

SELECTRONIC® TATTLETALE® Remote Alarm Annunciators

ST-95046B
Revised 01-03
Catalog Section 25
(00-02-0079)

FWMurphy



ST Series

- Provide Audible and Visual Alarm
- Simple and Inexpensive
- Wide Range of Applications
- Gen-Set Models Meet NFPA-99 and NFPA-110 Requirements

Description

The ST Series SELECTRONIC® TATTLETALE® annunciators are a simple and inexpensive answer to your remote alarm annunciator needs. Basic models **ST5AS** and **ST10AS** are general purpose alarms suitable for a variety of applications. Models **ST4X4** and **ST8** give first out annunciation of fault. Models **ST10HC**, **STA16** and **STA110** are designed for generator set applications. ST10HC and STA110 meet NFPA requirements for standby generators.

These compact TATTLETALE® annunciators tell you by a flashing LED which variable malfunctioned. Many feature a pulsating MINI-SIREN® to audibly alert you to the malfunction. The audible alarm is silenced by depressing the Alarm Silence push button, but the visual signal remains in operation until the fault is corrected and the contacts are cleared.

A test push button allows you to test all alarm LEDs. Because LEDs are solid state, cold light, electronic devices, they don't burn out as incandescent light bulbs do.

Basic models accept 8-32 VAC or 8-40 VDC

input voltage. Others are available for either 12 VDC or 24 VDC input.

Preprinted peel and stick nameplates for common faults are supplied with each unit. Model ST10HC and STA110 have pre-determined nameplates specified by NFPA. Most of the SELECTRONIC® TATTLETALE® annunciators accept either normally open (N.O.) or normally closed (N.C.) contacts. You can mix N.O. and N.C. contacts on the same unit.

Two mounting styles are offered; a recessed panel mounting flange and a free-standing gimbal mounting. (Models ST10HC, STA110 and STA16 are available only in flange mount). Additionally, models ST10HC, STA110 and STA16 are available with a pull box for hollow wall mounting.

All models except ST10HC, STA110 and STA16 have a time delay available to lockout the audible alarm on startup. These unique alarm panels have wide ranging applications and can be grouped in many configurations. Ask any Murphy sales/engineer for assistance.

Basic Operation

When an alarm sensor trips, the LED flashes and, if equipped, the MINI-SIREN® sounds. At the same time an output circuit is activated which allows you to connect an external relay to operate a general alarm, operate a shutdown device, etc.

Applications

- Marine
- Generator Sets
- Oil Field
- Agriculture
- Construction

Warranty

A two-year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and are packed with each unit.



CAUTION: Certain dangers to human safety and to equipment may occur if some equipment is stopped without pre-warning. It is recommended that monitored functions be limited to alarm-only or to alarm before shutdown.

*Applies to selected models.



BASIC: ST5AS, ST10AS and ST5DAS Series

Murphy Basic ST-SERIES SELECTRONIC® TATTLETALE® annunciators are used wherever a remote alarm and annunciation is required. Typical applications are in marine pilot houses to alert the crew of problems developing in engine, gear, bilge, auxiliary power plants, etc. Repeater panels can be added for additional locations such as flybridge, on deck, galley or engineer's quarters. Each repeater panel can be acknowledged individually or alternate wiring allows for one master control to silence all repeater panels.

Other applications include power plant control rooms or building maintenance, for remote drilling rigs, construction sites, agricultural and construction equipment.

When a fault occurs, the contact operation causes the appropriate LED to flash and the audible MINI-SIREN® to pulse. At the same time an output signal is generated which allows an external relay to be wired to operate a general alarm such as a bell or horn. Depressing the Alarm Silent button silences the local audible alarm and disconnects the output for the remote alarm. The flashing LED remains in operation until the fault is corrected and the contacts reset. Alarm Silence/Test button allows you to test all LEDs.

Preprinted peel and stick nameplates for common faults are supplied with each unit.



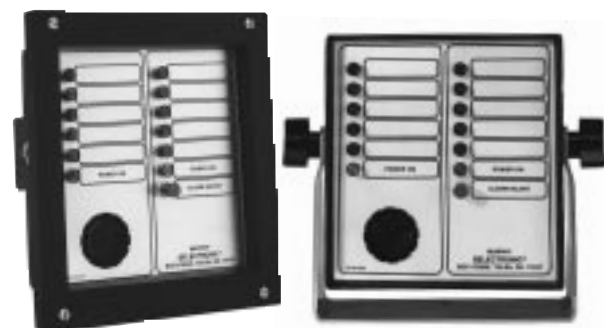
5-Points

- **ST5ASF** (flange mount) and **ST5ASG** (gimbal mount)
- Provides 5 alarm points and output for remote alarm relay.
- Accepts N.O. and/or N.C. contacts.
- Use individually or gang for multiple applications.
- Input voltage 8-32 VAC or 8-40 VDC.



