

## OPERATION MANUAL

This operation manual is intended as an instruction manual for trained personnel who are in charge of installation, maintenance, repair etc.



Before equipment use, please read this operation manual carefully.

Serial Number: \_\_\_\_\_

Date Purchased: \_\_\_\_\_

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# 1.0 WARRANTY

Every product is thoroughly inspected and tested before it is shipped from the factory. If any problem develops within one year, return the product prepaid to the factory. If an inspection reveals that the problem is caused by defective workmanship or material, repairs will be made without charge and the product will be returned with the shipping prepaid.

## Excluded Items

This warranty does not cover:

- Deterioration caused by normal wear, abuse, chemical or abrasive actions, improper maintenance or excessive heat.
- Problems resulting from repairs, modifications, or alterations made by people other than factory or ACI representatives.
- If the product has been abused or damaged due to an accident.
- If repair parts or accessories other than ACI equipment are used on the product; they are warranted only to the extent that they are warranted by the manufacturer of said parts or accessories.

## Remarks

EXCEPT AS STATED HERE, ACI MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES FOR A PARTICULAR PURPOSE.



Alterations or modifications of equipment and use of non-factory repair parts can lead to dangerous operation and injury.

To avoid injury:

**DO NOT** alter or modify equipment.

**DO NOT** use equipment to lift, support or otherwise transport people.





**DO NOT** suspend unattended loads over people.

## 2.0 SAFETY PRECAUTIONS

### 2.1 Safety Alert Symbols

Throughout this manual are steps and procedures that can prevent hazardous situations, the following symbols are used to identify the degree or level of hazard seriousness.

#### DANGER, WARNING AND CAUTION NOTICE

Symbol	Description
	<b>Danger</b> Indicates an imminently hazardous situation which, if not avoided, <b>will result in death or serious injury</b> and property damage.
	<b>Warning</b> Indicates an imminently hazardous situation which, if not avoided, <b>could result in death or serious injury</b> and property damage.
	<b>Caution</b> Indicates a potentially hazardous situation which, if not avoided, <b>may result in minor or moderate injury</b> or property damage.
	<b>Notice</b> Notifies people of installation, operation or maintenance information which is important but not directly hazard related.



Failure to read and comply with any of the limitations noted in this manual can result in serious bodily injury or death, and/or property damage.

# 3.0 GENERAL DESCRIPTION & FEATURES

## 3.1 General Description

The ACI push button pendant buttons are available to fit in a wide variety of applications... from the simplest one motion hoist to the three-motion cranes with multiple switches and accessories. They may be purchase as complete assemblies with switches and accessories pre-installed, or you may build your own station by purchasing individual components and assembling them yourself.

## 3.2 Features

- Compact safety-yellow enclosure.
- Two-piece enclosure simplified field wiring.
- Easy to read legend plates.
- Neoprene Booted buttons.
- NEMA 4x Enclosure rating. Degree of protection IP65.
- Range of -15°C to 40°C (5°F to 104°F) operation temperature.
- UL/CSA Listed.
- Contacts rated 5A at 120VAC.
- 100 gr. shock resistance.
- Indoor or outdoor use.

