

## Liconic STR44



Manufacturer: Liconic Instruments  
 Model Number: Liconic-STR44  
 Web Address: [www.liconic.com](http://www.liconic.com)

The STR44 is the smallest member of the STR family. The STR44 has the same width as the STX44 and the same depth as the STX220. Its 44 MTP capacity make it perfectly suitable of small-scale integration, highly miniaturized applications or short time incubation assays. The STR44 is ideal for protein crystallization work because the stationary cassettes with the Star concept allowing the periscope the only moving part, reducing vibration and movement of the samples. The STR44 supports a wide temperature and humidity range. Namely the STR44 is available as IC (Incubation), HC (high humidity cold storage), DC (dry, low humidity cold storage, HR (high humidity wide temperature range incubator) and DR (dry, low humidity wide temperature range storage).

### Incubator: Commands

▶ **STX2Activate( id )** - Opens serial communication and initialises the StoreX.

id	Integer	identifier of the unit.
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▶ **STX2Deactivate( id )** - Closes serial communication.

id	Integer	identifier of the unit.
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▶ **STX2Reset( id )** - Resets the StoreX after the error. STX2Activate should be invoked again to continue operations, or the "Reset" button should be pressed.

id	Integer	identifier of the unit.
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▶ **STX2ReadActualClimate( id )** - Reads the actual climate values.

id	Integer	identifier of the unit.
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▶ **STX2WriteSetClimate( id, t, h, co2, n2 )** - Sets the climate values.

id	Integer	identifier of the unit.
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t	Integer	target temperature in celcius.
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h	Integer	target relative humidity in percent. Range of values: 1 to 100.
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co2	Integer	target CO2 concentration in percent. Range of values: 1 to 100.
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n2	Integer	target N2 concentration in percent. Range of values: 1 to 100.
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▶ **STX2ReadSetClimate( id )** - Reads the target climate values.

id	Integer	identifier of the unit.
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▶ **STX2AlternateXferStation( id, stationID )** - Switch between transfer

stations.

id	Integer	identifier of the unit.
stationID	Integer	identifier of the transfer station. Range of values: 1 to 2.

▶ **STX2SwapIn( id )** - Rotates the swap station by 180 degrees.

id	Integer	identifier of the unit.
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▶ **STX2SwapOut( id )** - Rotates the swap station back to the home position.

id	Integer	identifier of the unit.
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▶ **STX2GetSysStatus( id )** - Returns the value of the status register in the decimal format.

id	Integer	identifier of the unit.
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▶ **STX2ServiceReadBarcode( id, slot, level )** - Reads the barcode of a microplate at the specified location.

id	Integer	identifier of the unit.
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slot	Integer	slot position for the microplate.
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level	Integer	level position for the microplate.
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▶ **STX2ServiceIsPlateAtLocation( id, slot, level )** - Verifies if the microplate is present at the specified location.

id	Integer	identifier of the unit.
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slot	Integer	slot position for the microplate.
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level	Integer	level position for the microplate.
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▶ **STX2Inventory( id, fileName, ppd, bcr )** - Saves the inventory of the incubator into the specified file.

id	Integer	identifier of the unit.
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fileName	String	name of the file where the inventory is saved.
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ppd	Boolean	true: uses the plate present detector, false: does not use the plate present detector.
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bcr	Boolean	true: uses the barcode reader, false: does not use the barcode reader.
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▶ **STX2ServiceMovePlate( srcId, srcPos, srcSlot, srcLevel, transSrcSlot, srcPlateType, dstId, dstPos, dstSlot, dstLevel, transDstSlot, dstPlateType )** - Moves a microplate from the source location to the target location. This operation allows to move the plate within the bound of one unit or between the units.

srcId	Integer	identifier of the source unit.
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srcPos	Integer	source position for the move. 1: transfer station, 2: slot and level, 3: shovel, 4: tunnel. Range of values: 1 to 4.
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srcSlot	Integer	slot for the source location.
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srcLevel	Integer	level for the source location.
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transSrcSlot	Integer	transport slot for the source unit when a plate is moved between different units. It is even for extended unit and odd for base unit.
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srcPlateType	Integer	type of the microplate present at the source location. 0: MTP, 1: DWP, 3: P28
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dstId	Integer	identifier of the destination unit.
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dstPos	Integer	destination position for the move. 1: transfer station, 2: slot and level, 3: shovel, 4: tunnel. Range of values: 1 to 4.
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dstSlot	Integer	slot for the destination location.
dstLevel	Integer	level for the destination location.
transDstSlot	Integer	transport slot for the destination unit when a plate is moved between different units. It is even for extended unit and odd for base unit.
dstPlateType	Integer	type of the microplate present at the destination location. 0: MTP, 1: DWP, 3: P28

▶ **STX2TransferStPosition( id, position )** - Rotates the transfer station.

id	Integer	identifier of the unit.
position	Integer	specifies an angle of rotation: 0 - 0 degrees, 1 - 90 degrees, 2 - 180 degrees.

## Instrument Error

🔥 **InstrumentError( )** - An error occurred during command execution.

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