10-Points

- **ST10ASF** (flange mount) and **ST10ASG** (gimbal mount)
- Provides 10 alarm points and output for remote alarm relay.
- Accepts N.O. and/or N.C. contacts.
- Use individually or gang for multiple applications.
- Input voltage 8-32 VAC or 8-40 VDC.



Dual 5-Points

- **ST5DASF** (flange mount) and **ST5DASG** (gimbal mount)
- Provides two separate sets of 5 alarm points in one package. Each set of 5 points is powered separately from the other, but they share the same negative of the power source.
- Primary application is on twin engine boats. Since each set of alarm points is powered separately, if only one engine is running there is no alarm on the engine not running.
- Accepts N.O. and/or N.C. contacts.
- Input voltage 8-32 VAC or 8-40 VDC.



FIRST OUT FAULTS: ST4X4 and ST8 Series

First out fault TATTLETALE® tells you which monitored variable malfunctioned first. The fault is annunciated and locked in until reset by the operator. In addition, the ST4X4 gives up to four pre-alarms. Applications include process monitoring such as compressors, pumps, generators, etc. Preprinted peel and stick nameplates for common faults are supplied with each unit.



4 Alarm/4 First Out

- **ST4X4F** (flange mount) and **ST4X4G** (gimbal mount)
- Provide pre-alarm and first out shutdown indication in one compact package. Or, four alarm only points and four separate first out shutdowns.
- Accepts N.O. and/or N.C. contacts.
- Lock out time delay is selectable for all points.
- Input voltage 8-32 VAC or 8-40 VDC.



8 First Out

ST8F (flange mount) and **ST8G** (gimbal mount)

- Provides 8-point first out cause of shutdown TATTLETALE®. A flashing LED indicates the cause of shutdown identified by the nameplate.
- Accepts N.O. and/or N.C. contacts.
- Includes SPDT dry contact output rated 2 A @ 28 VDC.
- Selectable sensor lockout for delay on startup.
- Input voltage 8-32 VAC or 8-40 VDC.



GENERATORS: ST10HC, STA110 and STA16 Series

These models are typically applied in remote control rooms or central offices remote from the generator set. They are available with flange mounting or optional pull-box for hollow wall mounting. Preprinted peel and stick nameplates for common faults are supplied with each unit.



NFPA-99

- **ST10HC** complies with NFPA-99 specs for standby generators used in health care facilities.
- Eight alarm functions are specified by NFPA-99 plus two additional functions for you to specify.
- Includes Alarm Test and Alarm Silence button.
- Built-in battery charging sensor detects malfunction in the battery charger circuit and initiates a visual alarm.
- Accepts N.O. switch inputs
- Specify positive (ST10HC-P) or negative (ST10HC-N) switch input.



16-Points

- **STA16** is a 16-point annunciator for generator sets.
- Provides 16 points of visual and audible alarms including built-in sensing for low battery voltage and battery charger malfunction.
- Accepts N.O. switch inputs
- Specify positive (STA16-P) or negative (STA16-N) switch input.

NFPA-110

STA110 is the same as the STA16 but has preprinted labels that allow it meet NFPA-110 requirements. Specify positive (STA110-P) or negative (STA110-N) switch input.

