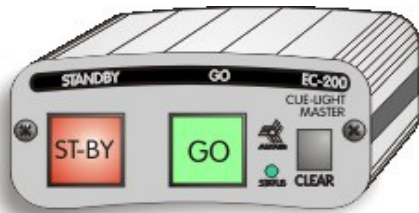


CUE LIGHT series

E-200 Series Intercom Systems



EC-200
CUE LIGHT TRANSMITTER



ER-200
CUE LIGHT RECEIVER

OWNER'S MANUAL

Issue 23Ap19



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1. INTRODUCTION.....	3
2. PANEL DESCRIPTION.....	4
2.1 EC-200 CUE LIGHT MASTER.....	4
2.2. ER-200 CUE LIGHT RECEIVER.....	5
3. SAFETY PRECAUTIONS.....	5
4. INSTALLATION.....	6
4.1. UNBOXING.....	6
4.2. MOUNTING.....	6
4.3. INTERCOM LINE CONNECTIONS	6
5. CUE LIGHT SYSTEM DESCRIPTION.....	7
5.1 CUE LIGHT STBY SWITCH AND INDICATOR 1	9
5.2 CUE LIGHT GO 2	9
5.3 CLEAR PUSH BUTTON 3	9
6. CUE LIGHT OPERATION.....	9
SYSTEM WORKFLOW. SINGLE CHANNEL. SEQUENTIAL CUEING.....	9
SYSTEM WORKFLOW. MULTICHANNEL SYSTEM.....	10
7. TROUBLESHOOTING GUIDE.....	10
8. WARRANTY.....	10

PACKING LIST

1x EC-200 or ER-200 Cue Light unit
1x OWNERS MANUAL
4x RUBBER FEET

1. INTRODUCTION

Congratulations on your purchase of the **ALTAIR** Cue Light products.

For operating the EC-200 ER-200 devices it is needed to connect to a powered intercom line or alternatively to either an ALTAIR **EF-200/EF-204/WB-200/PS-200** in order to powering the CUE system and setting the operating level.

Both systems are designed to share signals on the same simple cabling consisting of a two wire screened cable than can be extended to more than 200 meters without loses.

Multiple Cue Light receivers can be connected in parallel (loop) given the same Cue signalling is managed between receivers.

The Cue Light system comprises a minimum of a Cue Light master (transmitter) EC-200 and one or more Cue Light receivers EC-200 units.

For extended number of channels, separate EC-200 / ER-200 pairs are to be used sharing in common the intercom line for powering.

Before beginning it is important to read this manual. This manual will help you to install and use your new intercom devices. It is very important to read it carefully, mainly the paragraphs marked as NOTE, PRECAUTION and DANGER, for your security.

Save the original packing, you can re-use it to transport the unit. **NEVER SHIP THE ALTAIR EC/ER-200 WITHOUT ITS ORIGINAL PACKAGING.**

2. PANEL DESCRIPTION

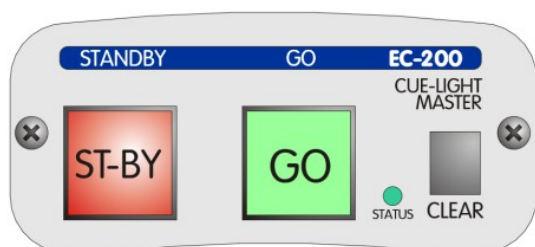
2.1 EC-200 CUE LIGHT MASTER

The single channel Cue Light master EC-200 generates the “Cue” signals and mixes it to the intercom line if necessary.

This station can be used stand alone in single channel operation transmitter/receiver pairs or used with multiple Cue receivers.

In both cases it can be mounted on a PC-4-200 panel for a clean and easy operation. Power supply is obtained trough the intercom line.

FRONT PANEL



1-STBY switch button with RED indicator.

Initiates attention Cue to all station receivers.

2-GO switch button with GREEN indicator. Clears the STBY indication when active and makes a GO Cue to be reproduced by all the receivers.

3-CLEAR push button. Clears the Cue lights process to prepare it for the next scene.

4-STATUS led. Power On. Activity.

REAR PANEL



5-INTERCOM only -XLR3 MALE- Input connection to the intercom line system. Cue is isolated.

6-INTERCOM +CUE -XLR3 FEMALE. Output connection to the Cue Light and Intercom system receivers.

7-INTERCOM + CUE -XLR3 MALE. Same as above.

8-UBS connection. For firmware updating

SPECIFICATIONS

POWER REQUIREMENTS	24 VDC nom.(12 to 32V oper.) / 50 mA
CONNECTIONS	INPUT XLR3-M INTERCOM only
	OUTPUT XLR3-M + XLR3-F INTERCOM +CUE
MAXIMUM CABLE LENGTH	Recommended maximum 200 meter. Transmitter-last receiver
MAXIMUM LOAD	Up to 8 RECEIVER UNITS (daisy chain)
DIMENSIONS/WEIGHT	84x38x105 mm /225 gr. net

NOTE: Technical specifications are subject to variation without previous notice.

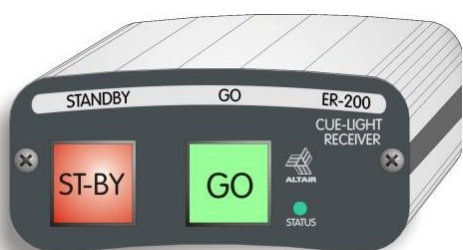
2.2. ER-200 CUE LIGHT RECEIVER

The single channel Cue Light RECEIVER ER-200 receives and reproduces the “Cue” signals sent from the master unit. Multiple ER-200 units can be cascaded together for visualization and operation to many users.

This station can be placed on a desk position, mounted on the optional PC-4-200 panel or over the wall for a clean and easy operation.

Power supply is obtained through the intercom + Cue line from the EC-200.

FRONT PANEL



1-STBY switch button with RED indicator. Receives Cue signal from the master unit. Generates acknowledgement signal to the MASTER unit when pressed > Red Light becomes steady.

2-GO, GREEN indicator without switch. Shows Cue Light GO for an immediate action.

4-STATUS led. Power On. Activity.

REAR PANEL



5-INTERCOM only -XLR3 MALE- Optional connection. Not used.

6-INTERCOM +CUE -XLR3 FEMALE. Input connection from the Cue Light and Intercom master.

7-INTERCOM + CUE -XLR3 MALE. Output to next Cue receiver.

8-USB connection. For firmware updates.

SPECIFICATIONS

SPECIFICATIONS	
POWER REQUIREMENTS	24 VDC nom.(12 to 32V oper.) / 50 mA
CONNECTIONS	INPUT XLR3F INTERCOM + CUE
	OUTPUT XLR3M INTERCOM +CUE cascading units
MAXIMUM CABLE LENGTH	Recommended maximum 200 meter. Transmitter-last receiver
MAXIMUM LOAD	Up to 8 RECEIVER UNITS (daisy chain)
DIMENSIONS/WEIGHT	84x38x105 mm /225 gr. net

NOTE: Technical specifications are subject to variation without previous notice.

3. SAFETY PRECAUTIONS

The manufacturer is not responsible for any damages to the Cue Light system units operating outside the limits of the warranty or for those damages occurred as a consequence of not following the indications included in this manual.

The intercom line DC voltage must be between the limits of the admitted power supply (12-32 VDC). Damages caused by a connection to an improper line DC voltage are not covered by the manufacturer's warranty.

DANGER: Inside the unit there are components at high temperature. Do not open it. The unit does not contain elements that could be repaired by the user. Whenever the Cue Light system is powered there will be components inside operating at moderate voltages. In order to disconnect the unit completely, you must unplug it from the powering line (intercom line or power supply)

CAUTION: Protect the unit from the rain and moisture. Ensure that no objects or liquids enter it. If liquid is spilled into the unit, disconnect the intercom system from the line and consult a qualified service technician.
Do not place the unit close to heat sources.

4. INSTALLATION

4.1. UNBOXING

Before leaving the factory, each ALTAIR product has been carefully inspected and tested. You can unpack and inspect the unit for any damage that may have occurred during shipment. If any damage is found, does not connect the unit to the mains; notify the salesperson immediately; a qualified service technician should inspect the unit.

Please keep the original packaging and **NEVER SHIP ALTAIR PRODUCTS WITHOUT IT.**

4.2. MOUNTING

Both ALTAIR EC-200 / ER-200 units can be mounted over the desk or in a rack position by using the optional one rack unit PC-4-200 mounting accessory. This panel allows the mounting of up to four beltback shape devices as EM-200/EM-202/4W2-200 etc.

4.3. INTERCOM LINE CONNECTIONS

Intercom and Cue Light connections are carried out through standard microphone double conductor shielded cable using either XLR3-M/XLR3-F connectors.

The next list shows the signal distribution in the pin XLR connectors.

XLR-3M or XLR-3F	INTERCOM ONLY	INTERCOM + CUE
PIN 1	0V (GND)	0V (GND)
PIN 2	+VCC (NOM 24Vdc)	+VCC (nom 24 Vdc)
PIN 3	INTERCOM SIGNALS	INTERCOM SIGNALS + CUE

EC-200 CUE Transmitter. Connection

Connect the **intercom only** XLR3 male connection to an existing intercom line or an intercom power supply only as the ALTAIR PS-200.

