

# Gold Solo Guitar

## Gold Solo Guitar Cable Kit



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## Catalog Number

CBL-GSOLGUIT01

## Revision History

Version	Date	Details
Ver. 1.0	January 2012	Initial release
Ver. 1.100	January 2014	Formatted according to the new template General document updates
Ver. 1.101	January 2014	Added Section 1.2: Recommended Tool
Ver. 1.102	May 2017	Change Molex PN to Recommended Tool



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## Chapter 1: Introduction

This document provides the wiring details for the cables used to connect Elmo's Gold Solo Guitar servo drive with the end-user application. The servo drive-side pinouts are provided in the *Gold Solo Guitar Digital Servo Drive Installation Guide*.

The cables come in one length: 2 meters (6 ½ feet).

### 1.1. Cable Kit

The catalog number of the Gold Solo Guitar cable kit is CBL-GSOLGUIKIT01.

#### NOTE:

It should be noted that this kit does not include any communication cables. Please purchase these cables separately.

This cable kit includes the following cables:

ELMO Part Number	Function
CBL-GPORTA-B2	Feedback port A
CBL-GPORTB-B2	Feedback port B
CBL-GPORTCIO-B2	Port C and I/O
CBL-GSTOCOM-B2	STO

### 1.2. Recommended Tool

If you are creating your own cables, it is recommended that you use a Molex hand crimp tool No. 63825-8200 or 63825-8100 (shown below) to attach the female terminals to the wires.



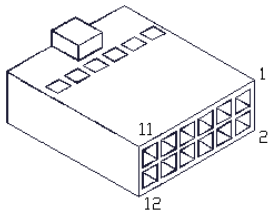


## Chapter 2: Feedback Port A Cable (CBL-GPORTA-B2)

The feedback port A cable is made from a 6-pair 24-AWG shielded twisted-pair cable. There is one type of feedback cable, which uses a 12-pin Molex 2.54 mm pitch plug to connect to the servo drive. The part number (P/N) of this cable is CBL-GPORTA-B2.

The feedback port A cable is open on the motor side so that it can be connected to the motor-feedback connector.

The general pinout of the feedback port A cable is as follows:

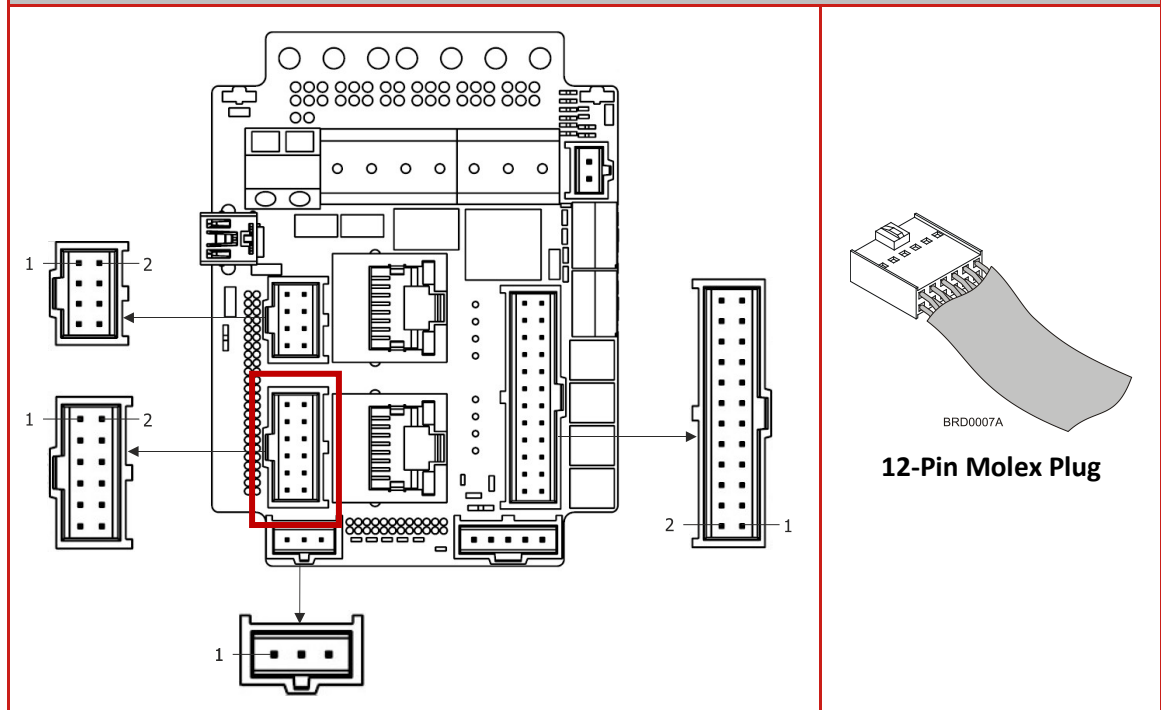
Pin No.	Signal	Color	Twisted & Shielded Wire	Plug
1	+5V	Brown	Pair	
2	COMRET	White		
3	PortA_ENC_A+	Cyan	Pair	
4	PortA_ENC_A-	Orange		
5	PortA_ENC_B+	Purple	Pair	
6	PortA_ENC_B-	Black		
7	PortA_ENC_INDEX+	Red	Pair	
8	PortA_ENC_INDEX-	Blue		
9	HA	Green		
10	HB	Yellow		
11	HC	Pink		
12	PE	-	Drain Wire	

