

<u>Non-Fatal Error Code</u>	<u>Description</u>
Err 221	1st LO unlocked more than 75 msec.
Err 222	2nd LO unlocked more than 75 msec.
Err 223	3rd LO unlocked more than 75 msec.
Err 230	RAM checksum failed. The receiver uses internal switches for configuration and returns to default parameters. A second failure after recalculation causes an Err 110. (This error occurs if the micro-processor card is unplugged.)
Err 233	Fine Tune reference out of to reference
Err 234	Unable to calibrate 2nd LO
Err 240	BFO counter timer not functional or out of time specification. BFO will not function properly

<u>Remote Error Code</u>	<u>Description</u>
Err 401	Input data buffer is full (message is too long)
Err 402	Less than 2 characters in message
Err 404	Number is out of range for command
Err 405	"/" or "?" not valid for this command
Err 407	Invalid mnemonic or binary code received
Err 416	This type mnemonic or binary code is not executed on the WJ-8615(S1)
Err 470	Permission to calibrate requested
Err 471	Calibration in progress
Err 472	Calibration is complete
Err 551	No more lockout space in lockout memory
Err 552	Attempt to store a memory channel above the partition limit
Err 810	Attempt to scan or step an undefined memory channel
Err 813	Attempt to scan with the start frequency greater than or equal to the stop frequency
Err 814	An attempt was made to select a non-occupied bandwidth slot

<u>Remote Error Code</u>	<u>Description</u>
Err 815	Attempt to scan or step without a valid calibration
Err 816	Attempt to unlock a non-existent lockout frequency
Err 817	Attempt to scan or step before the receiver has been on less than 45 minutes

2.6

ERRORS

Error codes of the WJ-8615D Compact Receiver are divided into two categories: fatal and non-fatal. Fatal errors detect faults which are not predictable and will not allow receiver operation. The first of the fatal errors encountered is displayed as "Err XXX" and no other operation continues.

Non-fatal errors cause the error to be displayed for 5 seconds after it is detected. These errors set SRQ on the remote bus along with bit 5 of the status byte. The error number is determined by requesting error status from the receiver. This returns the two least significant digits of the error. Non-fatal errors indicate remote errors or receiver errors. Any non-fatal error code clears after 5 seconds or clears on front panel activity.

<u>Fatal Error Code</u>	<u>Description</u>
Err ---	Hardware failure of RAM, microprocessor or data bus.
Err 100	Hardware failure of RAM or data bus: bit 0
Err 101	bit 1
Err 102	bit 2
Err 103	bit 3
Err 104	bit 4
Err 105	bit 5
Err 106	bit 6
Err 107	bit 7
Err 110	RAM checksum cannot be calculated properly.
Err 120	3.33 msec. interrupt non-functional or not properly timed.
Err 121	.833 msec. interrupt non-functional or not properly timed.

<u>Non-Fatal Error Code</u>	<u>Description</u>
Err 130	A/D end of conversion not active, or improper A/D operation.
Err 131	-15 V supply not functional. +15 V supply okay.
Err 132	+15 V supply not functional. Not capable of testing -15 V supply.
Err 140	Illegal key code detected from keyboard encoder.
Err 160	EPROM checksum failure.
Err 220	Unlock condition detected for ~75 msec. on 1st, 2nd LO's and 3rd Synthesizer. This error is only reported on initial failure. If unlock continues, it is displayed by decimal points on all MHz digits indicating 1st LO unlocked or decimal points on all kHz digits indicating 2nd LO or 3rd Synthesizer unlocked. On remote, the unlock indication is monitored on bit 7 of the status byte.

<u>Non-Fatal Error Code</u>	<u>Description</u>
Err 230	RAM checksum failed. The receiver uses internal switches for configuration and returns to default parameters. A second failure after recalculation causes an Err 110. (This error occurs if the microprocessor card is unplugged.)
Err 240	BFO counter timer not functional or out of time specification. BFO will not function properly.

<u>Remote Error Code</u>	<u>Description</u>
Err 401	Input data buffer is full (message is too long).
Err 402	Less than 2 characters in message.
Err 404	Number is out of range for command.
Err 406	"/" or "?" not valid for this command.
Err 407	Invalid mnemonic or binary code received.
Err 416	This type mnemonic or binary code is not executed on the WJ-8615D.
Err 814	An attempt was made to select a non-occupied bandwidth slot.

2.5 **ERRORS**

Error codes of the WJ-8615D(S1) Compact Receiver are divided into two categories: fatal and non-fatal. Fatal errors detect faults which are not predictable and will not allow receiver operation. The first of the fatal errors encountered is displayed as "Err XXX" and no other operation continues.

Non-fatal errors cause the error to be displayed for 5 seconds after it is detected. These errors set SRQ on the remote bus along with bit 5 of the status byte. The error number is determined by requesting error status from the receiver. This returns the two least significant digits of the error. Non-fatal errors indicate remote errors or receiver errors. Any non-fatal error code clears after 5 seconds or clears on front panel activity.

<u>Fatal Error Code</u>	<u>Description</u>
Err ---	Hardware failure of RAM, microprocessor or data bus
Err 100	Hardware failure of RAM or data bus: bit 0
Err 101	bit 1
Err 102	bit 2
Err 103	bit 3
Err 104	bit 4
Err 105	bit 5
Err 106	bit 6
Err 107	bit 7
Err 110	RAM checksum cannot be calculated properly
Err 120	3.33 msec. interrupt non-functional or not properly timed
Err 121	.833 msec. interrupt non-functional or not properly timed
Err 130	A/D end of conversion not active, or improper A/D operation
Err 131	-15 V supply not functional. +15 V supply okay
Err 132	+15 V supply not functional. Not capable of testing -15 V supply
Err 140	Illegal key code detected from keyboard encoder
Err 160	EPROM checksum failure

<u>Non-Fatal Error Code</u>	<u>Description</u>
Err 220	Unlock condition detected for 75 msec. on 1st, 2nd LO's and 3rd Synthesizer. This error is only reported on initial failure. If unlock continues, it is displayed by decimal points on all MHz digits indicating 1st LO unlocked or decimal points on all kHz digits indicating 2nd LO or 3rd Synthesizer unlocked. On remote, the unlock indication is monitored on bit 7 of the status byte.

<u>Non-Fatal Error Code</u>	<u>Description</u>
Err 221	1st LO unlocked more than 75 msec.
Err 222	2nd LO unlocked more than 75 msec.
Err 223	3rd LO unlocked more than 75 msec.
Err 230	RAM checksum failed. The receiver uses internal switches for configuration and returns to default parameters. A second failure after recalculation causes an Err 110. (This error occurs if the microprocessor card is unplugged.)
Err 233	Fine Tune reference out of tolerance
Err 234	Unable to calibrate 2nd LO

Err 240 BFO counter timer not functional or out of time specification. BFO will not function properly.

<u>Remote Error Code</u>	<u>Description</u>
Err 401	Input data buffer is full (message is too long)
Err 402	Less than 2 characters in message
Err 404	Number is out of range for command
Err 405	"/" or "?" not valid for this command
Err 407	Invalid mnemonic or binary code received
Err 416	This type mnemonic or binary code is not executed on the WJ-8615D(S1)
Err 470	Permission to calibrate requested
Err 471	Calibration in progress
Err 472	Calibration is complete
Err 551	No more lockout space in lockout memory
Err 552	Attempt to store a memory channel above the partition limit
Err 610	Attempt to scan or step an undefined memory channel
Err 813	Attempt to scan with the start frequency greater than or equal to the stop frequency
Err 814	An attempt was made to select a non-occupied bandwidth slot

<u>Remote Error Code</u>	<u>Description</u>
Err 815	Attempt to scan or step without a valid calibration
Err 816	Attempt to unlock a non-existent lockout frequency
Err 817	Attempt to scan or step before the receiver has been on for more than 45 minutes

Table 2-43. WJ-8615P Fatal Error Codes

Fatal Error Code	Description
---	Hardware failure of RAM, microprocessor or data bus.
100	Hardware failure of RAM or data bus: Bit 0
101	Bit 1
102	Bit 2
103	Bit 3
104	Bit 4
105	Bit 5
106	Bit 6
107	Bit 7
108	Failure of RAM in the RTC chip.
110	RAM check sum cannot be calculated properly
120	3.33 msec. interrupt non-functional or not properly timed.
121	833 msec. interrupt non-functional or not properly timed.
130	A/D end of conversion not active or improper A/D operation.
131	-15 V supply not functional. +15 Supply OK
132	+15 V supply not functional. Not capable of testing -15 V supply.
140	Illegal key code detected from keyboard encoder.
160	EPROM check sum failure

Non-fatal errors cause the front panel error LED (ERR) to light. These errors set SRQ on the remote bus along with bit 5 of the status byte. The error number is determined by requesting error status from the receiver. This returns the two least significant digits of the error. Non-fatal errors indicate remote errors or receiver errors. Any non-fatal error code clears after 5 seconds or clears on front panel activity. Table 2-44 lists the non-fatal errors. Table 2-45 lists the Remote Error Codes.

Table 2-44. WJ-8615P Non-fatal Error Codes

Non-Fatal Error Code	Description
221	Unlock condition detected for >75 msec. on 1st LO. The error is only reported on the initial failure. The current LO condition is shown on the LO display.
222	Unlock condition detected for >75 msec. on 2nd LO. The error is only reported on the initial failure. The current LO condition is shown on the LO display.
223	2nd LO synthesizer output loop unlocked. The current LO condition is shown on the LO display.
230	RAM check sum failed. The receiver uses internal switches for configuration and returns to default parameters. A second failure after re-calculation causes an Err 110. (This error occurs if the microprocessor card is unplugged, Err 230.)
240	BFO counter timer not functional or out of time specification. BFO will not function properly. Other receiver operation is normal. See Section IV for BFO counter timer alignment procedure.

Table 2-45. WJ-8615P Receiver Remote Error Codes

Remote Error Code	Description
401	Input or output data buffer is full (message is too long). Issuing QUE? not by itself may cause this error.
402	Less than 2 characters in message.
404	Number is out of range for command.
405	"/" or "?" not valid for this command.
407	Invalid mnemonic or binary code received.
416	This type mnemonic or binary code is not executed on the WJ-8615P
551	No more lockout space in lockout memory.
552	Attempt to unlock a frequency that is not currently in lockout memory.
810	Attempt to scan or step using a cleared memory channel.
813	Attempt to scan with the start frequency greater than or equal to the stop frequency.
814	An attempt was made to select a non-occupied bandwidth slot.
818	Attempt to store a memory channel greater than the partition.