Figure 3.2.1  
Pendant Features

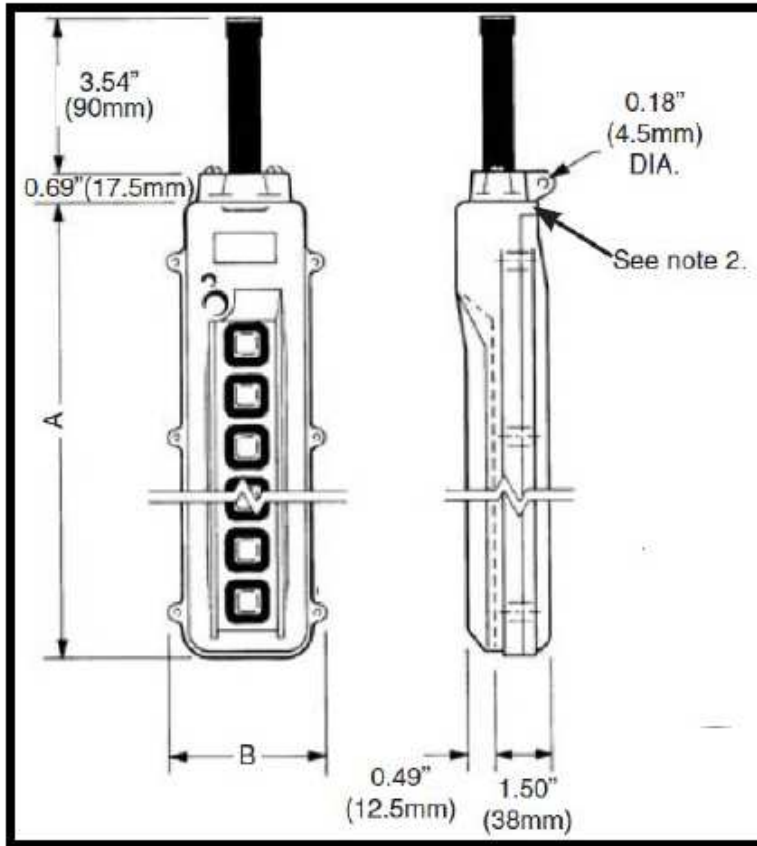


## 4.0 PUSH BUTTON STATIONS

The following pendants stations are provided fully assembled. For custom pendant stations, please contact ACI at [info@acihoist.com](mailto:info@acihoist.com).

Part No.	Description	Bushing
100021	2 Button – All single speed	100COBA2
100022	2 Button – All dual speed	100COBA2
100041	4 Button – All single speed	100COBA2
100042	4 Button – All dual speed	100COBA2
100041MO	4 Button – 2 single speed with momentary On/Off	100COBA2
100041MA	4 Button – 2 single speed with maintained On/Off	100COBA2
100042MO	4 Button – 2 dual speed with momentary On/Off	100COBA2
100042MA	4 Button – 2 dual speed with maintained On/Off	100COBA2
100061	6 Button – all single speed	100COBA2
100062	6 Button – all dual speed	100COBA2
100061MO	6 Button – 4 single speed with momentary On/Off	100COBA2
100061MA	6 Button – 4 single speed with maintained On/Off	100COBA2
100062MO	6 Button – 4 dual speed with momentary On/Off	100COBB1
100062MA	6 Button – 4 dual speed with maintained On/Off	100COBB1
100081	8 Button – all single speed	100COBB1
100082	8 Button – all dual speed	100COBB1
100081MO	8 Button – 6 single speed with momentary On/Off	100COBB1
100081MA	8 Button – 6 single speed with maintained On/Off	100COBB1
100082MO	8 Button – 6 dual speed with momentary On/Off	100COBB1
100082MA	8 Button – 6 dual speed with momentary On/Off	100COBB1
100083MO	8 Button – 6 three speed with momentary On/Off	100COBB1
100083MA	8 Button – 6 three speed with maintained On/Off	100COBB1
100101	10 Button – all single speed	100COBB1
100102	10 Button – all dual speed	100COBB1
100101MO	10 Button – 8 single speed with momentary On/Off	100COBB1
100101MA	10 Button – 8 single speed with maintained On/Off	100COBB1
100102MO	10 Button – 8 dual speed with momentary On/Off	100COBB1
100102MA	10 Button – 8 dual speed with maintained On/Off	100COBB1
100121	12 Button – all single speed	100COBD1
100122	12 Button – all dual speed	100COBD1
100121MO	12 Button – 10 single speed with momentary On/Off	100COBD1
100121MA	12 Button – 10 single speed with maintained On/Off	100COBD1
100122MO	12 Button – 10 dual speed with momentary On/Off	100COBD1
100122MA	12 Button – 10 dual speed with maintained On/Off	100COBD1

## 5.0 DIMENSIONS & SPECIFICATIONS



No of positions	A		B	
	(in)	(mm)	(in)	(mm)
2	4.49	114	3.07	78
4	7.09	180	3.07	78
6	10.31	262	3.23	82
8	12.68	322	3.23	82
10	15.24	387	3.43	87
12	17.60	447	3.43	87
12-24	See note 1			

**Note 1:** Please consult the factory for custom design.

**Note 2:** Bushing collar can be mounted facing front or rear

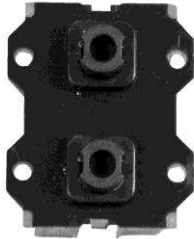
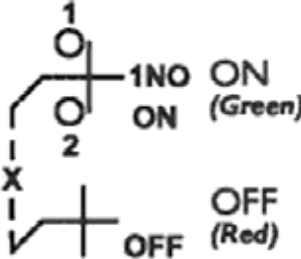
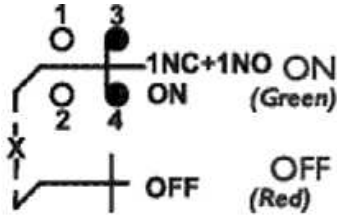
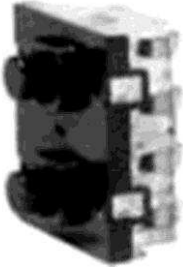
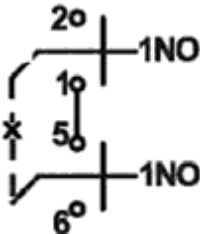
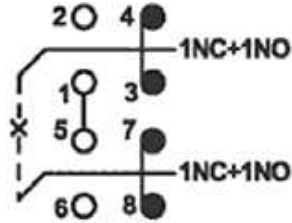
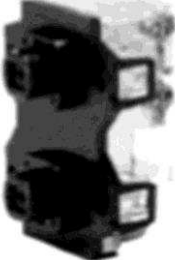
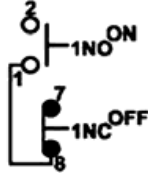
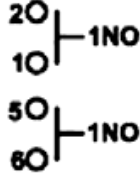
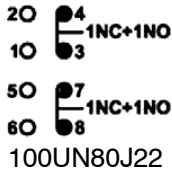
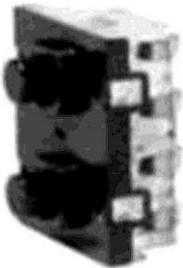
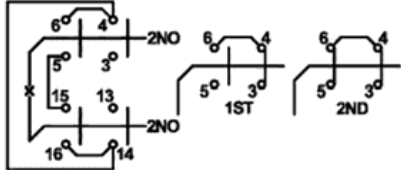
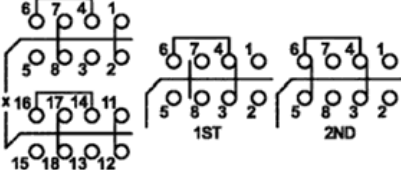
### Bushings

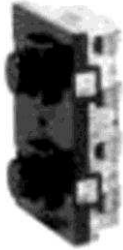
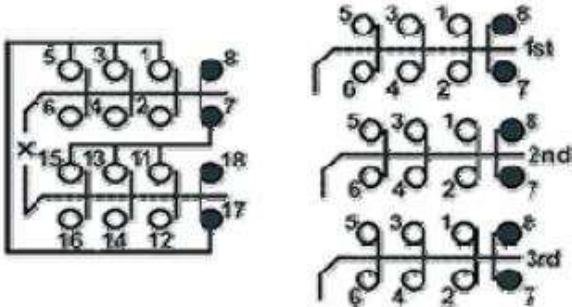
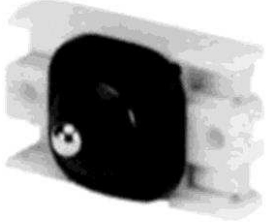
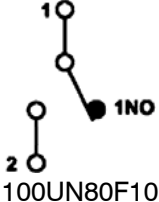
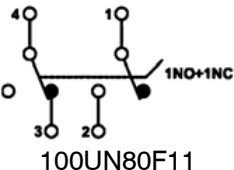


