Command Strings for ULX-D Receivers

The most recent version of this document can be found at:
http://www.shure.com/americas/support/find-an-answer/ulx-d-crestron-amx-control-strings

The ULX-D receiver is connected via Ethernet to a control system, such as AMX or Crestron.

Connection: Ethernet (TCP/IP; select "Client" in the AMX/Crestron program)
Port: 2202

The ULX-D Receiver has 4 types of strings, as follows:
1. GET – The GET command is used to find the status of a parameter. After the AMX/Crestron sends a GET command, the ULX-D receiver responds with a REPORT string.
2. SET – The SET command is used to change the status of a parameter. After the AMX/Crestron sends a SET command, the ULX-D receiver will respond with a REPORT string to indicate the new value of the parameter.
3. REP – When the ULX-D receives a GET or SET command, it will reply with a REPORT command to indicate the status of the parameter. REPORT is also sent by the ULX-D receiver when a parameter is changed via the front panel or via Wireless Workbench.
4. SAMPLE – Used for metering RF levels and audio levels.

All messages sent and received are ASCII. Note that the level indicators and gain indicators are also in ASCII.

Most parameters will send a REPORT command then they change. Thus, it is not necessary to constantly query battery or interference parameters. The receiver will send a REPORT command when any of these parameters change.

The character "x" in all of the following strings represents the channel of that particular receiver and can be ASCII numbers 0, 1, 2, 3 or 4. With a single channel receiver, the channel is always 1. With a dual or quad receiver, the receiver channels are numbered left to right, beginning with the number 1. Using the number 0 will report all channels on a dual or quad receiver.

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View All	Command String:	`< GET x ALL >`	*Where x is ASCII channel number: 0, 1, 2, 3, or 4. This command is intended to get all parameters on first power up.*

	ULX-D Response:	`< REP x CHAN_NAME {yyyyyyyy} >`
		`< REP x AUDIO_MUTE yy >`
		`< REP x AUDIO_GAIN yyy >`
		`< REP x GROUP_CHAN gg,cc >`
		`< REP x FREQUENCY yyyyyy >`
		`< REP x ENCRYPTION yy >`
		`. . .`
		`. . .`
		`etc.`
			The ULX-D will respond with all parameters. See below for the definition of all REPORT commands. This is intended for use when first powering up a sound system.

Get Firmware Version	Command String:	`< GET FW_VER >`	
	ULX-D Response:	`< REP FW_VER {yyyyyyyyyyyyyyyyyy} >`	*Where yyyyyyyyyyyyyyyyyy is 18 characters. The ULX-D receiver always responds with 18 characters.*
View Channel Name	Command String:	`< GET x CHAN_NAME >`	*Where x is ASCII channel number: 1, 2, 3, or 4.*
	ULX-D Response:	`< REP x CHAN_NAME {yyyyyyyy} >`	*Where yyyyyyyy is 8 characters of the user name. The ULX-D receiver always responds with an 8 character name.*