As the unit has not got complementary XLR3 female out, you need an splitter when needing powering another EC-200 Cue transmitter for additional Cue Light channels. You can use your own Y splitter or asking ALTAIR 3FFM-200 lead.

ER-200 CUE Receiver. Connection

On the ER-200 Cue receiver side, connect the **intercom + Cue** XLR3 male to the **intercom +Cue** connection female on the EC-200 CUE transmitter.

When the installations needs additional Cue receivers sharing the same transmitter, use the same method for cascading units: using always the **intercom+Cue** connections.

The Cue Light system employs internal filtering techniques for separating the **intercom only** connections from the **intercom+Cue** connections. For this reason Cue signals are made apart from intercom signals so a differentiation in the connections exists.

Certain rules have to be followed when installing the cables of an intercom system to avoid ground loops and to minimize the power loss and the possible effect of electromagnetic fields.

*Do not connect the XLR pin 1 to the XLR metal housing or to metal wall boxes. The ground loop created could increases notably the system background noise.

*Do not close the intercom line connection (avoid closed loops). Each intercom line leaves from the master station towards the remote stations, but it does not return to the master station. If the connection is closed, a ground loop with the increase from the system noise will take place.

*Use high quality cables and minimize its length. The increased DC resistance of a low quality or very long cable affects to the stability, noise, the channels crosstalk and affects all the intercom equipment connected to this branch.

5. CUE LIGHT SYSTEM DESCRIPTION

The ALTAIR Cue-Light series consist on three different models:

- EC-200 Cue Light master station,
- ER-200 Cue Light receiver.
- ES-203 CL wall/desk intercom station with built-in Cue Light receiver (separate manual)

All three devices are designed to be integrated into the Altair wired intercom system sharing the power supply and wiring. The EC-200 an ER-200 units incorporate two differentiated connectors:

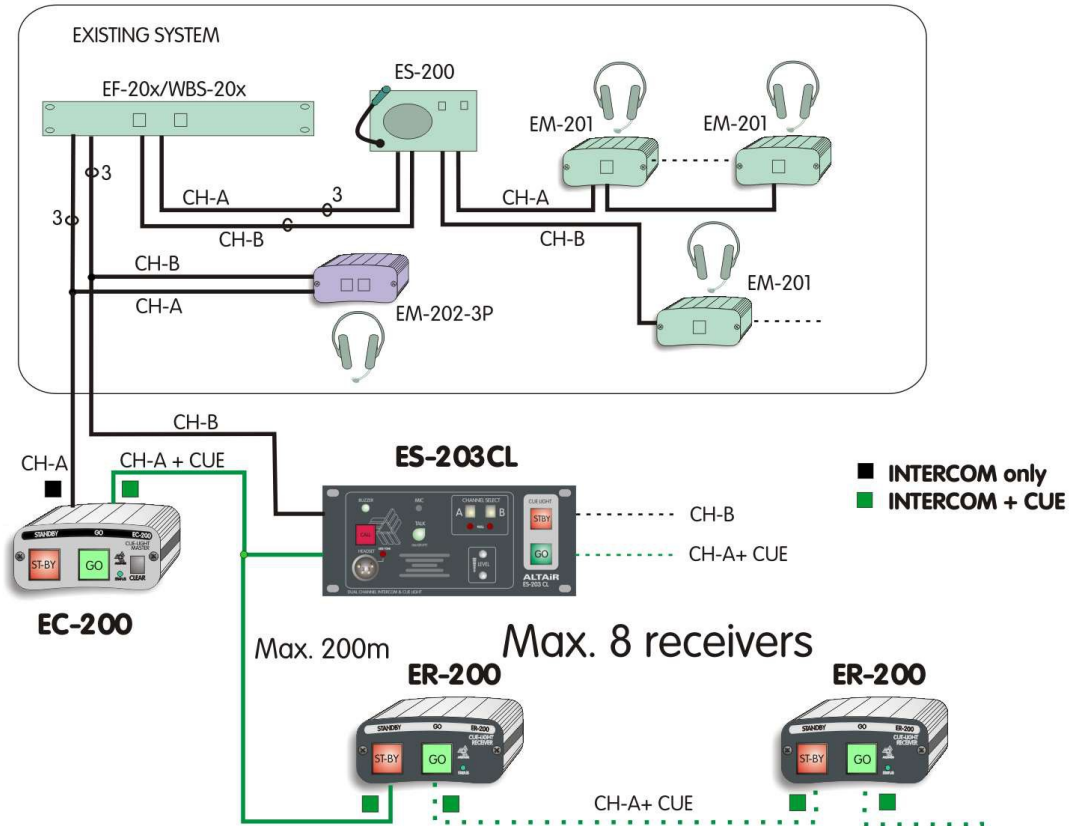
INTERCOM only This connector is used on the EC-200 side for connecting to a intercom line for powering and optionally to transport also the intercom audio/call signals. This is the “cold” connection as it has no Cue signalling inbuilt. In the ER-200 this connector is not used and reserved for future use.

