARDWARE_ERRORNUM_BASE+00
SERIAL_FLASH_TIMEOUT_ERROR:	HARDWARE_ERRORNUM_BASE+01

CSO Instruction

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Compliance Issues

None

3. Issuing Authority**Name and Position of Issuing Officer**

Chris Thomson
Technical Support

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Document History

Original Release	18 April 2005	C.T
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