

**STANDARD**

**ISA-18.1-1979 (R2004)**  
Formerly ISA-18.1-1979 (R1992)

**Annunciator Sequences  
and Specifications**

**Reaffirmed 25 February 2004**

ISA-18.1-1979 (R2004)  
Annunciator Sequences and Specifications

ISBN 0-87664-346-2

Copyright © 1979 by the Instrument Society of America. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of the publisher.

ISA  
67 Alexander Drive  
P.O. Box 12277  
Research Triangle Park, North Carolina 27709

---

## Preface

---

This preface is included for informational purposes and is not part of ISA-18.1-1979 (R2004).

This standard has been prepared as part of the service of ISA toward a goal of uniformity in the field of instrumentation. To be of real value, this document should not be static, but should be subject to periodic review. Toward this end, the Society welcomes all comments and criticisms and asks that they be addressed to the Secretary, Standards and Practices Board, ISA, 67 Alexander Drive, P.O. Box 12277, Research Triangle Park, North Carolina 27709, Telephone (919) 549-8411, e-mail: standards@isa.org.

Based on work started in 1955 by a survey committee titled Instrument Alarms and Interlocks, the 8D-RP18 Committee on Annunciator Systems of the Production Processes was formed in 1969. Tentative Recommended Practice ISA-RP18.1, titled Specifications and Guides for the Use of General Purpose Annunciators, was completed by that Committee in 1965.

The committee, reactivated as Committee SP18, Instrument Signals and Alarms, began revising ISA-RP18.1 in 1976 to reflect current industry practice for annunciators; in 1991, the Nuclear Power Plant Standards Committee, SP67, assumed responsibility for the reaffirmation of this standard.

It is the policy of ISA to encourage and welcome the participation of all concerned individuals and interests in the development of ISA standards. Participation in the ISA standards-making process by an individual in no way constitutes endorsement by the employers of the individual, of ISA, or of any of the standards that ISA develops.

The information contained in the preface, footnotes, and appendices is included for information only and is not a part of the standard.

The following people served as members of SP18 at the time of this standard's 2004 reaffirmation:

<b>NAME</b>	<b>COMPANY</b>
E. Icyan, Managing Director	ACES Inc.
A. Boquiren*	Bechtel Corp. Control Systems
M. Casiglio	HF Controls
D. Dunn	Equistar
M. Hanson	Meyer Control Corp.
W. Henderson*	Westinghouse Savannah River Co.
C. Mastromonico*	Westinghouse Savannah River Co.
L. McAdams	Bechtel National Inc.
N. Shah*	Bechtel Corp.
S. Wright	BNFL Inc.

---

\* One vote per company

This reaffirmed standard was approved for publication by the ISA Standards and Practices Board in 2004.

<b>NAME</b>	<b>COMPANY</b>
V. Maggioli, Chairman	Feltronics Corp.
K. Bond	Consultant
D. Bishop	David N. Bishop, Consultant
D. Bouchard	Paprican
M. Cohen	Consultant
M. Coppler	Ametek, Inc.
B. Dumortier	Schneider Electric
W. Holland	Consultant
E. Iccayan	ACES, Inc.
A. Iverson	Ivy Optiks
R. Jones	Dow Chemical Co.
T. McAviney	I&C Engineering, LLC
A. McCauley, Jr.	Chagrin Valley Controls, Inc.
G. McFarland	Emerson Process Management
D. Rapley	Rapley Consulting Inc.
R. Reimer	Rockwell Automation
J. Rennie	Factory Mutual Research Corp.
H. Sasajima	Yamatake Corp.
I. Verhappen	Syncrude Canada Ltd.
R. Webb	Consultant
W. Weidman	Parsons Energy & Chemicals Group
J. Weiss	KEMA Consulting
M. Widmeyer	Stanford Linear Accelerator Center
R. Wiegler	CANUS Corp.
C. Williams	Eastman Kodak Co.
M. Zielinski	Emerson Process Management

---

## Contents

---

<b>1 Purpose</b> .....	<b>7</b>
<b>2 Scope</b> .....	<b>7</b>
<b>3 Definition of terms</b> .....	<b>7</b>
<b>4 Sequences</b> .....	<b>11</b>
4.1 Operation .....	11
4.2 Presentation .....	11
4.3 Designation method .....	12
4.4 Basic sequence letter designations .....	20
4.5 Option number designations .....	20
4.6 First out designations .....	22
<b>5 Specifications</b> .....	<b>23</b>
5.1 All annunciators .....	23
5.2 Remote logic annunciators .....	24
5.3 Complex annunciator systems .....	24
5.4 Annunciator accessories and special features .....	24
<b>6 Documentation</b> .....	<b>25</b>
6.1 All annunciators .....	26
6.2 Remote logic annunciators .....	26
6.3 Complex annunciator systems .....	26
6.4 Annunciator accessories and special features .....	26
<b>Appendix A — Annunciator application guide</b> .....	<b>27</b>
<b>Appendix B — Sequence designation conversion</b> .....	<b>51</b>

This is a preview of "ISA 18.1-1979 (R2004...)". [Click here to purchase the full version from the ANSI store.](#)

---

## 1 Purpose

---

The purpose of this Standard is to establish uniform annunciator terminology, sequence designations, and sequence presentation and to assist in the preparation of annunciator specifications and documentation.

This Standard is intended to improve communications among those that specify, distribute, manufacture, or use annunciators.

---

## 2 Scope

---

This Standard is primarily for use with electrical annunciators that call attention to abnormal process conditions by the use of individual illuminated visual displays and audible devices. Annunciators can range from a single annunciator cabinet, to complex annunciator systems with many lamp cabinets and remote logic cabinets.

The sequence designations provided can be used to describe basic annunciator sequences and also many sequence variations. This Standard lists types of information that should be included in annunciator specifications and types of documents that should be provided by manufacturers; however, detailed design requirements and documentation formats are beyond the scope of this Standard.

---

## 3 Definition of terms

---

The following are terms and their definitions that have special meaning in relation to annunciators. Commonly used alternate terms are shown in parentheses. Defined terms used in other definitions are in italics to provide a cross-reference.

**acknowledge:** the *sequence action* that indicates recognition of a new *alarm*.

**active alarm point:** see *alarm point*.

**alarm:** 1. an abnormal *process condition*. 2. the *sequence state* when an abnormal *process condition* occurs. 3. a device that calls attention to the existence of an abnormal *process condition*. See *annunciator*. Types of *alarm* include:

**momentary:** an *alarm* that returns to normal before being acknowledged.

**maintained:** an *alarm* that returns to normal after being acknowledged.

**alarm module (point or sequence module):** a plug-in assembly containing the sequence logic circuit. Some *alarm* modules also contain *visual display* lamps or lamps and *windows*.

**alarm point:** the sequence logic circuit, *visual display*, auxiliary devices, and internal wiring related to one *visual display*. Types of *alarm point* include: