

8 WAY INTERCOM TALK BACK SYSTEM ITC-100

Instruction Manual

Welcome to the ITC-100 Instruction Manual



Thank you for choosing a Datavideo product, please visit the support pages on our website for the latest version of the instruction manual.

http://www.datavideo.info/Intercom+Systems/ITC-100

Don't forget to register your product online to qualify for an additional free one year extension to the standard warranty, and to receive information from Datavideo on service & information relevant to your Datavideo product including new software updates & drivers

Warranty

Standard Warranty

- Datavideo equipment is guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered by this warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- Cables & batteries are not covered under warranty.
- Warranty only valid within the country or region of purchase.
- · Your statutory rights are not affected.

Two Year Warranty

- All Datavideo products purchased after 01-Oct.-2008 qualify for a free one year extension to the standard Warranty, providing the product is registered with Datavideo within 30 days of purchase.
 For information on how to register please visit www.datavideo-tek.com or contact your local Datavideo office or authorized Distributors
- Certain parts with limited lifetime expectancy such as LCD Panels, DVD Drives, Hard Drives are only covered for the first 10,000 hours, or 1 year (whichever comes first).

Any second year warranty claims must be made to your local Datavideo office or one of its authorized Distributors before the extended warranty expires.

Disposal



For EU Customers only - WEEE Marking

This symbol on the product indicates that it will not be treated as household waste. It must be handed over to

the applicable take back scheme for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

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Disclaimer of Product and Services

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

Warnings and Precautions

- Read all of these warnings and save them for later reference.
- 2.Follow all warnings and instructions marked on this unit.
- 3.Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a slightly damp cloth for cleaning.
- 4.Do not use this unit in or near water.
- 5.Do not place this unit on an unstable surface, cart, stand, or table. The unit may fall, causing serious damage.
- 6.Any slots and openings on the case top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings may become blocked. This unit should never be placed near or over a heat source or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
- 7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
- 8.Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, damaged or otherwise stressed.
- 9.If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
- 10.Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.

- 11. Never push objects of any kind into this unit through the case ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
- 12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
- 13.Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
 - a. When the power cord is damaged or frayed;
 - b.When liquid has spilled into the unit;
 - c.When the product has been exposed to rain or water;
 - d.When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
 - e.When the product has been dropped or the case has been damaged;
 - f.When the product exhibits a distinct change in performance, indicating a need for service.

Packing List ____

Description	Qty
ITC-100 Base Unit	1
ITC-100SL Belt Packs	4
ITC-100SL Carry Cases	4
CB-3 20m Cables 5pin XLR to XLR	4
MC-1 Starter Headset with microphone	4
TD-2 on-camera Tally LED Indicators	1
MC-2 XLR Gooseneck Microphone	1
LP-1 XLR Gooseneck Light	1
12V / 1A Power Supply Unit	1
CB-17 17cm Earphone cable	4
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	ITC-100 Base Unit ITC-100SL Belt Packs ITC-100SL Carry Cases CB-3 20m Cables 5pin XLR to XLR MC-1 Starter Headset with microphone TD-2 on-camera Tally LED Indicators MC-2 XLR Gooseneck Microphone LP-1 XLR Gooseneck Light 12V / 1A Power Supply Unit CB-17 17cm Earphone cable

Product Overview ____

The ITC-100 is a 19" Rack Mount 8 Way Intercom / Talkback System. It incorporates tally indicators for each channel and individual channel call buttons as well as a call all channels button

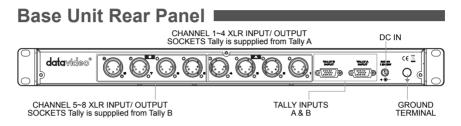
It is designed for communication use in a live mixing environment and enables easy bi-directional communication between the director and other members of the crew. It is a perfect accessory for Datavideo SE-500, SE-2000, SE-2800 and SE-3000 vision mixers.

Features i

- **Unit for Director**
- microphone input
- Dynamic / Condenser microphone selection switch
- Jack Socket 1/4' (6.3mm) for Headphones without microphone
- · Jack Socket 3.5mm for Headset with microphone
- · Speaker with volume control knob
- Channel selection buttons 1 8 select to talk to Belt Pack / Crew member
- ALL channels selection button.
- · Base Unit MUTE button
- Rear Panel 8x 5pin XLR connectors for TD-2 on camera Tally Indicator wired from cable connection to ITC-100SL Belt Packs

- ■ITC-100 1U 19" Rackmountable Base ■CB-3 20m 5pin XLR Male to XLR Female cables
- Combined XLR and 1/4' (6.3 mm) Allows cable runs of up to 200m to be created by purchasing additional cables
 - Rear Panel 2x15pin D Sub Tally Input sockets (for tally comms from mixer or tally box)
 - ITC-100SL Belt Pack for Crew members
 - · Call Button for sending paging signal to Base Unit
 - · Talk button press and hold down to communicate with Base Unit / Director
 - · Headset volume control knob
 - · Bi-Colour Tally LED on Belt Pack unit
 - Belt Pack

Base Unit Front Panel **POWER** HEADPHONE CALL BUTTONS 1~8 VOLUME 12V LIGHT ON/OFF SWITCH CONTROL SOCKET PLUS CALL ALL SOCKET datavideo MUTE BI III T-IN XLR/ 1/4" MICROPHONE MIC/HEADSET SPEAKER INPUT WITH DYNANAMIC/ RUITTON SOCKET CONDENSOR SWITCH



Connections and Controls Panel



On / Off Switch

Powers the ITC-100 On / Off. Red LED indicates that unit is switched on



Channel Input / Output XLR Sockets

Each of the 8 channels has an XLR connector that carries bi-directional signals between the ITC-100 and ITC-100SL. All connections are contained within the one cable. Channels 1 \sim 4 are supplied tally light information from tally A; channels 5 \sim 8 are supplied tally light information from tally B.





Tally Inputs A & B

Tally Inputs A & B are configured for direct connection to the Datavideo switcher. They supply bi-color tally information to the ITC-100SL; RED indicates Live and AMBER indicates Cued. Tally A will feed information to channels $1 \sim 4$ and Tally B will feed information to channels $5 \sim 8$





DC Power Input 12V 8W

Connects the 12V power supply. The power supply plug has a screw in locking collar to secure the connection.



Ground Terminal

When connecting this unit to any other component, make sure that it is properly grounded by connecting this terminal to an appropriate point. When connecting, use the socket and be sure to use wire with a cross-sectional area of at least 1.0 mm².



XLR Microphone Socket

Combined XLR / ¼" (6.3mm) Jack Microphone Input for either a Condenser or Dynamic Gooseneck Microphone. XLR supports Condenser Microphones ¼" (6.3mm) Jack supports Dynamic.



Headphone Socket

 $\frac{1}{2}$ " / 6.3mm Stereo Headphone Socket for conventional headphones. Plugging in headphones will disable the built-in speaker



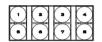
Microphone / Headset Socket

3.5mm Stereo Socket for combined Microphone Headset. Plugging in a Microphone / Headset will disable the built-in speaker and the XLR Microphone Input.



ALL Button

Opens communication with all channels. All channels will hear communication from the operator, or from any other channel using the TALK button.



Channel Buttons 1~8

Opens communication with individual channels. More than 1 channel can be active at any given time, active channels are illuminated red.

All active channels will hear any communication from the operator or from any other active channel.

The buttons will also indicate if any channel is paging, the paging channel will flash in orange until the page is answered.



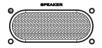
MUTE Button

Mutes all communication from the base station or any channel. N.B. If any channel uses the CALL button the paging tone will still sound even when the MUTE button is active.



Volume Control

Controls the Volume of the built-in speaker or outputs to the headphones or mic/headset according to what is connected



Built-In Speaker

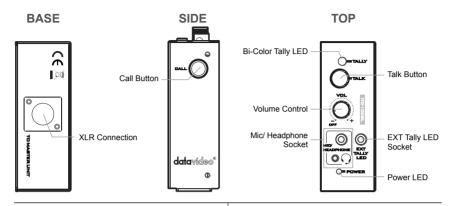
Sounds audible alert when a channel is paging and provides audio during talkback conversations. Speaker is mute when headphones or mic / headset are connected to the ITC-100



12V Light Socket

12V Powered light socket for gooseneck light (supplied).

ITC-100SL Belt Pack





XLR Connection

Connects the ITC-100SL to the ITC-100 Base Unit. Power, tally and bi-directional audio are all carried through the same CB-3 cable.



Mic / Headphone Socket

The ITC-100SL has both a 3.5mm and 2.5mm Mic / Headset socket. A standard 3.5mm Mic / Headset can be used, or a Motorola type 2.5mm Mic / headset could be used if preferred.



Call Button

Sends a paging message to the ITC-100 Base Unit. The channel button will flash orange and there will be an audible tone, each time the button is pressed.

Illuminates RED when the

channel is LIVE and AMBER

when the channel is CUED



External Tally LED Socket An external tally display (TD-2)

can be connected to the ITC-100SL. This enables the tally light to be positioned in a more convenient place, such as on top of the camera. When the channel is LIVE the LED will be RED, and when the channel is CUED the LED will be AMBER.

N.B. The Tally LED on the ITC-100SL will continue to operate as normal when a TD-2 has been added



Talk Button

Opens up talk back communication with the ITC-100 Base Unit, and any other active channels.



O-POWER Power LED

The Power LED indicates when the channel is active. If the operator has opened the channel by pressing the channel button 1 ~ 8, or by pressing ALL then the LED will light up.

N.B. The tally indicator lights will continue to work even when the Power LED is not on, and the channel is not active



Volume Control

Bi-Color Tally LED

Adjusts the volume of the headphones.

Cable Assignments Headset, Jack plug and 5pin XLR

Please Note: If you only want to extend the reach of the ITC-100SL Belt Pack cabling then Datavideo already sell pre-manufactured XLR cabling for doing this in 20m (CB-3) and 50m (CB-4) lengths. Please ask your local dealer for price and availability of additional CB-3 and CB-4 cables.

Pin Assigment for ITC-100 XLR Cable

Pin	Cable	Assignment
1	Red	Tally Red
2	Black	Tip (Talk & Call)
3	Shield	Common with Ground of XLR
4	Green	+12V DC power to ITC100SL
5	White	Tally Yellow

5pin XLR Cable is a straight through cable pin 1 to pin 1, pin 2 to pin 2 etc.

ITC-100SL Belt pack 3.5mm Jack socket Headset connector

Please Note: For connecting a professional headset, Datavideo can supply a mini jack to XLR adaptor cable which would support headsets with a Dynamic microphone. Please contact your dealer or local Datavideo office for more information on this XLR to Jack plug adaptor cable.

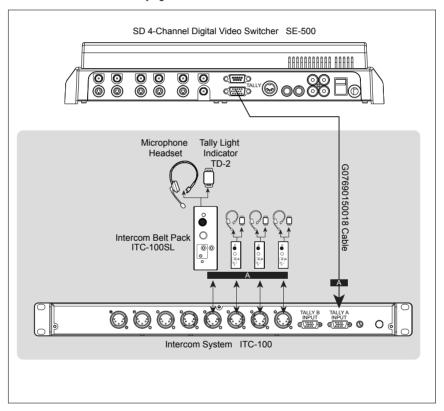
In the case of a professional headset with an Electret microphone a small SDM of 1yf/1uf (for decoupling ac) will be required on the Jack Tip/XLR pin 2 cabling.

Jack	Headset XLR	Assignment
Tip	Pin 2	Microphone
		(can be Dynamic or Electret)
Ring	Pin 4	Earphone (Impedance range 8-100 Ω) (ideally 30-40 Ω)
Ground/Sleeve	Pins 1 & 3	Common with Ground

Using the ITC-100 with the SE-500 ■

The ITC-100 is an ideal accessory for the Datavideo SE-500 Video Mixer. The SE-500 has four channels, each channel can connect to the ITC-100SL.

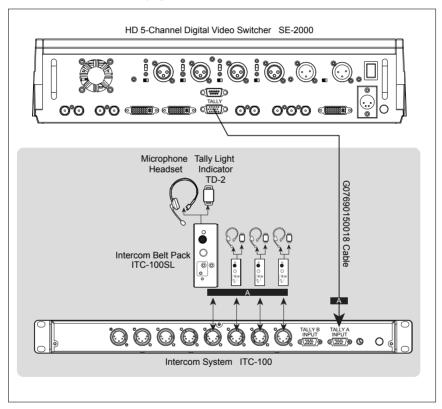
By using Datavideo G07690150018 cable, the Tally output from the SE-500 connects to the ITC-100 Tally Input A. Tally Input A provides tally information to channel $1 \sim 4$. When the camera is live the cameraman will see a tally light in red, when the camera is cued up, the cameraman will see a tally light in amber.



Using the ITC-100 with the SE-2000 I

The ITC-100 is an ideal accessory for the Datavideo SE-2000 Video Mixer. The SE-2000 has four channels, each channel can connect to the ITC-100SL.

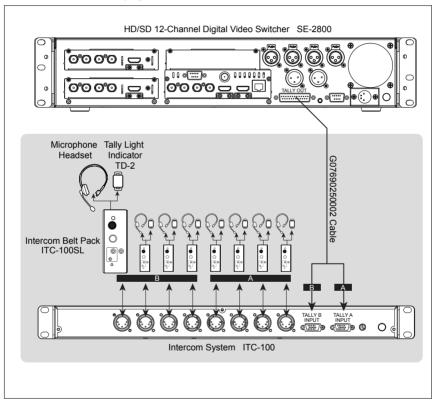
By using Datavideo G07690150018 cable, the Tally output from the SE-2000 connects to the ITC-100 Tally Input A. Tally Input A provides tally information to channel $1 \sim 4$. When the camera is live the cameraman will see a tally light in red, when the camera is cued up, the cameraman will see a tally light in amber.



Using the ITC-100 with the SE-2800 ■

The ITC-100 is an ideal accessory for the Datavideo SE-2800 Video Mixer. The SE-2800 has eight channels, each channel can connect to the ITC-100SL.

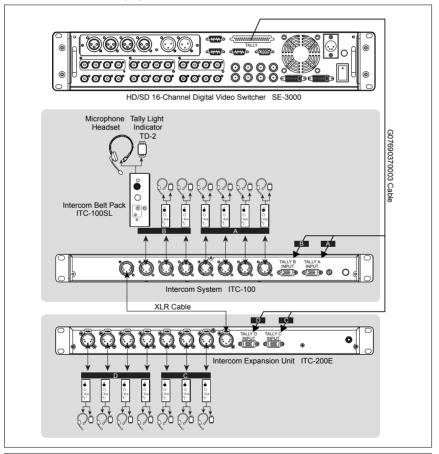
By using Datavideo G07690250002 cable, the, the Tally output from the SE-2800 connects to the ITC-100 Tally Input A & Tally Input B. Tally Input A provides tally information to channel 1 \sim 4, Tally Input B provides tally information to channel 5 \sim 8. When the camera is live the cameraman will see a tally light in red, when the camera is cued up, the cameraman will see a tally light in amber.



Using the ITC-100 with the SE-3000 ■

The ITC-100 is an ideal accessory for the Datavideo SE-3000 Video Mixer. The SE-3000 has sixteen channels, each channel can connect to the ITC-100SL.