Set Channel Name	Command String:	`< SET x CHAN_NAME {yyyyyyyy} >`	Where *yyyyyyyy* is 8 characters of the channel name. The channel name can be 1 to 8 characters long.
	ULX-D Response:	`< REP x CHAN_NAME {yyyyyyyy} >`	Where *yyyyyyyy* is 8 characters of the channel name. The ULX-D receiver always responds with an 8 character name.
View Device ID	Command String:	`< GET DEVICE_ID >`	The Device ID command does not contain the *x* channel character, as it is for the entire device.
	ULX-D Response:	`< REP DEVICE_ID {yyyyyyyy} >`	Where *yyyyyyyy* is 8 characters of the device ID. The ULX-D receiver always responds with an 8 character device ID.
Set Device ID	Command String:	`< SET DEVICE_ID {yyyyyyyy} >`	Where *yyyyyyyy* is 8 characters of the device ID. The device ID can be 1 to 8 characters long.
	ULX-D Response:	`< REP DEVICE_ID {yyyyyyyy} >`	Where *yyyyyyyy* is 8 characters of the device ID. The ULX-D receiver always responds with an 8 character device ID.
Get Mute Status	Command String:	`< GET x AUDIO_MUTE >`	
	ULX-D Response:	`< REP x AUDIO_MUTE ON >` `< REP x AUDIO_MUTE OFF >`	The ULX-D will respond with one of the two strings.
Mute Audio	Command String:	`< SET x AUDIO_MUTE ON >`	
	ULX-D Response:	`< REP x AUDIO_MUTE ON >`	
Un-mute Audio	Command String:	`< SET x AUDIO_MUTE OFF >`	
	ULX-D Response:	`< REP x AUDIO_MUTE OFF >`	
Toggle Mute	Command String:	`< SET x AUDIO_MUTE TOGGLE >`	
	ULX-D Response:	`< REP x AUDIO_MUTE ON >` `< REP x AUDIO_MUTE OFF >`	The ULX-D will respond with one of the two strings.
Get Audio Gain	Command String:	`< GET x AUDIO_GAIN >`	
	ULX-D Response:	`< REP x AUDIO_GAIN yyy >`	Where *yyy* takes on the ASCII values of 000 to 060. *yyy* minus 18 equals the value on the display of the ULX-D receiver.
Set Audio Gain	Command String:	`< SET x AUDIO_GAIN yyy >`	Where *yyy* takes on the ASCII values of 000 to 060.
	ULX-D Response:	`< REP x AUDIO_GAIN yyy >`	Where *yyy* takes on the ASCII values of 000 to 060.
Increase Audio Gain by n dB	Command String:	`< SET x AUDIO_GAIN INC n >`	Where *n* is the amount in dB to increase the gain. Valid *n* values are 1 through 60.
	ULX-D Response:	`< REP x AUDIO_GAIN yyy >`	Where *yyy* takes on the ASCII values of 000 to 060.
Decrease Audio Gain by n dB	Command String:	`< SET x AUDIO_GAIN DEC n >`	Where *n* is the amount in dB to decrease the gain. Valid *n* values are 1 through 60.
	ULX-D Response:	`< REP x AUDIO_GAIN yyy >`	Where *yyy* takes on the ASCII values of 000 to 060.
Get current Group, Channel	Command String:	`< GET x GROUP_CHAN >`	
	ULX-D Response:	`< REP x GROUP_CHAN gg,cc >`	Where *gg* is Group Number and *cc* is Channel Number. If the receiver is on a frequency that does not line up with a group and channel, then *gg* and *cc* will report '--,--'.
Set Group and Channel	Command String:	`< SET x GROUP_CHAN gg,cc >`	Where *gg* and *cc* are the group and channel numbers.
	ULX-D Response:	`< REP x FREQUENCY yyyyyy >` `< REP x GROUP_CHAN gg,cc >`	ULX-D responds with both strings. Where *gg* is Group Number and *cc* is Channel Number. Where *yyyyyy* is the Frequency represented as *yyy.yyy* MHz. If the receiver is on a frequency that does not line up with a group and channel, then *gg* and *cc* will report '--,--'.