**12-Pin Molex Plug**

12-Pin Molex Plug



## Pin Positions



**Note:** The specific functionality of each pin is described fully in the *Gold Solo Guitar Digital Servo Drive Installation Guide*.



Figure 1: Single-Sided Main Feedback Cable (Part No. CBL-GPORTA-B2)



## Chapter 3: Feedback Port B Cable (CBL-GPORTB-B2)

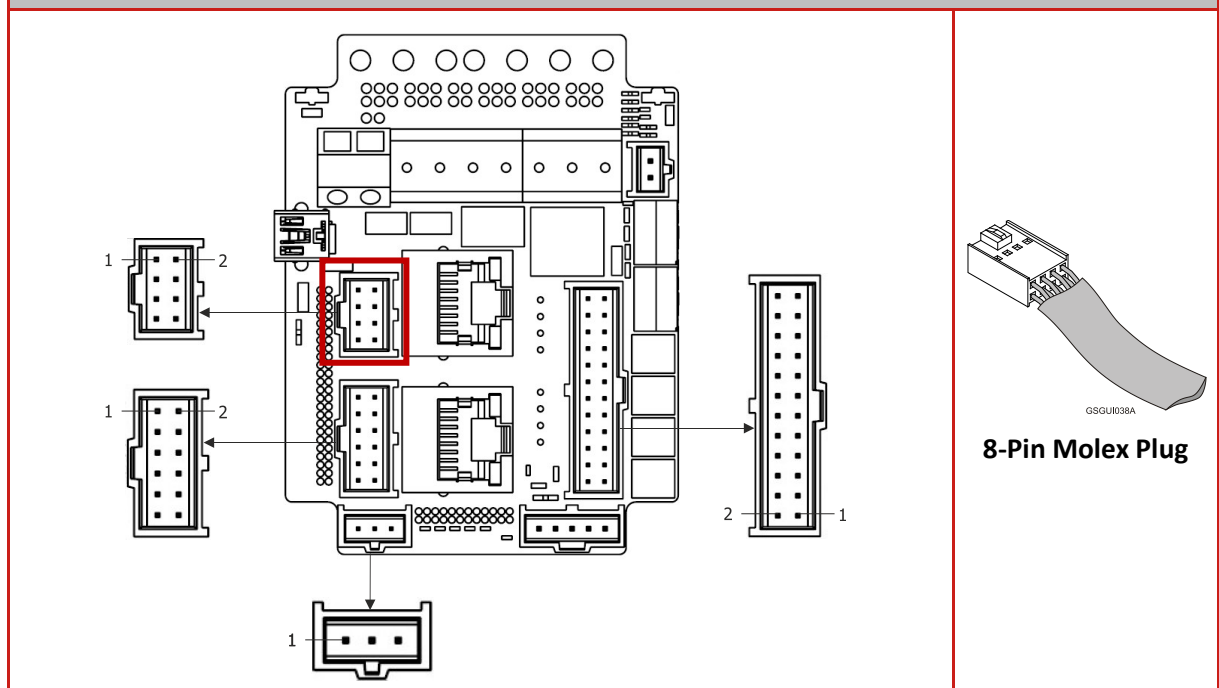
The feedback port B cable is a 4-pair 24-AWG shielded twisted-pair cable. It is connected using an 8-pin Molex 2.54 mm pitch plug. The part number (P/N) of this cable is CBL-GPORTB-B2.