SPECIFICATIONS

Models

Specifications

	ST5AS	ST10AS	ST5DAS	ST4X4	ST8	ST10HC	STA110	STA16	ST20AS
Number of Alarm Points									
• 5 Visual	•								
• 10 Visual		•	•			•			
• 4 Alarm Only and 4 Shutdown/Alarm				•					
• 8 First Out Visual					•				
• 16 Visual							•	•	
• 20 Visual									•
Audible Alarm									
• 1 local; common to all inputs	•	•	•				•	•	•
• 1 local; common to all inputs except battery charger malfunction and generator operating						•			
Alarm Silence: Silences audible only	•	•	•			•	•	•	•
Test Push Button: Tests all LED's	•	•	•			•	•	•	•
Alarm Output: Customer supplied relay same voltage as input; coil not to exceed 500 mA.	•	•	•	•		•	•	•	•
Input Voltage									
• 8-32 VAC / 8-40VDC	•	•	•	•	•				•
• 12 or 24 VDC (specify)						•	•	•	
Startup Time Delay: Customer selectable: 25-35 seconds	•	•	•	•	•				•
Sensor Input									
• Accepts N.O. positive or negative						•	•	•	
• Accepts N.O. and/or N.C.	•	•	•	•	•				•
Mounting Options									
• Less Mounting kit	•	•	•	•	•				
• Flange Mounting kit	•	•	•	•	•	•			
• Gimbal Mounting kit	•	•	•	•	•				
• Pull Box						•	•	•	
First Out Shutdown: Amber-No; Red-Yes				•	•				
Shutdown Relay Output: SPDT dry contacts; 2 A @ 28 VDC				•	•				
Alarm Reset: Repair fault; contacts open				•	•				
Shutdown Reset: Repair fault; contacts open; push reset button; remove power				•	•				
Battery Charger Malfunction: Built-in sensing; visual alarm only						•	•	•	
Shipping Weights									
• 1.25 lbs (567 g)	•								
• 1.50 lbs (680 g)		•	•	•	•	•			
• 2 lbs (907 g)							•	•	•
Shipping Dimensions									
• 6-1/4 x 6-1/4 x 6-1/4 in. (159 x 159 x 159 mm)	•	•	•	•	•	•			
• 12 x 7-1/2 x 5-1/2 in. (305 x 191 x 140 mm)							•	•	•

ACCESSORIES and OPTIONS

STAS (65700040) Diode Package

STAS (65020122) diode package is used to parallel two STAS Series annunciators from one set of sensors. One unit required for each five alarm points.

STASTD (25700035) Time Delay Module

Time delay module delays the sensor input to the ST Series annunciator for 6-10 seconds to compensate for momentary contact closures due to motion of the vessel, etc. Blocking diodes perform same function as STAS diode package. One unit required for each five time delayed inputs. Input voltage 8-40 VDC.

TDST3-5 and TDST8-10

TDST3-5 and TD8-10 single point time delays inhibit sensor input to ST Series annunciators for 3-5 or 8-10 seconds. Compensates for momentary contact operation due to vessel movement, etc.

GIMBAL and FLANGE Mounting Kits

These kits are available for change-over mounting and as service parts. They fit all "LM" (less mounting) configurations.

25700007 Gimbal mount kit fits ST5ASLM. **25020138**

25700008 Flange mount kit fits ST5ASLM. **25020139**

25700034 Gimbal mount kit fits ST10ASLM, ST5DASLM, ST4X4LM and ST8LM. **25020141**

25700371 Flange mount fits ST10ASLM, ST5DASLM, ST4X4LM and ST8LM. **25020142**

PULL BOX PACKAGE is optional for the ST10HC, STA110 and STA16 to allow on-site installation in hollow walls of the room. Specify "PB" (see How to Order section). Package includes the SELECTRONIC® TATTLETALE®, a flush screw plate and a pull box. Parts of this package are not sold separately (except SELECTRONIC® TATTLETALE®).