Get current Frequency	Command String:	`< GET x FREQUENCY >`	
	ULX-D Response:	`< REP x FREQUENCY yyyyyy >`	*Where yyyyyy is the Frequency represented as yyy.yyy MHz.*
Set Frequency	Command String:	`< SET x FREQUENCY yyyyyy >`	*Where yyyyyy is the Frequency represented as yyy.yyy MHz.*
	ULX-D Response:	`< REP x FREQUENCY yyyyyy >` `< REP x GROUP_CHAN gg,cc >`	*ULX-D responds with both strings. Where gg is Group Number and cc is Channel Number. Where yyyyyy is the Frequency represented as yyy.yyy MHz. If the receiver is on a frequency that does not line up with a group and channel, then gg and cc will report '--,--'.*
Get Battery Cycles	Command String:	`< GET x BATT_CYCLE >`	*Shure rechargeable battery only.*
	ULX-D Response:	`< REP x BATT_CYCLE yyyyy >`	*Shure rechargeable battery only. Where yyyyy is the cycle count of full charges. When transmitter is off or using AA batteries, yyyyy=65535.*
Get Battery Run Time	Command String:	`< GET x BATT_RUN_TIME >`	*Shure rechargeable battery only.*
	ULX-D Response:	`< REP x BATT_RUN_TIME yyyyy >`	*Shure rechargeable battery only. Where yyyyy is the minutes until the transmitter turns itself off. When transmitter is off or using AA batteries, yyyyy=65535.*
Get Battery Temperature (F)	Command String:	`< GET x BATT_TEMP_F >`	*Shure rechargeable battery only.*
	ULX-D Response:	`< REP x BATT_TEMP_F yyy >`	*Shure rechargeable battery only. Where yyy is the temperature in Fahrenheit, offset by 40. (ex. 072 = 32F). When transmitter is off or using AA batteries, yyy=255.*
Get Battery Temperature (C)	Command String:	`< GET x BATT_TEMP_C >`	*Shure rechargeable battery only.*
	ULX-D Response:	`< REP x BATT_TEMP_C yyy >`	*Shure rechargeable battery only. Where yyy is the temperature in Celsius, offset by 40. (ex. 040 = 0C). When transmitter is off or using AA batteries, yyy=255.*
Get Battery Type	Command String:	`< GET x BATT_TYPE >`	

	ULX-D Response:	`< REP x BATT_TYPE ALKA >`
		`< REP x BATT_TYPE LION >`
		`< REP x BATT_TYPE LITH >`
		`< REP x BATT_TYPE NIMH >`
		`< REP x BATT_TYPE UNKN >`
			The ULX-D will respond with one of the five strings.

Get Battery Charge Status	Command String:	`< GET x BATT_CHARGE >`	*Shure rechargeable battery only.*
	ULX-D Response:	`< REP x BATT_CHARGE yyy >`	*Shure rechargeable battery only. Where yyy is the remaining battery life as a percentage. Valid values are 000 through 100.*
Get Battery Health	Command String:	`< GET x BATT_HEALTH >`	*Shure rechargeable battery only.*
	ULX-D Response:	`< REP x BATT_HEALTH yyy >`	*Shure rechargeable battery only. Where yyy is the percentage of capacity the battery currently has relative to the factory defined original capacity.*
Get Battery Bars	Command String:	`< GET x BATT_BARS >`	
	ULX-D Response:	`< REP x BATT_BARS yyy >`	*Where yyy is the number of bars shown on the transmitter. Valid values are 000 through 005. (ex. 005 = 5 bars).*
Get Transmitter Type	Command String:	`< GET x TX_TYPE >`	

	ULX-D Response:	`< REP x TX_TYPE ULXD1 >`
		`< REP x TX_TYPE ULXD2 >`
		`< REP x TX_TYPE ULXD6 >`
		`< REP x TX_TYPE ULXD8 >`
		`< REP x TX_TYPE UNKN >`
			The ULX-D will respond with one of the three strings.

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Get Transmitter Offset	Command String:	`< GET x TX_OFFSET >`	
	ULX-D Response:	`< REP x TX_OFFSET yyy >`	*Where yyy is the transmitter offset. Typical values are 000, 003, 006 … 018, 021. When transmitter is off, yyy=255.*
Get Transmitter RF Power	Command String:	`< GET x TX_RF_PWR >`	

	ULX-D Response:	`< REP x TX_RF_PWR LOW >`
		`< REP x TX_RF_PWR NORMAL >`
		`< REP x TX_RF_PWR HIGH >`
		`< REP x TX_RF_PWR UNKN >`
			The ULX-D will respond with one of the four strings.

Get Transmitter Power Lock	Command String:	`< GET x TX_PWR_LOCK >`	

	ULX-D Response:	`< REP x TX_PWR_LOCK ON >`
		`< REP x TX_PWR_LOCK OFF >`
		`< REP x TX_PWR_LOCK UNKN >`
			The ULX-D will respond with one of the three strings.

Get Transmitter Menu Lock	Command String:	`< GET x TX_MENU_LOCK >`	

	ULX-D Response:	`< REP x TX_MENU_LOCK ON >`
		`< REP x TX_MENU_LOCK OFF >`
		`< REP x TX_MENU_LOCK UNKN >`
			The ULX-D will respond with one of the three strings.

Get Interference Detection	Command String:	`< GET x RF_INT_DET >`	
	ULX-D Response:	`< REP x RF_INT_DET NONE >` `< REP x RF_INT_DET CRITICAL >`	*The ULX-D will respond with one of the two strings. The ULX-D will send a REP command whenever this status changes. Thus, it is not necessary to constantly query this.*
Get Encryption Status (earlier than v1.4.8)	Command String:	`< GET x ENCRYPTION >`	
	ULX-D Response:	`< REP x ENCRYPTION ON >` `< REP x ENCRYPTION OFF >`	*The ULX-D will respond with one of the two strings.*
Get Encryption Status (v1.4.8 and later)	Command String:	`< GET ENCRYPTION >`	*Valid on firmware v1.4.8 or newer.*

	ULX-D Response:	`< REP ENCRYPTION AUTO >`
		`< REP ENCRYPTION MANUAL >`
		`< REP ENCRYPTION OFF >`
			The ULX-D will respond with one of these strings. AUTO creates a new encryption key with each IR sync (single TX using unique key). MANUAL keeps the same encryption key during an IR sync (multiple TX sharing same key).

Set Encryption Status (v1.4.8 and later)	Command String:	`< SET ENCRYPTION AUTO >`
		`< SET ENCRYPTION MANUAL >`
		`< SET ENCRYPTION OFF >`
			Send one of these commands to the receiver. Changing this setting will require an IR sync with the transmitter to be performed. Valid on firmware v1.4.8 or newer.

	ULX-D Response:	`< REP ENCRYPTION AUTO >`
		`< REP ENCRYPTION MANUAL >`
		`< REP ENCRYPTION OFF >`
			The ULX-D will respond with one of these strings.

Get Encryption Mismatch	Command String:	`< GET x ENCRYPTION_WARNING >`	
	ULX-D Response:	`< REP x ENCRYPTION_WARNING ON >` `< REP x ENCRYPTION_WARNING OFF >`	*The ULX-D will respond with one of the two strings.*
Get Audio Summing Mode	Command String:	`< GET AUDIO_SUMMING_MODE >`	*Valid on firmware v1.4.8 or newer.*

	ULX-D Response:	`< REP AUDIO_SUMMING_MODE OFF >`
		`< REP AUDIO_SUMMING_MODE 1+2 >`
		`< REP AUDIO_SUMMING_MODE 3+4 >`
		`< REP AUDIO_SUMMING_MODE 1+2/3+4 >`
		`< REP AUDIO_SUMMING_MODE 1+2+3+4 >`
			The ULX-D will respond with one of these strings.

Set Audio Summing Mode	Command String:	`< SET AUDIO_SUMMING_MODE OFF >`
		`< SET AUDIO_SUMMING_MODE 1+2 >`
		`< SET AUDIO_SUMMING_MODE 3+4 >`
		`< SET AUDIO_SUMMING_MODE 1+2/3+4 >`
		`< SET AUDIO_SUMMING_MODE 1+2+3+4 >`
			Send one of these commands to the receiver. Valid on firmware v1.4.8 or newer.