The cable is open on the motor side so that it can be connected to the motor feedback connector.

The general pinout of the feedback port B cable is as follows:

Pin No.	Signal	Color	Twisted & Shielded Wire	Plug
1	+5V	Brown	Pair	 <b>8-Pin Molex Plug</b>
2	COMRET	White		
3	PortB_ENC_A+/SIN+	Gray	Pair	
4	PortB_ENC_A-/SIN-	Pink		
5	PortB_ENC_B+/COS+	Green	Pair	
6	PortB_ENC_B-/COS-	Yellow		
7	PortB_ENC_INDEX+/Analog_Index+	Red	Pair	
8	PortB_ENC_INDEX-/Analog_Index-	Blue		

### Pin Positions





**Note:** The specific functionality of each pin is described fully in the *Gold Solo Guitar Digital Servo Drive Installation Guide*.



**Figure 2: Feedback Port B Cable (Part No. CBL-GPORTB-B2)**





## Chapter 4: Port C & I/O Cable (CBL-GPORTCIO-B2)

The Port C and I/O cable is a 12-pair 24-AWG shielded twisted-pair cable. It is connected using a 24-pin Molex 2.54 mm pitch plug. The part number (P/N) of this cable is CBL-GPORTCIO-B2.

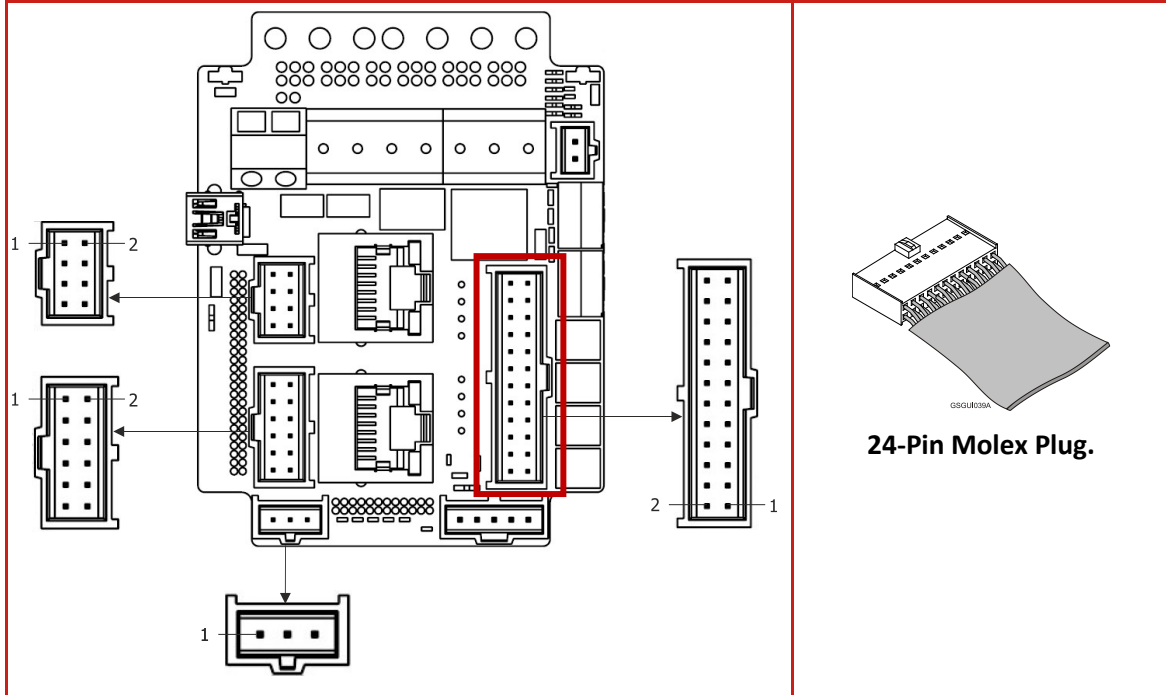
The cable is open on the motor side so that it can be connected to the controller interface connector.