By using Datavideo G07690370003 cable, the Tally output from the SE-3000 connects to the ITC-100 Tally Input A & Tally Input B, and also connects to the ITC-200E Tally Input C & Tally Input D. Tally Input A provides tally information to channel 1 \sim 4, Tally Input B provides tally information to channel 5 \sim 7, ITC-100 channel 8 connects to ITC-200E channel 1 by XLR Cable, So ITC-100 channel 8 and ITC-200E channels1 \sim 8 are the same signal. When the camera is live the cameraman will see a tally light in red, when the camera is cued up, the cameraman will see a tally light in amber.



ITC-100 Tally Input - Pin Cross Reference

If you are using the ITC-100 with a Datavideo product you do not need to worry about tally information, as it is automatically sent to the ITC-100. If you are using the ITC-100 with other equipments the following tables may help explain the pin configurations of the ITC-100 Tally A and Tally B input.

Contact closure between the relevant Pin number and ground will illuminate the Tally LED. For example on Tally A, if Pin 1 is connected to Pin 4 the RED LED will light up on Channel 1; if Pin 13 is connected to Pin 4 the AMBER LED will light up on Channel 3

Tally A Input

The Tally A Input will send Tally Information to Channels $1 \sim 4$. The following table shows the pin numbers for each channel:

Video Channel	Red LED LIVE (On Air)	Amber LED CUED (Next)
1	Pin 1	Pin 3
2	Pin 6	Pin 8
3	Pin 11	Pin 13
4	Pin 5	Pin 15

Pins 4, 9 and 14 can be used as ground.

Tally B Input

The Tally B Input will send Tally Information to Channels $5 \sim 8$. The following table shows the pin numbers for each channel:

Video Channel	Red LED LIVE (On Air)	Amber LED CUED (Next)
5	Pin 1	Pin 3
6	Pin 6	Pin 8
7	Pin 11	Pin 13
8	Pin 5	Pin 15

Pins 4, 9 and 14 can be used as ground.

Specifications

ITC-100 Base	Unit	Specification
INPUTS POWER TALLY		12V / 1A (8W)
		2 x 15 Pin D-Sub Sockets for Tally A and Tally B
	MIC / HEADSET	3.5mm Stereo Jack Socket for combination Headphone / Microphone Headset Impedance 8~600 ohms 100mW(min)
	HEADPHONE	1/4" (6.3mm) Stereo Headphone Socket Headset Impedance 8~600 ohms 100mW(min)
	LIGHT SOCKET (12V DC)	3 pin XLR connector. Pin2: 12V, Pin3: GND. Light power consumption 12V/100mA(max).
	MICROPHONE	3 Pin XLR / ¼" (6.3mm) Jack Microphone Socket Switchable Condenser / Dynamic Input Microphone Level -67dB
FREQUENCY	RESPONSE	550-3.6KHz, < +/-3dB
THD		< 3%
S/N		> 50dB
BUILT-IN SPEAKER		70mm x 30mm 32 Ohm 3 Watts
OPERATING RANGE		Up to 200m between Base Station and Slave
OPERATING TEMP. RANGE		5 ~ 45°C
DIMENSION		(1U height 19" rack) W: 440mm x D: 130mm x H: 40mm
WEIGHT		1.9Kg

ITC-100SL Belt Pack Unit	Specification
INPUT	5 Pin XLR Connector
MIC / HEADSET SOCKET	3.5mm Stereo Jack Socket for combination Headphone / Microphone Headset Impedance 8~600 ohms 100mW(min) Microphone Level -67dB Or 2.5mm Stereo Jack Socket, for Motorola Mobile Phone type headset / microphone
TALLY OUT SOCKET	3.5mm Jack Socket to connect to TD-1 Tally Indicator
TALLY LED	Bi-Color LED – RED indicates LIVE / AMBER Indicates CUED
POWER LED	Illuminates to indicate that power is being received
OPERATING RANGE	Up to 200m between Base Station and Slave
OPERATING TEMP. RANGE	5 ~ 45°C
DIMENSION	114mm x 97mm x 35mm
WEIGHT	348g

Service & Support ■

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo.com for answers to common questions, support requests or contact your local office below.

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