INTERCOM+CUE This connector includes the Cue signalling, powering and intercom signals. As seen on the diagram, the master panel EC-200 makes the link from the existing intercom system to the Cue Light system. It incorporates a filter between both systems acting as separator of both worlds, the Cue Light signals and the intercom line.

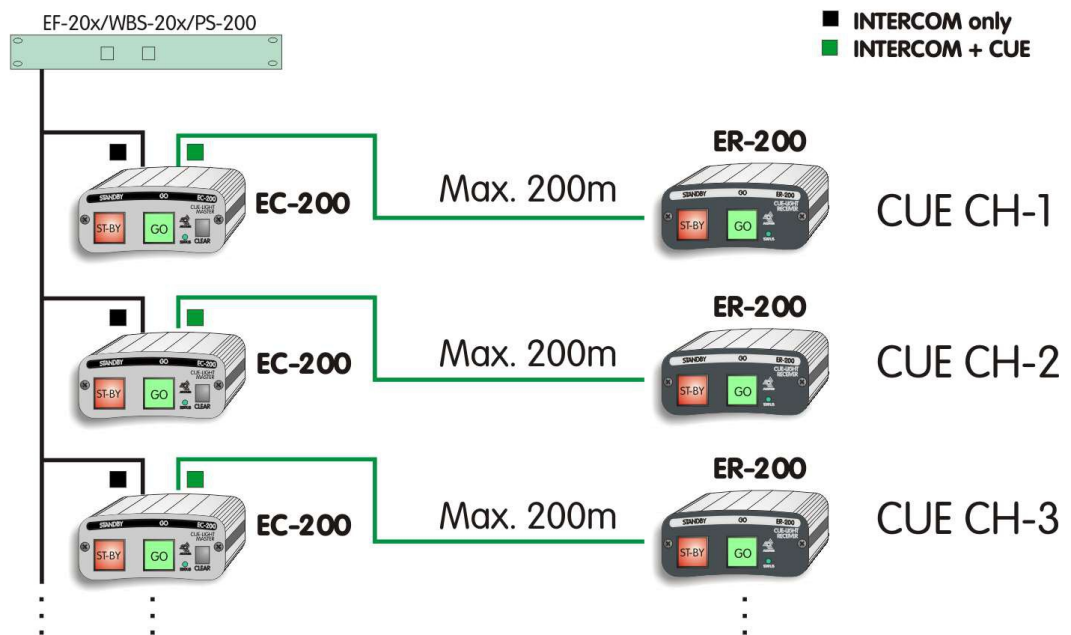
On the diagram, the same Cue signal is driving the two ES203 CL and the ER-200. Cue Light signals and intercom are now sharing the same wiring to be connected to the receivers ER-200 or the new combined Cue+intercom base station ES-203 CL in standalone or chained stations (up to 8 units).

Multiple EC-200 plus Cue Light receivers ER-200 (or ES-203CL) can be used in parallel to the existing intercom lines so having separate Cue signals as used on complex shows i.e. actors1 CH-1, actors2 CH-2, dance CH-3, music Cue CH-4 and more.

SINGLE CHANNEL CUE SYSTEM



MULTICHANNEL CUE SYSTEM



5.1 CUE LIGHT **STBY** SWITCH AND INDICATOR **1**

This red colour indicator shows the Cue Light STBY or “pay attention” notified from the Cue master panel STBY switch.

The light is intermittent for added visibility.

When the user -in the receiver side- is ready for the scene he/she can press the STBY key to acknowledge it to the producer/stage manager.

The STBY indicator turns steady in both receiver and transmitter showing standby. At this time producer would start the action by pressing the GO key that lit all the GO indicators, in green colour.

5.2 CUE LIGHT **GO** **2**

After the STBY action, the producer would start rush action by pressing the GO key in the master Cue station that would lit all the GO indicators, in green colour.

GO indicator light shows the user (users) -in the receiver side- to run the action involved in the CUE (e.g.: go on stage, change of scene, activate fog machine, etc)

This indicator does not incorporate switch on the receiver side as he/she can not initiate/finish cues.