The general pinout of the Port C and I/O cable is as follows:

Pin No.	Signal	Color	Twisted & Shielded Wire	Harness (Cable)	Plug
1	PortC_ENCO_A+	Brown	Pair	ENC_OUT	 <b>24-Pin Molex Plug</b>
2	PortC_ENCO_A-	White			
3	PortC_ENCO_B+	Gray	Pair		
4	PortC_ENCO_B-	Pink			
5	PortC_ENCO_Index+	Green	Pair		
6	PortC_ENCO_Index-	Yellow			
7	COMRET	Red			
8	PE	-	Shield		
9	ANALOG1-	Green	Pair	INPUTS	
10	ANALOG1+	Yellow			
11	ANARET	Brown			
12	INRET1_6	White			
13	IN1	Cyan			
14	IN2	Purple			
15	IN3	Orange			
16	IN4	Black			
17	IN5	Pink			
18	IN6	Blue			
19	OUT4	Brown		OUTPUTS	
20	OUT3	White			
21	OUT2	Gray			
22	OUT1	Pink			
23	VDD	Green	Pair		
24	VDDRET	Yellow			



## Pin Positions



**Note:** The specific functionality of each pin is described fully in the *Gold Solo Guitar Digital Servo Drive Installation Guide*.

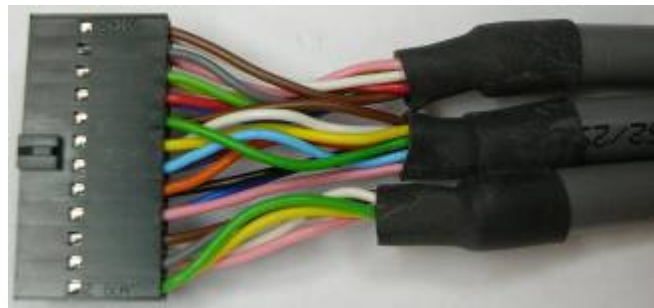


Figure 3: I/O Cable (Part No. CBL-GPORTCIO-B2)

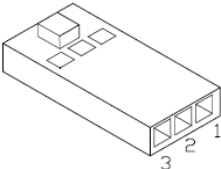


## Chapter 5: STO Cable (CBL-GSTOCOM-B2)

The STO cable is a 26-AWG shielded twisted-pair cable. It is connected using a 3-pin Molex 2.54 mm pitch plug. The part number (P/N) of this cable is CBL-GSTOCOM-B2.

The cable is open on the motor side so that it can be connected to customer-specific connectors.

The general pinout of the STO cable is as follows:

Pin No.	Signal	Color	Twisted & Shielded Wire	Plug
1	STO1	Yellow	-	 <b>3-Pin Molex Plug</b>
2	STO2	Green	-	
3	STO_RET	White	-	

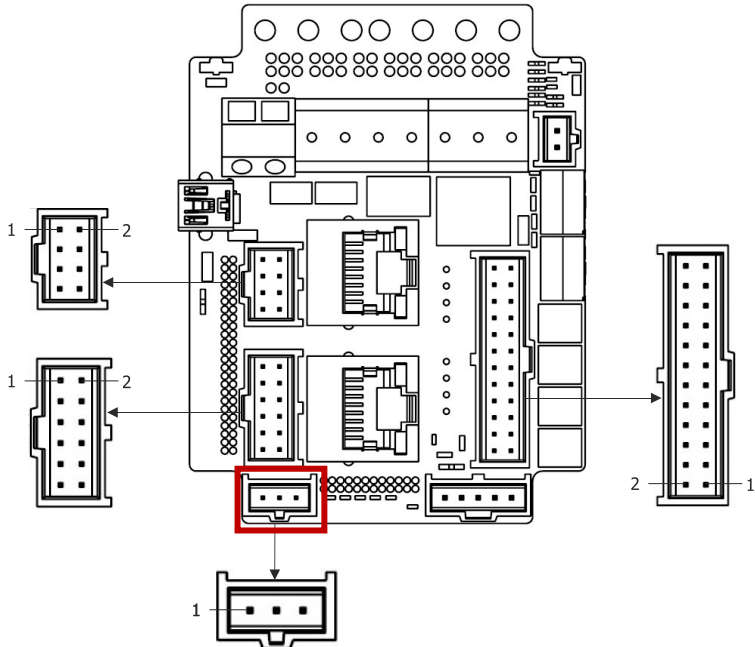
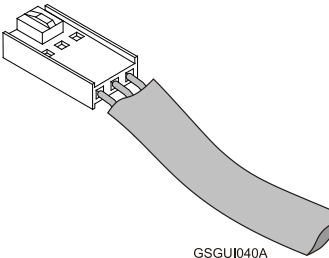
Pin Positions	
	 <b>3-Pin Molex Plug</b>



Figure 4: STO Cable (Part No. CBL-GSTOCOM-B2)



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