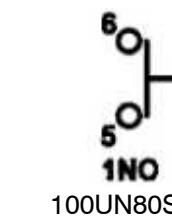
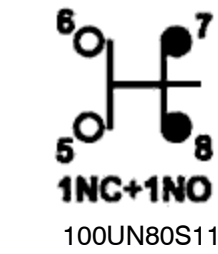
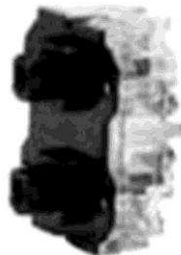
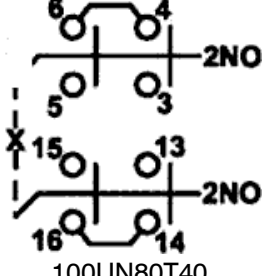
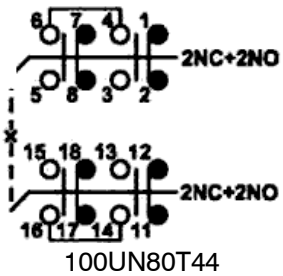
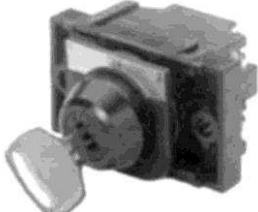
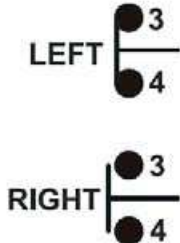

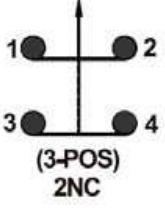
Cable bushing	Cable size	
	Diameter (mm)	Diameter (in)
100COBA1	7.5 – 10.5	.30 - .41
100COBA2	10.3 – 13.5	.41 - .53
100COBB1	13.3 – 16.5	.52 - .65
100COBB2	16.3 – 19.5	.64 - .77
100COBC1	19.3 – 22.5	.76 – 89
100COBC2	22.3 – 25.5	.88 – 1.00
100COBD1	25.3 – 28.5	1.00 – 1.12
100COBD2	28.3 – 29.5	1.11 – 1.16

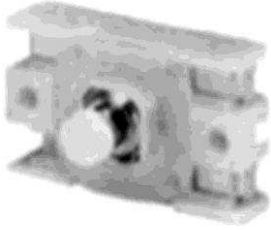
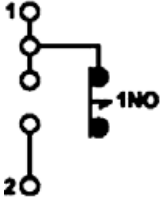
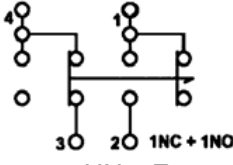
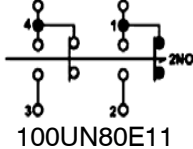



# 6.0 PARTS LIST

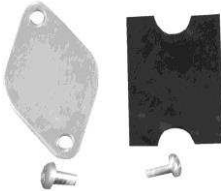



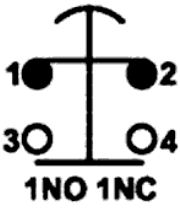
## 6.1 Switches



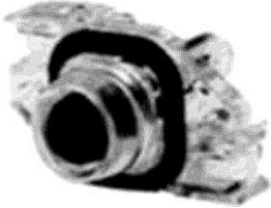


Part Number	Appearance	Contact Arrangement		Operation	
100UN80B10 100UN80B11		 <p>100UN80B10</p>	 <p>100UN80B11</p>	Maintained on-off	
100UN80C20 100UN80C22		 <p>100UN80C20</p>	 <p>100UN80C22</p>	Single speed with mechanical interlocking	
100UN80J11 100UN80J20 100UN80J22		 <p>100UN80J11</p>	 <p>100UN80J20</p>	 <p>100UN80J22</p>	Momentary on-off
100UN80D40 100UN80D44 100UN80D48		 <p>100UN80D40</p>		Dual speed with mechanical interlocking	
 <p>100UN80D44</p>					
<p>100UN80D48: Same as 100UN80D44 with delayed opening in contact 7 and 8, also called "Break-Before-Make" contact arrangement.</p>					