	ULX-D Response:	`< REP AUDIO_SUMMING_MODE OFF >`
		`< REP AUDIO_SUMMING_MODE 1+2 >`
		`< REP AUDIO_SUMMING_MODE 3+4 >`
		`< REP AUDIO_SUMMING_MODE 1+2/3+4 >`
		`< REP AUDIO_SUMMING_MODE 1+2+3+4 >`
			The ULX-D will respond with one of these strings.

Get Frequency Diversity Mode	Command String:	`< GET FREQUENCY_DIVERSITY_MODE >`	*Valid on firmware v1.4.8 or newer.*

	ULX-D Response:	`< REP FREQUENCY_DIVERSITY_MODE OFF >`
		`< REP FREQUENCY_DIVERSITY_MODE 1+2 >`
		`< REP FREQUENCY_DIVERSITY_MODE 3+4 >`
		`< REP FREQUENCY_DIVERSITY_MODE 1+2/3+4 >`
			The ULX-D will respond with one of these strings.

Set Frequency Diversity Mode	Command String:	`< SET FREQUENCY_DIVERSITY_MODE OFF >`
		`< SET FREQUENCY_DIVERSITY_MODE 1+2 >`
		`< SET FREQUENCY_DIVERSITY_MODE 3+4 >`
		`< SET FREQUENCY_DIVERSITY_MODE 1+2/3+4 >`
			Send one of these commands to the receiver. Valid on firmware v1.4.8 or newer.

	ULX-D Response:	`< REP FREQUENCY_DIVERSITY_MODE OFF >`
		`< REP FREQUENCY_DIVERSITY_MODE 1+2 >`
		`< REP FREQUENCY_DIVERSITY_MODE 3+4 >`
		`< REP FREQUENCY_DIVERSITY_MODE 1+2/3+4 >`
			The ULX-D will respond with one of these strings.

Get High Density Mode	Command String:	`< GET HIGH_DENSITY >`	*Valid on firmware v1.4.8 or newer.*
	ULX-D Response:	`< REP HIGH_DENSITY ON >` `< REP HIGH_DENSITY OFF >`	*The ULX-D will respond with one of these strings.*
Set High Density Mode	Command String:	`< SET HIGH_DENSITY ON >` `< SET HIGH_DENSITY OFF >`	*Send one of these commands to the receiver. Changing this setting will disrupt audio until an IR sync with the transmitter is performed. Valid on firmware v1.4.8 or newer.*
	ULX-D Response:	`< REP HIGH_DENSITY ON >` `< REP HIGH_DENSITY OFF >`	*The ULX-D will respond with one of these strings.*
Get Firmware Version	Command String:	`< GET FW_VER >`	
	ULX-D Response:	`< REP FW_VER {yyyyy.yyyyy.yyyyy.yyyyy }`	*Where yyyyy.yyyyy.yyyyy.yyyyy is 24 characters. The charger always responds with 24 characters. There is either a space or an asterisk at the end of the firmware version. An asterisk indicates corrupt firmware.*
Flash Lights on Receiver	Command String:	`< SET FLASH ON >` `< SET FLASH OFF >`	*Send one of these commands to the ULX-D receiver. The flash automatically turns off after 60 seconds.*
	ULX-D Response:	`< REP FLASH ON >` `< REP FLASH OFF >`	*The ULX-D receiver will respond with one of these strings.*
Get Flash Lights on Receiver	Command String:	`< GET FLASH >`	
	ULX-D Response:	`< REP FLASH ON >` `< REP FLASH OFF >`	*The ULX-D receiver will respond with one of these strings.*
Regenerate Encryption Key	Command String:	`< SET ENCRYPTION_REGENERATE_KEY REQUESTED >`	
	ULX-D Response:	`< REP ENCRYPTION_REGENERATE_KEY COMPLETED >` `< REP ENCRYPTION_REGENERATE_KEY COMPLETED >`	*The ULX-D receiver will respond with one of these strings. It is necessary to resync the transmitter through IR.*
View Transmitter Device ID	Command String:	`< GET x TX_DEVICE_ID >`	*ULXD6 and ULXD8 only.*
	ULX-D Response:	`< REP x TX_DEVICE_ID {yyyyyyyy} >`	*Where yyyyyyyy is 8 characters of the device ID. The charger always responds with an 8 character device ID.*