FLANGE Mount

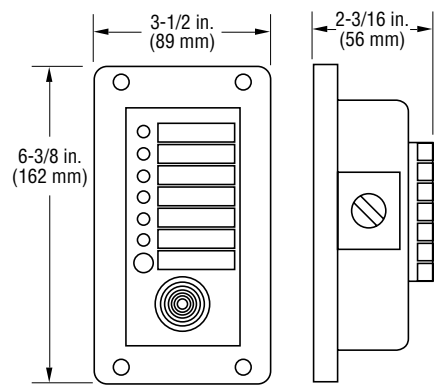


GIMBAL Mount

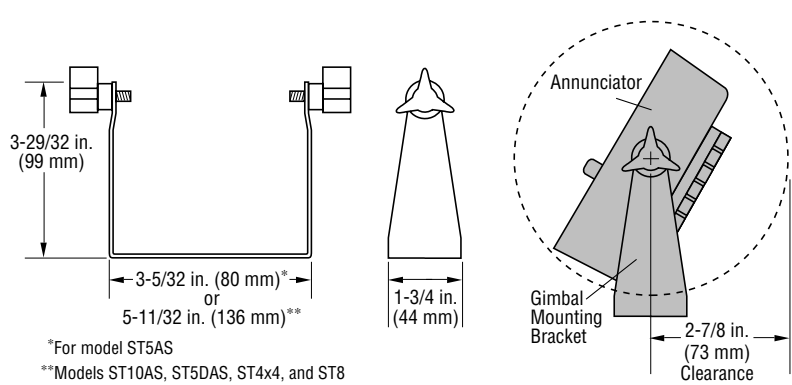


DIMENSIONS

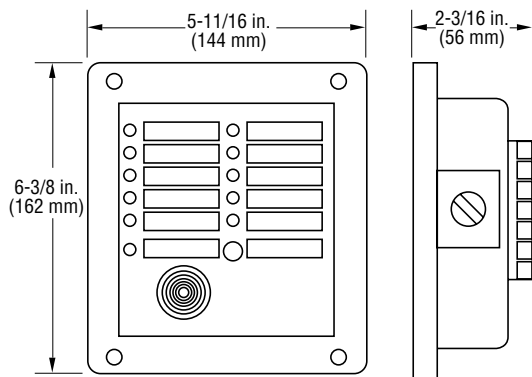
ST5ASF



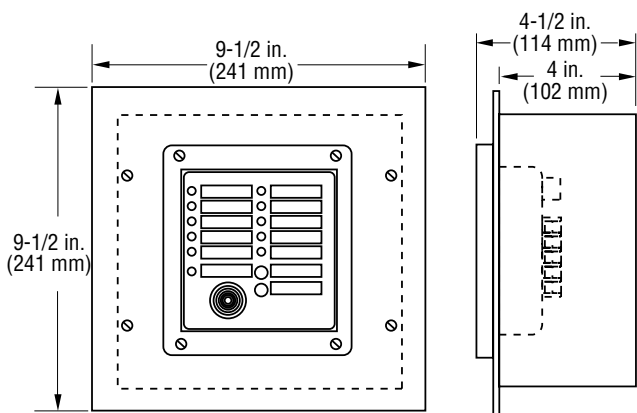
Gimbal Mounting (“G” Option)