NOTE: It is up to the producer actuating the “GO” switch without receiving the acknowledgement signal (STBY steady) from the receivers.

5.3 CLEAR PUSH BUTTON **3**

Clears all the system Cue Lights resetting the system to prepare for next scene.

6. CUE LIGHT OPERATION

SYSTEM WORKFLOW. Single channel. Sequential cueing.

-Producer/Director/Stage Manager operating the EC-200 master unit actuates the STBY – standby- key to prevent next scene preparation. RED lights flashing on all the Cue Light devices and receivers connected on this line.

-Operator/artist of any wall station ES-203 CL or receiver ER-200 sees the red light flashing and will depress, when ready, the STBY switch on the receiver, sending an acknowledgement signal back to the MASTER unit. All red lights on the Cue Light system will stop flashing and go steady (both on receiver/s and MASTER unit).

-Producer presses the GO key indicating scene to run immediately. GREEN lights lit steady on both sides on all connected wall stations or receivers showing scene to rush.

-When scene is at finish, producer presses the CLEAR key, all lights goes off on both sides. A new scene process can be initiated.

- It is up to Producer to run the GO straight without the previous STBY confirmation from the receivers.
- When the system is composed of more than one receiver, it is up to the artist/operators to interpret sequentially the action involved or addressed by the Producer.
- Operator/artist can not initiate a Cue Light sequence.

SYSTEM WORKFLOW. Multichannel system

Please refer to the above diagram. Procedure is the same as above but with the difference that there are different master/receiver pairs for each task on the action.

This method is more adequate for large performances, as it avoids confusions between different tasks.

7. TROUBLESHOOTING GUIDE

TROUBLESHOOTING GUIDE	
WHEN	POSSIBLE CAUSE and SOLUTIONS
1/ Cue Light abnormal behaviour	Check proper wiring. -Connect “intercom only” to an existing intercom line on EC-200 side. -Connect “intercom + Cue” between both Cue transmitter and receiver.
2/Units are continuously lighting.	-Press Clear button.
3/Cue Light system error	-Check for excessive number of units on the line -Check cabling type and length.

8. WARRANTY

This unit is warranted by Equipos Europeos Electrónicos to the original user, against flaws in the manufacturing and in the materials, for a period of two years (one year depending on some countries), starting from the date of sale.

Flaws due to wrong use of the unit, internal modifications or accidents, are not covered by this warranty.

There is no other warranty expressed or implicit.

Any faulty unit must be sent to the dealer or the manufacturer. The serial number of the unit must be included for any request to the technical service.

Equipos Europeos Electrónicos reserves the right to modify the prices or the technical specifications without further notice.

SERIAL NUMBERS EC-200.....ER-200.....

Extract of the Declaration of Conformity (DoC)

"We, Equipos Europeos Electrónicos, S.A. declare, that the above mentioned product is manufactured according to our Full Quality Assurance System in compliance with Directive 2014/30/UE. The presumption of conformity with the essential requirements regarding Council Directive 2014/30/UE is ensured."

The Declaration of Conformity (DoC) has been signed. In case of needing a copy of the original DoC, it can be made available via the internet direction: <http://www.altiraudio.com/DoC>

Disclaimer

You shall not use the EC-200/ER-200/ES-203CL in any safety critical or functional applications, including but not limited to using in life supporting, military or nuclear applications. Altair expressly disclaims any responsibility for such usage which shall be made at your sole risk, even if Altair has been informed in writing of such usage. Unless expressly designated in writing by Altair as suitable for use in automotive or aerospace applications, you shall not use the above products in such areas.

European Union Waste Electronics Information

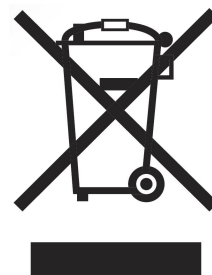
Unión Europea Información sobre residuos electrónicos

Waste from Electrical and Electronic Equipment (WEEE) directive

The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products. If you have further questions about recycling, contact your local sales office.

Directiva sobre Residuos de Aparatos Eléctricos y Electrónicos (RAEE)

El logotipo de la Directiva RAEE se refiere a los programas y procedimientos específicos de reciclaje para aparatos electrónicos de países de la Unión Europea. Recomendamos el reciclaje de nuestros productos. Si tiene alguna consulta, póngase en contacto con su Distribuidor.



Information based on European Union WEEE Directive 2002/96/EC

Información basada en la Directiva de la unión europea RAEE 2002/96/EC y el Real Decreto 208/2005



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Avda. Industria, 50 | 28760 Tres Cantos | Madrid | Spain

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