### Introduction

Transmitters used in Safety Systems, Custody Transfer, or critical processes need to be able to be secure from tampering or inadvertent changes to their setup.

# Yokogawa Solution

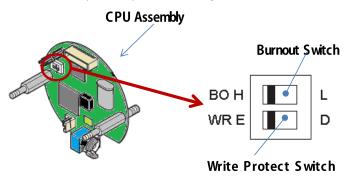
Yokogawa's EJA-E and EJX-A series of pressure transmitters have the security of a Software Write Protection (Password) and a Hardware Write Protection (Switch). These can be used independently or together to build the level of security desired.

## Applicable Models

⇒ EJA-E Series: All models⇒ EJX-A Series: All models

### Hardware Write Protection (Switch)

The HART communication EJA-E and EJX-A transmitters have a Write Protection (WR) switch located on the CPU Assembly Board next to the Burn Out (BO) switch. When the WR switch is in the "D" (Disabled) position, the transmitter will not allow parameter changes through the use of a handheld communicator, FieldMate, or range setting switch on the transmitter indicator (if equipped). When the WR switch is in the "E" (Enable) position, parameter changes will be allowed.



Hardware Write Protection Switch (WR)		
Write Protection Switch Position	H L D	H E D
Write Protection	Write Enabled	Write Disabled

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Refer to the exploded view of the transmitter in the Instruction Manual (IM) for the location of the CPU Assembly Board within the transmitter.

## Software Write Protection (Password)

The EJA-E and EJX-A transmitters with HART communication have a Password that can be set to protect the configured parameters. The Hardware Write Protect switch takes precedence over the Password Protection.

Using FieldMate, the Password function can be Enabled or Disabled. When the Password function is Enabled, a 8-digit password will need to be entered to make any setting changes. This Password can be any 8-digit password the customer wants.

Once the password is set-up, anytime a change needs to be made, the unit will need to be un-locked using the chosen password. When the password in entered, the technician will have 10 minutes to make the changes needed. Once the time limit has expired, the password will need to be re-entered for another 10-minute time block.



Hart 5

**DTM Works** 

> Write Protect

Hart 7

DTM Works

> Detailed Setup

> Device Information

> Field Device Info

> Wrt Protect Menu

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Once on the write protect screen, the current status of the write protect function is displayed. There will also be instructions to Enable or Disable the password function and how to assign the password.

Although FieldMate is highlighted here, any Hart Communicator has access to these functions. Refer to the User's Manual for the HART programming tree.

#### What if I forget the Password?

The transmitter has a temporary recovery password pre-programmed. Once this recovery password in entered, the technician is given 10 minutes to reset the password only. No other parameters can be changed during this 10-minute block. Refer to the Instruction Manual or contact Technical Service for the Recovery Password. The recovery password is the same for all Yokogawa pressure transmitters.

# Besides FieldMate, is there any way to know the Write Protect status of the transmitter?

Transmitters with integral indicators will display a key symbol when the Write Protect is enabled. (See Figure 1)

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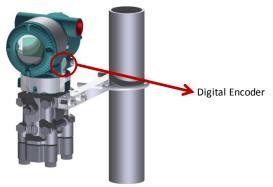


Figure 1: EJA-E and EJX-A display

## Zero-Adjustment Digital Encoder

The zero-adjustment digital encoder (Standard on all Yokogawa Transmitters), allows for simple adjustments to the LRL and URL. The functionality of this Encoder is un-affected by the Hardware or Software Write Protect settings. Using FieldMate, the technician can disable the Encoder.

There is no indication on the integral display whether this feature is Enabled or Disabled.



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Figure 2: External Digital Encoder location



Hart 7	
DTM Works	(HART 7)
Detailed Setup	
> Device information	
> Field Device info	
> EXT SW	<b>Enabled ▼</b>
	Disabled

# Settings when Shipped

Hardware Write Protect	Enabled	
(Switch)	(Parameters can be changed)	
Software Write Protect	Disabled	
(Password)	(Parameters can be changed)	
Zero-adjustment	Enabled	
Digital Encoder	(Encoder is active)	

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### BRAIN Protocol

The features described in this FieldGuide are also available for EJA-E and EJX-A transmitters with BRAIN Protocol communication. Please refer to the Instruction Manual for details.



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