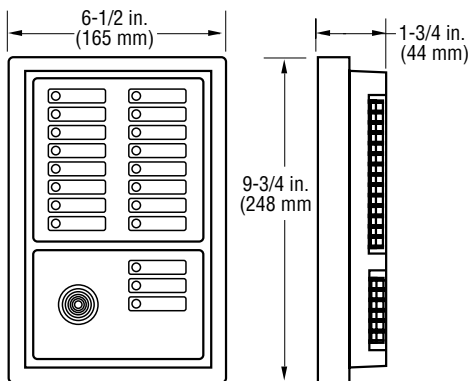
ST4X4F, ST8F,
ST10ASF and ST10HCF



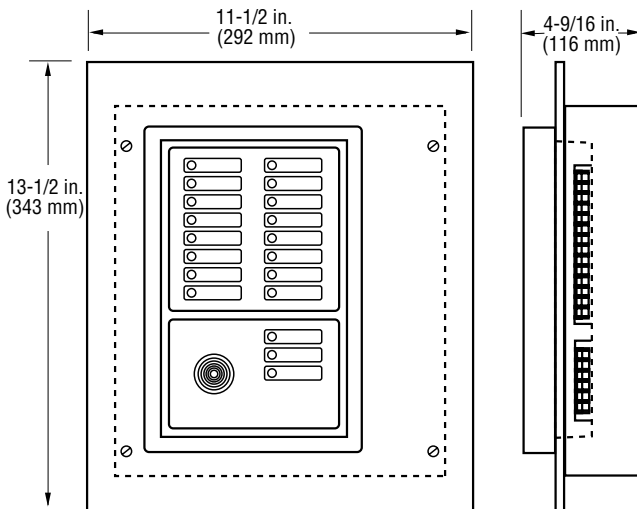
ST10HC with Pull Box
 (“PB”) Option



STA110F and STA16F



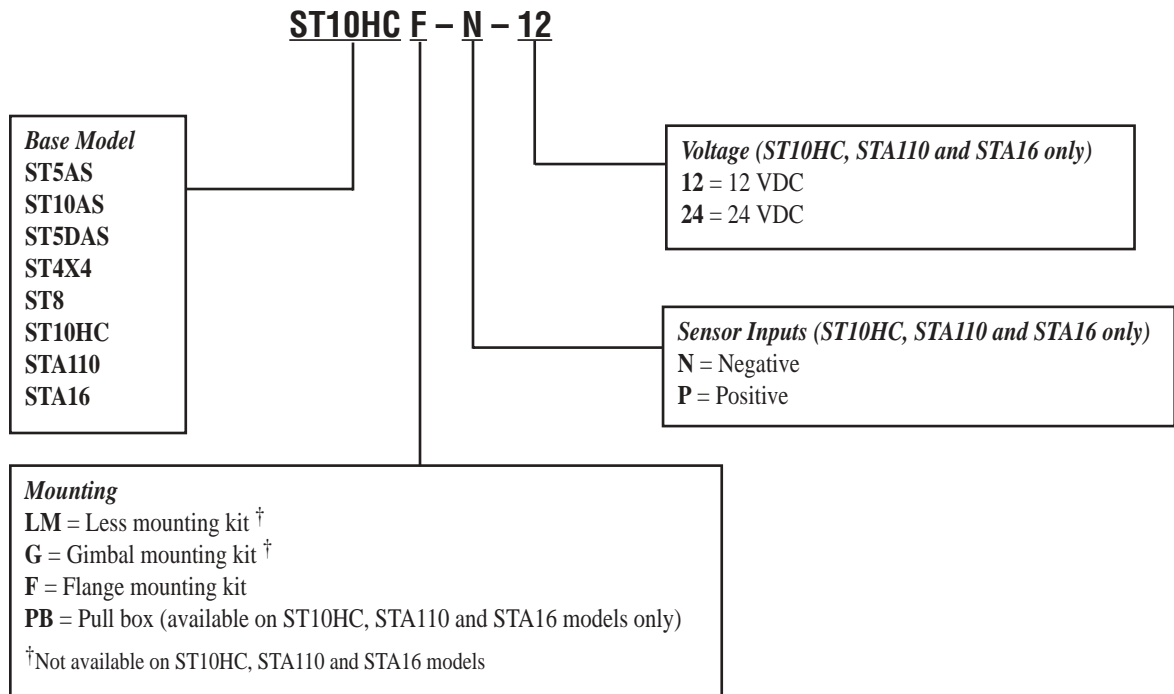
STA110 and STA16
with Pull Box (“PB”) Option



HOW TO ORDER

SELECTRONIC® TATTLETALE® Annunciator

Specify model number using diagram below.



Accessories and Options

Specify part number.

Part Number	Description
STAS	65700040 diode package for (5-point annunciator)
STASTD	25700035 time delay (for 5-point annunciator)
TDST3-5	3-5 second time delay
TDST8-10	8-10 second time delay
25700007	Gimbal mount kit; fits ST5ASLM.
25700008	Flange mount kit; fits ST5ASLM.
25700034	Gimbal mount kit; fits ST10ASLM, ST5DASLM, ST4X4LM and ST8LM
25700371	Flange mount fits; ST10ASLM, ST5DASLM, ST4X4LM and ST8LM.



P.O. Box 470248
Tulsa, Oklahoma 74147 USA
(918) 317-4100
fax (918) 317-4266
e-mail sales@fwmurphy.com
www.fwmurphy.com

CONTROL SYSTEMS & SERVICES DIVISION
P.O. Box 1819; Rosenberg, Texas 77471; USA
(281) 342-0297 fax (281) 341-6006
e-mail sales@fwmurphy.com

MURPHY DE MEXICO, S.A. DE C.V.
Blvd. Antonio Rocha Cordero 300, Fracción del Aguaje
San Luis Potosí, S.L.P.; México 78384
+52-444-8206264 fax +52-444-8206336
Villahermosa Office +52-993-3162117
e-mail ventas@murphymex.com.mx
www.murphymex.com.mx

FRANK W. MURPHY, LTD.
Church Rd.; Laverstock, Salisbury SP1 1QZ; U.K.
+44 1722 410055 fax +44 1722 410088
e-mail sales@fwmurphy.co.uk
www.fwmurphy.co.uk

MURPHY SWITCH OF CALIFORNIA
41343 12th Street West
Palmdale, California 93551-1442; USA
(661) 272-4700 fax (661) 947-7570
e-mail sales@murphyswitch.com
www.murphyswitch.com

MACQUARRIE CORPORATION
1620 Hume Highway
Campbellfield, Vic 3061; Australia
+61 3 9358-5555 fax +61 3 9358-5558
e-mail murphy@macquarrie.com.au



In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.

Printed in U.S.A.