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View Transmitter Mute Status	Command String:	`< GET x TX_MUTE_STATUS >`	*ULXD6 and ULXD8 only.*

	ULX-D Response:	`< REP x TX_MUTE_STATUS ON >`
		`< REP x TX_MUTE_STATUS OFF >`
		`< REP x TX_MUTE_STATUS UNKN >`
			The ULX-D receiver will respond with one of these strings.

View Transmitter Mute Button Status	Command String:	`< GET x TX_MUTE_BUTTON_STATUS >`	*ULXD6 and ULXD8 only.*

	ULX-D Response:	`< REP x TX_MUTE_BUTTON_STATUS PRESSED >`
		`< REP x TX_MUTE_BUTTON_STATUS RELEASED >`
		`< REP x TX_MUTE_BUTTON_STATUS UNKN >`
			The ULX-D receiver will respond with one of these strings.

View Transmitter Power Source	Command String:	`< GET x TX_POWER_SOURCE >`	*ULXD6 and ULXD8 only.*

	ULX-D Response:	`< REP x TX_POWER_SOURCE BATTERY >`
		`< REP x TX_POWER_SOURCE EXTERNAL >`
		`< REP x TX_POWER_SOURCE UNKN >`
			The ULX-D receiver will respond with one of these strings.

Turn Metering On	Command String:	`< SET x METER_RATE sssss >`	*Where sssss is the metering speed in milliseconds. Setting sssss=0 turns metering off. Minimum setting is 100 milliseconds. Metering is off by default.*
	ULX-D Response:	`< REP x METER_RATE sssss >` `< SAMPLE x ALL nn aaa eee >`	*See below.*
Stop Metering	Command String:	`< SET x METER_RATE 0 >`	*A value of 00000 is also acceptable.*
	ULX-D Response:	`< REP x METER_RATE 00000 >`	

Notes on metering

- Where sssss is the metering speed in milliseconds. Setting sssss=0 turns metering off. Minimum setting is 100 milliseconds. Maximum setting is 99999 milliseconds. Metering is off by default.
- Where nn indicates the blue RF LED's from the receiver. These show the squelch status of the receiver and take on the following ASCII values.
    - AX – Antenna A on, Antenna B off
    - XB – Antenna A off, Antenna B on
    - XX – Antenna A off, Antenna B off
- Where aaa is the value of the RF level received and is 000-115. To convert this value to dBm, subtract 128.
- Where eee is the audio level and is 000-050.

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Battery Charger Commands

These commands are for the battery charger when used with the ULXD6 and ULXD8. The commands need to be sent to the IP address of the battery charger.

The character "x" in all of the following strings represents the channel of that particular charger. For the SBC850, "x" can be 0 through 8. For the SBC450, "x" can be 0 through 4. Using the number 0 will report all channels on the charger.

View All	Command String:	`< GET x ALL >`	*Where yyyyyyyy is 8 characters of the channel name. The channel name can be 1 to 8 characters long.*

	Charger Response:	`< REP x TX_TYPE yyyy >`
		`< REP x FREQUENCY yyyyyy >`
		`< REP x BATT_BARS y >`
		`< REP x BATT_CHARGE yyyy >`
		`< REP x BATT_HEALTH yyy >`
		`< REP x BATT_CYCLE yyyy >`
		`. . .`
		`. . .`
		`etc.`
			The charger will respond with all parameters. See below for the definition of all REPORT commands. This is intended for use when first powering up a sound system.