<p>100UN80W62</p>				<p>3-speed with mechanical interlocking</p>	
<p>100UN80F10 100UN80F11 100UN80F20</p>		 <p>100UN80F10</p>	 <p>100UN80F11</p>	 <p>100UN80F20</p>	<p>Toggle switch</p>
<p>100UN80S10 100UN80S11</p>		 <p>100UN80S10</p>	 <p>100UN80S11</p>	<p>Momentary single speed button</p>	
<p>100UN80T40 100UN80T44</p>		 <p>100UN80T40</p>	 <p>100UN80T44</p>	<p>Momentary mechanical interlocking</p>	
<p>100UN80PJ210</p>		 <p>100UN80PJ210</p>		<p>Key Switch 2 Positions</p>	
<p>100UN80P302</p>		 <p>100UN80P302</p>		<p>Maintained selector switch – 2 and 3 positions</p>	

<p>100UN80E10 100UN80E20 100UN80E11</p>		 <p>100UN80E10</p>	 <p>100UN80E20</p>	 <p>100UN80E11</p>	<p>Alternate switch</p>
<p>100 UNL</p>		<p>100UNL – Momentary Horn Switch, 19mm dia.</p>			<p>Horn Switch</p>

## 6.2 Other Parts

Part Number	Appearance	Description / Contact Arrangement		Operation
<p>100UN80H</p>		<p>Blind Rubber</p>		<p>Blind rubber</p>
<p>100UN80V1K</p>		<p>Buzzer</p>		<p>Buzzer</p>
<p>100UN80MK01 100UN80MK02 100UN80MK11</p>		 <p>100UN80MK01</p>	 <p>100UN80MK11</p>	<p>Push Lock</p>

<p><b>100LNR082B1R</b>  <b>100LER082B24R</b>  <b>100LNR103B24R</b></p>		<p>100LNR082B1R – Lamp (Neon), 12mm dia., 110V / AC (Red)  100LER082B24R – Lamp (LED), 12mm dia., 24V / DC (Red)  100LER082B12R – Lamp (LED), 12mm dia., 12V / DC (Red)</p>	<p>Lamp,  12mm dia.</p>
<p><b>100LNR103B1R</b>  <b>100LER103B24R</b>  <b>100LNR103B24R</b></p>		<p>100LNR103B1R – Lamp (Neon), 19mm dia., 110V / AC (Red)  100LER103B24R – Lamp (LED), 19mm dia., 24V / DC (Red)  100LNR103B12R – Lamp (Neon), 19mm dia., 24V / DC (Red)</p>	<p>Lamp,  19mm dia.</p>
<p><b>100UN80G1R</b>  <b>100UN80GD24R</b></p>		<p>100UN80G1R – Pilot Light Switch (Neon), 110V / AC (Red)  100UN80GD24R – Pilot Light Switch (LED), 24 V / DC (Red)</p>	<p>Pilot Light</p>
<p><b>100GC</b>  <b>100BC</b>  <b>100RC</b></p>		<p>100GC – Neoprene Green Button Cover  100BC – Neoprene Black Button Cover  100RC – Neoprene Red Button Cover</p>	<p>Button  Cover  (Rubber)</p>
<p><b>100BL</b></p>		<p>One (1) sheet is included with each assembled pendant.</p>	<p>Button  Legend</p>
<p><b>100WL</b></p>		<p>One (1) label is included with each assembled pendant.</p>	<p>Warning  Label</p>