View Device ID	Command String:	`< GET DEVICE_ID >`	*The Device ID command does not contain the x channel character, as it is for the entire device.*
	Charger Response:	`< REP DEVICE_ID {yyyyyyyy} >`	*Where yyyyyyyy is 8 characters of the device ID. The charger always responds with an 8 character device ID.*
Get Model	Command String:	`< GET MODEL >`	

	Charger Response:	`< REP MODEL SBC250 >`
		`< REP MODEL SBC450 >`
		`< REP MODEL SBC850 >`
			The charger will reply with one of these strings.

Get Firmware Version	Command String:	`< GET FW_VER >`	
	Charger Response:	`< REP FW_VER {yyyyy.yyyyy.yyyyy.yyyyy }`	*Where yyyyy.yyyyy.yyyyy.yyyyy is 24 characters. The charger always responds with 24 characters. There is either a space or an asterisk at the end of the firmware version. An asterisk indicates corrupt firmware.*
Flash Lights on Charger	Command String:	`< SET FLASH ON >` `< SET FLASH OFF >`	*Send one of these commands to the Charger. The flash automatically turns off after 60 seconds.*
	Charger Response:	`< REP FLASH ON >` `< REP FLASH OFF >`	*The Charger will respond with one of these strings.*
Get Flash Lights on Charger	Command String:	`< GET FLASH >`	
	Charger Response:	`< REP FLASH ON >` `< REP FLASH OFF >`	*The Charger will respond with one of these strings.*
Get Transmitter Available	Command String:	`< GET x TX_AVAILABLE >`	*Indicates when a microphone is available for communication. A microphone is only available if it is on the charger and available for communication.*
	Charger Response:	`< REP x TX_AVAILABLE YES >` `< REP x TX_AVAILABLE NO >`	*The charger will respond with one of these strings.*
Get Microphone Type	Command String:	`< GET x TX_TYPE >`	

	Charger Response:	`< REP x TX_TYPE ULXD6 >`
		`< REP x TX_TYPE ULXD8 >`
		`< REP x TX_TYPE UNAVAILABLE >`
		`< REP x TX_TYPE OTHER >`
			The charger will respond with one of these strings.

Get current Frequency	Command String:	`< GET x FREQUENCY >`	
	Charger Response:	`< REP x FREQUENCY yyyyyy >`	*Where yyyyyy is the Frequency represented as yyy.yyy MHz.*

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Get Battery Bars	Command String:	< GET x BATT_BARS >	
	Charger Response:	< REP x BATT_BARS yyy >	*Where yyy is the number of bars shown on the transmitter. Valid values are 000 through 005. (ex. 005 = 5 bars).*
Get Battery Time To Full	Command String:	< GET x BATT_TIME_TO_FULL >	
	Charger Response:	< REP x BATT_TIME_TO_FULL yyyyy >	*Where yyyyy is the minutes until the microphone is fully charged. When transmitter is unknown/missing, yyyyy=65535. When the time is being calculated, yyyyy=65534. When transmitter is on the charger and fully charged, yyyyy=65529.*
Get Battery Charge Status	Command String:	< GET x BATT_CHARGE >	
	Charger Response:	< REP x BATT_CHARGE yyy >	*Where yyy is the remaining battery life as a percentage. Valid values are 000 through 100.*
Get Battery Cycles	Command String:	< GET x BATT_CYCLE >	*SHURE rechargeable battery only.*
	Charger Response:	< REP x BATT_CYCLE yyyyy >	*SHURE rechargeable battery only. Where yyyyy is the cycle count of full charges.*
Get Battery Health	Command String:	< GET x BATT_HEALTH >	
	Charger Response:	< REP x BATT_HEALTH yyy >	*Where yyy is the percentage of capacity the battery currently has relative to the factory defined original capacity.*

Error Codes

All commands adhere to a common set of error codes. The error codes are at the upper ends of the binary numbers. Thus 255, 254, 253, 252 are error codes for three digit numbers. 65535, 65534, 65533, 65532 are error codes for 5 digit numbers. These error codes indicate that the device you are trying to control is not available. The microphone might be off, not responding, etc.